

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

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

Ocuphire Pharma, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

11-3516358
(I.R.S. Employer
Identification Number)

37000 Grand River Avenue, Suite 120
Farmington Hills, MI 48335
(248) 681-9815

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

Mina Sooch
President and Chief Executive Officer
Ocuphire Pharma, Inc.
37000 Grand River Avenue, Suite 120
Farmington Hills, MI 48335
(248) 681-9815

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

Copy to:

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Kalamazoo, Michigan 49002-0402
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Approximate date of commencement of proposed sale to the public From time to time after the effective date of this Registration Statement.

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

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

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee ⁽¹⁾
Primary Offering: Common Stock, par value \$0.0001 per share	(2)	(3)	(3)	—
Primary Offering: Preferred Stock, par value \$0.0001 per share	(2)	(3)	(3)	—
Primary Offering: Debt Securities	(2)	(3)	(3)	—
Primary Offering: Warrants	(2)	(3)	(3)	—
Primary Offering :Total:	(2)	(3)	\$125,000,000	\$13,637.50
Secondary Offering ⁽⁴⁾ : Common Stock, par value \$0.0001 per share, issuable upon exercise of Series A/B Warrants	6,987,400	\$12.495	\$ 87,307,563	\$ 9,525.26
Total				\$23,162.76

(1) The proposed maximum offering price per unit, proposed maximum aggregate offering price and amount of registration fee have been calculated pursuant to (a) Rule 457(o) under the Securities Act of 1933, as amended, or the Securities Act, with respect to the primary offering of shares of common stock, preferred stock, debt securities and warrants, and (b) Rule 457(g) and Rule 457(c) under the Securities Act, with respect to the secondary offering of shares of common stock based upon the higher of (i) the price at which the warrants may be exercised and (ii) the average of the high and low prices for a share of the registrant's common stock as reported on the Nasdaq Capital Market on February 2, 2021.

(2) With respect to the primary offering, there are being registered hereunder such indeterminate number of shares of common stock and preferred stock, such indeterminate principal amount of debt securities and such indeterminate number of warrants to purchase common stock, preferred stock or debt securities as may be sold by the Registrant from time to time, which together shall have an aggregate initial offering price not to exceed \$125,000,000. Any securities registered hereunder may be sold separately or in combination with other securities registered hereunder. The proposed maximum offering price of the securities will be determined, from time to time, by the Registrant in connection with the issuance by the Registrant of the securities registered hereunder. The securities registered hereunder also include such indeterminate number of shares of common stock and preferred stock and amount of debt securities as may be issued upon conversion of or exchange for preferred stock or debt securities that provide for conversion or exchange, upon exercise of warrants or pursuant to the antidilution provisions of any such securities. In addition, pursuant to Rule 416 under the Securities Act, the shares being registered hereunder include such indeterminate number of shares of common stock and preferred stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

(3) The proposed maximum aggregate offering price per class of security will be determined from time to time by the Registrant in connection with the issuance by the Registrant of the securities registered hereunder and is not specified as to each class of security pursuant to General Instruction II.D. of Form S-3 under the Securities Act.

(4) Pursuant to Rule 416 under the Securities Act, the shares being registered hereunder include such indeterminate number of shares of common stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

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

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

SUBJECT TO COMPLETION, DATED FEBRUARY 4, 2021

PROSPECTUS



\$125,000,000

**Common Stock
Preferred Stock
Debt Securities
Warrants**

and

**6,987,400 Shares of
Common Stock**

Offered by the selling stockholders

We may, from time to time, offer and sell up to \$125,000,000 of any combination of the securities described in this prospectus, either individually or in combination, at prices and on terms described in one or more supplements to this prospectus. We may also offer common stock or preferred stock upon conversion of debt securities, or common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon exercise of warrants. In addition, the selling stockholders may offer and sell up to an aggregate of 6,987,400 shares of our common stock, from time to time, on the terms described in this prospectus or in an applicable prospectus supplement. We will not receive any of the proceeds from the sale of the shares offered by the selling stockholders hereunder. To the extent that any selling stockholder resells any securities, the selling stockholder may be required to provide you with this prospectus and a prospectus supplement identifying and containing specific information about the selling stockholders and the terms of the securities being offered.

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

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

We and the selling stockholders may sell the securities through underwriters or dealers, directly to purchasers or through agents designated from time to time. For additional information on the methods of sale, you should refer to the section entitled "[Plan of Distribution](#)" in this prospectus on page [66](#) and in the applicable prospectus supplement. If any underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable discounts or commissions and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is listed on the Nasdaq Capital Market under the symbol "OCUP." On February 3, 2021, the last reported sale price of our common stock on the Nasdaq Capital Market was \$13.31 per share. The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on the Nasdaq Capital Market or other securities exchange of the securities covered by the prospectus supplement.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "[Risk Factors](#)" contained in this prospectus on page [9](#), in our most recent [Annual Report on Form 10-K](#) and [Quarterly Report on Form 10-Q](#) incorporated by reference into this prospectus, in the applicable prospectus supplement and in any free writing prospectuses we have authorized for use in connection with a specific offering, and under similar headings in the other documents that are incorporated by reference into this prospectus.

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

The date of this prospectus is _____, 2021.

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You should rely only on the information contained in, or incorporated by reference into, this prospectus and the applicable prospectus supplement, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. We have not authorized anyone to provide you with different information. We are not making an offer to sell or seeking an offer to buy securities under this prospectus or the applicable prospectus supplement and any related free writing prospectus in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus, the applicable prospectus supplement or any related free writing prospectus, and the documents incorporated by reference herein and therein, are accurate only as of their respective dates, regardless of the time of delivery of this prospectus, the applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using a “shelf” registration process under the Securities Act of 1933, as amended, or the Securities Act. Under this shelf registration statement, we may sell from time to time in one or more offerings up to a total dollar amount of \$125,000,000 of common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in combination with other securities as described in this prospectus. In addition, under this shelf process, the selling stockholders to be named in a supplement to this prospectus may, from time to time, offer and sell up to 6,987,400 shares of our common stock, as described in this prospectus, in one or more offerings. This prospectus provides you with a general description of the securities we and the selling stockholders may offer.

Each time we or the selling stockholders sell any type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. We may also add, update or change in a prospectus supplement or free writing prospectus any of the information contained in this prospectus or in the documents we have incorporated by reference into this prospectus. This prospectus, together with the applicable prospectus supplement, any related free writing prospectus and the documents incorporated by reference into this prospectus and the applicable prospectus supplement, will include all material information relating to the applicable offering. You should carefully read both this prospectus and the applicable prospectus supplement and any related free writing prospectus, together with the additional information described under “Where You Can Find More Information,” before buying any of the securities being offered.

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

Neither we nor the selling stockholders have authorized anyone to provide you with any information other than contained in, or incorporated by reference into, this prospectus and the applicable prospectus supplement, along with the information contained in any free writing prospectuses we or the selling stockholders have authorized for use in connection with a specific offering. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should not assume that the information contained in or incorporated by reference in this prospectus or any prospectus supplement or in any such free writing prospectus is accurate as of any date other than their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

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

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the section entitled “Where You Can Find More Information.”

Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to “Ocuphire,” “the company,” “we,” “us,” “our” and similar references refer to Ocuphire Pharma, Inc., a corporation under the laws of the State of Delaware.

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

PROSPECTUS SUMMARY

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

OCUPHIRE PHARMA, INC.

Overview

Ocuphire is a clinical-stage ophthalmic biopharmaceutical company focused on developing and commercializing therapies for the treatment of several eye disorders. Ocuphire’s pipeline currently includes two small molecule product candidates targeting front and back of the eye indications.

Its lead product candidate, Nyxol® Eye Drops (“Nyxol”), is a once-daily eye drop formulation of phentolamine mesylate designed to reduce pupil diameter and improve visual acuity. As a result, Nyxol can potentially be used for the treatment of multiple indications such as dim light or night vision disturbances (“NVD”), pharmacologically-induced mydriasis (which refers to the use of pharmacological agents to dilate the pupil for office-based eye exams) and presbyopia (a gradual, age-related loss of the eyes’ ability to focus on nearby objects). Ocuphire management believes this multiple indication potential represents a significant market opportunity. Nyxol has been studied across three Phase 1 and four Phase 2 trials totaling over 230 patients and has demonstrated promising clinical data for use in multiple ophthalmic indications. Ocuphire initiated a Phase 3 trial for the treatment of NVD in the fourth quarter of 2020, a Phase 3 trial for reversal of pharmacologically-induced mydriasis (“RM”) in the fourth quarter of 2020, and plans to initiate a Phase 2 trial in combination with low dose pilocarpine for presbyopia, in the first quarter of 2021. Ocuphire expects top-line results to read out as early as the first quarter of 2021 and throughout the remainder of 2021, and, assuming successful and timely completion of further trials, anticipates submitting a new drug application (“NDA”) to the U.S. Food and Drug Administration (“FDA”) in early 2023 under the 505(b)(2) pathway.

Ocuphire’s second product candidate, APX3330, is a twice-a-day oral tablet, designed to target multiple pathways relevant to retinal and choroidal (the vascular layer of the eye) vascular diseases, such as diabetic retinopathy (“DR”) and diabetic macular edema (“DME”) which if left untreated may result in permanent visual acuity loss and eventual blindness. DR is a disease resulting from diabetes, in which chronically elevated blood sugar levels cause progressive damage to blood vessels in the retina. DME is a severe form of DR which involves leakage of protein and fluid into the macula, the central portion of the retina, causing swelling. Prior to Ocuphire’s in-licensing of the product candidate, APX3330 had been studied by third parties in six Phase 1 and five Phase 2 trials totaling over 440 patients, for inflammatory and oncology indications, and had demonstrated promising evidence of tolerability, pharmacokinetics, durability and target engagement. Ocuphire plans to initiate a Phase 2 trial for APX3330 in the first quarter of 2021 for the treatment of patients with DR, including moderately severe non-proliferative DR (“NPDR”) and mild proliferative DR (“PDR”), as well as patients with DME without loss of central vision. Ocuphire has also in-licensed additional second generation product candidates, analogs of APX3330, including APX2009 and APX2014.

As part of its strategy, Ocuphire will continue to explore opportunities to acquire additional ophthalmic assets and to seek strategic partners for late stage development, regulatory preparation and commercialization of drugs in key global markets.

Ocuphire estimates that there are 15-20 million moderate-to-severe NVD patients in the United States, over 80 million eye exams conducted per year with pharmacologically-induced mydriasis, over 100 million presbyopia patients, over 7 million patients with DR, and 750,000 patients with DME. There are no currently approved pharmacological products on the market for NVD, RM, or presbyopia. In the case of presbyopia there are non-pharmacologic and potentially inconvenient treatments such as reading glasses or contact lenses, as well as invasive surgical interventions with associated risks such as creation or worsening of NVD. For DR and DME, intraocular injections targeting vascular endothelial growth factors (“VEGF”) (a family of proteins that promote

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angiogenesis – the formation of new blood vessels – and vascular permeability) are approved globally, but these chronic therapies require frequent biweekly or monthly office visits and are prone to side effects such as hemorrhage, intraocular infection, and increased risk of blood clots.

Ocuphire is developing Nyxol and APX3330 for multiple indications. Ocuphire believes the two programs present similar potential advantages: (1) promising clinical data to date; (2) small molecules; (3) convenient dosing route and schedule; (4) potential for first-line or adjunct therapy; and (5) significant commercial potential. In the fourth quarter of 2020, Ocuphire initiated Phase 3 clinical trials for Nyxol in NVD and RM, with announcement of completion of enrollment in Phase 3 RM trial in the fourth quarter of 2020. In the first quarter of 2021, Ocuphire expects to initiate a Phase 2 proof of concept trial in presbyopia for a kit combination of Nyxol and low-dose pilocarpine, a pupil constrictor with a mechanism different and complementary to Nyxol. In preparation for at least one of the two Phase 3 registration trials for Nyxol, Ocuphire plans to launch a blow-fill-seal manufacturing program for preservative-free single use Nyxol eye drops. Furthermore, Ocuphire plans to initiate a 6-month rabbit toxicology study in the first quarter of 2021, completion of which is necessary prior to commencement of the Phase 3 safety exposure trial for chronic indications. Ocuphire also expects to launch a Phase 2 trial for APX3330 in DR and DME in the first quarter of 2021 with a concurrent Phase 2/3 oral tablet manufacturing program. **TABLE 1** below summarizes Ocuphire’s current development pipeline of product candidates and their target indications:

TABLE 1. Ocuphire Pipeline Indications

	Product Candidate	Indication	Development Stage				Anticipated Milestones
			Pre-clinical	Phase 1	Phase 2	Phase 3	
Ocuphire-Focused Development	0.75% Nyxol® Eye Drop	Dim Light or Night Vision Disturbances (NVD)					Initiated Phase 3 LYNX-1 trial 4Q2020; Data expected in 3Q21 (n=160)
	0.75% Nyxol® Eye Drop	Reversal of Mydriasis (RM)					Initiated Phase 3 MIRA-2 trial 4Q2020; Data expected in 1Q21 (n=168)
	0.75% Nyxol® + Low-Dose 0.4% Pilocarpine Eye Drops	Presbyopia (P)					Initiate Phase 2 VEGA-1 trial 1Q2021; Data expected in 2Q21 (n=152)
	APX3330 Oral Pill	Diabetic Retinopathy (DR)/ Macular Edema (DME)					Initiate Phase 2 ZETA-1 trial 1Q2021; Data expected in 4Q21 (n=100)

Note: 0.75% Nyxol (Phentolamine Ophthalmic Solution) is the same as 1% Nyxol (Phentolamine Mesylate Ophthalmic Solution).

The Merger, Reverse Stock Split and Name Change

On November 5, 2020, Ocuphire (formerly known as Rexahn Pharmaceuticals, Inc., and prior to the merger, referred to as “Rexahn”), completed its business combination with Ocuphire Pharma, Inc. (“Ocuphire Private Company”), in accordance with the terms of the Agreement and Plan of Merger, dated as of June 17, 2020, as amended, by and among Rexahn, Ocuphire Private Company, and Razor Merger Sub, Inc., a wholly-owned subsidiary of Rexahn (“Merger Sub”) (as amended, the “Merger Agreement”), pursuant to which Merger Sub merged with and into Ocuphire Private Company, with Ocuphire Private Company surviving as a wholly owned subsidiary of Rexahn (the “Merger”).

In connection with, and immediately prior to the completion of, the Merger, Rexahn effected a reverse stock split of the common stock, at a ratio of 1-for-4 (the “Reverse Stock Split”). Under the terms of the Merger Agreement, after taking into account the Reverse Stock Split, Rexahn issued shares of its common stock to Ocuphire Private Company stockholders, based on a common stock exchange ratio of 1.0565 shares of common stock for each share of Ocuphire Private Company common stock. In connection with the Merger, Rexahn changed its name from “Rexahn Pharmaceuticals, Inc.” to “Ocuphire Pharma, Inc.,” and the business conducted by Rexahn became the business conducted by Ocuphire Private Company.

Private Placement of Common Shares and Warrants

On November 5, 2020, Ocuphire and Ocuphire Sub completed a private placement transaction (the “Pre-Merger Financing”) with certain accredited investors (the “Investors”) pursuant to that certain Amended and Restated Securities Purchase Agreement (the “Securities Purchase Agreement”) dated June 29, 2020 by and among the Company, Ocuphire Sub and the Investors for an aggregate purchase price of approximately \$21.15 million (the “Purchase Price”).

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Pursuant to the Pre-Merger Financing, (i) Ocuphire Sub issued and sold to the Investors shares of Ocuphire Sub's common stock (the "Initial Shares") which converted pursuant to the exchange ratio in the Merger into an aggregate of approximately 1,249,996 shares (the "Converted Initial Shares") of the Company's common stock, (ii) Ocuphire Sub deposited into escrow, for the benefit of the Investors, additional shares of Ocuphire Sub's common stock (the "Additional Shares") which converted pursuant to the exchange ratio in the Merger into an aggregate of approximately 3,749,992 shares of common stock (the "Converted Additional Shares"), which Converted Additional Shares were delivered (or became deliverable) to the Investors on November 19, 2020, and (iii) the Company agreed to issue to each Investor on the tenth trading day following the consummation of the Merger Series A Warrants representing the right to acquire shares of common stock equal to the sum of (a) the Converted Initial Shares purchased by the Investor, (b) the Converted Additional Shares delivered or deliverable to the Investor, without giving effect to any limitation on delivery contained in the Securities Purchase Agreement and (c) the number of shares of Common Stock, if any, underlying the Series B Warrants issued to the Investor (the "Series A Warrants") and additional Series B Warrants to purchase shares of Common Stock (the "Series B Warrants" and together with the Series A Warrants, the "Series A/B Warrants").

On November 19, 2020 (the "Warrant Closing Date"), pursuant to the terms of the Amended and Restated Securities Purchase Agreement, the Company issued the Series A Warrants and the Series B Warrants. For a description of the Series A Warrants and Series B Warrants, see "Description of Capital Stock—Outstanding Warrants."

On February 3, 2021, the Company entered into a Waiver Agreement with each of the investors (collectively, the "Waiver Agreements"). Pursuant to the Waiver Agreements, the investors and the Company agreed to waive certain rights, finalize the exercise price and number of Warrants, and, in the case of certain major holders ("Major Holders"), grant certain registration rights for the shares underlying the Warrants as described herein.

Waiver of Warrant Resets and Final Determination of Number of Series B Warrants

Pursuant to the Waiver Agreements, each investor agreed to waive the reset provisions in the Warrants in order to allow for one more immediate and final reset of the number of shares of common stock underlying the Warrants and the exercise price of the Series A Warrants such that (A) the exercise price of the Series A Warrants was fixed at the initial exercise price of \$4.4795 per share, (B) the number of shares underlying all of the Series A Warrants was fixed at the initial number of 5,665,838 in the aggregate and (C) in the case of all Holders, the number of shares underlying all of the Series B Warrants was fixed at 1,708,334 in the aggregate with respect to such Holders (the "Final Series B Reset").

The directors and the officers waived their right to the Final Series B Reset such that the number of Series B Warrants for such directors and officers was fixed at the initial number of Series B Warrants issued to them on November 19, 2020.

The Waiver Agreement provides that the Company may file this registration statement on Form S-3, and may further file registration statements and undertake Subsequent Placements at any time following the close of business on March 1, 2021, subject to the Major Holders' participation rights.

In connection with the Waiver Agreement, each of the Major Holder's participation rights were extended to December 31, 2021, subject to a limitation of participation in any such Subsequent Placement (50% in the aggregate); provided that such participation rights will not apply to any at-the-market equity offering implemented by the Company through a broker dealer at any time following the Effective Date; and provided further that the Company will not be able to issue any equity securities under such at-the-market equity offering until on or after April 15, 2021.

Risks Associated with our Business

Our business is subject to numerous risks, as described under the heading "Risk Factors" contained in the applicable prospectus supplement and in any free writing prospectuses we have authorized for use in connection with a specific offering, and under similar headings in the documents that are incorporated by reference into this prospectus.

Description of Securities We May Offer

We may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in combination, with a total dollar amount up to \$125,000,000 from time to time under this prospectus, together with the applicable prospectus supplement and any related free writing prospectus, at prices and on terms to be determined at the time of any offering. We may also offer common

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stock, preferred stock and/or debt securities upon the exercise of warrants. In addition, the selling stockholders to be named in a supplement to this prospectus may offer or sell, from time to time, up to 6,987,400 shares of our common stock. This prospectus provides you with a general description of the securities we may offer. Each time we or the selling stockholders offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity;
- original issue discount;
- rates and times of payment of interest or dividends;
- redemption, conversion, exercise, exchange or sinking fund terms;
- ranking;
- restrictive covenants;
- voting or other rights;
- conversion or exchange prices or rates and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange; and
- a discussion of material United States federal income tax considerations, if any.

The applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

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

We or the selling stockholders may sell the securities directly to investors or to or through agents, underwriters or dealers. We and the selling stockholders, and our or their agents, underwriters or dealers reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities to or through agents, underwriters or dealers, we will include in the applicable prospectus supplement:

- the names of those agents, underwriters or dealers;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us, if any.

Common Stock

We may issue shares of our common stock from time to time. The selling stockholders may offer shares of our common stock to the extent such shares were issued and outstanding, or issuable upon exercise or conversion of securities issued and outstanding, prior to the original date of filing of the registration statement to which this prospectus relates. Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Under our amended and restated certificate of incorporation, as amended, or certificate of incorporation, and second amended and restated bylaws, or bylaws, our stockholders do not have cumulative voting rights. Because of this, the holders of a majority of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose. Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of common stock are entitled to receive ratably those dividends, if any, as may be declared from time to time by our board of

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directors out of legally available funds. In the event of our liquidation, dissolution or winding up, holders of common stock are entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock. Holders of common stock have no preemptive, conversion or subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future. In this prospectus, we have summarized certain general features of the common stock under “Description of Capital Stock—Common Stock.” We urge you, however, to read the applicable prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) related to any common stock being offered.

Preferred Stock

We may issue shares of our preferred stock from time to time, in one or more series. Our board of directors will determine the designations, voting powers, preferences and rights of the preferred stock, as well as the qualifications, limitations or restrictions thereof, including dividend rights, conversion rights, preemptive rights, terms of redemption or repurchase, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series, or the designation of such series, any or all of which may be greater than the rights of our common stock. Convertible preferred stock will be convertible into our common stock or exchangeable for other securities. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

If we sell any series of preferred stock under this prospectus, we will fix the designations, voting powers, preferences and rights of such series of preferred stock, as well as the qualifications, limitations or restrictions thereof, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock that we are offering before the issuance of the related series of preferred stock. In this prospectus, we have summarized certain general features of the preferred stock under “Description of Capital Stock—Preferred Stock.” We urge you to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Debt Securities

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible or exchangeable debt securities will be convertible into or exchangeable for our common stock or our other securities. Conversion or exchange may be mandatory or optional (at our option or the holders’ option) and would be at prescribed conversion or exchange rates.

Any debt securities issued under this prospectus will be issued under one or more documents called indentures, which are contracts between us and a national banking association or other eligible party, as trustee. In this prospectus, we have summarized certain general features of the debt securities under “Description of Debt Securities.” We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of debt securities being offered, as well as the complete indenture and any supplemental indentures that contain the terms of the debt securities. A form of indenture has been filed as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

Warrants

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or in combination with common stock, preferred stock and/or debt securities offered by any prospectus supplement. In this prospectus, we have summarized certain general features of the warrants under “Description of Warrants.” We urge you, however, to read the applicable prospectus supplement

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(and any related free writing prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as any warrant agreements and warrant certificates, as applicable, that contain the terms of the warrants. We have filed forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants that may be offered as exhibits to the registration statement of which this prospectus is a part. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant and/or the warrant agreement and warrant certificate, as applicable, that contain the terms of the particular series of warrants we are offering, and any supplemental agreements, before the issuance of such warrants.

Any warrants issued under this prospectus may be evidenced by warrant certificates. Warrants also may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

Use of Proceeds

Except as described in any applicable prospectus supplement or in any free writing prospectuses we have authorized for use in connection with a specific offering, we currently intend to use the net proceeds from this offering for working capital and general corporate purposes, which may include, among other things, funding research and development programs, vendor payables, hiring additional personnel, and capital expenditures.

We will not receive any proceeds from the sale of shares of our common stock by any selling stockholders.

Selling Stockholders

The selling stockholders acquired Series A Warrants and Series B Warrants exercisable for shares of our common stock in November 2020. See the section entitled "Selling Stockholders" on page 64 of this prospectus.

Company Information

Our principal executive offices are located at 37000 Grand River Avenue, Suite 120, Farmington Hills, MI 48335. Our telephone number is (248) 681-9815. Our website address is www.ocuphire.com. The information contained in, or accessible through, our website does not constitute part of this prospectus, should not be relied on in determining whether to make an investment decision, and the inclusion of our website address in this prospectus is an inactive textual reference only.

SUMMARY OF RISK FACTORS

Investing in our securities involves a high degree of risk. The following is a summary of the principal risks and uncertainties that could materially adversely affect our business, financial condition, or results of operations. You should read this summary together with the more detailed description of risk factors contained under the heading “Risk Factors” in this prospectus on page 9, as well as in the applicable prospectus supplement and in any free writing prospectuses we have authorized for use in connection with a specific offering.

- Ocuphire currently depends entirely on the success of Nyxol and APX3330, its only product candidates. Ocuphire may never receive marketing approval for, or successfully commercialize, Nyxol, APX3330, or other product candidates it may pursue in the future for any indication.
- The results of previous clinical trials may not be predictive of future results, and the results of Ocuphire’s current and planned clinical trials may not satisfy the requirements of the FDA or non-U.S. regulatory authorities.
- Changes in regulatory requirements or FDA guidance, or unanticipated events during Ocuphire’s clinical trials, may result in changes to clinical trial protocols or additional clinical trial requirements, which could result in increased costs to Ocuphire or delays in its development timeline.
- Ocuphire has incurred only losses since inception. Ocuphire expects to incur losses for the foreseeable future and may never achieve or maintain profitability.
- Ocuphire’s recurring operating losses have raised substantial doubt regarding its ability to continue as a going concern.
- Raising additional capital may cause dilution to Ocuphire’s stockholders, restrict Ocuphire’s operations, or require Ocuphire to relinquish rights to its technologies or product candidates.
- Even if it receives marketing approval for its product candidates in the United States, Ocuphire may never receive regulatory approval to market such product candidates outside of the United States.
- Even if Ocuphire obtains marketing approval for its product candidates, such product candidates could be subject to post-marketing restrictions or withdrawal from the market, and Ocuphire may be subject to substantial penalties if it fails to comply with regulatory requirements or experience unanticipated problems with a product following approval.
- Ocuphire’s relationships with healthcare providers and third-party payors will be subject to applicable fraud and abuse and other healthcare laws and regulations, which could expose Ocuphire to criminal sanctions, civil penalties, contractual damages, reputational harm, and diminished profits and future earnings, among other penalties and consequences.
- Ocuphire employees may engage in misconduct or other improper activities, including violating applicable regulatory standards and requirements or engaging in insider trading, which could significantly harm Ocuphire’s business.
- Ocuphire faces substantial competition, which may result in others discovering, developing, or commercializing products before or more successfully than it does.
- Ocuphire lacks experience in commercializing products, which may have an adverse effect on its business.
- If Ocuphire is unable to establish sales and marketing capabilities or enter into agreements with third parties to sell, market, and distribute its product candidates, if approved, it may not be successful in commercializing such product candidates if and when they are approved.
- Even if Ocuphire is able to commercialize its product candidates, their profitability will likely depend in significant part on third-party reimbursement practices, which, if unfavorable, would harm its business.
- Product liability lawsuits against Ocuphire, or its suppliers and manufacturers, could cause it to incur substantial liabilities and could limit commercialization of any product candidate that it may develop.
- Ocuphire will be unable to directly control all aspects of its clinical trials due to its reliance on clinical research organizations (CROs) and other third parties that assist Ocuphire in conducting clinical trials.

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- If Ocuphire is not able to establish new collaborations on commercially reasonable terms, it may have to alter its development, manufacturing, and commercialization plans.
- If Ocuphire is unable to obtain and maintain sufficient patent protection for its product candidates, its competitors could develop and commercialize products or technology similar or identical to those of Ocuphire, which would adversely affect Ocuphire's ability to successfully commercialize any product candidates it may develop, its business, results of operations, financial condition and prospects.
- If Ocuphire does not obtain protection under the Hatch-Waxman Act and similar foreign legislation by extending the patent terms and obtaining data exclusivity for its product candidate, its business may be materially harmed.
- Changes in U.S. patent law could diminish the value of patents in general, thereby impairing Ocuphire's ability to protect its product candidates.
- Ocuphire may not be able to protect or practice its intellectual property rights throughout the world.
- Obtaining and maintaining Ocuphire's patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental agencies, and its patent protection could be reduced or eliminated for noncompliance with these requirements.
- Ocuphire depends on intellectual property sublicensed from Apexian Pharmaceuticals, Inc. ("Apexian") for its APX3330 product candidate under development and its additional pipeline candidates, and the termination of, or reduction or loss of rights under, this sublicense would harm Ocuphire's business.
- Ocuphire is dependent on its key personnel, and if it is not successful in attracting and retaining highly qualified personnel, it may not be able to successfully implement its business strategy.
- Ocuphire will need to develop and expand its company, and may encounter difficulties in managing this development and expansion, which could disrupt its operations.
- The COVID-19 pandemic has and could continue to adversely impact Ocuphire's business, including pre-clinical and clinical trials and regulatory approvals.
- Ocuphire's insurance policies are expensive and protect only from some business risk, which leaves Ocuphire exposed to significant uninsured liabilities.
- Ocuphire does not anticipate paying any cash dividends in the foreseeable future.
- If Ocuphire fails to comply with the continued listing standards of the Nasdaq Capital Market, Ocuphire common stock could be delisted. If it is delisted, Ocuphire common stock and the liquidity of its common stock would be impacted.
- The market price of Ocuphire common stock may fluctuate significantly.
- Ocuphire may be subject to securities litigation, which is expensive and could divert management attention.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks and uncertainties described below, under the heading “Risk Factors” contained in the applicable prospectus supplement and any related free writing prospectuses we have authorized for use in connection with a specific offering, and discussed under the section entitled “Risk Factors” contained in our most recent Annual Report on Form 10-K and in our most recent Quarterly Report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, the documents incorporated by reference and any free writing prospectus that we may authorize for use in connection with this offering.

The risks described in these documents are not the only ones we face, but those that we consider to be material. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. Past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section below entitled “Forward-Looking Statements.”

Risks Related to Development of Ocuphire’s Product Candidates

Ocuphire currently depends entirely on the success of Nyxol and APX3330, its only product candidates. Ocuphire may never receive marketing approval for, or successfully commercialize, Nyxol, APX3330, or other product candidates it may pursue in the future for any indication.

Ocuphire currently has only two product candidates, Nyxol and APX3330, in clinical development, and its business depends on their successful clinical development, regulatory approval and commercialization. The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of a drug product are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, where regulations may differ. Ocuphire is not permitted to market its product candidates in the United States until it receives approval of an NDA from the FDA or in any foreign countries until it receives the requisite approval from such countries. Ocuphire has not submitted an NDA to the FDA or comparable applications to other regulatory authorities or received marketing approval for its product candidates. Before obtaining regulatory approval for the commercial sale of its product candidates for a particular indication, Ocuphire must demonstrate through preclinical testing and clinical trials that the applicable product candidate is safe and effective for use in that target indication. This process can take many years and may be followed by post-marketing studies and surveillance together which will require the expenditure of substantial resources beyond the proceeds raised in the Pre-Merger Financing. Of the large number of drugs in development in the United States, only a small percentage of drugs successfully complete the FDA regulatory approval process and are commercialized. Accordingly, even if Ocuphire is able to complete development of its product candidates, Ocuphire cannot assure you that its product candidates will be approved or commercialized.

Obtaining approval of an NDA is an extensive, lengthy, expensive and uncertain process, and the FDA may delay, limit or deny approval of Ocuphire’s product candidates for many reasons, including:

- the data collected from preclinical studies and clinical trials of Ocuphire’s product candidates may not be sufficient to support the submission of an NDA;
- Ocuphire may not be able to demonstrate to the satisfaction of the FDA that its product candidates are safe and effective for any indication;
- the results of clinical trials may not meet the level of statistical significance or clinical significance required by the FDA for approval;
- the FDA may disagree with the number, design, size, conduct, or implementation of Ocuphire’s clinical trials;
- the FDA may not find the data from preclinical studies and clinical trials sufficient to demonstrate that Ocuphire’s product candidates’ clinical and other benefits outweigh the safety risks;
- the FDA may disagree with Ocuphire’s interpretation of data from preclinical studies or clinical trials;
- the FDA may not accept data generated at Ocuphire’s clinical trial sites;

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- the FDA may have difficulties scheduling an advisory committee meeting in a timely manner or the advisory committee may recommend against approval of Ocuphire's application or may recommend that the FDA require, as a condition of approval, additional preclinical studies or clinical trials, limitations on approved labeling or distribution and use restrictions;
- the FDA may require development of a Risk Evaluation and Mitigation Strategy (REMS) as a condition of approval;
- the FDA may identify deficiencies in the manufacturing processes or facilities of third party manufacturers with which Ocuphire enters into agreements for clinical and commercial supplies; or
- the FDA may change its approval policies or adopt new regulations.

The results of previous clinical trials may not be predictive of future results, and the results of Ocuphire's current and planned clinical trials may not satisfy the requirements of the FDA or non-U.S. regulatory authorities.

The results from the prior preclinical studies and clinical trials for Nyxol and APX3330 discussed elsewhere in this prospectus may not necessarily be predictive of the results of future preclinical studies or clinical trials. Even if Ocuphire is able to complete its planned clinical trials of its product candidates according to its current development timeline, the results from its prior clinical trials of its product candidates may not be replicated in these future trials. Many companies in the pharmaceutical and biotechnology industries (including those with greater resources and experience than Ocuphire) have suffered significant setbacks in late-stage clinical trials after achieving positive results in early stage development, and Ocuphire cannot be certain that it will not face similar setbacks. These setbacks have been caused by, among other things, preclinical findings made while clinical trials were underway or safety or efficacy observations made in clinical trials, including previously unreported adverse events ("AEs"). Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials nonetheless have failed to obtain FDA approval. Additionally, Ocuphire is developing, as a treatment for Presbyopia, a combination product candidate of Nyxol and low-dose pilocarpine in a two-part kit, which have not been studied together yet. If Ocuphire fails to produce positive results in its clinical trials of any of its product candidates, the development timelines and regulatory approvals and commercialization prospects for its product candidates and its business and financial prospects, would be adversely affected. If Ocuphire fails to produce positive results in its clinical trials of any of its product candidates, the development timelines, regulatory approvals, and commercialization prospects for its product candidates, as well as Ocuphire's business and financial prospects, would be adversely affected. Further, Ocuphire's product candidates may not be approved even if they achieve their respective primary endpoints in Phase 3 registration trials. The FDA or non-U.S. regulatory authorities may disagree with Ocuphire's trial designs or its interpretation of data from preclinical studies and clinical trials. In addition, any of these regulatory authorities may change requirements for the approval of a product candidate even after reviewing and providing comments or advice on a protocol for a pivotal clinical trial that has the potential to result in approval by the FDA or another regulatory authority. Furthermore, any of these regulatory authorities may also approve Ocuphire's product candidate for fewer or more limited indications than it requests or may grant approval contingent on the performance of costly post-marketing clinical trials.

Ocuphire completed two Phase 2b clinical trials for Nyxol in patients with pharmacologically induced mydriasis and in elderly patients with ocular hypertension ("OHT") in the second half of 2019. For Nyxol, Ocuphire commenced a Phase 3 trial for the treatment of NVD in the fourth quarter of 2020, a Phase 3 trial for RM in the fourth quarter of 2020, and plans to commence a Phase 2 trial in combination with low-dose pilocarpine for presbyopia, in the first quarter of 2021. For APX3330, Ocuphire plans to commence a Phase 2 trial for the treatment of patients with DR, including patients with moderately severe NPDR and mild PDR, as well as patients with DME without loss of central vision, in the first quarter of 2021. Ocuphire also plans to pursue further clinical and preclinical trials as described elsewhere in this prospectus. If successful, Ocuphire plans to eventually seek regulatory approvals of Nyxol and APX3330 initially in the United States, Canada, and Europe, and may seek approvals in other geographies. Before obtaining regulatory approvals for the commercial sale of any product candidate for any target indication, Ocuphire must demonstrate with substantial evidence gathered in preclinical studies and adequate and well-controlled clinical studies, and, with respect to approval in the United States, to the satisfaction of the FDA, that the product candidate is safe and effective for use for that target indication. Ocuphire cannot assure you that the FDA or non-U.S. regulatory authorities would consider its planned clinical trials to be sufficient to serve as the basis for approval of its product candidates for any indication. The FDA and non-U.S. regulatory authorities retain broad discretion in evaluating the results of Ocuphire's clinical trials and in determining whether the results demonstrate that its product

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candidates are safe and effective. If Ocuphire is required to conduct clinical trials of its product candidates in addition to those it has planned prior to approval, Ocuphire will need substantial additional funds, and cannot assure you that the results of any such outcomes trial or other clinical trials will be sufficient for approval.

If clinical trials of Ocuphire's product candidates fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, Ocuphire may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of such product candidates.

Before obtaining marketing approval from regulatory authorities for the sale of Nyxol, Ocuphire must complete additional Phase 2 and Phase 3 clinical trials to demonstrate the safety and efficacy in humans. Additionally, for chronic indication Ocuphire must complete a six-month toxicology study in rabbits. Clinical testing is expensive, difficult to design and implement, can take many years to complete, and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of development. In addition, based on the Phase 2 safety, tolerability and efficacy results of APX3330 in patients with DR/DME, Ocuphire might need further animal toxicology studies and additional Phase 2 and Phase 3 clinical trials before obtaining marketing approval from regulatory authorities for the sale of APX3330.

Ocuphire, or its future collaborators, may experience numerous unforeseen events during, or as a result of, clinical trials that could result in increased development costs and delay, and could limit or prevent its ability to receive marketing approval or commercialize its product candidates, including:

- regulators or IRBs may not authorize Ocuphire or its investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site including due to the ongoing COVID-19 pandemic or other public health emergency;
- government or regulatory delays and changes in regulatory requirements, policy and guidelines may require Ocuphire to perform additional clinical trials or use substantial additional resources to obtain regulatory approval, including due to the ongoing COVID-19 pandemic or other public health emergency;
- Ocuphire may have delays in reaching or fail to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites, including due to the ongoing COVID-19 pandemic or other public health emergency;
- clinical trials may produce negative or inconclusive results, and Ocuphire may decide, or regulators may require it, to conduct additional clinical trials or abandon product development programs, including due to the ongoing COVID-19 pandemic or other public health emergency;
- the number of patients required for clinical trials may be larger, enrollment in these clinical trials may be slower or participants may drop out of these clinical trials at a higher rate than Ocuphire anticipates, including due to the ongoing COVID-19 pandemic or other public health emergency;
- Ocuphire's third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to Ocuphire in a timely manner, or at all;
- Ocuphire's patients or medical investigators may be unwilling to follow its clinical trial protocols;
- Ocuphire might have to suspend or terminate clinical trials for various reasons, including a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials may be greater than Ocuphire anticipates, including due to the ongoing COVID-19 pandemic or other public health emergency;
- the supply or quality of any product candidate or other materials necessary to conduct clinical trials may be insufficient or inadequate;
- the product candidate may have undesirable side effects or other unexpected characteristics, causing Ocuphire or its investigators, regulators or IRBs to suspend or terminate the trials;
- clinical trials may be delayed or terminated because of the ongoing COVID-19 pandemic or another public health emergency; and
- federal agencies may, due to reduced manpower or diverted resources to the COVID-19 pandemic, require more time to review clinical trial protocols and INDs.

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If Ocuphire experiences delays or difficulties in the enrollment of patients in clinical trials, Ocuphire's ability to conduct and complete those clinical trials, and its ability to seek and receive necessary regulatory approvals, could be delayed or prevented.

Ocuphire or its future collaborators may not be able to initiate or continue clinical trials for its product candidates if Ocuphire is unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or analogous regulatory authorities outside the United States. Patient enrollment can be affected by many factors, including:

- severity of the disease under investigation;
- availability and efficacy of medications already approved for the disease under investigation;
- eligibility criteria for the trial in question;
- competition for eligible patients with other companies conducting clinical trials for product candidates seeking to treat the same indication or patient population;
- its payments for conducting clinical trials;
- perceived risks and benefits of the product candidate under study;
- efforts to facilitate timely enrollment in clinical trials;
- patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment;
- proximity and availability of clinical trial sites for prospective patients;
- the ability of patients to safely participate in clinical trials during the COVID-19 pandemic or other public health emergencies; and
- the ability to monitor patients adequately during periods in which social distancing is required or recommended due to the COVID-19 pandemic.

Ocuphire expects that its late stage clinical trials of Nyxol and APX3330 will commence in the fourth quarter of 2020 through the first quarter of 2021 and each trial may take up to 3 to 9 months to enroll; however, Ocuphire cannot assure you that its timing and enrollment assumptions are correct given the above factors. The recent COVID-19 pandemic may also increase the time required to recruit patients for a study, and may also diminish the ability to monitor patients during the clinical trial. Ocuphire's inability to enroll a sufficient number of patients for its clinical trials or retain sufficient enrollment through the completion of its trials would result in significant delays or may require Ocuphire to abandon one or more clinical trials altogether. Enrollment delays in Ocuphire's clinical trials may result in increased development costs for its product candidates and cause its stock price to decline.

Ocuphire or others could discover that Ocuphire's product candidates lack sufficient efficacy, or that they cause undesirable side effects that were not previously identified, which could delay or prevent regulatory approval or commercialization.

Because both Nyxol and APX3330 have been tested in relatively small patient populations, at a limited range of daily doses up to .75% Phentolamine Ophthalmic Solution (which is the same as 1% Phentolamine Mesylate Ophthalmic Solution) and 720 mg respectively, and for limited durations to date, it is possible that Ocuphire's clinical trials have or will indicate an apparent positive effect of Nyxol or APX3330 that is greater than the actual positive effect, if any, or that additional and unforeseen side effects may be observed as its development progresses. Additionally, the combination product candidate of Nyxol and pilocarpine may not achieve the efficacy that is expected based on the individual contributions to efficacy. The discovery that either Nyxol or APX3330 lacks sufficient efficacy, or that they cause undesirable side effects (including side effects not previously identified in Ocuphire's completed clinical trials), could cause Ocuphire or regulatory authorities to interrupt, delay, or discontinue clinical trials, and could result in the denial of regulatory approval by the FDA or other non-U.S. regulatory authorities for any or all targeted indications.

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The discovery that Ocuphire's product candidates lack sufficient efficacy or that they cause undesirable side effects that were not previously identified could prevent Ocuphire from commercializing such product candidates and generating revenues from sales. In addition, if Ocuphire receives marketing approval for its product candidates and Ocuphire or others later discover that it is less effective, or identify undesirable side effects caused by its product candidates:

- regulatory authorities may withdraw their approval of the product;
- Ocuphire may be required to recall the product, change the way this product is administered, conduct additional clinical trials, or change the labeling or distribution of the product (including REMS);
- additional restrictions may be imposed on the marketing of, or the manufacturing processes for, the product;
- Ocuphire may be subject to fines, injunctions, or the imposition of civil or criminal penalties;
- Ocuphire could be sued and held liable for harm caused to patients;
- the product may be rendered less competitive and sales may decrease; or
- Ocuphire's reputation may suffer generally both among clinicians and patients.

Any one or a combination of these events could prevent Ocuphire from achieving or maintaining market acceptance of the affected product candidate, or could substantially increase the costs and expenses of commercializing the product candidate, which in turn could delay or prevent Ocuphire from generating significant, or any, revenues from the sale of the product candidate.

Changes in regulatory requirements or FDA guidance, or unanticipated events during Ocuphire's clinical trials, may result in changes to clinical trial protocols or additional clinical trial requirements, which could result in increased costs to Ocuphire or delays in its development timeline.

Changes in regulatory requirements or FDA guidance, or unanticipated events during Ocuphire's clinical trials, may force Ocuphire to amend clinical trial protocols or the FDA may impose additional clinical trial requirements. Amendments to Ocuphire's clinical trial protocols would require resubmission to the FDA and IRBs for review and approval, and may adversely impact the cost, timing or successful completion of a clinical trial. If Ocuphire experiences delays completing, or if it terminates, any Phase 2 or Phase 3 trials, or if it is required to conduct additional clinical trials, the commercial prospects for its product candidates may be harmed and its ability to generate product revenues will be delayed.

If Ocuphire fails to receive regulatory approval for any of its planned indications for its product candidates or fails to develop additional product candidates, Ocuphire's commercial opportunity will be limited.

Ocuphire is initially focused on the development of its product candidates for its target indications, the treatment of NVD, pharmacologically-induced mydriasis, presbyopia, DR and DME. However, Ocuphire cannot assure you that it will be able to obtain regulatory approval of its product candidates for any indication, or successfully commercialize its product candidates, if approved. If Ocuphire does not receive regulatory approval for, or successfully commercialize, its product candidates for one or more of its targeted or other indications, Ocuphire's commercial opportunity will be limited.

Ocuphire may pursue clinical development of additional acquired or in-licensing product candidates. Developing, obtaining regulatory approval for and commercializing additional product candidates will require substantial additional funding beyond the net proceeds of the Pre-Merger Financing, and are prone to the risks of failure inherent in drug product development. Ocuphire cannot assure you that it will be able to successfully advance any additional product candidates through the development process.

Even if it obtains FDA approval to market additional product candidates, Ocuphire cannot assure you that any such product candidates will be successfully commercialized, widely accepted in the marketplace, or more effective than other commercially available alternatives. If Ocuphire is unable to successfully develop and commercialize additional product candidates, its commercial opportunity will be limited.

Ocuphire has limited drug research and discovery capabilities and may need to acquire or license product candidates from third parties to expand its product candidate pipeline.

Ocuphire currently has limited drug research and discovery capabilities. Accordingly, if it is to expand its product candidate pipeline beyond Nyxol and APX3330 and its pipeline candidates, Ocuphire may need to acquire

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or license product candidates from third parties. Ocuphire would face significant competition in seeking to acquire or license promising product candidates. Many of its competitors for such promising product candidates may have significantly greater financial resources and more extensive experience in preclinical testing and clinical trials, obtaining regulatory approvals, and manufacturing and marketing pharmaceutical products, and thus, may be a more attractive option to a potential licensor than Ocuphire. If Ocuphire is unable to acquire or license additional promising product candidates, it may not be able to expand its product candidate pipeline.

If Ocuphire is able to acquire or license other product candidates, such license agreements will likely impose various obligations upon it, and its licensors may have the right to terminate the license thereunder in the event of a material breach or, in some cases, at will. A termination of a future license could result in Ocuphire's loss of the right to use the licensed intellectual property, which could adversely affect Ocuphire's ability to develop and commercialize a future product candidate, if approved, as well as harm its competitive business position and its business prospects.

Ocuphire may expend its limited resources to pursue a particular indication and fail to capitalize on indications that may be more profitable or for which there is a greater likelihood of success.

Because Ocuphire has limited financial and managerial resources, it is currently focusing only on development programs that it identifies for specific indications for its product candidates. As a result, Ocuphire may forego or delay pursuit of opportunities for other indications, or with other potential product candidates that later prove to have greater commercial potential. Ocuphire's resource allocation decisions may cause it to fail to capitalize on viable commercial products or profitable market opportunities. Ocuphire's spending on current and future research and development programs for specific indications or future product candidates may not yield any commercially viable product. If Ocuphire does not accurately evaluate the commercial potential or target market for its product candidates, it may not gain approval or achieve market acceptance of that candidate, and its business and financial results will be harmed.

Risks Related to Ocuphire's Financial Position and Need for Additional Capital

Ocuphire has incurred only losses since inception. Ocuphire expects to incur losses for the foreseeable future and may never achieve or maintain profitability.

Since inception, Ocuphire incurred only operating losses. Prior to the Merger, Ocuphire Private Company's net losses were approximately \$6.2 million and \$1.6 million for the years ended December 31, 2019 and 2018, respectively, and \$5.9 million for the nine-month period ended September 30, 2020. As of September 30, 2020, Ocuphire Private Company had an accumulated deficit of \$14 million. Ocuphire has funded its operations primarily through issuance of common stock, warrants, promissory notes and convertible notes in private placements. It has devoted substantially all of its financial resources and efforts on research and development, including clinical development of its product candidates. Even assuming Ocuphire obtains regulatory approval for one or more of its product candidates, Ocuphire expects that it will be at least three years before it has a product candidate ready for commercialization. Ocuphire expects to continue to incur significant expenses and increased operating losses for the foreseeable future.

To become and remain profitable, Ocuphire must develop and eventually commercialize a product with market potential. This will require Ocuphire to be successful in a range of challenging activities, including completing preclinical testing and clinical trials, obtaining regulatory approval for a product candidate, manufacturing, marketing, and selling any drug for which it may obtain regulatory approval and satisfying any post-marketing requirements. Ocuphire is in the early stages of most of these activities. Ocuphire may never succeed in these activities and, even if it does, it may never generate revenues that are significant or large enough to achieve profitability.

If Ocuphire does achieve profitability, it may not be able to sustain or increase profitability on an annual basis. Its failure to become or remain profitable may decrease Ocuphire's value and could impair its ability to raise capital, maintain its research and development efforts, expand its business, or continue its operations.

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Ocuphire has not generated any revenue and may never be profitable.

Ocuphire's ability to become profitable depends upon its ability to generate revenue. To date, Ocuphire has not generated any revenue from its product candidates, Nyxol and APX3330, and it does not currently have any other products or product candidates. Ocuphire does not know if, or when, it will generate any revenue. Ocuphire does not expect to generate significant revenue unless and until it obtains marketing approval of, and commercializes, Nyxol or APX3330. Ocuphire's ability to generate revenue depends on a number of factors, including its ability to:

- obtain favorable results from and complete the clinical development of both Nyxol and APX3330 for their planned indications, including successful completion of the Phase 2 and Phase 3 trials for these indications;
- submit an application to regulatory authorities for both product candidates and receive marketing approval in the United States and foreign countries;
- contract for the manufacture of commercial quantities of its product candidates at acceptable cost levels;
- establish sales and marketing capabilities to effectively market and sell its product candidates in the United States or other markets, alone or with a pharmaceutical partner; and
- achieve market acceptance of its product candidates in the medical community and with third-party payors.

Even if Ocuphire's product candidates are approved for commercial sale in one or all of the initial indications that it is pursuing, they may not gain market acceptance or achieve commercial success. In addition, Ocuphire anticipates incurring significant costs associated with commercializing its product candidates. Ocuphire may not achieve profitability soon after generating product revenue, if ever, and may be unable to continue operations without continued funding.

Ocuphire's recurring operating losses have raised substantial doubt regarding its ability to continue as a going concern.

Ocuphire's recurring operating losses raise substantial doubt about its ability to continue as a going concern. For the fiscal year ended December 31, 2019, its independent registered public accounting firm has issued its report on Ocuphire's financial statements and has expressed substantial doubt about its ability to continue as a going concern. Ocuphire has no current source of revenue to sustain its present activities, and it does not expect to generate revenue until and unless the FDA or other applicable regulatory authorities approves, and it successfully commercializes, its product candidates. Accordingly, Ocuphire's ability to continue as a going concern will require it to obtain additional financing to fund its operations. Uncertainty surrounding Ocuphire's ability to continue as a going concern may make it more difficult for it to obtain financing for the continuation of its operations and could result in a loss of confidence by investors, suppliers, contractors, and employees.

Ocuphire's relatively short operating history may make it difficult for investors to evaluate the success of its business to date and to assess its future viability.

Ocuphire is a clinical-stage company, and its operations to date have been limited to organizing and staffing its company, business planning, raising capital, and developing its product candidates. Ocuphire has not yet demonstrated its ability to successfully complete a Phase 3 program, obtain regulatory approval, manufacture a product at commercial scale, or conduct sales and marketing activities necessary for successful product commercialization.

Additionally, there is no operating history on which you may evaluate this business and its prospects. Investment in a start-up company such as Ocuphire is inherently subject to many risks. These risks and difficulties include challenges in accurate financial planning as a result of: (a) accumulated losses; (b) uncertainties resulting from a relatively limited time period in which to develop and evaluate business strategies as compared to companies with longer operating histories; (c) compliance with regulation required to commence sales on some future products; (d) reliance on third parties for operations; (e) financing the business; and (f) meeting the challenges of the other risk factors described herein. Ocuphire has no operating history upon which investors may base an evaluation of its performance; therefore, it is subject to all risks incident to the creation and development of a new business. There can be no assurance that Ocuphire can realize its plans on the projected timetable in order to reach sustainable or profitable operations.

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Ocuphire will need substantial additional capital in the future. If additional capital is not available, it will have to delay, reduce or cease operations.

Although Ocuphire believes that the net proceeds from the Pre-Merger Financing, together with cash on hand, will be sufficient to fund its operations through 2021, Ocuphire will need to raise additional capital to continue to fund the further development of its product candidates and operations. Its future capital requirements may be substantial and will depend on many factors including:

- the scope, size, rate of progress, results, and costs of researching and developing its product candidates, and initiating and completing its preclinical studies and clinical trials;
- the cost, timing and outcome of its efforts to obtain marketing approval for its product candidates in the United States and other countries, including to fund the preparation and filing of an NDA with the FDA for its product candidates and to satisfy related FDA requirements and regulatory requirements in other countries;
- the number and characteristics of any additional product candidates it develops or acquires, if any;
- Ocuphire's ability to establish and maintain collaborations on favorable terms, if at all;
- the amount of revenue, if any, from commercial sales, should its product candidates receive marketing approval;
- the costs associated with commercializing its product candidates, if Ocuphire receives marketing approval, including the cost and timing of developing sales and marketing capabilities or entering into strategic collaborations to market and sell its product candidates;
- the cost of manufacturing its product candidates or products Ocuphire successfully commercializes; and
- the costs associated with general corporate activities, such as the cost of filing, prosecuting and enforcing patent claims and making regulatory filings.

Changing circumstances may cause Ocuphire to consume capital significantly faster than it currently anticipates. Because the outcome of any clinical trial is highly uncertain, Ocuphire cannot reasonably estimate the actual amounts necessary to successfully complete the development, regulatory approval and commercialization of its product candidates. Additional financing may not be available when Ocuphire needs it, or may not be available on terms that are favorable to Ocuphire. In addition, Ocuphire may seek additional capital due to favorable market conditions or strategic considerations, even if Ocuphire believes it has sufficient funds for its current or future operating plans. If adequate funds are unavailable to it on a timely basis, or at all, Ocuphire may not be able to continue the development its product candidates, or commercialize its product candidates, if approved, unless it finds a strategic partner.

Raising additional capital may cause dilution to Ocuphire's stockholders, restrict Ocuphire's operations, or require Ocuphire to relinquish rights to its technologies or product candidates.

Until such time, if ever, as Ocuphire can generate substantial product revenues, it expects to finance its cash needs through a combination of equity and debt financings as well as potential strategic collaborations and licensing arrangements. It does not have any committed external source of funds. Debt financing or preferred equity financing, if available, may involve agreements that include covenants limiting or restricting Ocuphire's ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If Ocuphire raises funds through strategic collaborations or marketing, distribution, or licensing arrangements with third parties, it may have to relinquish valuable rights to its technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to it. If it is unable to raise additional funds when needed, Ocuphire may be required to delay, limit, reduce or terminate its product development or future commercialization efforts or grant rights to develop and market product candidates that it would otherwise prefer to develop and market itself. This may reduce the value of its common stock.

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Risks Related to Government Regulation

The FDA requires the completion of a toxicology study of similar duration before trials longer than 6 months can be conducted such as Phase 3 safety exposure trials for chronic indications or efficacy trials with such 6 month endpoints. This may lead to a significant delay in the commencement of long term clinical trials by Ocuphire or the failure of its product candidates to obtain marketing approval.

At this time, Ocuphire can run trials using Nyxol up to 28 days in duration based on its completed 28-day rabbit toxicology study. Therefore, the planned Phase 3 registration efficacy trials for NVD, with dosing for 7 to 14 days, may be conducted without further toxicology studies. Until Ocuphire has completed a six-month toxicology for Nyxol, FDA regulations restrict it from conducting clinical trials of six months or more in duration targeting chronic indications, which at this time is only the planned 1 year Phase 3 safety exposure trial for NVD. Ocuphire plans to initiate the in-life portion of the six-month toxicology study in rabbits for Nyxol in the first quarter of 2021, with an expected completion and draft report 12 months later. For APX3330, the drug has already been dosed for more than a year in humans and completed over 15 single- and repeat-dose toxicology studies in rats and dogs (including 2 studies up to 3 months in duration); with this data the FDA has reviewed, with no comments, Ocuphire's planned 24 week clinical trial without the need for further toxicology studies needed. However, the FDA may require Ocuphire to complete further animal toxicology studies for future clinical trials prior to any marketing approval from regulatory authorities for the sale of APX3330. Clinical trials may be delayed due to these clinical restrictions and additional oversight by the FDA. In addition, the findings in the toxicology studies could impact the NDA reviews, and, if approved, labels and uses of Ocuphire's product candidates.

Even if it receives marketing approval for its product candidates in the United States, Ocuphire may never receive regulatory approval to market such product candidates outside of the United States.

In addition to the United States, Ocuphire intends to seek regulatory approval to market its product candidates in Europe, Japan, Canada, and Australia, and potentially other markets. If Ocuphire pursues additional product candidates in the future, it may seek regulatory approval of such product candidates outside the United States. In order to market any product outside of the United States, however, Ocuphire must establish and comply with the numerous and varying safety, efficacy and other regulatory requirements of these other countries. Approval procedures vary among countries and can involve additional product candidate testing and additional administrative review periods. The time required to obtain approvals in other countries might differ from that required to obtain FDA approval. The marketing approval processes in other countries may include all of the risks detailed above regarding FDA approval in the United States as well as other risks. In particular, in many countries outside of the United States, products must receive pricing and reimbursement approval before the product can be commercialized. Obtaining this approval can result in substantial delays in bringing products to market in such countries. Marketing approval in one country does not ensure marketing approval in another, but a failure or delay in obtaining marketing approval in one country may have a negative effect on the regulatory process in others. Failure to obtain marketing approval in other countries or any delay or other setback in obtaining such approval would impair Ocuphire's ability to market its product candidates in such foreign markets. Any such impairment would reduce the size of Ocuphire's potential market, which could have an adverse impact on its business, results of operations and prospects.

Even if Ocuphire obtains marketing approval for its product candidates, such product candidates could be subject to post-marketing restrictions or withdrawal from the market, and Ocuphire may be subject to substantial penalties if it fails to comply with regulatory requirements or experience unanticipated problems with a product following approval.

Any product candidate for which Ocuphire, or its future collaborators, obtains marketing approval in the future, as well as the manufacturing processes, post-approval studies and measures, labeling, advertising, and promotional activities for such drug, among other things, will be subject to continual requirements of and review by the FDA and other regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping. Even if marketing approval of a product candidate is granted, the approval may be subject to limitations on the indicated uses for which the drug may be marketed or to the conditions of approval, including the requirement to implement a REMS, which could include requirements for a restricted distribution system.

The FDA may also impose requirements for costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of a product candidate. The FDA and other agencies, including the Department of

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Justice, closely regulate and monitor the post-approval marketing and promotion of drugs to ensure that they are manufactured, marketed, and distributed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA imposes stringent restrictions on manufacturers' communications regarding off-label use and if Ocuphire, or any future collaborator, does not market a product candidate for which it receives marketing approval for only its approved indications, Ocuphire, or the collaborator, may be subject to warnings or enforcement action for off-label promotion. Violation of the Federal Food, Drug, and Cosmetic Act ("FDCA") and other statutes, including the False Claims Act, relating to the promotion and advertising of prescription drugs, may lead to investigations or allegations of violations of federal or state healthcare fraud and abuse laws and state consumer protection laws.

In addition, later discovery of previously unknown AEs or other problems with Ocuphire's product candidates or its manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- litigation involving patients taking Ocuphire's drugs;
- restrictions on such drugs, manufacturers, or manufacturing processes;
- restrictions on the labeling or marketing of a drug;
- restrictions on drug distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning letters or untitled letters;
- withdrawal of the drugs from the market;
- refusal to approve pending applications or supplements to approved applications that Ocuphire submits;
- product recall or public notification or medical product safety alerts to healthcare professionals;
- fines, restitution, or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- damage to relationships with any potential collaborators;
- unfavorable press coverage and damage to Ocuphire's reputation;
- refusal to permit the import or export of drugs;
- product seizure;
or
- injunctions or the imposition of civil or criminal penalties.

Ocuphire may seek to avail itself of mechanisms to expedite the development or approval for product candidates it may pursue in the future, such as fast track or breakthrough designation, but such mechanisms may not actually lead to a faster development or regulatory review or approval process.

Ocuphire may seek fast track designation, breakthrough designation, orphan drug designation, priority review, or accelerated approval for product candidates it may pursue in the future. For example, if a drug is intended for the treatment of a serious or life-threatening condition and the drug demonstrates the potential to address unmet medical needs for this condition, the drug sponsor may apply for FDA fast track designation. However, the FDA has broad discretion with regard to these mechanisms, and even if Ocuphire believes a particular product candidate is eligible for any such mechanism, it cannot guarantee that the FDA would decide to grant it. Even if it does obtain fast track or priority review designation or pursue an accelerated approval pathway, Ocuphire may not experience a faster development process, review, or approval compared to conventional FDA procedures. The FDA may withdraw a particular designation if it believes that the designation is no longer supported by data from Ocuphire's clinical development program.

A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints. Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if Ocuphire believes a product candidate meets the criteria for designation as a breakthrough therapy, the FDA may disagree and

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instead determine not to make such designation. Ocuphire cannot be sure that its evaluation of a product candidate as qualifying for breakthrough therapy designation will meet the FDA's requirements. In any event, the receipt of a breakthrough therapy designation for a product candidate may not result in a faster development process, review, or approval compared to conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if one or more product candidates qualifies as a breakthrough therapy, the FDA may later decide that the product candidate no longer meets the conditions for qualification or may decide that the time period for FDA review or approval will not be shortened.

Recently enacted and future legislation may increase the difficulty and cost for Ocuphire and its future collaborators to obtain marketing approval of its product candidates and affect their pricing.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of a product candidate, restrict or regulate post-approval activities and affect Ocuphire's ability, or the ability of its future collaborators, to profitably sell any drug for which it, or they, obtains marketing approval. Ocuphire expects that current laws, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and cause downward pressure on the price that Ocuphire, or its future collaborators, may charge for any approved drug.

For example, in March 2010, the United States Congress enacted the Patient Protection and Affordable Care Act ("PPACA") and the Health Care and Education Reconciliation Act, or the Healthcare Reform Act, which expanded health care coverage through Medicaid expansion and the implementation of the individual mandate for health insurance coverage and which included changes to the coverage and reimbursement of drug products under government healthcare programs. Under the Trump administration, there have been ongoing efforts to modify or repeal all or certain provisions of the Healthcare Reform Act. For example, tax reform legislation was enacted at the end of 2017 that eliminates the tax penalty established under Healthcare Reform Act for individuals who do not maintain mandated health insurance coverage beginning in 2019. The Healthcare Reform Act has also been subject to judicial challenge. In December 2018, a federal district court, in a challenge brought by a number of state attorneys general, found the Healthcare Reform Act unconstitutional in its entirety because, once Congress repealed the individual mandate provision, there was no longer a basis to rely on Congressional taxing authority to support enactment of the law. Pending appeals, which could take some time, the Healthcare Reform Act is still operational in all respects.

There have also been other reform initiatives under the Trump Administration, including initiatives focused on drug pricing. For example, the Bipartisan Budget Act of 2018 contained various provisions that affect coverage and reimbursement of drugs, including an increase in the discount that manufacturers of Medicare Part D brand name drugs must provide to Medicare Part D beneficiaries during the coverage gap from 50% to 70% that took effect in 2019. As another example, in May of 2018, President Trump and the Secretary of the Department of Health and Human Services, or HHS, released a "blueprint" to lower prescription drug prices and out-of-pocket costs. Certain proposals in the blueprint, and related drug pricing measures proposed since the blueprint, could cause significant operational and reimbursement changes for the pharmaceutical industry. As another example, in November of 2018, CMS issued an advance notice of proposed rulemaking that proposed revisions to Medicare Part D to support health plans' negotiation of lower drug prices with manufacturers and reduce health plan members' out-of-pocket costs.

There have also been efforts by federal and state government officials or legislators to implement measures to regulate prices or payment for pharmaceutical products, including legislation on drug importation. Recently, there has been considerable public and government scrutiny of pharmaceutical pricing and proposals to address the perceived high cost of pharmaceuticals. There have also been recent state legislative efforts to address drug costs, which generally have focused on increasing transparency around drug costs or limiting drug prices.

General legislative cost control measures may also affect reimbursement for Ocuphire's product candidates. The Budget Control Act, as amended, resulted in the imposition of 2% reductions in Medicare (but not Medicaid) payments to providers in 2013 and will remain in effect through 2027 unless additional Congressional action is taken. Any significant spending reductions affecting Medicare, Medicaid or other publicly funded or subsidized health programs that may be implemented and/or any significant taxes or fees that may be imposed on Ocuphire could have an adverse impact on results of operations.

Adoption of new legislation at the federal or state level could affect demand for, or pricing of, Ocuphire's current or future products if approved for sale. Ocuphire cannot, however, predict the ultimate content, timing or effect of

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any changes to the Healthcare Reform Act or other federal and state reform efforts. There is no assurance that federal or state health care reform will not adversely affect Ocuphire's future business and financial results.

There have been judicial and congressional challenges and amendments to certain aspects of the PPACA, and Ocuphire expects there will be additional challenges and amendments to the PPACA in the future, as well as efforts to repeal and replace it. In addition, other legislative changes have been proposed and adopted since the PPACA was enacted. These new laws have resulted in additional reductions in Medicare and other healthcare funding and otherwise may affect the prices Ocuphire may obtain for any product candidate for which marketing approval is obtained. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors. Moreover, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products. The implementation of cost containment measures or other healthcare reforms may prevent Ocuphire from being able to generate revenue, attain profitability, or commercialize its drugs.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. Ocuphire cannot be sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance, or interpretations will be changed, or what the impact of such changes on the marketing approvals of a product candidate, if any, may be. In addition, increased scrutiny by the U.S. Congress of the FDA's approval process may significantly delay or prevent marketing approval, or subject Ocuphire or its future collaborators to more stringent drug labeling and post-marketing testing and other requirements.

Governments outside of the United States tend to impose strict price controls, which may adversely affect Ocuphire's revenues from the sales of a drug, if any.

In some countries, particularly in the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a drug. To obtain reimbursement or pricing approval in some countries, Ocuphire, or its future collaborators, may be required to conduct a clinical trial that compares the cost-effectiveness of its products to other available therapies. If reimbursement of Ocuphire's drugs are unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, its business could be harmed.

Ocuphire's relationships with healthcare providers and third-party payors will be subject to applicable fraud and abuse and other healthcare laws and regulations, which could expose Ocuphire to criminal sanctions, civil penalties, contractual damages, reputational harm, and diminished profits and future earnings, among other penalties and consequences.

Healthcare providers and third-party payors will play a primary role in the recommendation and prescription of any product candidate for which Ocuphire obtains marketing approval. Ocuphire's current and future arrangements with third-party payors and customers may expose Ocuphire to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which it markets, sells, and distributes product candidates for which it obtains marketing approval. Restrictions and obligations under applicable federal and state healthcare laws and regulations include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid;
- the federal false claims and civil monetary penalties laws, including the civil False Claims Act, impose criminal and civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease, or conceal an obligation to pay money to the federal government;
- HIPAA imposes criminal and civil liability for, among other things, executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

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- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and its implementing regulations, also imposes obligations, including mandatory contractual terms, on certain people and entities with respect to safeguarding the privacy, security, and transmission of individually identifiable health information;
- the federal Physician Payments Sunshine Act under the Affordable Care Act requires certain manufacturers of drugs, devices, biologics, and medical supplies for which payment is available under Medicare, Medicaid, or the Children’s Health Insurance Program, with specific exceptions, to report specially to the Centers for Medicare & Medicaid Services within the U.S. Department of Health and Human Services information related to physician payments and other transfers of value and physician ownership and investment interests; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, and some state laws require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, in addition to requiring drug manufacturers to report information related to payments to physicians and other healthcare providers or marketing expenditures. Certain state and foreign laws also govern the privacy and security of health information in ways that differ from each other and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that Ocuphire’s current and future business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that Ocuphire’s business practices may not comply with current or future statutes, regulations, or case law involving applicable fraud and abuse or other healthcare laws and regulations. If Ocuphire’s operations are found to be in violation of any of these laws or any other governmental regulations that may apply to it, it may be subject to significant civil, criminal, and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Medicare and Medicaid, disgorgement, individual imprisonment, contractual damages, reputational harm, diminished profits and future earnings, and the curtailment or restructuring of its operations. If any of the physicians or other providers or entities with whom Ocuphire expects to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil, and administrative sanctions, including exclusions from government funded healthcare programs. Defending against any such actions can be costly, time-consuming, and may require significant financial and personnel resources. Therefore, even if Ocuphire is successful in defending against any such actions that may be brought against it, its business may be impaired.

Ocuphire is subject to U.S. and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws, and anti-money laundering laws and regulations. Compliance with these legal standards could impair its ability to compete in domestic and international markets. Ocuphire could face criminal liability and other serious consequences for violations which could harm its business.

Ocuphire is subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, various economic and trade sanctions regulations administered by the U.S. Treasury Department’s Office of Foreign Assets Controls, the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and other state and national anti-bribery and anti-money laundering laws in the countries in which Ocuphire conducts activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors, and other partners from authorizing, promising, offering, or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. Ocuphire may engage third parties for clinical trials outside of the United States, to sell its products abroad once it enters a commercialization phase, and/or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals. Ocuphire has direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. Ocuphire can be held liable for the corrupt or other illegal activities of its employees, agents, contractors, and other partners, even if it does not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences.

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Ocuphire employees may engage in misconduct or other improper activities, including violating applicable regulatory standards and requirements or engaging in insider trading, which could significantly harm Ocuphire's business.

Ocuphire is exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include intentional failures to:

- comply with the regulations of the FDA and applicable non-U.S. regulators;
- provide accurate information to the FDA and applicable non-U.S. regulators;
- comply with healthcare fraud and abuse laws and regulations in the United States and abroad;
- report financial information or data accurately;
or
- disclose unauthorized activities to Ocuphire.

In particular, sales, marketing, and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing, and other abusive practices. These laws and regulations restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs, and other business arrangements. Employee misconduct could also involve the improper use of, including trading on, information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to Ocuphire's reputation. It is not always possible to identify and deter employee misconduct, and the precautions Ocuphire takes to detect and prevent this activity may be ineffective in controlling unknown or unmanaged risks or losses or in protecting it from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against Ocuphire, and Ocuphire is not successful in defending itself or asserting its rights, those actions could have a significant impact on its business, including the imposition of significant civil, criminal, and administrative penalties, damages, fines, exclusion from government funded healthcare programs such as Medicare and Medicaid, disgorgement, individual imprisonment, contractual damages, reputational harm, diminished profits and future earnings, and the curtailment or restructuring of its operations.

The FDA and other regulatory agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses. If found to have improperly promoted off-label uses, Ocuphire may become subject to significant liability.

The FDA and other regulatory agencies strictly regulate the promotional claims that may be made about prescription products. In particular, a product may not be promoted for uses that are not approved by the FDA or such other regulatory agencies as reflected in the product's approved labeling. If Ocuphire receives marketing approval for its product candidates for a certain indication, physicians may nevertheless prescribe such products to their patients in a manner that is inconsistent with the approved label. If Ocuphire is found to have promoted such off-label uses, it may become subject to significant liability. The federal government has levied large civil and criminal fines against companies for improper promotion and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed. If Ocuphire cannot successfully manage the promotion of its product candidates, if approved, it could become subject to significant liability, which would adversely affect its business and financial condition.

Risks Related to Commercialization of Ocuphire's Product Candidates

Ocuphire faces substantial competition, which may result in others discovering, developing, or commercializing products before or more successfully than it does.

The development and commercialization of new drug products is highly competitive. Ocuphire expects to face competition with respect to its product candidates, if approved, and will face competition with respect to any future product candidates that it may seek to develop or commercialize from major pharmaceutical companies, specialty pharmaceutical companies, biotechnology companies, universities and other research institutions, and government agencies worldwide. The ophthalmic therapies market is highly competitive and dynamic. Ocuphire's success will depend, in part, on its ability to obtain a share of the market for its planned indications.

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Nyxol

Ocuphire is developing Nyxol for use in three different indications: the treatment of NVD, the reversal of pharmacologically induced mydriasis (“RM”), and the treatment of presbyopia. In addition to currently approved therapies, any product that is developed for any of the three indications could compete with Nyxol. Such a product could reduce the overall market opportunity for Nyxol. Other pharmaceutical companies may develop therapies for the same indications that would compete with Nyxol, if approved, and that would not infringe the claims of Ocuphire’s patents, pending patent applications, or other proprietary rights, which could adversely affect its business and results of operations.

Currently, there are no available and approved pharmacological therapies for NVD or RM and Ocuphire is not aware of any in development. Rev-Eyes® (dapiprazole), an alpha-1 antagonist, was approved by the FDA in 1990 to reverse mydriasis induced by adrenergic or anticholinergic agents. Rev-Eyes was withdrawn in the past from the market for reasons unrelated to safety or efficacy, according to the FDA.

Presbyopia

There are currently no approved pharmacological treatments for presbyopia, though several drug treatments are in development. Currently, the competition includes reading glasses, multifocal contact lenses, and monovision contact lenses (i.e., where one eye wears a near vision lens and the other eye wears a distance vision lens). Ocuphire will also compete against several pharmacological therapies in development for the temporary treatment of presbyopia, some of which are pilocarpine-based pupil management therapies, including:

- Presbysol® (AGN-190584), with 1.25% pilocarpine, developed by Allergan plc.
- Presbidrops® (CSF-1), with low dose pilocarpine and a secondary agent (lubricant), developed by Orasis Pharmaceuticals Ltd.
- Liquid Vision®, with aceclidine (another miotic agent), developed by Presbyopia Therapies, LLC.
- MicroLine®, which is a microdose formulation of pilocarpine, developed by Eyenovia, Inc.
- KT-101, which uses pilocarpine in the AcuStream delivery system, developed by Kedalion Therapeutics, Inc.
- Brimochol™, with brimonidine and carbachol (both are miotic agents), developed by Visus Therapeutics, Inc.
- UNR844, which uses a mechanism that involves softening the lens to increase near visual acuity, developed by Novartis AG (originally Encore Vision, Inc.).

There are approved devices for presbyopia. One of these is the KAMRA Inlay, developed by AcuFocus, Inc. and marketed by SightLife Surgical, Inc. Another is the Eyelike NoanPinhole, developed by Koryo Eyetechnology, Inc., the first commercially available pinhole soft contact lens. Nyxol would not directly compete against these devices, but rather would be a non-invasive alternative for presbyopes who are averse to surgical intervention.

Glaucoma

Ocuphire may work with a partner to develop a combination approach with Nyxol and Latanoprost as a potential treatment strategy for glaucoma patients, and would face substantial competition. Glaucoma has many approved generic and prescription drug and non-drug treatments including: rho kinase inhibitors Rhopressa® and Rocklatan®, marketed by Aerie Pharmaceuticals, Inc.; latanoprostene bunod Vyzulta®, marketed by Bausch + Lomb, Inc.; prostaglandin analogues (“PGAs”), such as latanoprost; beta blockers, such as timolol; alpha agonists, such as brimonidine; carbonic anhydrase inhibitors, such as dorzolamide hydrochloride; cholinergic agonists, such as pilocarpine; combination therapies, such as Combigan®, marketed by Allergan, Inc., which combines brimonidine and timolol; and minimally invasive glaucoma surgery (“MIGS”).

APX3330

Ocuphire is developing APX3330 for use in two different indications initially: the treatment of DR and DME, and potentially later the treatment of wAMD. In addition to currently approved therapies, any product that is developed for either of the three indications could directly compete directly with APX3330. Such a product could reduce the overall market opportunity for APX3330. Other pharmaceutical companies may develop therapies for the

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same indications that would compete with APX3330, if approved, and that would not infringe the claims of Ocuphire's in-licensed patents, pending patent applications, or other proprietary rights, which could adversely affect its business and results of operations.

Competition in Diabetic Retinopathy / Diabetic Macular Edema / wAMD

Ocuphire may face potential competition from both existing therapies and those in development. Current therapies for these retinal diseases rely on suppressing VEGF activity via intravitreal injection or by mitigating the inflammation via intravitreal corticosteroid-releasing implants including:

- Lucentis® (ranibizumab) and Avastin® (bevacizumab), which are anti-VEGF monoclonal antibody intravitreal injections, developed by Genentech, Inc.
- EYLEA® (aflibercept), a VEGF inhibitor intravitreal injection, developed by Regeneron Pharmaceuticals.
- Beovu® Brolucizumab, an anti-VEGF monoclonal antibody intravitreal injection, developed by Novartis AG.
- MACUGEN® (pegaptanib sodium injection), a selective inhibitor of VEGF-165, developed by Bausch + Lomb.
- Ozurdex® (dexamethasone), a corticosteroid IVT implant, developed by Allergan plc.
- Iluvien (fluocinolone acetonide), a corticosteroid IVT implant, developed by Alimera Sciences, Inc.
- There are also several pharmacological therapies in development, including:
- Abicipar, an anti-VEGF intravitreal injection with a long duration of action, developed by Allergan plc and Molecular Partners.
- Farcimab, a bispecific antibody intravitreal injection that suppresses both VEGF and Angiopoietin-2, developed by Genentech, Inc. and Roche AG.
- KSI-301, an anti-VEGF antibody intravitreal injection coupled with a biopolymer that is intended to increase the time between injections, developed by Kodiak Sciences.
- OPT-302, an intravitreal injection which binds to multiple types of VEGF receptors that could be used with other anti-VEGF agents, developed by Opthea Limited.
- ALG-1001, an integrin peptide therapy intravitreal injection that is being evaluated as a sequential or in-combination therapy with bevacizumab in patients with DME, developed by Allegro Ophthalmics, LLC.

Ocuphire's competitors may develop products that are more effective, safer, more convenient, or less costly than any that it is developing, or that would render its product candidates obsolete or non-competitive. Ocuphire's competitors may also render its technologies obsolete by advances in existing technological approaches or the development of new or different approaches, potentially eliminating the advantages in Ocuphire's drug discovery process. Ocuphire's competitors may also obtain marketing approval from the FDA or other regulatory authorities for its products more rapidly than Ocuphire obtains approval for its products, which could result in Ocuphire's competitors establishing a strong market position before Ocuphire is able to enter the market.

Many of Ocuphire's competitors have significantly greater name recognition, financial resources, and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products than Ocuphire does. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of Ocuphire's competitors. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These companies compete with Ocuphire in recruiting, hiring, and retaining qualified scientific and management personnel, engaging contract service providers, manufacturers and consultants, establishing clinical trial sites, recruiting patients for clinical trials, and entering into strategic transactions, as well as in acquiring technologies complementary to, or necessary for, Ocuphire's programs.

Ocuphire lacks experience in commercializing products, which may have an adverse effect on its business.

If its product candidates receive marketing approval, Ocuphire will need to transition from a company with a development focus to a company capable of supporting commercial activities, and it may not be successful in making

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that transition. Ocuphire has never filed an NDA, and has not yet demonstrated the ability to obtain marketing approval for, or to commercialize, any product candidate. As a result, its clinical development and regulatory approval activities, and its ability to successfully commercialize any approved products, may involve more inherent risk, take longer, and cost more than would be the case if it were a company with experience obtaining marketing approval for and commercializing a product candidate.

If Ocuphire is unable to establish sales and marketing capabilities or enter into agreements with third parties to sell, market, and distribute its product candidates, if approved, it may not be successful in commercializing such product candidates if and when they are approved.

Ocuphire does not have any sales or marketing infrastructure and have no capabilities in place at the present time for the sale, marketing, or distribution of pharmaceutical products. To achieve commercial success for any approved product for which it retains sales and marketing responsibilities, Ocuphire must either develop a sales and marketing organization or outsource part or all of these functions to other third parties.

There are risks involved with Ocuphire both establishing its own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time-consuming, which could delay any product launch. If the commercial launch of a product candidate for which Ocuphire recruits a sales force and establish marketing capabilities is delayed or does not occur for any reason, it would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and Ocuphire's investment would be lost if it cannot retain or reposition its sales and marketing personnel.

Factors that may inhibit Ocuphire's efforts to commercialize its product candidates on its own include:

- the inability to recruit and retain adequate numbers of effective sales and marketing personnel or enter into distribution agreements with third parties;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe its product candidate;
- the lack of complementary products to be offered by sales personnel, which may put Ocuphire at a competitive disadvantage relative to companies with more extensive product lines;
- unforeseen costs and expenses associated with creating an independent sales and marketing organization; and
- the inability to obtain sufficient coverage and reimbursement from third-party payors and governmental agencies.

If it enters into arrangements with third parties to perform sales, marketing, and distribution services, Ocuphire's product revenues or the profitability of these product revenues to it are likely to be lower than if it were to market and sell a product that Ocuphire developed itself. In addition, Ocuphire may not be successful in entering into arrangements with third parties to sell and market any product candidate or may be unable to do so on terms that are favorable to it. Ocuphire likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market a drug effectively. If Ocuphire does not establish sales and marketing capabilities successfully, either on its own or in collaboration with third parties, it will not be successful in commercializing its product candidates.

Ocuphire's future commercial success depends upon attaining significant market acceptance of its product candidates, if approved, among physicians, patients, third-party payors, and others in the medical community.

Even if Ocuphire's product candidates receive marketing approval, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, healthcare payors, or others in the medical community. If such product candidates do not achieve an adequate level of acceptance, Ocuphire may not generate significant product revenues and may not become profitable. The degree of market acceptance of a product candidate, if approved for commercial sale, will depend on a number of factors, including:

- efficacy and potential advantages compared to alternative treatments;
- the ability to offer Ocuphire's product for sale at competitive prices;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;

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- any restrictions on the use of Ocuphire’s product together with other medications;
- interactions of its product with other medicines patients are taking;
- inability of certain types of patients to take Ocuphire’s product;
- demonstrated ability to treat patients and, if required by any applicable regulatory authority in connection with the approval for target indications as compared with other available therapies;
- the relative convenience and ease of administration as compared with other treatments available for approved indications;
- the prevalence and severity of any adverse side effects;
- limitations or warnings contained in the labeling approved by the FDA;
- availability of alternative treatments already approved or expected to be commercially launched in the near future;
- the effectiveness of Ocuphire’s sales and marketing strategies;
- Ocuphire’s ability to increase awareness through marketing efforts;
- guidelines and recommendations of organizations involved in research, treatment and prevention of various diseases that may advocate for alternative therapies;
- Ocuphire’s ability to obtain sufficient third-party coverage and adequate reimbursement;
- the willingness of patients to pay out-of-pocket in the absence of third-party coverage; and
- physicians or patients may be reluctant to switch from existing therapies even if potentially more effective, safe or convenient.

Ocuphire has not yet sold any of its products. Ocuphire cannot assure investors that there is a sufficient market demand for its products. Achieving market acceptance for its products will require substantial marketing efforts and expenditure of funds to create awareness and demand by participants in the industry. Ocuphire has not conducted any independent market research to determine the extent of any demand that exists for the products to be provided by it and there is no guarantee that a sufficient interest in the market will exist for the products and services being produced by, or for, it. Any lack of sufficient demand for the products contemplated to be provided by Ocuphire will have a material adverse effect on it.

If the FDA or a comparable foreign regulatory authority approves generic versions of Ocuphire’s product candidates that receive marketing approval, or if such authorities do not grant Ocuphire’s product candidates appropriate periods of exclusivity before approving generic versions of Ocuphire’s products, the sales of Ocuphire’s products could be adversely affected.

Once an NDA is approved, the product covered thereby becomes a “reference listed drug” in the FDA’s publication, “*Approved Drug Products with Therapeutic Equivalence Evaluations*.” Manufacturers may seek approval of generic versions of reference listed drugs through submission of abbreviated new drug applications (“ANDAs”) in the United States. In support of an ANDA, a generic manufacturer need not conduct clinical studies. Rather, the applicant generally must show that its product has the same active ingredient(s), dosage form, strength, route of administration, and conditions of use or labeling as the reference listed drug (“RLD”) and that the generic version is bioequivalent to the RLD, meaning it is absorbed in the body at the same rate and to the same extent. Generic products may be significantly less costly to bring to market than the RLD, and companies that produce generic products are generally able to offer them at lower prices. Thus, following the introduction of a generic drug, a significant percentage of the sales of any branded product or RLD may be lost to the generic product.

The FDA may not approve an ANDA for a generic product until any applicable period of non-patent exclusivity for the reference listed drug has expired. The FDC Act provides a period of five years of non-patent exclusivity for a new drug containing a new chemical entity (“NCE”). Specifically, in cases where such exclusivity has been granted, an ANDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification that a patent covering the reference listed drug is either invalid or will not be infringed by the generic product, in which case the applicant may submit its application four years after approval of the RLD. It is unclear whether the FDA will treat the active ingredients in its product candidates as NCEs

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and, therefore, afford them five years of NCE exclusivity if they are approved. If any product Ocuphire develops does not receive five years of NCE exclusivity, it may nonetheless be eligible for three years of exclusivity, which means that the FDA may approve generic versions of such product three years after its date of approval. Manufacturers may seek to launch these generic products following the expiration of the applicable marketing exclusivity period, even if Ocuphire still has patent protection for its product.

Competition that Ocuphire's product candidates would face from generic versions could materially and adversely impact its future revenue, profitability, and cash flows and substantially limit its ability to obtain a return on the investments it has made in any such product candidate.

Even if Ocuphire is able to commercialize its product candidates, their profitability will likely depend in significant part on third-party reimbursement practices, which, if unfavorable, would harm its business.

Ocuphire's ability to commercialize a drug successfully will depend in part on the extent to which coverage and adequate reimbursement will be available from government health administration authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for certain medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. Ocuphire cannot be sure that coverage will be available for any product candidate that Ocuphire commercializes and, if coverage is available, whether the level of reimbursement will be adequate. Assuming Ocuphire obtains coverage for its product candidates, if approved, by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who are prescribed medications for the treatment of their conditions, and their prescribing physicians, generally rely on third-party payors to reimburse all or some of the costs associated with their prescription drugs. Patients are unlikely to use a product candidate, if approved, unless coverage is provided and reimbursement is adequate to cover all or a significant portion of the cost of its products. Therefore, coverage and adequate reimbursement are critical to new product acceptance. If reimbursement is not available or is available only to limited levels, Ocuphire may not be able to successfully commercialize any product candidate for which it obtains marketing approval.

There may be significant delays in obtaining reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which a product candidate is approved by the FDA or similar regulatory authorities outside the United States. Moreover, eligibility for reimbursement does not imply that any product will be paid for in all cases or at a rate that covers Ocuphire's costs, including research, development, manufacture, sale, and distribution. Interim reimbursement levels for a new product, if applicable, may also not be sufficient to cover Ocuphire's costs and may not be made permanent. Reimbursement rates may vary according to the use of the product and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost medicines, and may be incorporated into existing payments for other services. Net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of medicines from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. However, there is no uniform policy requirement for coverage and reimbursement for drug products among third-party payors in the United States. Therefore, coverage and reimbursement for drug products can differ significantly from payor to payor. As a result, the coverage determination process is often time-consuming and costly, and it will require Ocuphire to provide scientific and clinical support for the use of its products to each payor separately. There is no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

Any inability to promptly obtain coverage and profitable payment rates from government-funded or private payors for any approved products that Ocuphire develops could have an adverse effect on its operating results, its ability to raise capital needed to commercialize products, and its overall financial condition.

Product liability lawsuits against Ocuphire, or its suppliers and manufacturers, could cause it to incur substantial liabilities and could limit commercialization of any product candidate that it may develop.

Ocuphire faces an inherent risk of product liability exposure related to the testing of its product candidates in human clinical trials and will face an even greater risk if it commercially sells any products that it may develop. Product liability claims might be brought against Ocuphire by patients, healthcare providers, or others selling or

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otherwise coming into contact with its product candidates during product testing, manufacturing, marketing, or sale. For example, Ocuphire may be sued under allegations that a product candidate caused injury or that the product was otherwise unsuitable. Any such product liability claims may include allegations of manufacturing or design defects, failure to warn of dangers inherent in the product, such as interactions with alcohol or other drugs, negligence, or breach of warranty. Claims could also be asserted under state consumer protection acts. If Ocuphire cannot successfully defend itself against claims that its product candidate caused injuries, it could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidate that Ocuphire is developing;
- injury to Ocuphire's reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- increased FDA warnings on product labels;
- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- distraction of management's attention from Ocuphire's primary business;
- loss of revenue; and
- the inability to commercialize any product candidate that Ocuphire may develop.

Its product liability and/or clinical trial insurance coverage may not be adequate to cover all liabilities that Ocuphire may incur. Ocuphire may need to increase its insurance coverage as it expands clinical trials and if it successfully commercializes its product candidates. Insurance coverage is increasingly expensive, and it may not be able to obtain product liability insurance on commercially reasonable terms or for a sufficient amount to satisfy liabilities that may arise.

Similarly, Ocuphire may be a party to, or may be otherwise responsible for, pending or threatened lawsuits or other claims related to products purchased from its manufacturers and suppliers. Although Ocuphire intends to require its providers to have product liability insurance, the ability to obtain such coverage and the sufficiency thereof is uncertain. Such cases and claims may raise difficult and complex factual and legal issues and may be subject to many uncertainties and complexities, including, but not limited to, the facts and circumstances of each particular case or claim, the jurisdiction in which each suit is brought, and differences in applicable law. Such litigation could result in additional expense and exposure in excess of Ocuphire's anticipated reserves, especially if such matters are not covered by insurance. Upon resolution of any pending legal matters or other claims, Ocuphire may incur charges in excess of established reserves. Product liability lawsuits and claims, safety alerts or product recalls in the future, regardless of their ultimate outcome, could have a material adverse effect on the business and reputation and on Ocuphire's ability to attract and retain customers and strategic partners. The business, profitability and growth prospects could suffer if Ocuphire faces such negative publicity.

If Ocuphire or its third-party manufacturers fail to comply with environmental or health and safety laws and regulations, Ocuphire could become subject to fines or penalties or incur costs that could have an adverse effect on the success of its business.

Ocuphire's research and development activities involve the controlled use of potentially hazardous substances, including chemical and biological materials, by itself and its third-party manufacturers. Ocuphire's manufacturers are subject to federal, state, and local laws and regulations in the United States and abroad governing laboratory procedures and the use, manufacture, storage, handling, and disposal of medical and hazardous materials. Although Ocuphire believes that its manufacturers' procedures for using, handling, storing, and disposing of these materials comply with legally prescribed standards, it cannot eliminate the risk of contamination or injury resulting from medical or hazardous materials. As a result of any such contamination or injury, Ocuphire may incur liability, or federal, state, city, or local authorities may curtail its use of these materials and interrupt its business operations. In the event of an accident, Ocuphire could be held liable for damages or fined, and such liability or fines could exceed its resources. Ocuphire does not have insurance for liabilities arising from medical or hazardous materials. Although Ocuphire maintains workers' compensation insurance for costs and expenses that it may incur due to injuries to its employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. Compliance with applicable environmental and health and safety laws and regulations is

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expensive, and current or future environmental regulations may impair Ocuphire's research, development, and production efforts, which could harm its business, prospects, financial condition, or results of operations.

Federal legislation and actions by state and local governments could permit reimportation of drugs from foreign countries into the United States, which could adversely affect Ocuphire's operating results when the drugs are sold at lower prices in foreign countries than in the United States.

Ocuphire may face competition for its product candidates, if approved, from other therapies sourced from foreign countries that have price controls on pharmaceutical products. The Medicare Modernization Act contains provisions that may change U.S. reimportation laws and expand pharmacists' and wholesalers' ability to import cheaper versions of approved drugs or competing products from Canada, where there are government price controls. These changes to U.S. importation laws would not take effect unless and until the Secretary of Health and Human Services certifies that the changes would pose no additional risk to the public's health and safety and would result in a significant reduction in the cost of products to consumers. The Secretary of Health and Human Services has so far declined to approve a reimportation plan. Proponents of drug reimportation may attempt to pass legislation that would directly allow reimportation under certain circumstances. Legislation or regulations allowing the reimportation of drugs, if enacted, could decrease the price Ocuphire receives for any product it may develop and adversely affect its future revenues and prospects for profitability.

Risks Related to Ocuphire's Reliance on Third Parties

Ocuphire will be unable to directly control all aspects of its clinical trials due to its reliance on clinical research organizations (CROs) and other third parties that assist Ocuphire in conducting clinical trials.

Ocuphire relies on third party CROs and other third parties to assist in managing, monitoring, and otherwise carrying out its clinical trials. Ocuphire expects to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions, and clinical investigators, to conduct its clinical trials in the future, including its Phase 3 development program for Nyxol. Ocuphire competes with many other companies for the resources of these third parties.

As a result, Ocuphire will have limited control over the conduct, timing, and completion of these clinical trials and the management of data developed through the clinical trials. Communicating with outside parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities. Additionally, the ongoing COVID-19 pandemic may affect the ability of third parties to fulfill their obligations to Ocuphire. Outside parties may:

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

These factors may adversely affect the willingness or ability of third parties to conduct Ocuphire's clinical trials and may subject Ocuphire to unexpected cost increases that are beyond its control.

While Ocuphire's reliance on these third parties for research and development activities will reduce its control over these activities, it will not relieve Ocuphire of its responsibilities and requirements. For example, the FDA requires Ocuphire to comply with standards, commonly referred to as good clinical practices ("GCP"), for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity, and confidentiality of clinical trial participants are protected.

Problems with the timeliness or quality of the work of any CRO may lead Ocuphire to seek to terminate its relationship with any such CRO and use an alternative service provider. Making this change may be costly or delay Ocuphire's clinical trials, and contractual restrictions may make such a change difficult or impossible. If Ocuphire must replace any CRO that is conducting its clinical trials, its clinical trials may have to be suspended until it finds another CRO that offers comparable services. The time that it would take Ocuphire to find alternative organizations may cause a delay in the commercialization of its product candidates, or it may cause it to incur significant expenses to replicate any lost data. Although Ocuphire does not believe that any CRO on which it would rely would offer

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services that are not available elsewhere, it may be difficult to find a replacement organization that can conduct Ocuphire's clinical trials in an acceptable manner and at an acceptable cost. Any delay in or inability to complete Ocuphire's clinical trials could significantly compromise its ability to secure regulatory approval for its product candidates and preclude its ability to commercialize its product candidates, thereby limiting or preventing its ability to generate sales revenue.

Ocuphire relies completely on third parties to supply and manufacture its preclinical and clinical drug supplies for product candidates, and intends to rely on third parties to produce commercial supplies of its current and any future product candidates.

Ocuphire does not currently have, nor does it plan to acquire, the infrastructure or capability to internally manufacture its clinical drug supply of product candidates for use in the conduct of its preclinical studies and clinical trials. Ocuphire lacks the internal resources and the capability to manufacture any product candidates on a clinical or commercial scale. The process of manufacturing drug products is complex, highly regulated, and subject to several risks. For example, the facilities used by Ocuphire's contract manufacturers to manufacture the active pharmaceutical ingredient (or drug substance) and final drug product for product candidates must be inspected by the FDA and other comparable foreign regulatory agencies in connection with Ocuphire's submission of an NDA or relevant foreign regulatory submission to the applicable regulatory agency. In addition, the manufacturing of drug substance or product is susceptible to product loss due to contamination, equipment failure, improper installation or operation of equipment, or vendor or operator error. Moreover, the manufacturing facilities in which product candidates are made could be adversely affected by equipment failures, labor shortages, natural disasters, power failures, or other factors.

Ocuphire does not control the manufacturing process of its contract manufacturers, and is completely dependent on them to comply with current good manufacturing practices ("cGMP") for manufacture of both active drug substances and finished drug products. If Ocuphire's contract manufacturers cannot successfully manufacture material that conforms to its specifications and the strict regulatory requirements of the FDA or applicable foreign regulatory agencies, Ocuphire will not be able to secure and/or maintain regulatory approval for its products. In addition, Ocuphire has no direct control over its contract manufacturers' ability to maintain adequate quality control, quality assurance, and qualified personnel. Failure to satisfy the regulatory requirements for the production of those materials and products may affect the regulatory clearance of Ocuphire's contract manufacturers' facilities generally. If the FDA or a comparable foreign regulatory agency does not approve these facilities for the manufacture of product candidates, or if it withdraws its approval in the future, Ocuphire may need to find alternative manufacturing facilities, which would adversely impact Ocuphire's ability to develop, obtain regulatory approval for, or market product candidates. Furthermore, all of Ocuphire's contract manufacturers are engaged with other companies to supply and/or manufacture materials or products for such companies, which exposes its manufacturers to regulatory and sourcing risks for the production of such materials and products. To the extent practicable, Ocuphire attempts to identify more than one supplier. However, some raw materials are available only from a single source or only one supplier has been identified, even in instances where multiple sources exist.

Ocuphire has relied and will rely upon third-party manufacturers in the United States and overseas for the manufacture of Nyxol and APX3330 for preclinical and clinical testing purposes and intends to continue to do so in the future for Nyxol, APX3330, the combination kit of Nyxol and low-dose pilocarpine, and any other product candidates, including for commercial purposes. If Ocuphire's third-party manufacturers are unable to supply drug substance and/or drug product on a commercial basis, Ocuphire may not be able to successfully produce and market product candidates, if approved, or it could be delayed in doing so. For instance, Ocuphire presently relies on one supplier in Italy for the drug substance for Nyxol, and one manufacturer in India for APX3330 drug substance. If there is any delay or problem with the manufacture of these drug substance or if there is a delay in producing finished drug product from these drug substances, the development and possible approval of Ocuphire's product candidates and potential commercial launch may be delayed or otherwise adversely affected. Ocuphire will rely on comparison of product specifications (identity, strength, quality, and potency) to demonstrate equivalence of the current drug substance and/or drug product to the drug substance and/or drug product used in previously completed preclinical and clinical testing. If Ocuphire is unable to demonstrate such equivalence, it may be required to conduct additional preclinical and/or clinical testing of its product candidates. The formulation of the low-dose pilocarpine in the combination product candidate of Nyxol is still in development. Also, due to the current COVID-19 pandemic, disruptions of global supply chains are more likely to occur, which could delay the clinical development of Ocuphire's product candidates. Ocuphire has already experienced a few interruptions in its manufacturing, supply chain, research and development operations, regulatory and financial position, including, for example, the acceleration of the shipment of active pharmaceutical ingredient supply from overseas.

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Due to these and other potential problems, Ocuphire is exploring the possibility of establishing additional sources of supply, with U.S. manufacturers, for the active pharmaceutical ingredients of both Nyxol and APX3330. Establishing these additional sources, including qualifying their manufacturing processes and demonstrating the equivalence of their products, may be costly, time-consuming, and difficult to effectuate, and may delay Ocuphire's research and development activities. If Ocuphire must replace any manufacturer, its research and development activities may have to be suspended until it finds another manufacturer that offers comparable services. The time that it takes Ocuphire to find alternative organizations may cause a delay in the development and commercialization of product candidates.

Ocuphire may form or seek strategic alliances or enter into licensing arrangements in the future, and may not realize benefits from such alliances or licensing arrangements.

Ocuphire may form or seek strategic alliances, create joint ventures or collaborations or enter into additional licensing arrangements with third parties that it believes will complement or augment its development and commercialization efforts with respect to product candidates. Any of these relationships may require Ocuphire to incur non-recurring and other charges, increase its near- and long-term expenditures, or issue securities that dilute Ocuphire's existing stockholders, which may disrupt its management and business. Ocuphire's likely collaborators include large, mid-size, regional, or national pharmaceutical companies and biotechnology companies. If Ocuphire enters into any such arrangements with any third parties, it will likely have limited control over the amount and timing of resources that its collaborators dedicate to the development or commercialization of product candidates. Ocuphire's ability to generate revenues from these arrangements will depend on its collaborators' abilities to successfully perform the functions assigned to them in these arrangements. Ocuphire cannot be certain that, following a strategic transaction or license, it will achieve the revenue or specific net income that justifies such transaction. Collaborations involving product candidates pose the following risks to Ocuphire:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding, or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials, or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with its product candidate if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more attractive than Ocuphire's;
- a collaborator with marketing and distribution rights to one or more product candidates may not commit sufficient resources to the marketing or distribution of any such product candidate;
- collaborators may not properly maintain or defend Ocuphire's intellectual property rights or may use its proprietary information in such a way as to invite litigation that could jeopardize or invalidate Ocuphire's proprietary information or expose Ocuphire to litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose Ocuphire to litigation and potential liability;
- disputes may arise between the Ocuphire and collaborators that result in the delay or termination of research, development, or commercialization of its product candidates, or in litigation or arbitration that diverts management attention and resources;
- Ocuphire may lose certain valuable rights under circumstances identified in its collaborations, including if it undergoes a change of control;

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- collaborations may be terminated and such terminations may create a need for additional capital to pursue further development or commercialization of the applicable product candidates;
- collaborators may learn about Ocuphire's discoveries and use this knowledge to compete with Ocuphire in the future;
- the results of collaborators' preclinical or clinical studies could harm or impair other development programs;
- there may be conflicts between different collaborators that could negatively affect those collaborations and potentially others;
- the number and nature of Ocuphire's collaborations could adversely affect its attractiveness to potential future collaborators or acquirers;
- collaboration agreements may not lead to development or commercialization of its product candidate in the most efficient manner or at all. If a present or future collaborator of Ocuphire were to be involved in a business combination, the continued pursuit and emphasis on its product development or commercialization program under such collaboration could be delayed, diminished, or terminated; and
- collaborators may be unable to obtain the necessary marketing approvals.

If future collaboration partners fail to develop or effectively commercialize product candidates for any of these reasons, such product candidates may not be approved for sale and Ocuphire's sales of such product candidates, if approved, may be limited, which would have an adverse effect on Ocuphire's operating results and financial condition.

If Ocuphire is not able to establish new collaborations on commercially reasonable terms, it may have to alter its development, manufacturing, and commercialization plans.

Ocuphire faces significant competition in attracting collaborators for development, manufacturing or commercialization plans. Whether it reaches a definitive agreement for collaboration will depend, among other things, upon its assessment of the proposed collaborator's resources, expertise, and evaluation of a number of factors related to the associated product candidate, as well as the terms and conditions of the proposed collaboration. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA or similar regulatory authorities outside the United States, the potential market for the product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to Ocuphire's ownership of technology, which may exist if there is a challenge to such ownership without regard to the merits of the challenge, and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available for collaborations and whether such a collaboration could be more attractive than one with Ocuphire. Ocuphire may not be able to enter into these agreements on commercially reasonable terms, or at all.

Much of the potential revenue from future commercial collaborations may consist of contingent payments, such as payments for achieving regulatory milestones or royalties payable on sales of Ocuphire's product candidate, if approved. The milestone and royalty revenue that Ocuphire may receive under these collaborations would depend upon its collaborators' ability to successfully develop, introduce, market and sell its product candidate, if approved. In addition, collaborators may decide to enter into arrangements with third parties to commercialize products developed under collaborations related to its product candidate, which could reduce the milestone and royalty revenue received, if any.

Ocuphire may also be restricted under existing collaboration agreements from entering into future agreements on certain terms with potential collaborators. Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

Ocuphire may not be able to negotiate collaborations on a timely basis and on acceptable terms, or at all. If Ocuphire is unable to do so, it may have to curtail the development of the product candidate for which it is seeking to collaborate, reduce or delay its development program or that of one or more of its other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase its expenditures and undertake development or commercialization activities at its own expense. If Ocuphire elects to increase its expenditures to fund development or commercialization activities on its own, it may need to obtain

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additional capital, which may not be available to Ocuphire on acceptable terms or at all. If Ocuphire does not have sufficient funds, it may not be able to further develop its product candidate or bring it to market and generate product revenue.

If Ocuphire engages in acquisitions, in-licensing or strategic partnerships, this may increase its capital requirements, dilute its stockholders, cause it to incur debt or assume contingent liabilities and subject it to other risks.

Ocuphire may engage in various acquisitions and strategic partnerships, including licensing or acquiring complementary products, intellectual property rights, technologies, or businesses. Any acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of indebtedness or contingent liabilities;
- the issuance of Ocuphire's equity securities which would result in dilution to Ocuphire Stockholders;
- assimilation of operations, intellectual property, products and product candidates of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of management's attention from Ocuphire's existing product candidates and initiatives in pursuing such an acquisition or strategic partnership;
- retention of key employees, the loss of key personnel, and uncertainties in Ocuphire's ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products or product candidates and regulatory approvals; and
- Ocuphire's inability to generate revenue from acquired intellectual property, technology and/or products sufficient to meet its objectives or even to offset the associated transaction and maintenance costs.

In addition, if Ocuphire undertakes such a transaction, it may incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense.

Risks Related to Ocuphire's Intellectual Property

If Ocuphire is unable to obtain and maintain sufficient patent protection for its product candidates, its competitors could develop and commercialize products or technology similar or identical to those of Ocuphire, which would adversely affect Ocuphire's ability to successfully commercialize any product candidates it may develop, its business, results of operations, financial condition and prospects.

Ocuphire primarily protects its intellectual property through a combination of patents and patent applications on inventions, trademark protection on its product name, and trade secret protection as it deems appropriate.

The patent estate relating to Ocuphire's Nyxol product candidate contains ten U.S. patents, four pending U.S. non-provisional patent applications, two pending international patent applications, as well as issued patents in Australia, Europe, Japan, and Mexico, and pending patent applications in Canada, all of which are owned by Ocuphire.

Ocuphire's U.S. Patents 9,795,560, 10,278,918 and 10,772,829 and counterpart Australian, European, and Japanese patents each contain composition of matter claims to aqueous phentolamine mesylate formulations and are scheduled to expire in year 2034. A counterpart patent application directed to aqueous phentolamine mesylate formulations is pending in Canada, where a patent, if granted, based on this pending patent application, would expire in year 2034. In the same patent family, there is one pending U.S. patent application with additional claims to aqueous phentolamine mesylate formulations, whereby a patent, if granted based on this patent application, would expire in year 2034. The patents and patent applications cover the current clinical formulation for the Nyxol product.

Ocuphire's U.S. Patent Nos. 9,089,560 and 9,789,088 contain claims directed to methods of improving visual performance using, for example, phentolamine mesylate and are scheduled to expire in year 2034. Counterpart patents have issued in Australia, Europe and Japan, which are scheduled to expire in year 2034. Counterpart patent applications are pending in Canada, along with a further patent application pending in the U.S. Patents, if granted from these pending patent applications, would expire in year 2034. The patents and patent applications cover uses of the current clinical formulation for the Nyxol product.

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Ocuphire's pending international patent application PCT/US2019/056324 is directed to treating glaucoma and other medical disorders using phentolamine mesylate. Patents, if granted based on this pending patent application, would expire in year 2039. Ocuphire's pending international patent application PCT/US2019/058182 is directed to methods of treating presbyopia, mydriasis, and other medical disorders; patents, if granted based on this pending patent application, would expire in year 2039. Two pending U.S. patent applications have been filed based on international patent application PCT/US2019/058182, one with claims to treating presbyopia and the other with claims to treating mydriasis.

The remaining five of Ocuphire's U.S. patents are scheduled to expire in year 2020 and have claims to methods of use or ophthalmic formulations containing an ophthalmic artificial tear solution, which is not the current clinical formulation used in the Nyxol product. Ocuphire's issued patent in Mexico is scheduled to expire in year 2025 and has claims to ophthalmic formulations.

Ocuphire has in-licensed a patent estate directed to APX3330 and related compounds that contains five U.S. patents, four pending U.S. non-provisional patent applications, and one pending international patent application, as well as issued patents in Europe, Japan, Canada, and Australia, and pending patent applications in Europe, Japan, China, and Canada. Ocuphire's in-licensed U.S. patent 9,040,505 has claims to methods of treating diabetic retinopathy and other diseases using, for example, APX3330 and is scheduled to expire in year 2030. Counterpart patents have issued in Europe, Japan, Australia, and Canada, which are scheduled to expire in year 2028, and there is a related pending U.S. patent application with method of treatment claims that, if issued as a patent, would expire in year 2028. Ocuphire's in-licensed pending international patent application PCT/US2019/017023 has claims to methods of treating wAMD and other diseases using, for example, APX3330. Patents, if granted based on this pending international patent application, would expire in year 2039. Ocuphire's in-licensed patent applications directed to a combination therapy composition comprising an APE1/REF-1 inhibitor, such as APX3330, and a second therapeutic agent, and methods of using such combination therapies to treat retinal diseases and other indications are pending in the U.S., Europe, Japan, China, and Canada, whereby patents, if granted based on these pending patent applications, would expire in year 2038. Patents to derivatives of APX3330 have issued in the U.S., Europe, and other countries that are scheduled to expire from year 2028 to 2032, and patent applications to derivatives of APX3330 are pending in the U.S., Europe, and other countries whereby a patent, if granted based on these pending patent applications, would expire from year 2028 to 2032.

The patent prosecution process is expensive and time-consuming, and Ocuphire and its future licensors, licensees, or collaboration partners may not be able to prepare, file, and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that Ocuphire or any future licensors, licensees, or collaboration partners may fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Ocuphire and its licensors' patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications, and then only to the extent the issued claims cover the technology.

Ocuphire cannot assure you that any of its patents have matured, or that any of its pending patent applications will mature, into issued patents that will include, claims with a scope sufficient to protect its product candidates. Others have developed technologies that may be related or competitive to Ocuphire's approach, and may have filed or may file patent applications and may have received or may receive patents that overlap or conflict with Ocuphire's patent applications, for example by claiming the same compounds, methods or formulations or by claiming subject matter that could dominate the patents that Ocuphire owns or in-licenses. The patent positions of biotechnology and pharmaceutical companies, including Ocuphire's patent position, involve complex legal and factual questions, and, therefore, the issuance, scope, validity, and enforceability of any patent claims that Ocuphire may obtain cannot be predicted with certainty. Patents, if issued, may be challenged, deemed unenforceable, invalidated, or circumvented. U.S. patents and patent applications may also be subject to interference proceedings, *ex parte* reexamination, or *inter partes* review proceedings, supplemental examination and challenges in district court. Patents may be subjected to opposition, post-grant review, or comparable proceedings in various national and regional patent offices. These proceedings could result in either loss of the patent or denial of the patent application or loss or reduction in the scope of one or more of the claims of the patent or patent application. In addition, such interference, re-examination, opposition, post-grant review, *inter partes* review, supplemental examination, or revocation proceedings may be

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costly or time-consuming. Thus, any patents that Ocuphire may own or exclusively license may not provide any protection against competitors. Furthermore, an adverse decision in an interference proceeding can result in a third party receiving the patent right sought by Ocuphire, which in turn could affect its ability to develop, market or otherwise commercialize its product candidates.

Furthermore, the issuance of a patent, while presumed valid, is not conclusive as to its validity or its enforceability and it may not provide Ocuphire with adequate proprietary protection or competitive advantages against competitors with similar products. Competitors may also be able to design around Ocuphire's patents. Other parties may develop and obtain patent protection for more effective technologies, designs, or methods. Ocuphire may not be able to prevent the unauthorized disclosure or use of any technical knowledge or trade secrets by consultants, vendors, former employees, or current employees. The laws of some foreign countries do not protect proprietary rights to the same extent as do the laws of the United States, and Ocuphire may encounter significant problems in protecting its proprietary rights in these countries. If these developments were to occur, they could have a material adverse effect on Ocuphire's sales.

Ocuphire's ability to enforce its patent rights depends on its ability to detect infringement. It is difficult to detect infringers who do not advertise the components that are used in their products. Moreover, it may be difficult or impossible to obtain evidence of infringement in a competitor's or potential competitor's product. Any litigation to enforce or defend Ocuphire's patent rights, if any, even if Ocuphire were to prevail, could be costly and time-consuming and would divert the attention of management and key personnel from Ocuphire's business operations. Ocuphire may not prevail in any lawsuits that it initiates and the damages or other remedies awarded if it were to prevail may not be commercially meaningful.

In addition, proceedings to enforce or defend Ocuphire's patents could put its patents at risk of being invalidated, held unenforceable, or interpreted narrowly. Such proceedings could also provoke third parties to assert claims against Ocuphire, including that some or all of the claims in one or more of Ocuphire's patents are invalid or otherwise unenforceable. If, in any proceeding, a court invalidated or found unenforceable Ocuphire's patents covering its product candidates, Ocuphire's financial position and results of operations would be adversely impacted. In addition, if a court found that valid, enforceable patents held by third parties covered Ocuphire's product candidates, its financial position and results of operations would also be adversely impacted.

The degree of future protection for Ocuphire's proprietary rights is uncertain, and Ocuphire cannot ensure that:

- any of Ocuphire's patents, or any of its pending patent applications, if issued, will include claims having a scope sufficient to protect its product candidates;
- any of its pending patent applications will result in issued patents;
- Ocuphire will be able to successfully commercialize its product candidates, if approved, before its relevant patents expire;
- Ocuphire was the first to make the inventions covered by each of its patents and pending patent applications;
- Ocuphire was the first to file patent applications for these inventions;
- others will not develop similar or alternative technologies that do not infringe Ocuphire's patents;
- any of Ocuphire's patents will be valid and enforceable;
- any patents issued to Ocuphire will provide a basis for an exclusive market for its commercially viable products, will provide Ocuphire with any competitive advantages or will not be challenged by third parties;
- Ocuphire will develop additional proprietary technologies or product candidates that are separately patentable; or
- that Ocuphire's commercial activities or products will not infringe upon the patents of others.

Patents have a limited lifespan. The natural expiration of a patent is generally 20 years after its effective filing date. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited. Given the extensive period of time between patent filing and regulatory approval for a product candidate, the time during

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which Ocuphire can market a product candidate under patent protection is limited, and Ocuphire's patent may expire before it obtains such approval. Without patent protection for its product candidates, it may be vulnerable to competition from generic versions of its product candidates, which may affect the profitability of its product candidates.

If Ocuphire does not obtain protection under the Hatch-Waxman Act and similar foreign legislation by extending the patent terms and obtaining data exclusivity for its product candidate, its business may be materially harmed.

Depending upon the timing, duration of regulatory review, and date of FDA marketing approval of its APX3330 or other product candidates, if any, one of such U.S. patents may be eligible for patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act. The Hatch-Waxman Act provides for a patent restoration term, or patent term extension, of up to five years as compensation for the time the product is under FDA regulatory review. The duration of patent term extension is calculated based on the time spent in the regulatory review process. In the future, Ocuphire may plan to seek patent term extension for one or more of its patents related to its APX3330 or other product candidates. However, Ocuphire may not be granted an extension because of, for example, failing to apply within the applicable deadline, expiration of relevant patents prior to obtaining approval, or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be shorter or less than what Ocuphire requests. If Ocuphire is unable to obtain patent term extension or the term of any such extension is less than it requests, Ocuphire's revenue could be reduced, possibly materially.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing Ocuphire's ability to protect its product candidates.

In 2011, the United States enacted wide-ranging patent reform legislation with the America Invents Act ("AIA").

An important change introduced by the AIA is that, as of March 16, 2013, the United States transitioned to a "first-to-file" system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention. A third party that files a patent application in the USPTO after that date but before Ocuphire could therefore be awarded a patent covering an invention of ours even if Ocuphire had made the invention before it was made by the third party. This will require Ocuphire to be cognizant going forward of the time from invention to filing of a patent application, but circumstances could prevent Ocuphire from promptly filing patent applications on its inventions.

Among some of the other changes introduced by the AIA are changes that limit where a patentee may file a patent infringement suit and providing opportunities for third parties to challenge any issued patent in the USPTO. This applies to all of Ocuphire's U.S. patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate Ocuphire's patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. The AIA and its implementation could increase the uncertainties and costs surrounding the prosecution of Ocuphire's patent applications and the enforcement or defense of Ocuphire's issued patents.

Additionally, the U.S. Supreme Court's holdings in several patent cases in recent years, such as Association for Molecular Pathology v. Myriad Genetics, Inc. (Myriad I), Mayo Collaborative Services v. Prometheus Laboratories, Inc., and Alice Corporation Pty. Ltd. v. CLS Bank International, have narrowed the scope of patent protection available in certain circumstances or weakened the rights of patent owners in certain situations. In addition to increasing uncertainty about Ocuphire's ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken Ocuphire's ability to obtain new patents or to enforce Ocuphire's existing patents and patents that it might obtain in the future.

Ocuphire may not be able to protect or practice its intellectual property rights throughout the world.

In jurisdictions where Ocuphire has not obtained patent protection, competitors may use its intellectual property to develop their own products and further, may export otherwise infringing products to territories where Ocuphire has

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patent protection, but where it is more difficult to enforce a patent as compared to the United States. Competitor products may compete with Ocuphire's product candidates in jurisdictions where it does not have issued or granted patents or where its issued or granted patent claims or other intellectual property rights are not sufficient to prevent competitor activities in these jurisdictions. The legal systems of certain countries, particularly certain developing countries, make it difficult to enforce patents and such countries may not recognize other types of intellectual property protection, particularly that relating to pharmaceuticals. This could make it difficult for Ocuphire to prevent the infringement of its patents or marketing of competing products in violation of its proprietary rights generally in certain jurisdictions. Proceedings to enforce Ocuphire's patent rights in foreign jurisdictions could result in substantial cost and divert its efforts and attention from other aspects of its business.

The laws of some jurisdictions do not protect intellectual property rights to the same extent as the laws in the United States, and many companies have encountered significant difficulties in protecting and defending such rights in such jurisdictions. If Ocuphire, or any future licensor, encounters difficulties in protecting, or is otherwise precluded from effectively protecting, the intellectual property rights important for its business in such jurisdictions, the value of these rights may be diminished and Ocuphire may face additional competition from others in those jurisdictions. Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If Ocuphire, or any licensor, is forced to grant a license to third parties with respect to any patents relevant to its business, Ocuphire's competitive position in the relevant jurisdiction may be impaired and its business and results of operations may be adversely affected.

Ocuphire may become involved in lawsuits to protect or enforce its patents and other intellectual property rights, which could be expensive, time consuming, and unsuccessful.

Competitors may infringe Ocuphire's patents, the patents of its licensing partners, or other intellectual property rights. To counter infringement or unauthorized use, Ocuphire may be required to file infringement claims, which can be expensive and time consuming. In addition, in an infringement proceeding, a court may decide that an Ocuphire patent is invalid or unenforceable, or may refuse to stop the other party from using the technology on the grounds that Ocuphire's patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of Ocuphire's patents at risk of being invalidated or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of Ocuphire's confidential information could be compromised by disclosure during this type of litigation. Moreover, there can be no assurance that Ocuphire will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are concluded.

Litigation proceedings may fail and, even if successful, may be costly and a distraction to Ocuphire's management and other employees. Ocuphire may not be able to prevent, alone or with its collaborators, misappropriation of its proprietary rights, particularly in countries where the laws may not protect those rights as fully as in the United States.

In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of Ocuphire common stock.

Third parties may initiate legal proceedings alleging that Ocuphire is infringing their intellectual property rights, the outcome of which would be uncertain and could have an adverse effect on the success of Ocuphire's business.

Ocuphire's commercial success depends upon its ability and the ability of its collaborators to develop, manufacture, market and sell its product candidates and use its proprietary technologies without infringing the proprietary rights and intellectual property of third parties. The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights. Ocuphire may in the future become party to, or threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to its medicines and technology, including interference or derivation proceedings, post-grant reviews, *inter partes* reviews, or other procedures before the USPTO or other similar procedures in foreign jurisdictions. Third parties may assert infringement claims against Ocuphire based on existing patents or patents that may be granted in the future. If Ocuphire is found to infringe a third party's intellectual property rights, it could be required to obtain a license from such third party to continue developing and marketing its medicines and technology. However,

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Ocuphire may not be able to obtain any required license on commercially reasonable terms or at all. Even if Ocuphire were able to obtain a license, it could be non-exclusive, thereby giving its competitors and other third parties access to the same technologies licensed to it. Ocuphire could be forced, including by court order, to cease developing and commercializing the infringing technology or medicine. In addition, Ocuphire could be held liable for substantial monetary damages, potentially including treble damages and attorneys' fees, if found to have willfully infringed. A finding of infringement could prevent Ocuphire from commercializing a product candidate or force it to cease some of its business operations, which could harm Ocuphire's business. Alternatively, Ocuphire may need to redesign its infringing products, which may be impossible or require substantial time and monetary expenditure. Claims that Ocuphire has misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on its business.

The cost to Ocuphire of any litigation or other proceeding relating to patent or other proprietary rights, even if resolved in its favor, could be substantial and may result in substantial costs and distraction to Ocuphire's management and other employees. Some of Ocuphire's competitors may be able to sustain the costs of complex patent litigation more effectively than Ocuphire can because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could delay Ocuphire's research and development efforts and limit its ability to continue its operations.

Ocuphire may be subject to damages resulting from claims that its employees or Ocuphire has wrongfully used or disclosed alleged trade secrets of their former employers.

Ocuphire's employees and consultants have been previously employed at other biotechnology or pharmaceutical companies, including its competitors or potential competitors. Although Ocuphire is not aware of any claims currently pending against it, Ocuphire may be subject to claims that these employees or Ocuphire has inadvertently or otherwise used or disclosed trade secrets or other proprietary information or intellectual property of the former employers of its employees. Litigation may be necessary to defend against these claims. Even if Ocuphire is successful in defending against these claims, litigation could result in substantial costs and be a distraction to management. If Ocuphire fails in defending such claims, in addition to paying money claims, it may lose valuable intellectual property rights or personnel. A loss of key personnel or their work product could detract from Ocuphire's ability to develop or commercialize its product candidates.

If Ocuphire is not able to adequately prevent disclosure of trade secrets and other proprietary information, the value of any product it may pursue could be significantly diminished.

Ocuphire may rely upon trade secrets, know-how, and continuing technological innovation to develop and maintain its competitive position. However, trade secrets are difficult to protect. Ocuphire relies in part on confidentiality agreements with its employees, consultants, outside scientific collaborators, sponsored researchers, contract manufacturers, vendors, and other advisors to protect its trade secrets and other proprietary information. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, Ocuphire cannot guarantee that it has executed these agreements with each party that may have or has had access to trade secrets.

If a party breaches an agreement and discloses Ocuphire's proprietary information, including its trade secrets, Ocuphire may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive, and time consuming, and the outcome is unpredictable. In addition, some courts in and outside of the United States are less willing or unwilling to protect trade secrets. If any of Ocuphire's trade secrets were to be lawfully obtained or independently developed by a competitor, Ocuphire would have no right to prevent them, or those to whom they disclose such trade secrets, from using that technology or information to compete with it. If any of Ocuphire's trade secrets were to be disclosed to, or independently developed by, a competitor or other third party, Ocuphire's competitive position would be harmed.

Obtaining and maintaining Ocuphire's trademark protection depends on approval from the USPTO and other foreign government agencies, and third parties may challenge, infringe, or otherwise weaken Ocuphire's trademark rights.

Ocuphire has obtained registration of the "Nyxol" trademark in the United States. It has not yet registered trademarks for any other product candidates in any jurisdiction. If Ocuphire does not secure and maintain registrations for its trademarks, it may encounter more difficulty in enforcing them against third parties than it otherwise would, which could affect its business. When Ocuphire files trademark applications for a product candidate,

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those applications may not be allowed for registration, and registered trademarks may not be obtained, maintained, or enforced. During trademark registration proceedings in the United States and foreign jurisdictions, Ocuphire may receive rejections. Ocuphire is given an opportunity to respond to those rejections, but may not be able to overcome such rejections. In addition, the USPTO and comparable agencies in many foreign jurisdictions allow third parties opportunities to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against Ocuphire's trademarks and its trademarks may not survive such proceedings.

In addition, any proprietary name Ocuphire proposes to use with a future product candidate in the United States must be approved by the FDA, regardless of whether Ocuphire has registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed drug names, including an evaluation of potential for confusion with other drug names. If the FDA objects to any proposed proprietary drug name for any product candidate, Ocuphire may be required to expend significant additional resources in an effort to identify a suitable substitute proprietary drug name that would qualify under applicable trademark laws, not infringe the existing rights of third parties, and be acceptable to the FDA.

If Ocuphire registers any of its trademarks, its trademarks or trade names may be challenged, infringed, circumvented, declared generic, or determined to infringe on other marks. Ocuphire may not be able to protect its rights to these trademarks and trade names or may be forced to stop using these names, which Ocuphire needs for name recognition by potential partners or customers in its markets of interest. If Ocuphire is unable to establish name recognition based on its trademarks and trade names, Ocuphire may not be able to compete effectively and its business may be adversely affected.

Obtaining and maintaining Ocuphire's patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental agencies, and its patent protection could be reduced or eliminated for noncompliance with these requirements.

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment or other provisions during the patent application process. In addition, periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, Ocuphire's competitors might be able to enter the market, which would have an adverse effect on Ocuphire's business.

Ocuphire depends on intellectual property sublicensed from Apexian Pharmaceuticals, Inc. ("Apexian") for its APX3330 product candidate under development and its additional pipeline candidates, and the termination of, or reduction or loss of rights under, this sublicense would harm Ocuphire's business.

Ocuphire entered into a sublicense agreement with Apexian (as amended, the "Apexian Sublicense Agreement") to in-license intellectual property relating to the APX3330 product candidate and second generation product candidates, including certain study reports, manufacturing and analytical records, data, know-how, technical and other proprietary information relating to APX3330 that Apexian in-licensed from Eisai Co., Ltd. ("Eisai"). The rights granted under the Apexian Sublicense Agreement are subject to various milestone payment, royalty, insurance or other obligations on Ocuphire, and may be revocable under certain circumstances including if Ocuphire ceases to do business, fails to make the payments due thereunder, commits a material breach of the agreement that is not cured within a certain time period after receiving written notice or fails to meet certain specified development and commercial timelines. Additionally, if Ocuphire does not list its shares on a major stock exchange prior to December 31, 2020, either party may terminate the Apexian Sublicense Agreement. Termination of the Apexian Sublicense Agreement may result in Ocuphire having to negotiate a new or reinstated agreement, which may not be available to Ocuphire on equally favorable terms, or at all, which may mean Ocuphire is unable to develop or commercialize APX3330 and second generation assets.

Ocuphire does not have total control over the preparation, filing, prosecution and maintenance of patents and patent applications covering the technology that it licenses under the Apexian Sublicense Agreement. Under the Sublicense Agreement, Indiana University Research and Technology Corp. ("IURTC"), the owner of the patents licensed to Apexian and sublicensed to Ocuphire, maintains the right to control all prosecution and maintenance of

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such patents. Therefore, Ocuphire cannot always be certain that these patents and patent applications will be prepared, filed, prosecuted and maintained in a manner consistent with the best interests of Ocuphire's business. Although Ocuphire has a right to have its comments considered in connection with, and has agreed to bear the costs of, the prosecution and maintenance of the licensed patents, if IURTC fails to prosecute and maintain such patents, or loses rights to those patents or patent applications as a result of its control of the prosecution activities, the rights Ocuphire has licensed may be reduced or eliminated, and Ocuphire's right to develop and commercialize any of its product candidates that are the subject of such licensed rights could be adversely affected.

Further, if Apexian breaches its license agreement with IURTC and fails to cure such breach within a 60-day cure period, IURTC may terminate such license agreement with Apexian, in which case, Ocuphire's license shall also terminate and Ocuphire will lose all rights under the license agreement with Apexian. While the Apexian Sublicense Agreement provides that Apexian must cooperate with Ocuphire to remedy and cure Apexian's breach of the license agreement with IURTC in order to prevent the termination of such license agreement, Ocuphire cannot guarantee that such efforts will be successful in preventing the termination of the license agreement between Apexian and IURTC. Similarly, if Apexian breaches its license agreement with Eisai and fails to cure such breach within a 60-day cure period, Eisai may terminate such license agreement with Apexian, in which case, Ocuphire's sublicense rights under such license shall also terminate. While Ocuphire does not have any material obligations under the license agreement between Eisai and Apexian, Apexian has certain confidentiality and payment obligations that, if not met, could result in breach of the Eisai license agreement.

Under Apexian's license agreement with IURTC, any act or omission by Ocuphire that would be a breach of the license agreement with IURTC if imputed to Apexian is deemed to be a breach by Apexian of such license agreement and cause for termination, including, in particular, any breach by Ocuphire of its payment, reporting, audit, and indemnification obligations.

The Apexian Sublicense Agreement obligates Ocuphire to make certain milestone payments.

Ocuphire is obligated to pay certain milestone payments to Apexian pursuant to the Apexian Sublicense Agreement. These milestone payments include (i) payments for specified developmental and regulatory milestones totaling up to \$11 million in the aggregate and (ii) payments for specified sales milestones of up to \$20 million in the aggregate.

Because certain of the milestone payments payable by Ocuphire are due upon certain events related to the development and regulatory approval of its product candidates, Ocuphire may be required to make such payments prior to the time at which it is able to generate revenue, if any, from sales any of its product candidates, if approved. There can be no assurance that Ocuphire will have the funds necessary to make such payments, or be able to raise such funds when needed, on terms acceptable to Ocuphire, or at all. Furthermore, if Ocuphire is forced to raise additional funds, it may be required to delay, limit, reduce or terminate its product development or future commercialization efforts, or grant rights to develop and market product candidates that it would otherwise develop and market themselves. If Ocuphire is unable to raise additional funds or maintain sufficient liquidity to make its payment obligations if and when they become due, it may be in material breach of its license and acquisition agreements and its counterparties may seek legal action or remedies against Ocuphire, which would harm its business, financial condition, results of operations and prospects.

Ocuphire may enter into collaborations, in-licensing arrangements, joint ventures, strategic alliances or partnerships with third-parties that may not result in the development of commercially viable products or the generation of significant future revenues.

Ocuphire may enter into certain license or other collaboration agreements in the future. Such agreements may impose various diligence, milestone payment, royalty, insurance or other obligations on Ocuphire. If Ocuphire fails to comply with such obligations, Ocuphire's licensor or collaboration partners may have the right to terminate the relevant agreement, in which event Ocuphire would not be able to develop or market the products covered by such licensed intellectual property. Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which Ocuphire's product candidates, technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under Ocuphire's collaborative development relationships;

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- Ocuphire’s diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property; and
- the priority of invention of patented technology.

In addition, the agreements under which intellectual property or technology is licensed from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what Ocuphire believes to be the scope of Ocuphire’s rights to the relevant intellectual property or technology, or increase what Ocuphire believes to be Ocuphire’s financial or other obligations under the relevant agreement, either of which could have a material adverse effect on Ocuphire’s business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that Ocuphire has licensed prevent or impair Ocuphire’s ability to maintain Ocuphire’s licensing arrangements on commercially acceptable terms, Ocuphire may be unable to successfully develop and commercialize the affected product candidates, which could have a material adverse effect on Ocuphire’s business, financial conditions, results of operations, and prospects.

In addition, Ocuphire cannot be certain that the preparation, filing, prosecution and maintenance activities by any future licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights.

Risks Related to Ocuphire’s Employee Matters and Managing Growth

Ocuphire is dependent on its key personnel, and if it is not successful in attracting and retaining highly qualified personnel, it may not be able to successfully implement its business strategy.

Ocuphire is highly dependent on its management, scientific, and medical personnel, including Mina Sooch, its President, Chief Executive Officer and Board Vice Chair. Ocuphire has entered into employment agreements with its executive officers, but any employee may terminate his or her employment with Ocuphire. The loss of the services of any of Ocuphire’s executive officers, other key employees or consultants, or other scientific and medical advisors in the foreseeable future might impede the achievement of Ocuphire’s research, development, and commercialization objectives. Ocuphire relies on consultants and advisors, including scientific and clinical advisors, to assist it in formulating its development and commercialization strategy. Ocuphire’s consultants and advisors may be employed by employers other than Ocuphire and may have commitments under consulting or advisory contracts with other entities that may limit their availability to Ocuphire. Recruiting and retaining qualified scientific personnel and business and commercial personnel will also be critical to Ocuphire’s success. Ocuphire may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. Ocuphire also experiences competition for the hiring of scientific personnel from universities and research institutions. Failure to succeed in clinical trials may also make it more challenging to recruit and retain qualified scientific personnel.

Ocuphire will need to develop and expand its company, and may encounter difficulties in managing this development and expansion, which could disrupt its operations.

As of February 1, 2021, Ocuphire had five full-time employees, and Ocuphire expects to increase its number of employees and the scope of its operations as it furthers the clinical development of its product candidates and becomes a public company. To manage its anticipated development and expansion, Ocuphire must continue to implement and improve its managerial, operational, and financial systems, expand its facilities, and continue to recruit and train additional qualified personnel. Also, Ocuphire’s management may need to divert a disproportionate amount of its attention away from its day-to-day activities and devote a substantial amount of time to managing these development activities. Due to its limited resources, Ocuphire may not be able to effectively manage the expansion of its operations or recruit and train additional qualified personnel. This may result in weaknesses in Ocuphire’s infrastructure, and give rise to operational mistakes, loss of business opportunities, loss of employees, or reduced productivity among remaining employees. The physical expansion of Ocuphire’s operations may lead to significant costs and may divert financial resources from other projects, such as the development of product candidates. If Ocuphire’s management is unable to effectively manage its expected development and expansion, its expenses may increase more than expected, its ability to generate or increase its revenue could be reduced and it may not be able

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to implement its business strategy. Ocuphire's future financial performance and its ability to commercialize product candidates, if approved, and compete effectively will depend, in part, on its ability to effectively manage the future development and expansion of Ocuphire.

A variety of risks associated with operating internationally for Ocuphire and its collaborators could adversely affect its business.

In addition to its U.S. operations, Ocuphire may pursue international operations in the future and would face risks associated with such global operations, including possible unfavorable regulatory, pricing and reimbursement, legal, political, tax, and labor conditions, which could harm its business. Ocuphire plans to conduct clinical trials outside of the United States. Ocuphire is subject to numerous risks associated with international business activities, including:

- compliance with differing or unexpected regulatory requirements for its product candidates;
- different medical practices and customs affecting acceptance of its product candidates, if approved, or any other approved product in the marketplace;
- language barriers;
- the interpretation of contractual provisions governed by foreign law in the event of a contract dispute;
- difficulties in staffing and managing foreign operations, and an inability to control commercial or other activities where it is relying on third parties;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- potential liability under the Foreign Corrupt Practice Act of 1977 or comparable foreign regulations;
- production shortages resulting from any events affecting raw material supply or manufacturing capability abroad;
- foreign government taxes, regulations, and permit requirements;
- U.S. and foreign government tariffs, trade restrictions, price and exchange controls, and other regulatory requirements;
- economic weakness, including inflation, natural disasters, war, events of terrorism, or political instability in particular foreign countries;
- fluctuations in currency exchange rates, which could result in increased operating expenses and reduced revenues;
- compliance with tax, employment, immigration, and labor laws, regulations, and restrictions for employees living or traveling abroad;
- changes in diplomatic and trade relationships;
and
- challenges in enforcing its contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States.

The COVID-19 pandemic has and could continue to adversely impact Ocuphire's business, including pre-clinical and clinical trials and regulatory approvals.

On March 11, 2020, the World Health Organization declared the outbreak of COVID-19 as a global pandemic, which continues to spread throughout the United States and around the world. As a result of the COVID-19 pandemic, Ocuphire has experienced a few disruptions in its manufacturing, supply chain, research and development operations, regulatory process, and financial position. These disruptions have included the acceleration of shipment of active pharmaceutical ingredient supply from Italy and India, the convening of an FDA End-of-Phase 2 meeting via teleconference, and difficulties in obtaining more favorable financing terms. The global outbreak of COVID-19 continues to rapidly evolve. The extent to which the COVID-19 pandemic may impact Ocuphire's business and pre-clinical and clinical trials will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the duration of the outbreak, travel restrictions and social distancing in the U.S. and other countries, business closures or business disruptions and the effectiveness of actions taken in the U.S. and other countries to contain and treat the disease.

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The COVID-19 pandemic poses the risk that Ocuphire, its employees, contractors, suppliers, and other partners may be prevented from conducting business activities for an indefinite period of time due to shutdowns that may be requested or mandated by state and federal governmental authorities. As COVID-19 continues to spread around the globe, Ocuphire may experience disruptions that could severely impact its business and planned clinical trials, including:

- interruption in global manufacturing and shipping that has affected, and may continue to affect the transport of clinical trial materials and materials, including testing equipment and personal protective equipment;
- changes in local regulations as part of a response to the COVID-19 coronavirus outbreak which may result in unexpected costs;
- delay in the timing of interactions with the FDA due to absenteeism by federal employees or by the diversion of their efforts and attention to approval of other therapeutics or other activities related to COVID-19;
- impacts on Ocuphire's ability to secure additional financing on favorable terms; and
- modifications to the Ocuphire convertible notes.

In addition, the outbreak of COVID-19 could disrupt Ocuphire's operations due to absenteeism by infected or ill members of management or other employees, or absenteeism by members of management and other employees who elect not to come to work due to the illness affecting others in Ocuphire's office or laboratory facilities, or due to quarantines. COVID-19 illness could also impact members of the Ocuphire Board and its ability to hold meetings. Although Ocuphire cannot estimate the length or gravity of the impact of the COVID-19 outbreak at this time, if the pandemic continues, it may have a material adverse effect on Ocuphire's results of future operations, financial position, and liquidity over the next 12 or more months.

Ocuphire's business and operations would suffer in the event of system failures or unplanned events.

Despite the implementation of security measures, Ocuphire's internal computer systems and those of its current and future contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war, and telecommunications and electrical failures. While Ocuphire is not aware of any such material system failure, accident, or security breach to date, if such an event were to occur and cause interruptions in its operations, it could result in a material disruption of Ocuphire's development programs and its business operations. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in Ocuphire's regulatory approval efforts and significantly increase Ocuphire's costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, Ocuphire's data or applications, or inappropriate disclosure of confidential or proprietary information, Ocuphire could incur liability and the further development and commercialization of its product candidates could be delayed.

Furthermore, any unplanned event, such as flood, fire, explosion, tornadoes, earthquake, extreme weather condition, medical epidemics, power shortage, telecommunications failure, other natural or manmade accidents or incidents, or pandemics, including the ongoing COVID-19 pandemic, that result in Ocuphire being unable to fully utilize the facilities, may have an adverse effect on Ocuphire's ability to operate its business, particularly on a daily basis, and have significant negative consequences on its financial and operating conditions. Loss of access to these facilities may result in increased costs, delays in the development of its product candidates, or interruption of its business operations.

Ocuphire's insurance policies are expensive and protect only from some business risk, which leaves Ocuphire exposed to significant uninsured liabilities.

Ocuphire does not carry insurance for all categories of risks that its business may encounter, and insurance coverage is becoming increasingly expensive. Ocuphire does not know if it will be able to maintain existing insurance with adequate levels of coverage, and any liability insurance coverage it acquires in the future may not be sufficient to reimburse the company for any expenses or losses it may suffer. If Ocuphire obtains marketing approval for any product candidates that it may develop, Ocuphire intends to acquire insurance coverage to include the sale of commercial products, but it may be unable to obtain such insurance on commercially reasonable terms or in adequate amounts. Required coverage limits for such insurances are difficult to predict and may not be sufficient. If potential losses exceed Ocuphire's insurance coverage, its financial condition would be adversely affected. In the event of contamination or injury, Ocuphire could be held liable for damages or be penalized with fines in an amount exceeding its resources. Clinical trials or regulatory approvals for any of its product candidates could be suspended, which could

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adversely affect Ocuphire's results of operations and business, including by preventing or limiting the development and commercialization of any product candidates that the company or its collaborators may develop.

In addition, as a public company, it may be more difficult or more costly for us to obtain certain types of insurance, including directors' and officers' liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified personnel to serve on our board of directors, our board committees or as executive officers.

Risks Related to Ownership of Ocuphire Common Stock

Ocuphire does not anticipate paying any cash dividends in the foreseeable future.

The current expectation is that Ocuphire will retain its future earnings, if any, to fund the development and growth of its business. As a result, capital appreciation, if any, of its common stock will be your sole source of gain, if any, for the foreseeable future.

If Ocuphire fails to comply with the continued listing standards of the Nasdaq Capital Market, Ocuphire common stock could be delisted. If it is delisted, Ocuphire common stock and the liquidity of its common stock would be impacted.

The continued listing of Ocuphire common stock on Nasdaq is contingent on Ocuphire's continued compliance with a number of listing standards. There is no assurance that Ocuphire will remain in compliance with these standards. Delisting from Nasdaq would adversely affect Ocuphire's ability to raise additional financing through the public or private sale of equity securities, significantly affect the ability of investors to trade Ocuphire's securities and negatively affect the value and liquidity of Ocuphire's common stock. Delisting also could limit Ocuphire's strategic alternatives and attractiveness to potential counterparties and have other negative results, including the potential loss of employee confidence, the loss of institutional investors or interest in business development opportunities. Moreover, Ocuphire committed in connection with the sale of securities to use commercially reasonable efforts to maintain the listing of its common stock during such time that certain warrants are outstanding.

The market price of Ocuphire common stock may fluctuate significantly.

The market price of Ocuphire common stock may fluctuate significantly in response to factors, some of which are beyond Ocuphire's control, such as:

- the announcement of new products or product enhancements by Ocuphire or its competitors;
- changes in Ocuphire's relationships with its licensors or other strategic partners;
- developments concerning intellectual property rights and regulatory approvals;
- variations in Ocuphire's and Ocuphire's competitors' results of operations;
- substantial sales of shares of our common stock due to the release of lock-up agreements;
- the announcement of clinical trial results;
- the announcement of potentially dilutive financings;
- changes in earnings estimates or recommendations by securities analysts;
- changes in the structure of healthcare payment systems; and
- developments and market conditions in the pharmaceutical and biotechnology industries, including due to the COVID-19 pandemic.

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Further, the stock market, in general, and the market for biotechnology companies, in particular, have experienced extreme price and volume fluctuations. Continued market fluctuations could result in extreme volatility in the price of Ocuphire's common stock, which may be unrelated or disproportionate to Ocuphire's operating performance and which could cause a decline in the value of Ocuphire's common stock. You should also be aware that price volatility might be worse if the trading volume of Ocuphire common stock is low.

Ocuphire may be subject to securities litigation, which is expensive and could divert management attention.

The market price of Ocuphire common stock may be volatile, and in the past companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. Ocuphire may be the target of this type of litigation in the future. Securities litigation against Ocuphire could result in substantial costs and direct Ocuphire management's attention from other business concerns, which could seriously harm Ocuphire's business.

FORWARD-LOOKING STATEMENTS

This prospectus and the documents we have filed with the SEC that are incorporated by reference contain “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements relate to future events or to our future operating or financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial condition, business strategy and plans and objectives of management for future operations, are forward-looking statements. In some cases, forward-looking statements may be identified by words such as “anticipate,” “believe,” “continue,” “could,” “design,” “estimate,” “expect,” “intend,” “may,” “plan,” “potentially,” “predict,” “project,” “should,” “will” or the negative of these terms or other similar expressions.

We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are subject to a number of known and unknown risks, uncertainties and assumptions, including risks described in the section titled “Risk Factors” and elsewhere in this prospectus and in our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, the documents incorporated by reference and any free writing prospectus that we may authorize for use in connection with a specific offering. These factors include, among other things:

- We may never earn a profit;
- We are subject to the uncertainties associated with the clinical development and regulatory approval of its product candidates including potential delays in the commencement, enrollment and completion of clinical trials and that the results of prior clinical trials may not be predictive of future results;
- We will be required to raise additional funds to finance its operations and remain a going concern and may be required to do so sooner than it expects;
- We may not be able to raise additional funds when necessary, and/or on acceptable terms;
- We may not be able to protect our respective intellectual property rights;
- There may be changes in expected or existing competition for our product candidates;
- if we were to be delisted from Nasdaq, it could reduce the visibility, liquidity and price of its common stock;
- a significant portion of the our total outstanding shares of common stock may be sold into the public market at any point, which could cause the market price of our common stock to drop significantly, even if we are doing well;
- we do not anticipate paying any cash dividends on its capital stock in the foreseeable future;
- provisions in our certificate of incorporation, our bylaws or Delaware law might discourage, delay or prevent a change in control of the company or changes in its management, which may depress the price of its common stock;
- the coronavirus (COVID-19) pandemic may have an adverse effect on our business, the medical community and the global economy; and
- securities analysts’ published reports could cause a decline in the price of the our stock.

These risks are not exhaustive. Other sections of this prospectus may include additional factors that could harm our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment.

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New risks and uncertainties emerge from time to time, and it is not possible for our management to predict all risks and uncertainties nor can we assess the impact of all such factors on our business or the extent to which any such factor, or combination of such factors, may cause actual results to differ from those contained in, or implied by, any forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus or to conform these statements to actual results or to changes in our expectations.

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

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance and achievements may be different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

Except as described in any applicable prospectus supplement or in any free writing prospectuses we have authorized for use in connection with a specific offering, we currently intend to use the net proceeds from this offering for working capital and general corporate purposes, which may include, among other things, funding research and development programs, vendor payables, hiring additional personnel, and capital expenditures.

We will not receive any proceeds from the sale of shares of our common stock by any selling stockholders.

DESCRIPTION OF CAPITAL STOCK

General

As of the date of this prospectus, our certificate of incorporation authorizes us to issue up to 85,000,000 shares of capital stock, all with a par value of \$0.0001 per share, of which: 75,000,000 shares are designated as common stock and 10,000,000 shares are designated as preferred stock.

The following summary describes the material terms of our capital stock. The description of capital stock is qualified by reference to our certificate of incorporation and our bylaws.

Common Stock

As of December 31, 2020, 10,882,495 shares of common stock were outstanding. All outstanding shares of common stock are duly authorized, validly issued, fully paid, and nonassessable. All authorized but unissued shares of our common stock are available for issuance by our board of directors without any further stockholder action, except as required by the listing standards of Nasdaq.

Voting Rights

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders, including the election of directors, and do not have cumulative voting rights. Accordingly, the holders of a majority of the outstanding shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they so choose, other than any directors that holders of any preferred stock we may issue may be entitled to elect.

Dividend Rights

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of common stock are entitled to receive ratably those dividends, if any, as may be declared by the board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution, or winding up, the holders of common stock will be entitled to share ratably in the assets legally available for distribution to stockholders after the payment of or provision for all of our debts and other liabilities, subject to the prior rights of any preferred stock then-outstanding.

Rights and Preferences

Holders of common stock have no preemptive or conversion rights or other subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences, and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

As of December 31, 2020, no shares of preferred stock were outstanding. Our board of directors may, without further action by our stockholders, fix the rights, preferences, privileges and restrictions of up to an aggregate of 10,000,000 shares of preferred stock in one or more series and authorize their issuance. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of our common stock. The issuance of our preferred stock could adversely affect the voting power of holders of our common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of decreasing the market price of our common stock and could also have the effect of delaying, deferring or preventing a change of control or other corporate action.

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We will fix the designations, voting powers, preferences and rights of the preferred stock of each series we issue under this prospectus, as well as the qualifications, limitations or restrictions thereof, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering. We will describe in the applicable prospectus supplement the terms of the series of preferred stock being offered, including, to the extent applicable:

- the title and stated value;
- the number of shares we are offering;
- the liquidation preference per share;
- the purchase price;
- the dividend rate, period and payment date and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing;
- the provisions for a sinking fund;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price, or how it will be calculated, and the exchange period;
- voting rights of the preferred stock;
- preemptive rights;
- restrictions on transfer, sale or other assignment;
- whether interests in the preferred stock will be represented by depositary shares;
- a discussion of material United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on the issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

If we issue shares of preferred stock under this prospectus, the shares will be fully paid and non-assessable.

Options and Restricted Stock

As of December 31, 2020, (i) stock options to purchase an aggregate of 583,500 shares of common stock were outstanding under our 2020 Equity Incentive Plan, or 2020 Plan, stock options to purchase an aggregate of 1,200,698 shares of common stock were outstanding under our 2018 Equity Incentive Plan, or 2018 Plan, and 123 shares of common stock were outstanding under our 2003 Stock Option Plan, or 2003 Plan, and (ii) 40,000 unvested shares of restricted stock were outstanding.

Warrants

As of December 31, 2020, 6,398,212 warrants to purchase shares of our capital stock were outstanding, with a weighted average exercise price of \$4.52 (subject to adjustment).

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Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Some provisions of Delaware law, our amended and restated certificate of incorporation, and our amended and restated bylaws contain provisions that could make the following transactions more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions which provide for payment of a premium over the market price for our shares.

These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of the increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Stockholder Meetings

Our bylaws provide that a special meeting of stockholders may be called only by our chairperson of the board, chief executive officer or president, or by a resolution adopted by a majority of our board of directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our bylaws establish advance notice procedures with respect to stockholder proposals to be brought before a stockholder meeting and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors.

Elimination of Stockholder Action by Written Consent

Our bylaws eliminate the right of stockholders to act by written consent without a meeting.

Removal of Directors

Our certificate of incorporation provides for the removal of any of its directors only for cause and requires a stockholder vote of at least a majority of the voting power of the then outstanding voting stock.

Stockholders Not Entitled to Cumulative Voting

Our certificate of incorporation does not permit stockholders to cumulate their votes in the election of directors. Accordingly, the holders of a majority of the outstanding shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they choose, other than any directors that holders of our preferred stock may be entitled to elect.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the Delaware General Corporation Law, or DGCL, which prohibits persons deemed to be “interested stockholders” from engaging in a “business combination” with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an “interested stockholder” is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation’s voting stock. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors.

The provisions of Delaware law, our certificate of incorporation, and our bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the composition of our board and management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

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Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Olde Monmouth Stock Transfer Co.

Listing on the Nasdaq Capital Market

Our common stock is listed on the Nasdaq Capital Market under the symbol "OCUP."

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. Unless the context requires otherwise, whenever we refer to the indenture, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue the debt securities under the indenture that we will enter into with the trustee named in the indenture. The indenture will be qualified under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. We have filed the form of indenture as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The following summary of material provisions of the debt securities and the indenture is subject to, and qualified in its entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete indenture that contains the terms of the debt securities.

General

The indenture does not limit the amount of debt securities that we may issue. It provides that we may issue debt securities up to the principal amount that we may authorize and may be in any currency or currency unit that we may designate. Except for the limitations on consolidation, merger and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations, financial condition or transactions involving us.

We may issue the debt securities issued under the indenture as “discount securities,” which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may be issued with “original issue discount,” or OID, for U.S. federal income tax purposes because of interest payment and other characteristics or terms of the debt securities. Material U.S. federal income tax considerations applicable to debt securities issued with OID will be described in more detail in any applicable prospectus supplement.

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title of the series of debt securities;
- any limit upon the aggregate principal amount that may be issued;
- the maturity date or dates;
- the form of the debt securities of the series;
- the applicability of any guarantees;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- whether the debt securities rank as senior debt, senior subordinated debt, subordinated debt or any combination thereof, and the terms of any subordination;
- if the price (expressed as a percentage of the aggregate principal amount thereof) at which such debt securities will be issued is a price other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof, or if applicable, the portion of the principal amount of such debt securities that is convertible into another security or the method by which any such portion shall be determined;

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- the interest rate or rates, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- if applicable, the date or dates after which, or the period or periods during which, and the price or prices at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- the date or dates, if any, on which, and the price or prices at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
- any and all terms, if applicable, relating to any auction or remarketing of the debt securities of that series and any security for our obligations with respect to such debt securities and any other terms which may be advisable in connection with the marketing of debt securities of that series;
- whether the debt securities of the series shall be issued in whole or in part in the form of a global security or securities; the terms and conditions, if any, upon which such global security or securities may be exchanged in whole or in part for other individual securities; and the depository for such global security or securities;
- if applicable, the provisions relating to conversion or exchange of any debt securities of the series and the terms and conditions upon which such debt securities will be so convertible or exchangeable, including the conversion or exchange price, as applicable, or how it will be calculated and may be adjusted, any mandatory or optional (at our option or the holders' option) conversion or exchange features, the applicable conversion or exchange period and the manner of settlement for any conversion or exchange;
- if other than the full principal amount thereof, the portion of the principal amount of debt securities of the series which shall be payable upon declaration of acceleration of the maturity thereof;
- additions to or changes in the covenants applicable to the particular debt securities being issued, including, among others, the consolidation, merger or sale covenant;
- additions to or changes in the events of default with respect to the securities and any change in the right of the trustee or the holders to declare the principal, premium, if any, and interest, if any, with respect to such securities to be due and payable;
- additions to or changes in or deletions of the provisions relating to covenant defeasance and legal defeasance;
- additions to or changes in the provisions relating to satisfaction and discharge of the indenture;
- additions to or changes in the provisions relating to the modification of the indenture both with and without the consent of holders of debt securities issued under the indenture;
- the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;
- whether interest will be payable in cash or additional debt securities at our or the holders' option and the terms and conditions upon which the election may be made;
- the terms and conditions, if any, upon which we will pay amounts in addition to the stated interest, premium, if any and principal amounts of the debt securities of the series to any holder that is not a "United States person" for federal tax purposes;
- any restrictions on transfer, sale or assignment of the debt securities of the series;
and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, any other additions or changes in the provisions of the indenture, and any terms that may be required by us or advisable under applicable laws or regulations.

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Conversion or Exchange Rights

We will set forth in the applicable prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to settlement upon conversion or exchange and whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indenture will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of our assets as an entirety or substantially as an entirety. However, any successor to or acquirer of such assets (other than a subsidiary of ours) must assume all of our obligations under the indenture or the debt securities, as appropriate.

Events of Default under the Indenture

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indenture with respect to any series of debt securities that we may issue:

- if we fail to pay any installment of interest on any series of debt securities, as and when the same shall become due and payable, and such default continues for a period of 90 days; provided, however, that a valid extension of an interest payment period by us in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of interest for this purpose;
- if we fail to pay the principal of, or premium, if any, on any series of debt securities as and when the same shall become due and payable whether at maturity, upon redemption, by declaration or otherwise, or in any payment required by any sinking or analogous fund established with respect to such series; provided, however, that a valid extension of the maturity of such debt securities in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of principal or premium, if any;
- if we fail to observe or perform any other covenant or agreement contained in the debt securities or the indenture, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive written notice of such failure, requiring the same to be remedied and stating that such is a notice of default thereunder, from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indenture, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

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A holder of the debt securities of any series will have the right to institute a proceeding under the indenture or to appoint a receiver or trustee, or to seek other remedies only if:

- the holder has given written notice to the trustee of a continuing event of default with respect to that series;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request;
- such holders have offered to the trustee indemnity satisfactory to it against the costs, expenses and liabilities to be incurred by the trustee in compliance with the request; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indenture.

Modification of Indenture; Waiver

We and the trustee may change an indenture without the consent of any holders with respect to specific matters:

- to cure any ambiguity, defect or inconsistency in the indenture or in the debt securities of any series;
- to comply with the provisions described above under “Description of Debt Securities—Consolidation, Merger or Sale;”
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to add to our covenants, restrictions, conditions or provisions such new covenants, restrictions, conditions or provisions for the benefit of the holders of all or any series of debt securities, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred upon us in the indenture;
- to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;
- to make any change that does not adversely affect the interests of any holder of debt securities of any series in any material respect;
- to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided above under “Description of Debt Securities—General” to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;
- to evidence and provide for the acceptance of appointment under any indenture by a successor trustee; or
- to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act.

In addition, under the indenture, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of any debt securities of any series;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any series of any debt securities; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

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Discharge

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

- provide for payment;
- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- pay principal of and premium and interest on any debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- recover excess money held by the trustee;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we provide otherwise in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indenture provides that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company, or DTC, or another depository named by us and identified in the applicable prospectus supplement with respect to that series. To the extent the debt securities of a series are issued in global form and as book-entry, a description of terms relating to any book-entry securities will be set forth in the applicable prospectus supplement.

At the option of the holder, subject to the terms of the indenture and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indenture and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will impose no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

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Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the trustee is under no obligation to exercise any of the powers given it by the indenture at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indenture and the debt securities will be governed by and construed in accordance with the internal laws of the State of New York, except to the extent that the Trust Indenture Act of 1939 is applicable.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplement and free writing prospectus, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may consist of warrants to purchase common stock, preferred stock or debt securities and may be issued in one or more series. Warrants may be offered independently or in combination with common stock, preferred stock or debt securities offered by any prospectus supplement. While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The following description of warrants will apply to the warrants offered by this prospectus unless we provide otherwise in the applicable prospectus supplement. The applicable prospectus supplement for a particular series of warrants may specify different or additional terms.

We have filed forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants that may be offered as exhibits to the registration statement of which this prospectus is a part. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant and/or the warrant agreement and warrant certificate, as applicable, that contain the terms of the particular series of warrants we are offering, and any supplemental agreements, before the issuance of such warrants. The following summaries of material terms and provisions of the warrants are subject to, and qualified in their entirety by reference to, all the provisions of the form of warrant and/or the warrant agreement and warrant certificate, as applicable, and any supplemental agreements applicable to a particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplement related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectus, and the complete form of warrant and/or the warrant agreement and warrant certificate, as applicable, and any supplemental agreements, that contain the terms of the warrants.

General

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

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreements and warrants may be modified;
- a discussion of any material or special U.S. federal income tax considerations of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants;
and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

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Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. The warrants may be exercised as set forth in the prospectus supplement relating to the warrants offered. Unless we otherwise specify in the applicable prospectus supplement, warrants may be exercised at any time up to the close of business on the expiration date set forth in the prospectus supplement relating to the warrants offered thereby. After the close of business on the expiration date, unexercised warrants will become void.

Upon receipt of payment and the warrant or warrant certificate, as applicable, properly completed and duly executed at the corporate trust office of the warrant agent, if any, or any other office, including ours, indicated in the prospectus supplement, we will, as soon as practicable, issue and deliver the securities purchasable upon such exercise. If less than all of the warrants (or the warrants represented by such warrant certificate) are exercised, a new warrant or a new warrant certificate, as applicable, will be issued for the remaining warrants.

Governing Law

Unless we otherwise specify in the applicable prospectus supplement, the warrants and any warrant agreements will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

Each warrant agent, if any, will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee, depository or warrant agent maintain for this purpose as the “holders” of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as “indirect holders” of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depository on behalf of other financial institutions that participate in the depository’s book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Securities issued in global form will be registered in the name of the depository or its participants. Consequently, for securities issued in global form, we will recognize only the depository as the holder of the securities, and we will make all payments on the securities to the depository. The depository passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depository and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a global security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depository’s book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not legal holders, of the securities.

Street Name Holders

We may terminate a global security or issue securities in non-global form. In these cases, investors may choose to hold their securities in their own names or in “street name.” Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we or any applicable trustee or depository will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we or any applicable trustee or depository will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee and of any third parties employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the legal holder, we have no further responsibility for the payment or notice even if that legal holder is required, under agreements with its participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the legal holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of the indenture or for other purposes. In such an event, we would seek approval only from the holders, and not the indirect holders, of the securities. Whether and how the legal holders contact the indirect holders is up to the legal holders.

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Special Considerations For Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form because the securities are represented by one or more global securities or in street name, you should check with your own institution to find out:

- how it handles securities payments and notices;
- whether it imposes fees or charges;
- how it would handle a request for the holders' consent, if ever required;
- whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;
- how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

Global Securities

A global security is a security that represents one or any other number of individual securities held by a depositary. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we issue to, deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depositary. Unless we specify otherwise in the applicable prospectus supplement, DTC will be the depositary for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depositary, its nominee or a successor depositary, unless special termination situations arise. We describe those situations below under "Special Situations When a Global Security Will Be Terminated." As a result of these arrangements, the depositary, or its nominee, will be the sole registered owner and legal holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depositary or with another institution that does. Thus, an investor whose security is represented by a global security will not be a legal holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued in global form only, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations for Global Securities

The rights of an indirect holder relating to a global security will be governed by the account rules of the investor's financial institution and of the depositary, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a holder of securities and instead deal only with the depositary that holds the global security.

If securities are issued only in the form of a global security, an investor should be aware of the following:

- an investor cannot cause the securities to be registered in his or her name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below;
- an investor will be an indirect holder and must look to his or her own bank, broker or other financial institution for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above;
- an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;
- an investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;

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- the depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in a global security;
- we and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in a global security, nor do we or any applicable trustee supervise the depositary in any way;
- the depositary may, and we understand that DTC will, require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds, and your bank, broker or other financial institution may require you to do so as well; and
- financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, notices and other matters relating to the securities.

There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations when a Global Security will be Terminated

In a few special situations described below, the global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks, brokers or other financial institutions to find out how to have their interests in securities transferred to their own name, so that they will be direct holders. We have described the rights of holders and street name investors above.

Unless we provide otherwise in the applicable prospectus supplement, the global security will terminate when the following special situations occur:

- if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;
- if we notify any applicable trustee that we wish to terminate that global security;
or
- if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The applicable prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the applicable prospectus supplement. When a global security terminates, the depositary, and not we or any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

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SELLING STOCKHOLDERS

The shares of Common Stock being offered by the selling stockholders are those issuable to the selling stockholders, upon exercise of Series A Warrants and Series B Warrants. For additional information regarding the issuances of those shares of common stock and the Series A/B Warrants, see “Private Placement of Common Shares and Warrants” above. We are registering the common stock underlying the Series A/B Warrants in order to permit the selling stockholders to offer the shares for resale from time to time. Except for the ownership of the shares of common stock and the Series A/B Warrants, the selling stockholders have not had any material relationship with us within the past three years.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by each selling stockholder, based on its ownership of the shares of common stock and the warrants, as of January 29, 2021, assuming exercise of the Series A/B Warrants held by the selling stockholders on that date, without regard to any limitations on exercises. The third column lists the shares of common stock being offered by this prospectus by the selling stockholders.

In accordance with the terms of the waiver agreements, this prospectus generally covers the resale of at least the maximum number of shares of common stock issued and issuable upon exercise of the Warrants, determined as if the outstanding Warrants were exercised, as applicable, in full, as of the trading day immediately preceding the date this registration statement is initially filed with the SEC. The fourth column assumes the sale of all of the shares offered by the selling shareholders pursuant to this prospectus.

Under the terms of the Series A/B Warrants, a selling stockholder may not exercise the warrants to the extent such exercise would cause such selling stockholder, together with its affiliates, to beneficially own a number of shares of common stock which would exceed 4.99% or 9.99%, as applicable, of our then outstanding common stock following such exercise, excluding for purposes of such determination common stock issuable upon exercise of the warrants which have not been exercised. In addition, pursuant to an agreement with the Company, a selling stockholder cannot receive shares of common stock held in an escrow account for the benefit of such selling stockholder (the “Escrow Common Stock”) to the extent the receipt of such shares would cause such selling stockholder, together with its affiliates, to beneficially own a number of shares of common stock which would exceed 9.99% of the outstanding shares of our then outstanding common stock following such exercise. The number of shares in the second and fourth columns do not reflect this limitation. The selling stockholders may sell all, some or none of their shares in this offering. See “Plan of Distribution.”

Name of Selling Securityholder	Number of Shares of Common Stock Owned Prior to Offering ⁽¹⁾	Maximum Number of Shares of Common Stock to be Sold Pursuant to this Prospectus	Number of Shares of Common Stock Owned After Offering	Percentage of Shares of Common Stock Owned After Offering if Greater than 1%
Empery Asset Master, Ltd. ⁽²⁾	367,875	244,560	123,315	*%
Empery Tax Efficient, LP ⁽³⁾	105,105	69,875	35,230	*%
Empery Debt Opportunity Fund, LP ⁽⁴⁾	4,782,307	3,179,265	1,603,042	9.99%
Altium Growth Fund, LP ⁽⁵⁾	5,295,310	3,493,700	1,801,610	9.9%

* Represents less than 1%

- (1) Beneficial ownership includes shares of common stock as to which a person or group has sole or shared voting power or dispositive power. Shares of common stock registered hereunder, as well as shares of common stock subject to options, warrants or convertible preferred stock that are exercisable or convertible within 60 days of January 29, 2021, are deemed outstanding for purposes of computing the number of shares beneficially owned and percentage ownership of the person or group holding such shares of common stock, options, warrants or convertible securities, but are not deemed outstanding for computing the percentage of any other person.
- (2) The number of shares consists of (i) 16,561 shares of common stock held directly by the selling stockholder and 106,754 shares of Escrow Common Stock, and (ii) 367,875 shares of common stock issuable upon exercise of the Series A/B Warrants, without giving effect to the blocker provisions described above. Empery Asset Management LP, the authorized agent of Empery Asset Master Ltd (“EAM”), has discretionary authority to vote and dispose of the shares held by EAM and may be deemed to be the beneficial owner of these shares. Martin Hoe and Ryan Lane, in their capacity as investment managers of Empery Asset Management LP, may also be deemed to have investment discretion and voting power over the shares held by EAM. EAM, Mr. Hoe and Mr. Lane each disclaim any beneficial ownership of these shares.

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- (3) The number of shares consists of (i) 4,730 shares of common stock directly by the selling stockholder and 30,500 shares of Escrow Common Stock, and (ii) 69,875 shares of common stock issuable upon exercise of the Series A/B Warrants, without giving effect to the blocker provisions described above. Empery Asset Management LP, the authorized agent of Empery Tax Efficient, LP (“ETE”), has discretionary authority to vote and dispose of the shares held by ETE and may be deemed to be the beneficial owner of these shares. Martin Hoe and Ryan Lane, in their capacity as investment managers of Empery Asset Management LP, may also be deemed to have investment discretion and voting power over the shares held by ETE. ETE, Mr. Hoe and Mr. Lane each disclaim any beneficial ownership of these shares.
- (4) The number of shares consists of (i) 215,247 shares of common stock held directly by the selling stockholder and 1,387,795 shares of Escrow Common Stock, and (ii) 3,179,265 shares of common stock issuable upon exercise of the Series A/B Warrants, without giving effect to the blocker provisions described above. Empery Asset Management LP, the authorized agent of Empery Debt Opportunity Fund, LP (“EDOF”), has discretionary authority to vote and dispose of the shares held by EDOF and may be deemed to be the beneficial owner of these shares. Martin Hoe and Ryan Lane, in their capacity as investment managers of Empery Asset Management LP, may also be deemed to have investment discretion and voting power over the shares held by EDOF. EDOF, Mr. Hoe and Mr. Lane each disclaim any beneficial ownership of these shares.
- (5) The number of shares consists of (i) 878,561 shares of Common Stock held directly by the selling stockholder and 923,049 shares held in escrow for the benefit of the selling stockholder, and (ii) 3,493,700 shares of Common Stock issuable upon exercise of the Series A/B Warrants, without giving effect to the blocker provision described above. Altium Capital Management, LP, the investment manager of Altium Growth Fund, LP, has voting and investment power over these securities. Jacob Gottlieb is the managing member of Altium Capital Growth GP, LLC, which is the general partner of Altium Growth Fund, LP. Each of Altium Growth Fund, LP and Jacob Gottlieb disclaims beneficial ownership over these shares.

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PLAN OF DISTRIBUTION

We may sell our securities covered by this prospectus in any of three ways (or in any combination):

- to or through underwriters or dealers;
- directly to one or more purchasers; or
- through agents.

The selling stockholders may sell our securities covered by this prospectus in any of the following ways:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act of 1933, as amended (the "Securities Act"), if available, rather than under this prospectus.

We or the selling stockholders may distribute the securities:

- from time to time in one or more transactions at a fixed price or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to the prevailing market prices; or
- at negotiated prices.

Each time we or the selling stockholders offer and sell securities covered by this prospectus, we will provide a prospectus supplement or supplements, if necessary, that will describe the method of distribution and set forth the terms of the offering, including:

- the name or names of any underwriters, dealers or agents;
- the amounts of securities underwritten or purchased by each of them;
- the purchase price of securities and the proceeds, if any, we or the selling stockholders will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us or the selling stockholders;
- any underwriting discounts or commissions or agency fees and other items constituting underwriters' or agents' compensation;

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- the public offering price of the securities;
- any discounts, commissions or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time. We or the selling stockholders may determine the price or other terms of the securities offered under this prospectus by use of an electronic auction. We will describe how any auction will determine the price or any other terms, how potential investors may participate in the auction and the nature of the obligations of the underwriter, dealer or agent in the applicable prospectus supplement. In connection with sales of the shares of common stock or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume.

Underwriters or dealers may offer and sell the offered securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. If underwriters or dealers are used in the sale of any securities, the securities will be acquired by the underwriters or dealers for their own account and may be resold from time to time in one or more transactions described above. The securities may be either offered to the public through underwriting syndicates represented by managing underwriters, or directly by underwriters or dealers. Generally, the underwriters' or dealers' obligations to purchase the securities will be subject to certain conditions precedent. The underwriters or dealers will be obligated to purchase all of the securities if they purchase any of the securities, unless otherwise specified in the prospectus supplement. We may use underwriters with whom we have a material relationship. We will describe the nature of any such relationship in the prospectus supplement, naming the underwriter.

We or the selling stockholders may sell the securities through agents from time to time. The prospectus supplement will name any agent involved in the offer or sale of the securities and any commissions we or the selling stockholders pay to them. Generally, any agent will be acting on a best efforts basis for the period of its appointment. We or the selling stockholders may authorize underwriters, dealers or agents to solicit offers by certain purchasers to purchase the securities from us or the selling stockholders at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The contracts will be subject only to those conditions set forth in the prospectus supplement, and the prospectus supplement will set forth any commissions we or the selling stockholders pay for solicitation of these contracts.

Agents, dealers and underwriters may be entitled to indemnification by us or the selling stockholders against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which the agents, dealers or underwriters may be required to make in respect thereof. Agents, dealers and underwriters may be customers of, engage in transactions with, or perform services for us or the selling stockholders in the ordinary course of business.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended. Over-allotment involves sales in excess of the offering size, which create a short position. This short sales position may involve either "covered" short sales or "naked" short sales. Covered short sales are short sales made in an amount not greater than the underwriters' over-allotment option to purchase additional securities in this offering described above. The underwriters may close out any covered short position either by exercising their over-allotment option or by purchasing securities in the open market. To determine how they will close the covered short position, the underwriters will consider, among other things, the price of securities available for purchase in the open market, as compared to the price at which they may purchase securities through the over-allotment option. Naked short sales are short sales in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that, in the open market after pricing, there may be downward pressure on the price of the securities that could adversely affect investors who purchase securities in this offering. Stabilizing transactions permit bids to

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purchase the underlying security for the purpose of fixing the price of the security so long as the stabilizing bids do not exceed a specified maximum. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions.

Any underwriters who are qualified market makers on the Nasdaq Capital Market may engage in passive market making transactions in our common stock, preferred stock, warrants and debt securities, as applicable, on the Nasdaq Capital Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

The selling stockholders and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be "underwriters" within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of common stock is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or reallocated or paid to broker-dealers.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

The selling stockholders may pledge or grant a security interest in some or all of the Warrants or shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

Similar to other purchase transactions, an underwriter's purchase to cover the syndicate short sales or to stabilize the market price of our securities may have the effect of raising or maintaining the market price of our securities or preventing or mitigating a decline in the market price of our securities. As a result, the price of our securities may be higher than the price that might otherwise exist in the open market. The imposition of a penalty bid might also have an effect on the price of the securities if it discourages resales of the securities.

Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of the securities. If such transactions are commenced, they may be discontinued without notice at any time.

We will pay all expenses of the registration of the shares of common stock pursuant to the waiver agreements, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, that a selling stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act, in accordance with the waiver agreements, or the selling stockholders will be entitled to

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contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the related waiver agreements, or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.

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LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered by this prospectus, and any supplement thereto, will be passed upon for us by Honigman LLP.

EXPERTS

Rexahn Pharmaceuticals, Inc. (Effective November 5, 2020 now Ocuphire Pharma, Inc.)

The financial statements of Rexahn Pharmaceuticals, Inc. (effective November 5, 2020 now Ocuphire Pharma, Inc.) as of and for each of the years ended December 31, 2019 and 2018, incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2019, have been audited by Baker Tilly US, LLP (formerly known as Baker Tilly Virchow Krause, LLP), an independent registered public accounting firm, as stated in its report thereon incorporated by reference herein, and have been so incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

Ocuphire Pharma, Inc.

The financial statements of Ocuphire Pharma, Inc. at December 31, 2019 and 2018, and for each of the two years in the period ended December 31, 2019, incorporated by reference in this Prospectus and Registration Statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about Ocuphire Pharma, Inc.'s ability to continue as a going concern as described in Note 1 to the financial statements), and are incorporated herein by reference. Such financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement we filed with the SEC. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. Neither we nor any agent, underwriter or dealer has authorized any person to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front page of this prospectus, regardless of the time of delivery of this prospectus or any sale of the securities offered by this prospectus.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, including Ocuphire. The address of the SEC website is www.sec.gov.

We maintain a website at www.ocuphire.com. Information contained in or accessible through our website does not constitute a part of this prospectus.

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INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” the information we file with it, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings (including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to the effectiveness of such registration statement) we will make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act until the termination of the offering of the shares covered by this prospectus (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K):

- Rexahn's annual report on Form 10-K for the year ended December 31, 2019, filed with the SEC on [February 21, 2020](#), as amended on [April 29, 2020](#);
- Rexahn's quarterly reports on Form 10-Q for the quarter ended March 31, 2020, filed with the SEC on [May 7, 2020](#), quarterly report on Form 10-Q for the quarter ended June 30, 2020, filed with the SEC on [August 14, 2020](#), and quarterly report on Form 10-Q for the quarter ended September 30, 2020, filed with the SEC on [October 29, 2020](#);
- Current reports on Form 8-K filed with the SEC on [March 16, 2020](#), [April 9, 2020](#), [June 19, 2020](#), [July 1, 2020](#), [August 3, 2020](#), [September 2, 2020](#), [September 11, 2020](#), [October 9, 2020](#), [November 3, 2020](#), [November 6, 2020](#) (as amended on [December 30, 2020](#)), [November 17, 2020](#), [November 25, 2020](#) and [February 4, 2021](#);
- Registration Statement on Form S-4 (File No. 333-239702) filed on [July 6, 2020](#), as amended on [August 27, 2020](#), [September 16, 2020](#) and [September 30, 2020](#); and
- the description of common stock set forth in the Registration Statement on Form 8-A, filed with the SEC on [June 7, 2019](#), including any amendments thereto or reports filed for the purposes of updating this description.

We will furnish without charge to each person, including any beneficial owner, to whom a prospectus is delivered, upon written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents.:

Ocuphire Pharma, Inc.
37000 Grand River Avenue, Suite 120
Farmington Hills, MI 48335
(248) 681-9815
Attn: Chief Executive Officer

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the estimated costs and expenses, other than the underwriting discounts and commissions, payable by us, in connection with the offering of the securities pursuant to this Registration Statement:

SEC Registration Fee	\$23,162.76	
Financial Industry Regulatory Authority Filing Fee		(1)
Legal Fees and Expenses		(1)
Nasdaq Capital Market Listing Fees		(1)
Accounting Fees		(1)
Printing and Miscellaneous Fees		(1)
Total		(1)

- (1) The amount of securities and number of offerings are indeterminable and the expenses cannot be estimated at this time. An estimate of the aggregate expenses in connection with the sale and distribution of securities being offered will be included in the applicable prospectus supplement.

Item 15. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the Securities Act. Our amended and restated certificate of incorporation provides for indemnification of our directors, officers, employees and other agents to the maximum extent permitted by the Delaware General Corporation Law, and our amended and restated bylaws provide for indemnification of our directors, officers, employees and other agents to the maximum extent permitted by the Delaware General Corporation Law.

We have entered into indemnification agreements with our directors and officers whereby we have agreed to indemnify our directors and officers to the fullest extent permitted by law, including indemnification against expenses and liabilities incurred in legal proceedings to which the director or officer was, or is threatened to be made, a party by reason of the fact that such director or officer is or was a director, officer, employee or agent of Personalis, Inc., provided that such director or officer acted in good faith and in a manner that the director or officer reasonably believed to be in, or not opposed to, the best interest of Personalis, Inc. At present, there is no pending litigation or proceeding involving a director or officer of Personalis, Inc. regarding which indemnification is sought, nor is the registrant aware of any threatened litigation that may result in claims for indemnification.

We maintain insurance policies that indemnify our directors and officers against various liabilities arising under the Securities Act and the Securities Exchange Act of 1934, as amended, that might be incurred by any director or officer in his capacity as such.

The underwriting agreement(s) that the Registrant may enter into may provide for indemnification by any underwriters of the Registrant, its directors, its officers who sign the registration statement and the Registrant's controlling persons for some liabilities, including liabilities arising under the Securities Act.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, executive officers or persons controlling us, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

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Item 16. Exhibits.

Exhibit Number	Description
1.1*	Form of Underwriting Agreement.
3.1	Amended and Restated Certificate of Incorporation, filed as Appendix G to the Company's Definitive Proxy Statement on Schedule 14A filed on April 29, 2005, is incorporated herein by reference.
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation, filed as Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on May 5, 2017, is incorporated herein by reference.
3.3	Certificate of Amendment of Amended and Restated Certificate of Incorporation, filed as Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on August 30, 2018 is incorporated herein by reference.
3.4	Certificate of Amendment of Amended and Restated Certificate of Incorporation, filed as Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on April 12, 2019, is incorporated herein by reference.
3.5	Certificate of Amendment of Amended and Restated Certificate of Incorporation, filed as Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on November 6, 2020, is incorporated herein by reference.
3.6	Certificate of Amendment of Amended and Restated Certificate of Incorporation, filed as Exhibit 3.2 to the Company's Current Report on Form 8-K, filed on November 6, 2020, is incorporated herein by reference.
3.7	Second Amended and Restated Bylaws of the Registrant, filed as Exhibit 3.3 to the Company's Current Report on Form 8-K, filed on November 6, 2020, is incorporated herein by reference.
4.1	Form of common stock certificate of the Registrant., filed as Exhibit 4.3 to the Company's Registration Statement on Form S-8, filed on October 28, 2005, is incorporated herein by reference.
4.2*	Form of Preferred Stock Certificate and Form of Certificate of Designation of Preferred Stock.
4.3	Form of Indenture.
4.4*	Form of Debt Securities.
4.5	Form of Common Stock Warrant Agreement and Warrant Certificate.
4.6	Form of Preferred Stock Warrant Agreement and Warrant Certificate.
4.7	Form of Debt Securities Warrant Agreement and Warrant Certificate.
4.8	Form of Series A/B Warrants filed as Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on July 1, 2020, is incorporated herein by reference.
4.9	Form of Waiver Agreement, dated as of February 3, 2021, by and between Ocuphire Pharma, Inc. and the Holder(s) filed as Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on February 4, 2021, is incorporated herein by reference.
5.1	Opinion of Honigman LLP.
23.1	Consent of Independent Registered Public Accounting Firm.
23.2	Consent of Independent Registered Public Accounting Firm.
23.3	Consent of Honigman LLP (reference is made to Exhibit 5.1).

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Exhibit Number	Description
24.1	Power of Attorney (reference is made to the signature page hereto).
25.1*+	Statement of Eligibility of Trustee under the Indenture.

* To be filed by amendment or as an exhibit to a Current Report on Form 8-K and incorporated herein by reference, if applicable.

+ To be filed separately under electronic form type 305B2, if applicable.

Item 17. Undertakings.

The undersigned registrants hereby undertakes:

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

provided, however, that the undertakings set forth in paragraphs (i), (ii) and (iii) of this section do not apply if the registration statement is on Form S-3, Form SF-3 or Form F-3 and 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 Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (b) 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.
- (c) 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.
- (d) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time

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shall be deemed to be the initial bona fide offering thereof. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

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- (c) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (f) That for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (g) That, for purposes of determining any liability under the Securities Act, (i) the information omitted from the form of prospectus filed as part of the registration statement in reliance upon Rule 430A and contained in the 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 a part of the registration statement as of the time it was declared effective; and (ii) 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.
- (h) 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 Trust Indenture Act.
- (i) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Farmington Hills, state of Michigan, on February 4, 2021.

OCUPHIRE PHARMA, INC.

By: /s/ Mina Sooch

Mina Sooch

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Mina Sooch and Bernhard Hoffmann, and each of them, as his or her true and lawful agent, proxy and attorney-in-fact, each acting alone, 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 (i) act on, sign, and file with the SEC any and all amendments (including post-effective amendments) to this registration statement together with all schedules and exhibits thereto, (ii) act on, sign and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, (iii) act on and file any supplement to any prospectus included in this registration statement or any such amendment or any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act, and (iv) take any and all actions which may be necessary or appropriate to be done, as fully for all intents and purposes as he or she might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy and attorney-in-fact or any of his substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Mina Sooch</u> Mina Sooch	President, Chief Executive Officer (Principal Executive Officer)	February 4, 2021
<u>/s/ Amy Rabourn</u> Amy Rabourn	Vice President of Finance (Principal Financial and Accounting Officer)	February 4, 2021
<u>/s/ Sean Ainsworth</u> Sean Ainsworth	Director	February 4, 2021
<u>/s/ James S. Manuso</u> James S. Manuso	Director	February 4, 2021
<u>/s/ Cam Gallagher</u> Cam Gallagher	Director	February 4, 2021
<u>/s/ Alan R. Meyer</u> Alan R. Meyer	Director	February 4, 2021
<u>/s/ Richard J. Rodgers</u> Richard J. Rodgers	Director	February 4, 2021
<u>/s/ Susan K. Benton</u> Susan K. Benton	Director	February 4, 2021

OCUPHIRE PHARMA, INC.,

Issuer

AND

[TRUSTEE],
Trustee

INDENTURE

Dated as of [●], 20 ____

Debt Securities

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INDENTURE

THIS INDENTURE, dated as of [●], 20___, between **Ocuphire Pharma, Inc.**, a Delaware corporation (the “*Company*”), and [TRUSTEE], as trustee (the “*Trustee*”):

Recitals

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

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

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

Agreement

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

ARTICLE 1 DEFINITIONS

Section 1.01 Definitions of Terms.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The term **“given”**, **“mailed”**, **“notify”** or **“sent”** with respect to any notice to be given to a Securityholder pursuant to this Indenture, shall mean notice (x) given to the Depository (or its designee) pursuant to the standing instructions from the Depository or its designee, including by electronic mail in accordance with accepted practices or procedures at the Depository (in the case of a Global Security) or (y) mailed to such Holder by first class mail, postage prepaid, at its address as it appears on the Security Register (in the case of a definitive Security). Notice so “given” shall be deemed to include any notice to be “mailed” or “delivered,” as applicable, under this Indenture.

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

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

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

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

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

“Officer” means, with respect to the Company, the chairman of the Board of Directors, a chief executive officer, a president, a chief financial officer, a chief operating officer, any executive vice president, any senior vice president, any vice president, the treasurer or any assistant treasurer, the controller or any assistant controller or the secretary or any assistant secretary.

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

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

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

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

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

“Responsible Officer” when used with respect to the Trustee means any officer within the Corporate Trust Office of the Trustee (or any successor group of the Trustee) or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of his or her knowledge of and familiarity with the particular subject and in each case who shall have direct responsibility for the administration of this Indenture.

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

“Securities Act” means the Securities Act of 1933, as amended.

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

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

“**Subsidiary**” means, with respect to any Person, any corporation, association, partnership or other business entity of which more than 50% of the total voting power of shares of capital stock or other interests (including partnership interests) entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers, general partners or trustees thereof is at the time owned or controlled, directly or indirectly, by (i) such Person; (ii) such Person and one or more Subsidiaries of such Person; or (iii) one or more Subsidiaries of such Person.

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

“**Trust Indenture Act**” means the Trust Indenture Act of 1939, as amended.

“**U.S.A. Patriot Act**” means the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Pub. L. 107-56, as amended and signed into law October 26, 2001.

ARTICLE 2 ISSUE, DESCRIPTION, TERMS, EXECUTION, REGISTRATION AND EXCHANGE OF SECURITIES

Section 2.01 Designation and Terms of Securities.

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

- (1) the title of the Securities of the series (which shall distinguish the Securities of that series from all other Securities);
- (2) any limit upon the aggregate principal amount of the Securities of that series that may be authenticated and delivered under this Indenture (except for Securities authenticated and delivered upon registration of transfer of, or in exchange for, or in lieu of, other Securities of that series);
- (3) the maturity date or dates on which the principal of the Securities of the series is payable;
- (4) the form of the Securities of the series including the form of the certificate of authentication for such series;
- (5) the applicability of any guarantees;
- (6) whether or not the Securities will be secured or unsecured, and the terms of any secured debt;
- (7) whether the Securities rank as senior debt, senior subordinated debt, subordinated debt or any combination thereof, and the terms of any subordination;

- (8) if the price (expressed as a percentage of the aggregate principal amount thereof) at which such Securities will be issued is a price other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof, or if applicable, the portion of the principal amount of such Securities that is convertible into another security or the method by which any such portion shall be determined;
- (9) the interest rate or rates, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- (10) the Company's right, if any, to defer the payment of interest and the maximum length of any such deferral period;
- (11) if applicable, the date or dates after which, or the period or periods during which, and the price or prices at which, the Company may at its option, redeem the series of Securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- (12) the date or dates, if any, on which, and the price or prices at which the Company is obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the Securityholder's option to purchase, the series of Securities and the currency or currency unit in which the Securities are payable;
- (13) the denominations in which the Securities of the series shall be issuable, if other than denominations of one thousand U.S. dollars (\$1,000) or any integral multiple thereof;
- (14) any and all terms, if applicable, relating to any auction or remarketing of the Securities of that series and any security for the obligations of the Company with respect to such Securities and any other terms which may be advisable in connection with the marketing of Securities of that series;
- (15) whether the Securities of the series shall be issued in whole or in part in the form of a Global Security or Securities; the terms and conditions, if any, upon which such Global Security or Securities may be exchanged in whole or in part for other individual Securities; and the Depositary for such Global Security or Securities;
- (16) if applicable, the provisions relating to conversion or exchange of any Securities of the series and the terms and conditions upon which such Securities will be so convertible or exchangeable, including the conversion or exchange price, as applicable, or how it will be calculated and may be adjusted, any mandatory or optional (at the Company's option or the holders' option) conversion or exchange features, the applicable conversion or exchange period and the manner of settlement for any conversion or exchange, which may, without limitation, include the payment of cash as well as the delivery of securities;
- (17) if other than the full principal amount thereof, the portion of the principal amount of Securities of the series which shall be payable upon declaration of acceleration of the maturity thereof pursuant to Section 6.01;
- (18) additions to or changes in the covenants applicable to the series of Securities being issued, including, among others, the consolidation, merger or sale covenant;
- (19) additions to or changes in the Events of Default with respect to the Securities and any change in the right of the Trustee or the Securityholders to declare the principal, premium, if any, and interest, if any, with respect to such Securities to be due and payable;
- (20) additions to or changes in or deletions of the provisions relating to covenant defeasance and legal defeasance;

- (21) additions to or changes in the provisions relating to satisfaction and discharge of this Indenture;
- (22) additions to or changes in the provisions relating to the modification of this Indenture both with and without the consent of Securityholders of Securities issued under this Indenture;
- (23) the currency of payment of Securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;
- (24) whether interest will be payable in cash or additional Securities at the Company's or the Securityholders' option and the terms and conditions upon which the election may be made;
- (25) the terms and conditions, if any, upon which the Company shall pay amounts in addition to the stated interest, premium, if any and principal amounts of the Securities of the series to any Securityholder that is not a "United States person" for federal tax purposes;
- (26) any restrictions on transfer, sale or assignment of the Securities of the series; and
- (27) any other specific terms, preferences, rights or limitations of, or restrictions on, the Securities, any other additions or changes in the provisions of this Indenture, and any terms that may be required by us or advisable under applicable laws or regulations.

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

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

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

Section 2.02 Form of Securities and Trustee's Certificate.

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

Section 2.03 Denominations: Provisions for Payment.

The Securities shall be issuable as registered Securities and in the denominations of one thousand U.S. dollars (\$1,000) or any integral multiple thereof, subject to Section 2.01(a)(13). The Securities of a particular series shall bear interest payable on the dates and at the rate specified with respect to that series. Subject to Section 2.01(a)(23), the principal of and the interest on the Securities of any series, as well as any premium thereon in case of redemption or repurchase thereof prior to maturity, and any cash amount due upon conversion or exchange thereof, shall be payable in the coin or currency of the United States of America that at the time is legal tender for public and private debt, at the office or agency of the Company maintained for that purpose. Each Security shall be dated the date of its authentication. Interest on the Securities shall be computed on the basis of a 360-day year composed of twelve 30-day months.

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

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

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

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

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

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

Section 2.04 Execution and Authentications.

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

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

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

Upon the Company's delivery of any such authentication order to the Trustee at any time after the initial issuance of Securities under this Indenture, the Trustee shall be provided with, and (subject to Sections 315(a) through 315(d) of the Trust Indenture Act) shall be fully protected in relying upon, (1) an Opinion of Counsel or reliance letter and (2) an Officer's Certificate stating that all conditions precedent to the execution, authentication and delivery of such Securities are in conformity with the provisions of this Indenture.

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

Section 2.05 Registration of Transfer and Exchange.

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

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

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

The Company initially appoints the Trustee as initial Security Registrar for each series of Securities.

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

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

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

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

Section 2.06 Temporary Securities.

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

Section 2.07 Mutilated, Destroyed, Lost or Stolen Securities.

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

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

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

Section 2.08 Cancellation.

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

Section 2.09 Benefits of Indenture.

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

Section 2.10 Authenticating Agent.

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

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

Section 2.11 Global Securities.

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

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

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

Section 2.12 CUSIP Numbers.

The Company in issuing the Securities may use "CUSIP" numbers (if then generally in use), and, if so, the Trustee shall use "CUSIP" numbers in notices of redemption as a convenience to Holders; provided that any such notice may 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 a redemption and that reliance may be placed only on the other elements of identification printed on the Securities, and any such redemption shall not be affected by any defect in or omission of such numbers. The Company will promptly notify the Trustee of any change in the "CUSIP" numbers.

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

Section 3.01 Redemption.

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

Section 3.02 Notice of Redemption.

(a) In case the Company shall desire to exercise such right to redeem all or, as the case may be, a portion of the Securities of any series in accordance with any right the Company reserved for itself to do so pursuant to Section 2.01 hereof, the Company shall, or shall cause the Trustee to, give notice of such redemption to holders of the Securities of such series to be redeemed by mailing, first class postage prepaid (or with regard to any Global Security held in book entry form, by electronic mail in accordance with the applicable procedures of the Depository), a notice of such redemption not less than 30 days and not more than 90 days before the date fixed for redemption of that series to such Securityholders, unless a shorter period is specified in the Securities to be redeemed. Any notice that is mailed in the manner herein provided shall be conclusively presumed to have been duly given, whether or not the registered holder receives the notice. In any case, failure duly to give such notice to the holder of any Security of any series designated for redemption in whole or in part, or any defect in the notice, shall not affect the validity of the proceedings for the redemption of any other Securities of such series or any other series. In the case of any redemption of Securities prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, the Company shall furnish the Trustee with an Officer's Certificate evidencing compliance with any such restriction.

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

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

(b) If less than all the Securities of a series are to be redeemed, the Company shall give the Trustee at least 45 days' notice (unless a shorter notice shall be satisfactory to the Trustee) in advance of the date fixed for redemption as to the aggregate principal amount of Securities of the series to be redeemed, and thereupon the Securities to be redeemed shall be selected, by lot, on a pro rata basis, or in such other manner as the Company shall deem appropriate and fair in its discretion and that may provide for the selection of a portion or portions (equal to one thousand U.S. dollars (\$1,000) or any integral multiple thereof) of the principal amount of such Securities of a denomination larger than \$1,000, the Securities to be redeemed and shall thereafter promptly notify the Company in writing of the numbers of the Securities to be redeemed, in whole or in part. The Company may, if and whenever it shall so elect, by delivery of instructions signed on its behalf by an Officer, instruct the Trustee or any paying agent to call all or any part of the Securities of a particular series for redemption and to give notice of redemption in the manner set forth in this Section, such notice to be in the name of the Company or its own name as the Trustee or such paying agent may deem advisable. In any case in which notice of redemption is to be given by the Trustee or any such paying agent, the Company shall deliver or cause to be delivered to, or permit to remain with, the Trustee or such paying agent, as the case may be, such Security Register, transfer books or other records, or suitable copies or extracts therefrom, sufficient to enable the Trustee or such paying agent to give any notice by mail that may be required under the provisions of this Section.

Section 3.03 Payment Upon Redemption.

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

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

Section 3.04 Sinking Fund.

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

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

Section 3.05 Satisfaction of Sinking Fund Payments with Securities.

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

Section 3.06 Redemption of Securities for Sinking Fund.

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

**ARTICLE 4
COVENANTS**

Section 4.01 Payment of Principal, Premium and Interest.

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

Section 4.02 Maintenance of Office or Agency.

So long as any series of the Securities remain Outstanding, the Company agrees to maintain an office or agency with respect to each such series and at such other location or locations as may be designated as provided in this Section 4.02, where (i) Securities of that series may be presented for payment, (ii) Securities of that series may be presented as herein above authorized for registration of transfer and exchange and (iii) notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be given or served, such designation to continue with respect to such office or agency until the Company shall, by written notice signed by any officer authorized to sign an Officer's Certificate and delivered to the Trustee, designate some other office or agency for such purposes or any of them. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, notices and demands may be made or served at the Corporate Trust Office of the Trustee, and the Company hereby appoints the Trustee as its agent to receive all such presentations, notices and demands. The Company initially appoints the Corporate Trust Office of the Trustee as its paying agent with respect to the Securities.

Section 4.03 Paying Agents.

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

- (1) that it will hold all sums held by it as such agent for the payment of the principal of (and premium, if any) or interest on the Securities of that series (whether such sums have been paid to it by the Company or by any other obligor of such Securities) in trust for the benefit of the Persons entitled thereto;
- (2) that it will give the Trustee notice of any failure by the Company (or by any other obligor of such Securities) to make any payment of the principal of (and premium, if any) or interest on the Securities of that series when the same shall be due and payable;
- (3) that it will, at any time during the continuance of any failure referred to in the preceding paragraph (a)(2) above, upon the written request of the Trustee, forthwith pay to the Trustee all sums so held in trust by such paying agent; and
- (4) that it will perform all other duties of paying agent as set forth in this Indenture.

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

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

Section 4.04 Appointment to Fill Vacancy in Office of Trustee.

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

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

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

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

Section 5.02 Preservation of Information; Communications with Securityholders.

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

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

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

Section 5.03 Reports by the Company.

(a) The Company will at all times comply with Section 314(a) of the Trust Indenture Act. The Company covenants and agrees to provide (which delivery may be via electronic mail) to the Trustee within 30 days, after the Company files the same with the Commission, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the Commission may from time to time by rules and regulations prescribe) that the Company is required to file with the Commission pursuant to Section 13 or Section 15(d) of the Exchange Act; provided, however, the Company shall not be required to deliver to the Trustee any correspondence filed with the Commission or any materials for which the Company has sought and received confidential treatment by the Commission; and provided further, that so long as such filings by the Company are available on the Commission's Electronic Data Gathering, Analysis and Retrieval System (EDGAR), or any successor system, such filings shall be deemed to have been filed with the Trustee for purposes hereof without any further action required by the Company. For the avoidance of doubt, a failure by the Company to file annual reports, information and other reports with the Commission within the time period prescribed thereof by the Commission shall not be deemed a breach of this Section 5.03.

(b) Delivery of reports, information and documents to the Trustee under Section 5.03 is for informational purposes only and the information and the Trustee's receipt of the foregoing shall not constitute constructive notice of any information contained therein, or determinable from information contained therein including the Company's compliance with any of their covenants thereunder (as to which the Trustee is entitled to rely exclusively on an Officer's Certificate). The Trustee is under no duty to examine any such reports, information or documents delivered to the Trustee or filed with the Commission via EDGAR to ensure compliance with the provision of this Indenture or to ascertain the correctness or otherwise of the information or the statements contained therein. The Trustee shall have no responsibility or duty whatsoever to ascertain or determine whether the above referenced filings with the Commission on EDGAR (or any successor system) has occurred.

Section 5.04 Reports by the Trustee.

(a) If required by Section 313(a) of the Trust Indenture Act, the Trustee, within sixty (60) days after each May 1, shall send to the Securityholders a brief report dated as of such May 1, which complies with Section 313(a) of the Trust Indenture Act.

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

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

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

Section 6.01 Events of Default.

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

(1) the Company defaults in the payment of any installment of interest upon any of the Securities of that series, as and when the same shall become due and payable, and such default continues for a period of 90 days; provided, however, that a valid extension of an interest payment period by the Company in accordance with the terms of any indenture supplemental hereto shall not constitute a default in the payment of interest for this purpose;

(2) the Company defaults in the payment of the principal of (or premium, if any, on) any of the Securities of that series as and when the same shall become due and payable whether at maturity, upon redemption, by declaration or otherwise, or in any payment required by any sinking or analogous fund established with respect to that series; provided, however, that a valid extension of the maturity of such Securities in accordance with the terms of any indenture supplemental hereto shall not constitute a default in the payment of principal or premium, if any;

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

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

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

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

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

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

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

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

(a) The Company covenants that (i) in case it shall default in the payment of any installment of interest on any of the Securities of a series, or in any payment required by any sinking or analogous fund established with respect to that series as and when the same shall have become due and payable, and such default shall have continued for a period of 90 days, or (ii) in case it shall default in the payment of the principal of (or premium, if any, on) any of the Securities of a series when the same shall have become due and payable, whether upon maturity of the Securities of a series or upon redemption or upon declaration or otherwise then, upon demand of the Trustee, the Company will pay to the Trustee, for the benefit of the holders of the Securities of that series, the whole amount that then shall have become due and payable on all such Securities for principal (and premium, if any) or interest, or both, as the case may be, with interest upon the overdue principal (and premium, if any) and (to the extent that payment of such interest is enforceable under applicable law) upon overdue installments of interest at the rate per annum expressed in the Securities of that series; and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, and the amount payable to the Trustee under Section 7.06.

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

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

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

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

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

Section 6.03 Application of Moneys Collected.

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

FIRST: To the payment of costs and expenses of collection and of all amounts payable to the Trustee under Section 7.06;

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

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

Section 6.04 Limitation on Suits.

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

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

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

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

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

Section 6.06 Control by Securityholders.

The holders of a majority in aggregate principal amount of the Securities of any series at the time Outstanding, determined in accordance with Section 8.04, shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred on the Trustee with respect to such series; provided, however, that such direction shall not be in conflict with any rule of law or with this Indenture or subject the Trustee in its sole discretion to personal liability. Subject to the provisions of Section 7.01, the Trustee shall have the right to decline to follow any such direction if the Trustee in good faith shall, by a Responsible Officer or officers of the Trustee, determine that the proceeding so directed, subject to the Trustee's duties under the Trust Indenture Act, would involve the Trustee in personal liability or might be unduly prejudicial to the Securityholders not involved in the proceeding. The holders of a majority in aggregate principal amount of the Securities of any series at the time Outstanding affected thereby, determined in accordance with Section 8.04, may on behalf of the holders of all of the Securities of such series waive any past default in the performance of any of the covenants contained herein or established pursuant to Section 2.01 with respect to such series and its consequences, except a default in the payment of the principal of, or premium, if any, or interest on, any of the Securities of that series as and when the same shall become due by the terms of such Securities otherwise than by acceleration (unless such default has been cured and a sum sufficient to pay all matured installments of interest and principal and any premium has been deposited with the Trustee (in accordance with Section 6.01(c)). Upon any such waiver, the default covered thereby shall be deemed to be cured for all purposes of this Indenture and the Company, the Trustee and the holders of the Securities of such series shall be restored to their former positions and rights hereunder, respectively; but no such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

Section 6.07 Undertaking to Pay Costs.

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

**ARTICLE 7
CONCERNING THE TRUSTEE**

Section 7.01 Certain Duties and Responsibilities of Trustee.

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

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

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

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

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

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

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

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

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

(vi) The permissive right of the Trustee to do things enumerated in this Indenture shall not be construed as a duty of the Trustee; and

(vii) No Trustee shall have any duty or responsibility for any act or omission of any other Trustee appointed with respect to a series of Securities hereunder.

Section 7.02 Certain Rights of Trustee.

Except as otherwise provided in Section 7.01:

(a) The Trustee may conclusively rely and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, approval, bond, security or other paper or document 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 a Board Resolution or an instrument signed in the name of the Company by any authorized Officer of the Company (unless other evidence in respect thereof is specifically prescribed herein);

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

(d) The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request, order or direction of any of the Securityholders pursuant to the provisions of this Indenture, unless such Securityholders shall have offered to the Trustee security or indemnity reasonably acceptable to the Trustee against the costs, expenses and liabilities that may be incurred therein or thereby; nothing contained herein shall, however, relieve the Trustee of the obligation, upon the occurrence of an Event of Default with respect to a series of the Securities (that has not been cured or waived), to exercise with respect to Securities of that series such of the rights and powers vested in it by this Indenture, and to use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his or her own affairs;

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

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

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

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

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

(j) The Trustee agrees to accept and act upon instructions or directions pursuant to this Indenture sent by unsecured e-mail, facsimile transmission or other similar unsecured electronic methods; provided, however, that such instructions or directions shall be signed by an authorized representative of the party providing such instructions or directions. If the party elects to give the Trustee e-mail or facsimile instructions (or instructions by a similar electronic method) and the Trustee in its discretion elects to act upon such instructions, the Trustee's understanding of such instructions shall be deemed controlling. The Trustee shall not be liable for any losses, costs or expenses arising directly or indirectly from the Trustee's reliance upon and compliance with such instructions notwithstanding such instructions conflict or are inconsistent with a subsequent written instruction. The party providing electronic instructions agrees to assume all risks arising out of the use of such electronic methods to submit instructions and directions to the Trustee, including without limitation the risk of the Trustee acting on unauthorized instructions, and the risk of interception and misuse by third parties. The Trustee may request that the Company deliver an Officer's Certificate setting forth the names of individuals and/or titles of officers authorized at such time to furnish the Trustee with Officer's Certificates, Company Orders and any other matters or directions pursuant to this Indenture.

(k) The rights, privileges, protections, immunities and benefits given to the Trustee, 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 under the Securities, and each agent, custodian or other person employed to act under this Indenture.

(l) The Trustee shall not be deemed to have knowledge of any Default or Event of Default (other than an Event of Default constituting the failure to pay the interest on, or the principal of, the Securities if the Trustee also serves as the paying agent for such Securities) until the Trustee shall have received written notification in the manner set forth in this Indenture or a Responsible Officer of the Trustee shall have obtained actual knowledge.

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

(a) The recitals contained herein and in the Securities shall be taken as the statements of the Company, and the Trustee assumes no responsibility for the correctness of the same. The Trustee shall not be responsible for any statement in any registration statement, prospectus, or any other document in connection with the sale of Securities. The Trustee shall not be responsible for any rating on the Securities or any action or omission of any rating agency.

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

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

Section 7.04 May Hold Securities.

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

Section 7.05 Moneys Held in Trust.

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

Section 7.06 Compensation and Reimbursement.

(a) The Company shall pay to the Trustee for each of its capacities hereunder from time to time compensation for its services as the Company and the Trustee shall from time to time agree upon in writing. The Trustee's compensation shall not be limited by any law on compensation of a trustee of an express trust. The Company shall reimburse the Trustee upon request for all reasonable out-of-pocket expenses incurred by it. Such expenses shall include the reasonable compensation and expenses of the Trustee's agents and counsel.

(b) The Company shall indemnify each of the Trustee in each of its capacities hereunder against any loss, liability or expense (including the cost of defending itself and including the reasonable compensation and expenses of the Trustee's agents and counsel) incurred by it except as set forth in Section 7.06(c) in the exercise or performance of its powers, rights or duties under this Indenture as Trustee or Agent. The Trustee shall notify the Company promptly of any claim for which it may seek indemnity. The Company shall defend the claim and the Trustee shall cooperate in the defense. The Trustee may have one separate counsel and the Company shall pay the reasonable fees and expenses of such counsel. The Company need not pay for any settlement made without its consent, which consent shall not be unreasonably withheld. This indemnification shall apply to officers, directors, employees, shareholders and agents of the Trustee.

(c) The Company need not reimburse any expense or indemnify against any loss or liability incurred by the Trustee or by any officer, director, employee, shareholder or agent of the Trustee through negligence or bad faith.

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

Section 7.07 Reliance on Officer's Certificate.

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

Section 7.08 Disqualification; Conflicting Interests.

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

Section 7.09 Corporate Trustee Required; Eligibility.

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

If such corporation or other Person publishes reports of condition at least annually, pursuant to law or to the requirements of the aforesaid supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such corporation or other Person shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. The Company may not, nor may any Person directly or indirectly controlling, controlled by or under common control with the Company, serve as Trustee. In case at any time the Trustee shall cease to be eligible in accordance with the provisions of this Section, the Trustee shall resign immediately in the manner and with the effect specified in Section 7.10.

Section 7.10 Resignation and Removal; Appointment of Successor.

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

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

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

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

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

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

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

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

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

Section 7.11 Acceptance of Appointment by Successor.

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

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

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

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

(e) Upon acceptance of appointment by a successor trustee as provided in this Section, the Company shall send notice of the succession of such trustee hereunder to the Securityholders. If the Company fails to transmit such notice within ten days after acceptance of appointment by the successor trustee, the successor trustee shall cause such notice to be transmitted at the expense of the Company.

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

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

Section 7.13 Preferential Collection of Claims Against the Company.

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

Section 7.14 Notice of Default.

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

**ARTICLE 8
CONCERNING THE SECURITYHOLDERS**

Section 8.01 Evidence of Action by Securityholders.

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

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

Section 8.02 Proof of Execution by Securityholders.

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

- (a) The fact and date of the execution by any such Person of any instrument may be proved in any reasonable manner acceptable to the Trustee.
- (b) The ownership of Securities shall be proved by the Security Register of such Securities or by a certificate of the Security Registrar thereof.

The Trustee may require such additional proof of any matter referred to in this Section as it shall deem necessary.

Section 8.03 Who May be Deemed Owners.

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

Section 8.04 Certain Securities Owned by Company Disregarded.

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

Section 8.05 Actions Binding on Future Securityholders.

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

**ARTICLE 9
SUPPLEMENTAL INDENTURES**

Section 9.01 Supplemental Indentures without the Consent of Securityholders.

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

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

(d) to add to the covenants, restrictions, conditions or provisions relating to the Company for the benefit of the holders of all or any series of Securities (and if such covenants, restrictions, conditions or provisions are to be for the benefit of less than all series of Securities, stating that such covenants, restrictions, conditions or provisions are expressly being included solely for the benefit of such series), to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an Event of Default, or to surrender any right or power herein conferred upon the Company;

(e) to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms or purposes of issue, authentication and delivery of Securities, as herein set forth;

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

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

(h) to evidence and provide for the acceptance of appointment hereunder by a successor trustee; or

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

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

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

Section 9.02 Supplemental Indentures with Consent of Securityholders.

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

It shall not be necessary for the consent of the Securityholders of any series affected thereby under this Section to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such consent shall approve the substance thereof.

Section 9.03 Effect of Supplemental Indentures.

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

Section 9.04 Securities Affected by Supplemental Indentures.

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

Section 9.05 Execution of Supplemental Indentures.

Upon the request of the Company, accompanied by its Board Resolutions authorizing the execution of any such supplemental indenture, and upon the filing with the Trustee of evidence of the consent of Securityholders required to consent thereto as aforesaid, the Trustee shall join with the Company in the execution of such supplemental indenture unless such supplemental indenture affects the Trustee's own rights, duties or immunities under this Indenture or otherwise, in which case the Trustee may in its discretion but shall not be obligated to enter into such supplemental indenture. The Trustee, subject to the provisions of Section 7.01, shall receive an Officer's Certificate or an Opinion of Counsel as conclusive evidence that any supplemental indenture executed pursuant to this Article is authorized or permitted by the terms of this Article and that all conditions precedent to the execution of the supplemental indenture have been complied with; provided, however, that such Officer's Certificate or Opinion of Counsel need not be provided in connection with the execution of a supplemental indenture that establishes the terms of a series of Securities pursuant to Section 2.01 hereof.

Promptly after the execution by the Company and the Trustee of any supplemental indenture pursuant to the provisions of this Section, the Company shall (or shall direct the Trustee to) send a notice, setting forth in general terms the substance of such supplemental indenture, to the Securityholders of all series affected thereby .as their names and addresses appear upon the Security Register. Any failure of the Company to send, or cause the sending of, such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture.

**ARTICLE 10
SUCCESSOR ENTITY**

Section 10.01 Company May Consolidate, Etc.

Nothing contained in this Indenture shall prevent any consolidation or merger of the Company with or into any other Person (whether or not affiliated with the Company) or successive consolidations or mergers in which the Company or its successor or successors shall be a party or parties, or shall prevent any sale, conveyance, transfer or other disposition of the property of the Company or its successor or successors as an entirety, or substantially as an entirety, to any other Person (whether or not affiliated with the Company or its successor or successors); provided, however, the Company hereby covenants and agrees that, upon any such consolidation or merger (in each case, if the Company is not the survivor of such transaction) or any such sale, conveyance, transfer or other disposition (other than a sale, conveyance, transfer or other disposition to a Subsidiary of the Company), the due and punctual payment of the principal of (premium, if any) and interest on all of the Securities of all series in accordance with the terms of each series, according to their tenor, and the due and punctual performance and observance of all the covenants and conditions of this Indenture with respect to each series or established with respect to such series pursuant to Section 2.01 to be kept or performed by the Company shall be expressly assumed, by supplemental indenture (which shall conform to the provisions of the Trust Indenture Act, as then in effect) reasonably satisfactory in form to the Trustee executed and delivered to the Trustee by the entity formed by such consolidation, or into which the Company shall have been merged, or by the entity which shall have acquired such property.

Section 10.02 Successor Entity Substituted.

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

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

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

**ARTICLE 11
SATISFACTION AND DISCHARGE**

Section 11.01 Satisfaction and Discharge of Indenture.

If at any time: (a) the Company shall have delivered to the Trustee for cancellation all Securities of a series theretofore authenticated and not delivered to the Trustee for cancellation (other than any Securities that shall have been destroyed, lost or stolen and that shall have been replaced or paid as provided in Section 2.07 and Securities for whose payment money or Governmental Obligations have theretofore been deposited in trust or segregated and held in trust by the Company and thereupon repaid to the Company or discharged from such trust, as provided in Section 11.05); or (b) all such Securities of a particular series not theretofore delivered to the Trustee for cancellation shall have become due and payable, or are by their terms to become due and payable within one year or are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption, and the Company shall deposit or cause to be deposited with the Trustee as trust funds the entire amount in moneys or Governmental Obligations or a combination thereof, sufficient in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, to pay at maturity or upon redemption all Securities of that series not theretofore delivered to the Trustee for cancellation, including principal (and premium, if any) and interest due or to become due to such date of maturity or date fixed for redemption, as the case may be, and if the Company shall also pay or cause to be paid all other sums payable hereunder with respect to such series by the Company then this Indenture shall thereupon cease to be of further effect with respect to such series except for the provisions of Sections 2.03, 2.05, 2.07, 4.01, 4.02, 4.03, 7.10, 11.05 and 13.04, that shall survive until the date of maturity or redemption date, as the case may be, and Sections 7.06 and 11.05, that shall survive to such date and thereafter, and the Trustee, on demand of the Company and at the cost and expense of the Company shall execute proper instruments acknowledging satisfaction of and discharging this Indenture with respect to such series.

Section 11.02 Discharge of Obligations.

If at any time all such Securities of a particular series not heretofore delivered to the Trustee for cancellation or that have not become due and payable as described in Section 11.01 shall have been paid by the Company by depositing irrevocably with the Trustee as trust funds moneys or an amount of Governmental Obligations sufficient to pay at maturity or upon redemption all such Securities of that series not theretofore delivered to the Trustee for cancellation, including principal (and premium, if any) and interest due or to become due to such date of maturity or date fixed for redemption, as the case may be, and if the Company shall also pay or cause to be paid all other sums payable hereunder by the Company with respect to such series, then after the date such moneys or Governmental Obligations, as the case may be, are deposited with the Trustee the obligations of the Company under this Indenture with respect to such series shall cease to be of further effect except for the provisions of Sections 2.03, 2.05, 2.07, 4.01, 4.02, 4.03, 7.06, 7.10, 11.05 and 13.04 hereof that shall survive until such Securities shall mature and be paid.

Thereafter, Sections 7.06 and 11.05 shall survive.

Section 11.03 Deposited Moneys to be Held in Trust.

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

Section 11.04 Payment of Moneys Held by Paying Agents.

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

Section 11.05 Repayment to Company.

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

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

Section 12.01 No Recourse.

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

**ARTICLE 13
MISCELLANEOUS PROVISIONS**

Section 13.01 Effect on Successors and Assigns.

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

Section 13.02 Actions by Successor.

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

Section 13.03 Surrender of Company Powers.

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

Section 13.04 Notices.

Except as otherwise expressly provided herein, any notice, request or demand that by any provision of this Indenture is required or permitted to be given, made or served by the Trustee, the Security Registrar, any paying or other agent under this Indenture or by the holders of Securities or by any other Person pursuant to this Indenture to or on the Company may be given or served by being deposited in first class mail, postage prepaid, addressed (until another address is filed in writing by the Company with the Trustee), as follows: . Any notice, election, request or demand by the Company or any Securityholder or by any other Person pursuant to this Indenture to or upon the Trustee shall be deemed to have been sufficiently given or made, for all purposes, if given or made in writing at the Corporate Trust Office of the Trustee.

Section 13.05 Governing Law; Jury Trial Waiver.

This Indenture and each Security shall be governed by, and construed in accordance with, the internal laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

EACH PARTY HERETO, AND EACH HOLDER OF A SECURITY BY ACCEPTANCE THEREOF, HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS INDENTURE.

Section 13.06 Treatment of Securities as Debt.

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

Section 13.07 Certificates and Opinions as to Conditions Precedent.

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

(b) Each certificate or opinion provided for in this Indenture and delivered to the Trustee with respect to compliance with a condition or covenant in this Indenture (other than the certificate to be delivered pursuant to Section 13.12 of this Indenture or Section 314(a)(1) of the Trust Indenture Act) shall include (i) a statement that the Person making such certificate or opinion has read such covenant or condition; (ii) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based; (iii) a statement that, in the opinion of such Person, he has made such examination or investigation as is reasonably necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and (iv) a statement as to whether or not, in the opinion of such Person, such condition or covenant has been complied with.

Section 13.08 Payments on Business Days.

Except as provided pursuant to Section 2.01 pursuant to a Board Resolution, and set forth in an Officer's Certificate, or established in one or more indentures supplemental to this Indenture, in any case where the date of maturity of interest or principal of any Security or the date of redemption of any Security shall not be a Business Day, then payment of interest or principal (and premium, if any) may be made on the next succeeding Business Day with the same force and effect as if made on the nominal date of maturity or redemption, and no interest shall accrue for the period after such nominal date.

Section 13.09 Conflict with Trust Indenture Act.

If and to the extent that any provision of this Indenture limits, qualifies or conflicts with the duties imposed by Section 318(c) of the Trust Indenture Act, such imposed duties shall control.

Section 13.10 Counterparts.

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

Section 13.11 Severability.

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

Section 13.12 Compliance Certificates.

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

Section 13.13 U.S.A. Patriot Act.

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

Section 13.14 Force Majeure.

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

Section 13.15 Table of Contents; Headings.

The table of contents and headings of the articles and sections of this Indenture have been inserted for convenience of reference only, are not intended to be considered a part hereof, and will not modify or restrict any of the terms or provisions hereof.

In Witness Whereof, the parties hereto have caused this Indenture to be duly executed all as of the day and year first above written.

Ocuphire Pharma, Inc., as the Company

By: _____
Name: _____
Title: _____

[TRUSTEE], as Trustee

By: _____
Name: _____
Title: _____

CROSS-REFERENCE TABLE (1)

Section of Trust Indenture Act of 1939, as Amended	Section of Indenture
310(a)	7.09
310(b)	7.08
	7.10
310(c)	Inapplicable
311(a)	7.13
311(b)	7.13
311(c)	Inapplicable
312(a)	5.01
	5.02(a)
312(b)	5.02(c)
312(c)	5.02(c)
313(a)	5.04(a)
313(b)	5.04(b)
313(c)	5.04(a)
	5.04(b)
313(d)	5.04(c)
314(a)	5.03
	13.12
314(b)	Inapplicable
314(c)	13.07(a)
314(d)	Inapplicable
314(e)	13.07(b)
314(f)	Inapplicable
315(a)	7.01(a)
	7.01(b)
315(b)	7.14
315(c)	7.01
315(d)	7.01(b)
315(e)	6.07
316(a)	6.06
	8.04
316(b)	6.04
316(c)	8.01
317(a)	6.02
317(b)	4.03
318(a)	13.09

(1) This Cross-Reference Table does not constitute part of the Indenture and shall not have any bearing on the interpretation of any of its terms or provisions.

OCUPHIRE PHARMA, INC.

AND

_____, AS WARRANT AGENT

FORM OF COMMON STOCK
WARRANT AGREEMENT

DATED AS OF _____

OCUPHIRE PHARMA, INC. FORM OF COMMON STOCK WARRANT AGREEMENT

THIS COMMON STOCK WARRANT AGREEMENT (this “*Agreement*”), dated as of [●], between **Ocuphire Pharma, Inc.**, a Delaware corporation (the “*Company*”), and [●], a [corporation] [national banking association] organized and existing under the laws of [●] and having a corporate trust office in [●], as warrant agent (the “*Warrant Agent*”).

Recitals

Whereas, the Company proposes to sell [*If Warrants are sold with other securities* — [title of such other securities being offered] (the “*Other Securities*”) with] warrant certificates evidencing one or more warrants (the “*Warrants*” or, individually, a “*Warrant*”) representing the right to purchase Common Stock of the Company, par value \$0.0001 per share (the “*Warrant Securities*”), such warrant certificates and other warrant certificates issued pursuant to this Agreement being herein called the “*Warrant Certificates*”; and

Whereas, the Company desires the Warrant Agent to act on behalf of the Company, and the Warrant Agent is willing so to act, in connection with the issuance, registration, transfer, exchange, exercise and replacement of the Warrant Certificates, and in this Agreement wishes to set forth, among other things, the form and provisions of the Warrant Certificates and the terms and conditions on which they may be issued, registered, transferred, exchanged, exercised and replaced.

Agreement

Now, Therefore, in consideration of the premises and of the mutual agreements herein contained, the parties hereto agree as follows:

**ARTICLE 1
ISSUANCE OF WARRANTS AND EXECUTION AND
DELIVERY OF WARRANT CERTIFICATES**

1.1 Issuance of Warrants. [*If Warrants alone* — Upon issuance, each Warrant Certificate shall evidence one or more Warrants.] [*If Other Securities and Warrants* — Warrant Certificates will be issued in connection with the issuance of the Other Securities but shall be separately transferable and each Warrant Certificate shall evidence one or more Warrants.] Each Warrant evidenced thereby shall represent the right, subject to the provisions contained herein and therein, to purchase one Warrant Security. [*If Other Securities and Warrants* — Warrant Certificates will be issued with the Other Securities and each Warrant Certificate will evidence [●] Warrants for each [\$●] principal amount] [[●] shares] of Other Securities issued.]

1.2 Execution and Delivery of Warrant Certificates. Each Warrant Certificate, whenever issued, shall be in registered form substantially in the form set forth in Exhibit A hereto, shall be dated the date of its countersignature by the Warrant Agent and may have such letters, numbers, or other marks of identification or designation and such legends or endorsements printed, lithographed or engraved thereon as the officers of the Company executing the same may approve (execution thereof to be conclusive evidence of such approval) and as are not inconsistent with the provisions of this Agreement, or as may be required to comply with any law or with any rule or regulation made pursuant thereto or with any rule or regulation of any securities exchange on which the Warrants may be listed, or to conform to usage. The Warrant Certificates shall be signed on behalf of the Company by any of its present or future chief executive officers, presidents, senior vice presidents, vice presidents, chief financial officers, chief legal officers, treasurers, assistant treasurers, controllers, assistant controllers, secretaries or assistant secretaries under its corporate seal reproduced thereon. Such signatures may be manual or facsimile signatures of such authorized officers and may be imprinted or otherwise reproduced on the Warrant Certificates. The seal of the Company may be in the form of a facsimile thereof and may be impressed, affixed, imprinted or otherwise reproduced on the Warrant Certificates.

No Warrant Certificate shall be valid for any purpose, and no Warrant evidenced thereby shall be exercisable, until such Warrant Certificate has been countersigned by the manual signature of the Warrant Agent. Such signature by the Warrant Agent upon any Warrant Certificate executed by the Company shall be conclusive evidence that the Warrant Certificate so countersigned has been duly issued hereunder.

In case any officer of the Company who shall have signed any of the Warrant Certificates either manually or by facsimile signature shall cease to be such officer before the Warrant Certificates so signed shall have been countersigned and delivered by the Warrant Agent, such Warrant Certificates may be countersigned and delivered notwithstanding that the person who signed such Warrant Certificates ceased to be such officer of the Company; and any Warrant Certificate may be signed on behalf of the Company by such persons as, at the actual date of the execution of such Warrant Certificate, shall be the proper officers of the Company, although at the date of the execution of this Agreement any such person was not such officer.

The term “*holder*” or “*holder of a Warrant Certificate*” as used herein shall mean any person in whose name at the time any Warrant Certificate shall be registered upon the books to be maintained by the Warrant Agent for that purpose.

1.3 Issuance of Warrant Certificates. Warrant Certificates evidencing the right to purchase Warrant Securities may be executed by the Company and delivered to the Warrant Agent upon the execution of this Agreement or from time to time thereafter. The Warrant Agent shall, upon receipt of Warrant Certificates duly executed on behalf of the Company, countersign such Warrant Certificates and shall deliver such Warrant Certificates to or upon the order of the Company.

ARTICLE 2 WARRANT PRICE, DURATION AND EXERCISE OF WARRANTS

2.1 Warrant Price. During the period specified in Section 2.2, each Warrant shall, subject to the terms of this Agreement and the applicable Warrant Certificate, entitle the holder thereof to purchase the number of Warrant Securities specified in the applicable Warrant Certificate at an exercise price of \$[●] per Warrant Security, subject to adjustment upon the occurrence of certain events, as hereinafter provided. Such purchase price per Warrant Security is referred to in this Agreement as the “*Warrant Price*.”

2.2 Duration of Warrants. Each Warrant may be exercised in whole or in part at any time, as specified herein, on or after [the date thereof] [●] and at or before [●] p.m., [City] time, on [●] or such later date as the Company may designate by notice to the Warrant Agent and the holders of Warrant Certificates mailed to their addresses as set forth in the record books of the Warrant Agent (the “*Expiration Date*”). Each Warrant not exercised at or before [●] p.m., [City] time, on the Expiration Date shall become void, and all rights of the holder of the Warrant Certificate evidencing such Warrant under this Agreement shall cease.

2.3 Exercise of Warrants.

(a) During the period specified in Section 2.2, the Warrants may be exercised to purchase a whole number of Warrant Securities in registered form by providing certain information as set forth on the reverse side of the Warrant Certificate and by paying in full, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds] the Warrant Price for each Warrant Security with respect to which a Warrant is being exercised to the Warrant Agent at its corporate trust office, provided that such exercise is subject to receipt within five business days of such payment by the Warrant Agent of the Warrant Certificate with the form of election to purchase Warrant Securities set forth on the reverse side of the Warrant Certificate properly completed and duly executed. The date on which payment in full of the Warrant Price is received by the Warrant Agent shall, subject to receipt of the Warrant Certificate as aforesaid, be deemed to be the date on which the Warrant is exercised; provided, however, that if, at the date of receipt of such Warrant Certificates and payment in full of the Warrant Price, the transfer books for the Warrant Securities purchasable upon the exercise of such Warrants shall be closed, no such receipt of such Warrant Certificates and no such payment of such Warrant Price shall be effective to constitute the person so designated to be named as the holder of record of such Warrant Securities on such date, but shall be effective to constitute such person as the holder of record of such Warrant Securities for all purposes at the opening of business on the next succeeding day on which the transfer books for the Warrant Securities purchasable upon the exercise of such Warrants shall be opened, and the certificates for the Warrant Securities in respect of which such Warrants are then exercised shall be issuable as of the date on such next succeeding day on which the transfer books shall next be opened, and until such date the Company shall be under no duty to deliver any certificate for such Warrant Securities. The Warrant Agent shall deposit all funds received by it in payment of the Warrant Price in an account of the Company maintained with it and shall advise the Company by telephone at the end of each day on which a payment for the exercise of Warrants is received of the amount so deposited to its account. The Warrant Agent shall promptly confirm such telephone advice to the Company in writing.

(b) The Warrant Agent shall, from time to time, as promptly as practicable, advise the Company of (i) the number of Warrant Securities with respect to which Warrants were exercised, (ii) the instructions of each holder of the Warrant Certificates evidencing such Warrants with respect to delivery of the Warrant Securities to which such holder is entitled upon such exercise, (iii) delivery of Warrant Certificates evidencing the balance, if any, of the Warrants for the remaining Warrant Securities after such exercise, and (iv) such other information as the Company shall reasonably require.

(c) As soon as practicable after the exercise of any Warrant, the Company shall issue to or upon the order of the holder of the Warrant Certificate evidencing such Warrant the Warrant Securities to which such holder is entitled, in fully registered form, registered in such name or names as may be directed by such holder. If fewer than all of the Warrants evidenced by such Warrant Certificate are exercised, the Company shall execute, and an authorized officer of the Warrant Agent shall manually countersign and deliver, a new Warrant Certificate evidencing Warrants for the number of Warrant Securities remaining unexercised.

(d) The Company shall not be required to pay any stamp or other tax or other governmental charge required to be paid in connection with any transfer involved in the issue of the Warrant Securities, and in the event that any such transfer is involved, the Company shall not be required to issue or deliver any Warrant Security until such tax or other charge shall have been paid or it has been established to the Company's satisfaction that no such tax or other charge is due.

(e) Prior to the issuance of any Warrants there shall have been reserved, and the Company shall at all times through the Expiration Date keep reserved, out of its authorized but unissued Warrant Securities, a number of shares sufficient to provide for the exercise of the Warrants.

ARTICLE 3
OTHER PROVISIONS RELATING TO RIGHTS OF HOLDERS OF
WARRANT CERTIFICATES

3.1 No Rights as Warrant Securityholder Conferred by Warrants or Warrant Certificates No Warrant Certificate or Warrant evidenced thereby shall entitle the holder thereof to any of the rights of a holder of Warrant Securities, including, without limitation, the right to receive the payment of dividends or distributions, if any, on the Warrant Securities or to exercise any voting rights, except to the extent expressly set forth in this Agreement or the applicable Warrant Certificate.

3.2 Lost, Stolen, Mutilated or Destroyed Warrant Certificates Upon receipt by the Warrant Agent of evidence reasonably satisfactory to it and the Company of the ownership of and the loss, theft, destruction or mutilation of any Warrant Certificate and/or indemnity reasonably satisfactory to the Warrant Agent and the Company and, in the case of mutilation, upon surrender of the mutilated Warrant Certificate to the Warrant Agent for cancellation, then, in the absence of notice to the Company or the Warrant Agent that such Warrant Certificate has been acquired by a bona fide purchaser, the Company shall execute, and an authorized officer of the Warrant Agent shall manually countersign and deliver, in exchange for or in lieu of the lost, stolen, destroyed or mutilated Warrant Certificate, a new Warrant Certificate of the same tenor and evidencing Warrants for a like number of Warrant Securities. Upon the issuance of any new Warrant Certificate under this Section 3.2, 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 Warrant Agent) in connection therewith. Every substitute Warrant Certificate executed and delivered pursuant to this Section 3.2 in lieu of any lost, stolen or destroyed Warrant Certificate shall represent an additional contractual obligation of the Company, whether or not the lost, stolen or destroyed Warrant Certificate shall be at any time enforceable by anyone, and shall be entitled to the benefits of this Agreement equally and proportionately with any and all other Warrant Certificates duly executed and delivered hereunder. The provisions of this Section 3.2 are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement of mutilated, lost, stolen or destroyed Warrant Certificates.

3.3 Holder of Warrant Certificate May Enforce Rights Notwithstanding any of the provisions of this Agreement, any holder of a Warrant Certificate, without the consent of the Warrant Agent, the holder of any Warrant Securities or the holder of any other Warrant Certificate, may, in such holder's own behalf and for such holder's own benefit, enforce, and may institute and maintain any suit, action or proceeding against the Company suitable to enforce, or otherwise in respect of, such holder's right to exercise the Warrants evidenced by such holder's Warrant Certificate in the manner provided in such holder's Warrant Certificate and in this Agreement.

3.4 Adjustments.

(a) In case the Company shall at any time subdivide its outstanding shares of Common Stock into a greater number of shares, the Warrant Price in effect immediately prior to such subdivision shall be proportionately reduced and the number of Warrant Securities purchasable under the Warrants shall be proportionately increased. Conversely, in case the outstanding shares of Common Stock of the Company shall be combined into a smaller number of shares, the Warrant Price in effect immediately prior to such combination shall be proportionately increased and the number of Warrant Securities purchasable under the Warrants shall be proportionately decreased.

(b) If at any time or from time to time the holders of Common Stock (or any shares of stock or other securities at the time receivable upon the exercise of the Warrants) shall have received or become entitled to receive, without payment therefor,

(i) Common Stock or any shares of stock or other securities which are at any time directly or indirectly convertible into or exchangeable for Common Stock, or any rights or options to subscribe for, purchase or otherwise acquire any of the foregoing by way of dividend or other distribution;

(ii) any cash paid or payable otherwise than as a cash dividend paid or payable out of the Company's current or retained earnings;

(iii) any evidence of the Company's indebtedness or rights to subscribe for or purchase the Company's indebtedness; or

(iv) Common Stock or additional stock or other securities or property (including cash) by way of spinoff, split-up, reclassification, combination of shares or similar corporate rearrangement (other than shares of Common Stock issued as a stock split or adjustments in respect of which shall be covered by the terms of Section 3.4(a) above), then and in each such case, the holder of each Warrant shall, upon the exercise of the Warrant, be entitled to receive, in addition to the number of Warrant Securities receivable thereupon, and without payment of any additional consideration therefore, the amount of stock and other securities and property (including cash and indebtedness or rights to subscribe for or purchase indebtedness) which such holder would hold on the date of such exercise had such holder been the holder of record of such Warrant Securities as of the date on which holders of Common Stock received or became entitled to receive such shares or all other additional stock and other securities and property.

(c) In case of (i) any reclassification, capital reorganization, or change in the Common Stock of the Company (other than as a result of a subdivision, combination, or stock dividend provided for in Section 3.4(a) or Section 3.4(b) above), (ii) share exchange, merger or similar transaction of the Company with or into another person or entity (other than a share exchange, merger or similar transaction in which the Company is the acquiring or surviving corporation and which does not result in any change in the Common Stock other than the issuance of additional shares of Common Stock) or (iii) the sale, exchange, lease, transfer or other disposition of all or substantially all of the properties and assets of the Company as an entirety (in any such case, a **“Reorganization Event”**), then, as a condition of such Reorganization Event, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the holders of the Warrants, so that the holders of the Warrants shall have the right at any time prior to the expiration of the Warrants to purchase, at a total price equal to that payable upon the exercise of the Warrants, the kind and amount of shares of stock and other securities and property receivable in connection with such Reorganization Event by a holder of the same number of Warrant Securities as were purchasable by the holders of the Warrants immediately prior to such Reorganization Event. In any such case appropriate provisions shall be made with respect to the rights and interests of the holders of the Warrants so that the provisions hereof shall thereafter be applicable with respect to any shares of stock or other securities and property deliverable upon exercise the Warrants, and appropriate adjustments shall be made to the Warrant Price payable hereunder provided the aggregate purchase price shall remain the same. In the case of any transaction described in clauses (ii) and (iii) above, the Company shall thereupon be relieved of any further obligation hereunder or under the Warrants, and the Company as the predecessor corporation may thereupon or at any time thereafter be dissolved, wound up or liquidated. Such successor or assuming entity thereupon may cause to be signed, and may issue either in its own name or in the name of the Company, any or all of the Warrants issuable hereunder which heretofore shall not have been signed by the Company, and may execute and deliver securities in its own name, in fulfillment of its obligations to deliver Warrant Securities upon exercise of the Warrants. All the Warrants so issued shall in all respects have the same legal rank and benefit under this Agreement as the Warrants theretofore or thereafter issued in accordance with the terms of this Agreement as though all of such Warrants had been issued at the date of the execution hereof. In any case of any such Reorganization Event, such changes in phraseology and form (but not in substance) may be made in the Warrants thereafter to be issued as may be appropriate. The Warrant Agent may receive a written opinion of legal counsel as conclusive evidence that any such Reorganization Event complies with the provisions of this Section 3.4.

(d) The Company may, at its option, at any time until the Expiration Date, reduce the then current Warrant Price to any amount deemed appropriate by the Board of Directors of the Company for any period not exceeding twenty consecutive days (as evidenced in a resolution adopted by such Board of Directors), but only upon giving the notices required by Section 3.5 at least ten days prior to taking such action.

(e) Except as herein otherwise expressly provided, no adjustment in the Warrant Price shall be made by reason of the issuance of shares of Common Stock, or securities convertible into or exchangeable for shares of Common Stock, or securities carrying the right to purchase any of the foregoing or for any other reason whatsoever.

(f) No fractional Warrant Securities shall be issued upon the exercise of Warrants. If more than one Warrant shall be exercised at one time by the same holder, the number of full Warrant Securities which shall be issuable upon such exercise shall be computed on the basis of the aggregate number of Warrant Securities purchased pursuant to the Warrants so exercised. Instead of any fractional Warrant Security which would otherwise be issuable upon exercise of any Warrant, the Company shall pay a cash adjustment in respect of such fraction in an amount equal to the same fraction of the last reported sale price (or bid price if there were no sales) per Warrant Security, in either case as reported on the principal registered national securities exchange on which the Warrant Securities are listed or admitted to trading on the business day that next precedes the day of exercise or, if the Warrant Securities are not then listed or admitted to trading on any registered national securities exchange, the average of the closing high bid and low asked prices as reported on the OTC Bulletin Board Service (the "*OTC Bulletin Board*") operated by the Financial Industry Regulatory Authority, Inc. ("*FINRA*") or, if not available on the OTC Bulletin Board, then the average of the closing high bid and low asked prices as reported on any other U.S. quotation medium or inter-dealer quotation system on such date, or if on any such date the Warrant Securities are not listed or admitted to trading on a registered national securities exchange, are not included in the OTC Bulletin Board, and are not quoted on any other U.S. quotation medium or inter-dealer quotation system, an amount equal to the same fraction of the average of the closing bid and asked prices as furnished by any FINRA member firm selected from time to time by the Company for that purpose at the close of business on the business day that next precedes the day of exercise.

(g) Whenever the Warrant Price then in effect is adjusted as herein provided, the Company shall mail to each holder of the Warrants at such holder's address as it shall appear on the books of the Company a statement setting forth the adjusted Warrant Price then and thereafter effective under the provisions hereof, together with the facts, in reasonable detail, upon which such adjustment is based.

(h) Notwithstanding anything to the contrary herein, in no event shall the Warrant Price, as adjusted in accordance with the terms hereof, be less than the par value per share of Common Stock.

3.5 Notice to Warrant Holders. In case the Company shall (a) effect any dividend or distribution described in Section 3.4(b), (b) effect any Reorganization Event, (c) make any distribution on or in respect of the Common Stock in connection with the dissolution, liquidation or winding up of the Company or (d) reduce the then current Warrant Price pursuant to Section 3.4(d), then the Company shall mail to each holder of Warrants at such holder's address as it shall appear on the books of the Warrant Agent, at least ten days prior to the applicable date hereinafter specified, a notice stating (x) the record date for such dividend or distribution, or, if a record is not to be taken, the date as of which the holders of record of Common Stock that will be entitled to such dividend or distribution are to be determined, (y) the date on which such Reorganization Event, dissolution, liquidation or winding up is expected to become effective, and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such Reorganization Event, dissolution, liquidation or winding up or (z) the first date on which the then current Warrant Price shall be reduced pursuant to Section 3.4(d). No failure to mail such notice nor any defect therein or in the mailing thereof shall affect any such transaction or any adjustment in the Warrant Price required by Section 3.4.

3.6 [If the Warrants are subject to acceleration by the Company — Acceleration of Warrants by the Company.]

(a) At any time on or after [●], the Company shall have the right to accelerate any or all Warrants at any time by causing them to expire at the close of business on the day next preceding a specified date (the “*Acceleration Date*”), if the Market Price (as hereinafter defined) of the Common Stock equals or exceeds [●] percent ([●]%) of the then effective Warrant Price on any twenty Trading Days (as hereinafter defined) within a period of thirty consecutive Trading Days ending no more than five Trading Days prior to the date on which the Company gives notice to the Warrant Agent of its election to accelerate the Warrants.

(b) “*Market Price*” for each Trading Day shall be, if the Common Stock is listed or admitted to trading on any registered national securities exchange, the last reported sale price, regular way (or, if no such price is reported, the average of the reported closing bid and asked prices, regular way) of Common Stock, in either case as reported on the principal registered national securities exchange on which the Common Stock is listed or admitted to trading or, if not listed or admitted to trading on any registered national securities exchange, the average of the closing high bid and low asked prices as reported on the OTC Bulletin Board operated by FINRA, or if not available on the OTC Bulletin Board, then the average of the closing high bid and low asked prices as reported on any other U.S. quotation medium or inter-dealer quotation system, or if on any such date the shares of Common Stock are not listed or admitted to trading on a registered national securities exchange, are not included in the OTC Bulletin Board, and are not quoted on any other U.S. quotation medium or inter-dealer quotation system, the average of the closing bid and asked prices as furnished by any FINRA member firm selected from time to time by the Company for that purpose. “Trading Day” shall be each Monday through Friday, other than any day on which securities are not traded in the system or on the exchange that is the principal market for the Common Stock, as determined by the Board of Directors of the Company. In the event of an acceleration of less than all of the Warrants, the Warrant Agent shall select the Warrants to be accelerated by lot, pro rata or in such other manner as it deems, in its discretion, to be fair and appropriate.

(c) Notice of an acceleration specifying the Acceleration Date shall be sent by mail first class, postage prepaid, to each registered holder of a Warrant Certificate representing a Warrant accelerated at such holder’s address appearing on the books of the Warrant Agent not more than sixty days nor less than thirty days before the Acceleration Date. Such notice of an acceleration also shall be given no more than twenty days, and no less than ten days, prior to the mailing of notice to registered holders of Warrants pursuant to this Section 3.6, by publication at least once in a newspaper of general circulation in the City of New York.

(d) Any Warrant accelerated may be exercised until [●] p.m., [City] time, on the business day next preceding the Acceleration Date. The Warrant Price shall be payable as provided in Section 2.]

ARTICLE 4
EXCHANGE AND TRANSFER OF WARRANT CERTIFICATES

4.1 Exchange and Transfer of Warrant Certificates. Upon surrender at the corporate trust office of the Warrant Agent, Warrant Certificates evidencing Warrants may be exchanged for Warrant Certificates in other denominations evidencing such Warrants or the transfer thereof may be registered in whole or in part; provided that such other Warrant Certificates evidence Warrants for the same aggregate number of Warrant Securities as the Warrant Certificates so surrendered. The Warrant Agent shall keep, at its corporate trust office, books in which, subject to such reasonable regulations as it may prescribe, it shall register Warrant Certificates and exchanges and transfers of outstanding Warrant Certificates, upon surrender of the Warrant Certificates to the Warrant Agent at its corporate trust office for exchange or registration of transfer, properly endorsed or accompanied by appropriate instruments of registration of transfer and written instructions for transfer, all in form satisfactory to the Company and the Warrant Agent. No service charge shall be made for any exchange or registration of transfer of Warrant Certificates, but the Company may require payment of a sum sufficient to cover any stamp or other tax or other governmental charge that may be imposed in connection with any such exchange or registration of transfer. Whenever any Warrant Certificates are so surrendered for exchange or registration of transfer, an authorized officer of the Warrant Agent shall manually countersign and deliver to the person or persons entitled thereto a Warrant Certificate or Warrant Certificates duly authorized and executed by the Company, as so requested. The Warrant Agent shall not be required to effect any exchange or registration of transfer which will result in the issuance of a Warrant Certificate evidencing a Warrant for a fraction of a Warrant Security or a number of Warrants for a whole number of Warrant Securities and a fraction of a Warrant Security. All Warrant Certificates issued upon any exchange or registration of transfer of Warrant Certificates shall be the valid obligations of the Company, evidencing the same obligations and entitled to the same benefits under this Agreement as the Warrant Certificate surrendered for such exchange or registration of transfer.

4.2 Treatment of Holders of Warrant Certificates. The Company, the Warrant Agent and all other persons may treat the registered holder of a Warrant Certificate as the absolute owner thereof for any purpose and as the person entitled to exercise the rights represented by the Warrants evidenced thereby, any notice to the contrary notwithstanding.

4.3 Cancellation of Warrant Certificates. Any Warrant Certificate surrendered for exchange, registration of transfer or exercise of the Warrants evidenced thereby shall, if surrendered to the Company, be delivered to the Warrant Agent and all Warrant Certificates surrendered or so delivered to the Warrant Agent shall be promptly canceled by the Warrant Agent and shall not be reissued and, except as expressly permitted by this Agreement, no Warrant Certificate shall be issued hereunder in exchange therefor or in lieu thereof. The Warrant Agent shall deliver to the Company from time to time or otherwise dispose of canceled Warrant Certificates in a manner satisfactory to the Company.

**ARTICLE 5
CONCERNING THE WARRANT AGENT**

5.1 Warrant Agent. The Company hereby appoints [●] as Warrant Agent of the Company in respect of the Warrants and the Warrant Certificates upon the terms and subject to the conditions herein set forth, and [●] hereby accepts such appointment. The Warrant Agent shall have the powers and authority granted to and conferred upon it in the Warrant Certificates and hereby and such further powers and authority to act on behalf of the Company as the Company may hereafter grant to or confer upon it. All of the terms and provisions with respect to such powers and authority contained in the Warrant Certificates are subject to and governed by the terms and provisions hereof.

5.2 Conditions of Warrant Agent's Obligations. The Warrant Agent accepts its obligations herein set forth upon the terms and conditions hereof, including the following to all of which the Company agrees and to all of which the rights hereunder of the holders from time to time of the Warrant Certificates shall be subject:

(a) **Compensation and Indemnification.** The Company agrees promptly to pay the Warrant Agent the compensation to be agreed upon with the Company for all services rendered by the Warrant Agent and to reimburse the Warrant Agent for reasonable out-of-pocket expenses (including reasonable counsel fees) incurred without negligence, bad faith or willful misconduct by the Warrant Agent in connection with the services rendered hereunder by the Warrant Agent. The Company also agrees to indemnify the Warrant Agent for, and to hold it harmless against, any loss, liability or expense incurred without negligence, bad faith or willful misconduct on the part of the Warrant Agent, arising out of or in connection with its acting as Warrant Agent hereunder, including the reasonable costs and expenses of defending against any claim of such liability.

(b) **Agent for the Company.** In acting under this Agreement and in connection with the Warrant Certificates, the Warrant Agent is acting solely as agent of the Company and does not assume any obligations or relationship of agency or trust for or with any of the holders of Warrant Certificates or beneficial owners of Warrants.

(c) **Counsel.** The Warrant Agent may consult with counsel satisfactory to it, which may include counsel for the Company, and the written advice of such counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in accordance with the advice of such counsel.

(d) **Documents.** The Warrant Agent shall be protected and shall incur no liability for or in respect of any action taken or omitted by it in reliance upon any Warrant Certificate, notice, direction, consent, certificate, affidavit, statement or other paper or document reasonably believed by it to be genuine and to have been presented or signed by the proper parties.

(e) **Certain Transactions.** The Warrant Agent, and its officers, directors and employees, may become the owner of, or acquire any interest in, Warrants, with the same rights that it or they would have if it were not the Warrant Agent hereunder, and, to the extent permitted by applicable law, it or they may engage or be interested in any financial or other transaction with the Company and may act on, or as depository, trustee or agent for, any committee or body of holders of Warrant Securities or other obligations of the Company as freely as if it were not the Warrant Agent hereunder. Nothing in this Agreement shall be deemed to prevent the Warrant Agent from acting as trustee under any indenture to which the Company is a party.

(f) **No Liability for Interest.** Unless otherwise agreed with the Company, the Warrant Agent shall have no liability for interest on any monies at any time received by it pursuant to any of the provisions of this Agreement or of the Warrant Certificates.

(g) **No Liability for Invalidity.** The Warrant Agent shall have no liability with respect to any invalidity of this Agreement or any of the Warrant Certificates (except as to the Warrant Agent's countersignature thereon).

(h) **No Responsibility for Representations.** The Warrant Agent shall not be responsible for any of the recitals or representations herein or in the Warrant Certificates (except as to the Warrant Agent's countersignature thereon), all of which are made solely by the Company.

(i) **No Implied Obligations.** The Warrant Agent shall be obligated to perform only such duties as are herein and in the Warrant Certificates specifically set forth and no implied duties or obligations shall be read into this Agreement or the Warrant Certificates against the Warrant Agent. The Warrant Agent shall not be under any obligation to take any action hereunder which may tend to involve it in any expense or liability, the payment of which within a reasonable time is not, in its reasonable opinion, assured to it. The Warrant Agent shall not be accountable or under any duty or responsibility for the use by the Company of any of the Warrant Certificates authenticated by the Warrant Agent and delivered by it to the Company pursuant to this Agreement or for the application by the Company of the proceeds of the Warrant Certificates. The Warrant Agent shall have no duty or responsibility in case of any default by the Company in the performance of its covenants or agreements contained herein or in the Warrant Certificates or in the case of the receipt of any written demand from a holder of a Warrant Certificate with respect to such default, including, without limiting the generality of the foregoing, any duty or responsibility to initiate or attempt to initiate any proceedings at law or otherwise or, except as provided in Section 6.2 hereof, to make any demand upon the Company.

5.3 Resignation, Removal and Appointment of Successors.

(a) The Company agrees, for the benefit of the holders from time to time of the Warrant Certificates, that there shall at all times be a Warrant Agent hereunder until all the Warrants have been exercised or are no longer exercisable.

(b) The Warrant Agent may at any time resign as agent by giving written notice to the Company of such intention on its part, specifying the date on which its desired resignation shall become effective; provided that such date shall not be less than three months after the date on which such notice is given unless the Company otherwise agrees. The Warrant Agent hereunder may be removed at any time by the filing with it of an instrument in writing signed by or on behalf of the Company and specifying such removal and the intended date when it shall become effective. Such resignation or removal shall take effect upon the appointment by the Company, as hereinafter provided, of a successor Warrant Agent (which shall be a bank or trust company authorized under the laws of the jurisdiction of its organization to exercise corporate trust powers) and the acceptance of such appointment by such successor Warrant Agent. The obligation of the Company under Section 5.2(a) shall continue to the extent set forth therein notwithstanding the resignation or removal of the Warrant Agent.

(c) In case at any time the Warrant Agent shall resign, or shall be removed, or shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or shall commence a voluntary case under the Federal bankruptcy laws, as now or hereafter constituted, or under any other applicable Federal or state bankruptcy, insolvency or similar law or shall consent to the appointment of or taking possession by a receiver, custodian, liquidator, assignee, trustee, sequestrator (or other similar official) of the Warrant Agent or its property or affairs, or shall make an assignment for the benefit of creditors, or shall admit in writing its inability to pay its debts generally as they become due, or shall take corporate action in furtherance of any such action, or a decree or order for relief by a court having jurisdiction in the premises shall have been entered in respect of the Warrant Agent in an involuntary case under the Federal bankruptcy laws, as now or hereafter constituted, or any other applicable Federal or state bankruptcy, insolvency or similar law, or a decree or order by a court having jurisdiction in the premises shall have been entered for the appointment of a receiver, custodian, liquidator, assignee, trustee, sequestrator (or similar official) of the Warrant Agent or of its property or affairs, or any public officer shall take charge or control of the Warrant Agent or of its property or affairs for the purpose of rehabilitation, conservation, winding up or liquidation, a successor Warrant Agent, qualified as aforesaid, shall be appointed by the Company by an instrument in writing, filed with the successor Warrant Agent. Upon the appointment as aforesaid of a successor Warrant Agent and acceptance by the successor Warrant Agent of such appointment, the Warrant Agent shall cease to be Warrant Agent hereunder.

(d) Any successor Warrant Agent appointed hereunder shall execute, acknowledge and deliver to its predecessor and to the Company an instrument accepting such appointment hereunder, and thereupon such successor Warrant Agent, without any further act, deed or conveyance, shall become vested with all the authority, rights, powers, trusts, immunities, duties and obligations of such predecessor with like effect as if originally named as Warrant Agent hereunder, and such predecessor, upon payment of its charges and disbursements then unpaid, shall thereupon become obligated to transfer, deliver and pay over, and such successor Warrant Agent shall be entitled to receive, all monies, securities and other property on deposit with or held by such predecessor, as Warrant Agent hereunder.

(e) Any corporation into which the Warrant Agent hereunder may be merged or converted or any corporation with which the Warrant Agent may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Warrant Agent shall be a party, or any corporation to which the Warrant Agent shall sell or otherwise transfer all or substantially all the assets and business of the Warrant Agent, provided that it shall be qualified as aforesaid, shall be the successor Warrant Agent under this Agreement without the execution or filing of any paper or any further act on the part of any of the parties hereto.

ARTICLE 6
MISCELLANEOUS

6.1 Amendment. This Agreement may be amended by the parties hereto, without the consent of the holder of any Warrant Certificate, for the purpose of curing any ambiguity, or of curing, correcting or supplementing any defective provision contained herein, or making any other provisions with respect to matters or questions arising under this Agreement as the Company and the Warrant Agent may deem necessary or desirable; provided that such action shall not materially adversely affect the interests of the holders of the Warrant Certificates.

6.2 Notices and Demands to the Company and Warrant Agent. If the Warrant Agent shall receive any notice or demand addressed to the Company by the holder of a Warrant Certificate pursuant to the provisions of the Warrant Certificates, the Warrant Agent shall promptly forward such notice or demand to the Company.

6.3 Addresses. Any communication from the Company to the Warrant Agent with respect to this Agreement shall be addressed to [●], Attention: [●] and any communication from the Warrant Agent to the Company with respect to this Agreement shall be addressed to Ocuphire Pharma, Inc., 37000 Grand River Avenue, Suite 120, Farmington Hills, Michigan 48335, Attention: [●] (or such other address as shall be specified in writing by the Warrant Agent or by the Company).

6.4 Governing Law. This Agreement and each Warrant Certificate issued hereunder shall be governed by and construed in accordance with the laws of the State of New York.

6.5 Delivery of Prospectus. The Company shall furnish to the Warrant Agent sufficient copies of a prospectus meeting the requirements of the Securities Act of 1933, as amended, relating to the Warrant Securities deliverable upon exercise of the Warrants (the "*Prospectus*"), and the Warrant Agent agrees that upon the exercise of any Warrant, the Warrant Agent will deliver to the holder of the Warrant Certificate evidencing such Warrant, prior to or concurrently with the delivery of the Warrant Securities issued upon such exercise, a Prospectus. The Warrant Agent shall not, by reason of any such delivery, assume any responsibility for the accuracy or adequacy of such Prospectus.

6.6 Obtaining of Governmental Approvals. The Company will from time to time take all action which may be necessary to obtain and keep effective any and all permits, consents and approvals of governmental agencies and authorities and securities act filings under United States Federal and state laws (including without limitation a registration statement in respect of the Warrants and Warrant Securities under the Securities Act of 1933, as amended), which may be or become requisite in connection with the issuance, sale, transfer, and delivery of the Warrant Securities issued upon exercise of the Warrants, the issuance, sale, transfer and delivery of the Warrants or upon the expiration of the period during which the Warrants are exercisable.

6.7 Persons Having Rights under the Agreement. Nothing in this Agreement shall give to any person other than the Company, the Warrant Agent and the holders of the Warrant Certificates any right, remedy or claim under or by reason of this Agreement.

6.8 Headings. The descriptive headings of the several Articles and Sections of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

6.9 Counterparts. This Agreement may be executed in any number of counterparts, each of which as so executed shall be deemed to be an original, but such counterparts shall together constitute but one and the same instrument.

6.10 Inspection of Agreement. A copy of this Agreement shall be available at all reasonable times at the principal corporate trust office of the Warrant Agent for inspection by the holder of any Warrant Certificate. The Warrant Agent may require such holder to submit such holder's Warrant Certificate for inspection by it.

In Witness Whereof, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

Ocuphire Pharma, Inc., as the Company

By: _____
Name: _____
Title: _____

ATTEST: _____

COUNTERSIGNED

[•], as the Warrant Agent

By: _____
Name: _____
Title: _____

ATTEST: _____

[SIGNATURE PAGE TO OCUPHIRE PHARMA, INC. DEBT SECURITIES WARRANT AGREEMENT]

EXHIBIT A

FORM OF WARRANT CERTIFICATE
[FACE OF WARRANT CERTIFICATE]

[Form of Legend if Warrants are not
immediately exercisable.]

[Prior to [●], Warrants evidenced by this
Warrant Certificate cannot be exercised.]

EXERCISABLE ONLY IF COUNTERSIGNED BY THE WARRANT AGENT AS
PROVIDED HEREIN

VOID AFTER [●] P.M., [City] time, ON [●].

OCUPHIRE PHARMA, INC.
WARRANT CERTIFICATE REPRESENTING
WARRANTS TO PURCHASE
COMMON STOCK, PAR VALUE \$0.0001 PER SHARE

No. [●]

[●] Warrants

This certifies that [●] or registered assigns is the registered owner of the above indicated number of Warrants, each Warrant entitling such owner to purchase, at any time [after [●] p.m., [City] time, [on [●] and] on or before [●] p.m., [City] time, on [●], [●] shares of Common Stock, par value \$0.0001 per share (the "*Warrant Securities*"), of Ocuphire Pharma, Inc. (the "*Company*") on the following basis: during the period from [●], through and including [●], the exercise price per Warrant Security will be \$[●], subject to adjustment as provided in the Warrant Agreement (as hereinafter defined) (the "*Warrant Price*"). The Holder may exercise the Warrants evidenced hereby by providing certain information set forth on the back hereof and by paying in full, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds], the Warrant Price for each Warrant Security with respect to which this Warrant is exercised to the Warrant Agent (as hereinafter defined) and by surrendering this Warrant Certificate, with the purchase form on the back hereof duly executed, at the corporate trust office of [name of Warrant Agent], or its successor as warrant agent (the "*Warrant Agent*"), which is, on the date hereof, at the address specified on the reverse hereof, and upon compliance with and subject to the conditions set forth herein and in the Warrant Agreement (as hereinafter defined).

The term "*Holder*" as used herein shall mean the person in whose name at the time this Warrant Certificate shall be registered upon the books to be maintained by the Warrant Agent for that purpose pursuant to Section 4 of the Warrant Agreement.

The Warrants evidenced by this Warrant Certificate may be exercised to purchase a whole number of Warrant Securities in registered form. Upon any exercise of fewer than all of the Warrants evidenced by this Warrant Certificate, there shall be issued to the Holder hereof a new Warrant Certificate evidencing Warrants for the number of Warrant Securities remaining unexercised.

This Warrant Certificate is issued under and in accordance with the Warrant Agreement dated as of [●] (the "*Warrant Agreement*"), between the Company and the Warrant Agent and is subject to the terms and provisions contained in the Warrant Agreement, to all of which terms and provisions the Holder of this Warrant Certificate consents by acceptance hereof. Copies of the Warrant Agreement are on file at the above-mentioned office of the Warrant Agent.

Transfer of this Warrant Certificate may be registered when this Warrant Certificate is surrendered at the corporate trust office of the Warrant Agent by the registered owner or such owner's assigns, in the manner and subject to the limitations provided in the Warrant Agreement.

After countersignature by the Warrant Agent and prior to the expiration of this Warrant Certificate, this Warrant Certificate may be exchanged at the corporate trust office of the Warrant Agent for Warrant Certificates representing Warrants for the same aggregate number of Warrant Securities.

This Warrant Certificate shall not entitle the Holder hereof to any of the rights of a holder of the Warrant Securities, including, without limitation, the right to receive payments of dividends or distributions, if any, on the Warrant Securities (except to the extent set forth in the Warrant Agreement) or to exercise any voting rights.

Reference is hereby made to the further provisions of this Warrant Certificate set forth on the reverse hereof, which further provisions shall for all purposes have the same effect as if set forth at this place.

This Warrant Certificate shall not be valid or obligatory for any purpose until countersigned by the Warrant Agent.

In Witness Whereof, the Company has caused this Warrant to be executed in its name and on its behalf by the facsimile signatures of its duly authorized officers.

Dated: _____

Ocuphire Pharma, Inc., as the Company

By: _____

Name: _____

Title: _____

ATTEST: _____

COUNTERSIGNED

[•], as Warrant Agent

By: _____

Name: _____

Title: _____

ATTEST: _____

[REVERSE OF WARRANT CERTIFICATE]

(Instructions for Exercise of Warrant)

To exercise any Warrants evidenced hereby for Warrant Securities (as hereinafter defined), the Holder must pay, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds], the Warrant Price in full for Warrants exercised, to [●] [address of Warrant Agent], Attention: [●], which payment must specify the name of the Holder and the number of Warrants exercised by such Holder. In addition, the Holder must complete the information required below and present this Warrant Certificate in person or by mail (certified or registered mail is recommended) to the Warrant Agent at the appropriate address set forth above. This Warrant Certificate, completed and duly executed, must be received by the Warrant Agent within five business days of the payment.

(To be executed upon exercise of Warrants)

The undersigned hereby irrevocably elects to exercise _____ Warrants, evidenced by this Warrant Certificate, to purchase _____ shares of the Common Stock, par value \$0.0001 per share (the "*Warrant Securities*"), of Ocuphire Pharma, Inc. and represents that the undersigned has tendered payment for such Warrant Securities, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds], to the order of Ocuphire Pharma, Inc., c/o [insert name and address of Warrant Agent], in the amount of \$ _____ in accordance with the terms hereof. The undersigned requests that said Warrant Securities be in fully registered form in the authorized denominations, registered in such names and delivered all as specified in accordance with the instructions set forth below.

If the number of Warrants exercised is less than all of the Warrants evidenced hereby, the undersigned requests that a new Warrant Certificate evidencing the Warrants for the number of Warrant Securities remaining unexercised be issued and delivered to the undersigned unless otherwise specified in the instructions below.

Dated: _____ Name: _____
Please Print

Address: _____

(Insert Social Security or Other Identifying
Number of Holder)

Signature Guaranteed: _____
Signature

(Signature must conform in all respects to name of holder as specified on the face of this Warrant Certificate and must bear a signature guarantee by a FINRA member firm).

This Warrant may be exercised at the following addresses: By hand at:

[•]

By mail at:

[Instructions as to form and delivery of Warrant Securities and, if applicable, Warrant Certificates evidencing Warrants for the number of Warrant Securities remaining unexercised — complete as appropriate.]

ASSIGNMENT

[Form of assignment to be executed if Warrant Holder desires to transfer Warrant]

FOR VALUE RECEIVED, _____ hereby sells, assigns and transfers unto:

(Please print name and address including zip code)

Please print Social Security or other
identifying number

the right represented by the within Warrant to purchase _____ shares of [Title of Warrant Securities] of Ocuphire Pharma, Inc. to which the within Warrant relates and appoints _____ attorney to transfer such right on the books of the Warrant Agent with full power of substitution in the premises.

Dated: _____

Name: _____
Signature

(Signature must conform in all respects to name of holder as specified on the face of the Warrant)

Signature Guaranteed

OCUPHIRE PHARMA, INC.

AND

_____, AS WARRANT AGENT

FORM OF PREFERRED STOCK
WARRANT AGREEMENT

DATED AS OF _____

**OCUPHIRE PHARMA, INC. FORM OF PREFERRED STOCK WARRANT
AGREEMENT**

THIS PREFERRED STOCK WARRANT AGREEMENT (this “*Agreement*”), dated as of [●], between **Ocuphire Pharma, Inc.**, a Delaware corporation (the “*Company*”), and [●], a [corporation] [national banking association] organized and existing under the laws of [●] and having a corporate trust office in [●], as warrant agent (the “*Warrant Agent*”).

Recitals

Whereas, the Company proposes to sell [*If Warrants are sold with other securities* — [title of such other securities being offered] (the “*Other Securities*”) with] warrant certificates evidencing one or more warrants (the “*Warrants*” or, individually, a “*Warrant*”) representing the right to purchase [title of Preferred Stock purchasable through exercise of Warrants] of the Company, par value \$0.0001 per share (the “*Warrant Securities*”), such warrant certificates and other warrant certificates issued pursuant to this Agreement being herein called the “*Warrant Certificates*”; and

Whereas, The Company desires the Warrant Agent to act on behalf of the Company, and the Warrant Agent is willing so to act, in connection with the issuance, registration, transfer, exchange, exercise and replacement of the Warrant Certificates, and in this Agreement wishes to set forth, among other things, the form and provisions of the Warrant Certificates and the terms and conditions on which they may be issued, registered, transferred, exchanged, exercised and replaced.

Recitals

Now, Therefore, in consideration of the premises and of the mutual agreements herein contained, the parties hereto agree as follows:

**ARTICLE 1
ISSUANCE OF WARRANTS AND EXECUTION AND
DELIVERY OF WARRANT CERTIFICATES**

1.1 Issuance of Warrants. [*If Warrants alone* — Upon issuance, each Warrant Certificate shall evidence one or more Warrants.] [*If Other Securities and Warrants* — Warrant Certificates will be issued in connection with the issuance of the Other Securities but shall be separately transferable and each Warrant Certificate shall evidence one or more Warrants.] Each Warrant evidenced thereby shall represent the right, subject to the provisions contained herein and therein, to purchase one Warrant Security. [*If Other Securities and Warrants* — Warrant Certificates will be issued with the Other Securities and each Warrant Certificate will evidence [●] Warrants for each [\$●] principal amount] [[●] shares] of Other Securities issued.]

1.2 Execution and Delivery of Warrant Certificates. Each Warrant Certificate, whenever issued, shall be in registered form substantially in the form set forth in Exhibit A hereto, shall be dated the date of its countersignature by the Warrant Agent and may have such letters, numbers, or other marks of identification or designation and such legends or endorsements printed, lithographed or engraved thereon as the officers of the Company executing the same may approve (execution thereof to be conclusive evidence of such approval) and as are not inconsistent with the provisions of this Agreement, or as may be required to comply with any law or with any rule or regulation made pursuant thereto or with any rule or regulation of any securities exchange on which the Warrants may be listed, or to conform to usage. The Warrant Certificates shall be signed on behalf of the Company by any of its present or future chief executive officers, presidents, senior vice presidents, vice presidents, chief financial officers, chief legal officers, treasurers, assistant treasurers, controllers, assistant controllers, secretaries or assistant secretaries under its corporate seal reproduced thereon. Such signatures may be manual or facsimile signatures of such authorized officers and may be imprinted or otherwise reproduced on the Warrant Certificates. The seal of the Company may be in the form of a facsimile thereof and may be impressed, affixed, imprinted or otherwise reproduced on the Warrant Certificates.

No Warrant Certificate shall be valid for any purpose, and no Warrant evidenced thereby shall be exercisable, until such Warrant Certificate has been countersigned by the manual signature of the Warrant Agent. Such signature by the Warrant Agent upon any Warrant Certificate executed by the Company shall be conclusive evidence that the Warrant Certificate so countersigned has been duly issued hereunder.

In case any officer of the Company who shall have signed any of the Warrant Certificates either manually or by facsimile signature shall cease to be such officer before the Warrant Certificates so signed shall have been countersigned and delivered by the Warrant Agent, such Warrant Certificates may be countersigned and delivered notwithstanding that the person who signed such Warrant Certificates ceased to be such officer of the Company; and any Warrant Certificate may be signed on behalf of the Company by such persons as, at the actual date of the execution of such Warrant Certificate, shall be the proper officers of the Company, although at the date of the execution of this Agreement any such person was not such officer.

The term “*holder*” or “*holder of a Warrant Certificate*” as used herein shall mean any person in whose name at the time any Warrant Certificate shall be registered upon the books to be maintained by the Warrant Agent for that purpose.

1.3 Issuance of Warrant Certificates. Warrant Certificates evidencing the right to purchase Warrant Securities may be executed by the Company and delivered to the Warrant Agent upon the execution of this Agreement or from time to time thereafter. The Warrant Agent shall, upon receipt of Warrant Certificates duly executed on behalf of the Company, countersign such Warrant Certificates and shall deliver such Warrant Certificates to or upon the order of the Company.

ARTICLE 2 WARRANT PRICE, DURATION AND EXERCISE OF WARRANTS

2.1 Warrant Price. During the period specified in Section 2.2, each Warrant shall, subject to the terms of this Agreement and the applicable Warrant Certificate, entitle the holder thereof to purchase the number of Warrant Securities specified in the applicable Warrant Certificate at an exercise price of \$[●] per Warrant Security, subject to adjustment upon the occurrence of certain events, as hereinafter provided. Such purchase price per Warrant Security is referred to in this Agreement as the “*Warrant Price*.”

2.2 Duration of Warrants. Each Warrant may be exercised in whole or in part at any time, as specified herein, on or after [the date thereof] [●] and at or before [●] p.m., [City] time, on [●] or such later date as the Company may designate by notice to the Warrant Agent and the holders of Warrant Certificates mailed to their addresses as set forth in the record books of the Warrant Agent (the “*Expiration Date*”). Each Warrant not exercised at or before [●] p.m., [City] time, on the Expiration Date shall become void, and all rights of the holder of the Warrant Certificate evidencing such Warrant under this Agreement shall cease.

2.3 Exercise of Warrants.

(a) During the period specified in Section 2.2, the Warrants may be exercised to purchase a whole number of Warrant Securities in registered form by providing certain information as set forth on the reverse side of the Warrant Certificate and by paying in full, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds] the Warrant Price for each Warrant Security with respect to which a Warrant is being exercised to the Warrant Agent at its corporate trust office, provided that such exercise is subject to receipt within five business days of such payment by the Warrant Agent of the Warrant Certificate with the form of election to purchase Warrant Securities set forth on the reverse side of the Warrant Certificate properly completed and duly executed. The date on which payment in full of the Warrant Price is received by the Warrant Agent shall, subject to receipt of the Warrant Certificate as aforesaid, be deemed to be the date on which the Warrant is exercised; provided, however, that if, at the date of receipt of such Warrant Certificates and payment in full of the Warrant Price, the transfer books for the Warrant Securities purchasable upon the exercise of such Warrants shall be closed, no such receipt of such Warrant Certificates and no such payment of such Warrant Price shall be effective to constitute the person so designated to be named as the holder of record of such Warrant Securities on such date, but shall be effective to constitute such person as the holder of record of such Warrant Securities for all purposes at the opening of business on the next succeeding day on which the transfer books for the Warrant Securities purchasable upon the exercise of such Warrants shall be opened, and the certificates for the Warrant Securities in respect of which such Warrants are then exercised shall be issuable as of the date on such next succeeding day on which the transfer books shall next be opened, and until such date the Company shall be under no duty to deliver any certificate for such Warrant Securities. The Warrant Agent shall deposit all funds received by it in payment of the Warrant Price in an account of the Company maintained with it and shall advise the Company by telephone at the end of each day on which a payment for the exercise of Warrants is received of the amount so deposited to its account. The Warrant Agent shall promptly confirm such telephone advice to the Company in writing.

(b) The Warrant Agent shall, from time to time, as promptly as practicable, advise the Company of (i) the number of Warrant Securities with respect to which Warrants were exercised, (ii) the instructions of each holder of the Warrant Certificates evidencing such Warrants with respect to delivery of the Warrant Securities to which such holder is entitled upon such exercise, (iii) delivery of Warrant Certificates evidencing the balance, if any, of the Warrants for the remaining Warrant Securities after such exercise, and (iv) such other information as the Company shall reasonably require.

(c) As soon as practicable after the exercise of any Warrant, the Company shall issue to or upon the order of the holder of the Warrant Certificate evidencing such Warrant the Warrant Securities to which such holder is entitled, in fully registered form, registered in such name or names as may be directed by such holder. If fewer than all of the Warrants evidenced by such Warrant Certificate are exercised, the Company shall execute, and an authorized officer of the Warrant Agent shall manually countersign and deliver, a new Warrant Certificate evidencing Warrants for the number of Warrant Securities remaining unexercised.

(d) The Company shall not be required to pay any stamp or other tax or other governmental charge required to be paid in connection with any transfer involved in the issue of the Warrant Securities, and in the event that any such transfer is involved, the Company shall not be required to issue or deliver any Warrant Security until such tax or other charge shall have been paid or it has been established to the Company's satisfaction that no such tax or other charge is due.

(e) Prior to the issuance of any Warrants there shall have been reserved, and the Company shall at all times through the Expiration Date keep reserved, out of its authorized but unissued Warrant Securities, a number of shares sufficient to provide for the exercise of the Warrants.

**ARTICLE 3
OTHER PROVISIONS RELATING TO RIGHTS OF HOLDERS OF
WARRANT CERTIFICATES**

3.1 No Rights as Warrant Securityholder Conferred by Warrants or Warrant Certificates. No Warrant Certificate or Warrant evidenced thereby shall entitle the holder thereof to any of the rights of a holder of Warrant Securities, including, without limitation, the right to receive the payment of dividends or distributions, if any, on the Warrant Securities or to exercise any voting rights, except to the extent expressly set forth in this Agreement or the applicable Warrant Certificate.

3.2 Lost, Stolen, Mutilated or Destroyed Warrant Certificates. Upon receipt by the Warrant Agent of evidence reasonably satisfactory to it and the Company of the ownership of and the loss, theft, destruction or mutilation of any Warrant Certificate and/or indemnity reasonably satisfactory to the Warrant Agent and the Company and, in the case of mutilation, upon surrender of the mutilated Warrant Certificate to the Warrant Agent for cancellation, then, in the absence of notice to the Company or the Warrant Agent that such Warrant Certificate has been acquired by a bona fide purchaser, the Company shall execute, and an authorized officer of the Warrant Agent shall manually countersign and deliver, in exchange for or in lieu of the lost, stolen, destroyed or mutilated Warrant Certificate, a new Warrant Certificate of the same tenor and evidencing Warrants for a like number of Warrant Securities. Upon the issuance of any new Warrant Certificate under this Section 3.2, 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 Warrant Agent) in connection therewith. Every substitute Warrant Certificate executed and delivered pursuant to this Section 3.2 in lieu of any lost, stolen or destroyed Warrant Certificate shall represent an additional contractual obligation of the Company, whether or not the lost, stolen or destroyed Warrant Certificate shall be at any time enforceable by anyone, and shall be entitled to the benefits of this Agreement equally and proportionately with any and all other Warrant Certificates duly executed and delivered hereunder. The provisions of this Section 3.2 are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement of mutilated, lost, stolen or destroyed Warrant Certificates.

3.3 Holder of Warrant Certificate May Enforce Rights Notwithstanding any of the provisions of this Agreement, any holder of a Warrant Certificate, without the consent of the Warrant Agent, the holder of any Warrant Securities or the holder of any other Warrant Certificate, may, in such holder's own behalf and for such holder's own benefit, enforce, and may institute and maintain any suit, action or proceeding against the Company suitable to enforce, or otherwise in respect of, such holder's right to exercise the Warrants evidenced by such holder's Warrant Certificate in the manner provided in such holder's Warrant Certificate and in this Agreement.

3.4 Adjustments.

(a) In case the Company shall at any time subdivide its outstanding shares of [title of Preferred Stock purchasable through exercise of Warrants] into a greater number of shares, the Warrant Price in effect immediately prior to such subdivision shall be proportionately reduced and the number of Warrant Securities purchasable under the Warrants shall be proportionately increased. Conversely, in case the outstanding shares of [title of Preferred Stock purchasable through exercise of Warrants] shall be combined into a smaller number of shares, the Warrant Price in effect immediately prior to such combination shall be proportionately increased and the number of Warrant Securities purchasable under the Warrants shall be proportionately decreased.

(b) If at any time or from time to time the holders of [title of Preferred Stock purchasable through exercise of Warrants] (or any shares of stock or other securities at the time receivable upon the exercise of the Warrants) shall have received or become entitled to receive, without payment therefore,

(i) [title of Preferred Stock purchasable through exercise of Warrants] or any shares of stock or other securities which are at any time directly or indirectly convertible into or exchangeable for [title of Preferred Stock purchasable through exercise of Warrants], or any rights or options to subscribe for, purchase or otherwise acquire any of the foregoing by way of dividend or other distribution;

(ii) any cash paid or payable otherwise than in accordance with the terms of [title of Preferred Stock purchasable through exercise of Warrants] or as a cash dividend paid or payable out of the Company's current or retained earnings;

(iii) any evidence of the Company's indebtedness or rights to subscribe for or purchase the Company's indebtedness; or

(iv) [title of Preferred Stock purchasable through exercise of Warrants] or additional stock or other securities or property (including cash) by way of spinoff, split-up, reclassification, combination of shares or similar corporate rearrangement (other than shares of [title of Preferred Stock purchasable through exercise of Warrants] issued as a stock split or adjustments in respect of which shall be covered by the terms of Section 3.4(a) above), then and in each such case, the holder of each Warrant shall, upon the exercise of the Warrant, be entitled to receive, in addition to the number of Warrant Securities receivable thereupon, and without payment of any additional consideration therefore, the amount of stock and other securities and property (including cash and indebtedness or rights to subscribe for or purchase indebtedness) which such holder would hold on the date of such exercise had such holder been the holder of record of such Warrant Securities as of the date on which holders of [title of Preferred Stock purchasable through exercise of Warrants] received or became entitled to receive such shares or all other additional stock and other securities and property.

(c) In case of (i) any reclassification, capital reorganization, or change in the [title of Preferred Stock purchasable through exercise of Warrants] of the Company (other than as a result of a subdivision, combination, or stock dividend provided for in Section 3.4(a) or Section 3.4(b) above), (ii) share exchange, merger or similar transaction of the Company with or into another person or entity (other than a share exchange, merger or similar transaction in which the Company is the acquiring or surviving corporation and which does not result in any change in the [title of Preferred Stock purchasable through exercise of Warrants] other than the issuance of additional shares of [title of Preferred Stock purchasable through exercise of Warrants]) or (iii) the sale, exchange, lease, transfer or other disposition of all or substantially all of the properties and assets of the Company as an entirety (in any such case, a ***“Reorganization Event”***), then, as a condition of such Reorganization Event, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the holders of the Warrants, so that the holders of the Warrants shall have the right at any time prior to the expiration of the Warrants to purchase, at a total price equal to that payable upon the exercise of the Warrants, the kind and amount of shares of stock and other securities and property receivable in connection with such Reorganization Event by a holder of the same number of shares of [title of Preferred Stock purchasable through exercise of Warrants] as were purchasable by the holders of the Warrants immediately prior to such Reorganization Event. In any such case appropriate provisions shall be made with respect to the rights and interests of the holders of the Warrants so that the provisions hereof shall thereafter be applicable with respect to any shares of stock or other securities and property deliverable upon exercise the Warrants, and appropriate adjustments shall be made to the Warrant Price payable hereunder provided the aggregate purchase price shall remain the same. In the case of any transaction described in clauses (ii) and (iii) above, the Company shall thereupon be relieved of any further obligation hereunder or under the Warrants, and the Company as the predecessor corporation may thereupon or at any time thereafter be dissolved, wound up or liquidated. Such successor or assuming entity thereupon may cause to be signed, and may issue either in its own name or in the name of the Company, any or all of the Warrants issuable hereunder which heretofore shall not have been signed by the Company, and may execute and deliver securities in its own name, in fulfillment of its obligations to deliver Warrant Securities upon exercise of the Warrants. All the Warrants so issued shall in all respects have the same legal rank and benefit under this Agreement as the Warrants theretofore or thereafter issued in accordance with the terms of this Agreement as though all of such Warrants had been issued at the date of the execution hereof. In any case of any such Reorganization Event, such changes in phraseology and form (but not in substance) may be made in the Warrants thereafter to be issued as may be appropriate. The Warrant Agent may receive a written opinion of legal counsel as conclusive evidence that any such Reorganization Event complies with the provisions of this Section 3.4.

(d) The Company may, at its option, at any time until the Expiration Date, reduce the then current Warrant Price to any amount deemed appropriate by the Board of Directors of the Company for any period not exceeding twenty consecutive days (as evidenced in a resolution adopted by such Board of Directors), but only upon giving the notices required by Section 3.5 at least ten days prior to taking such action.

(e) Except as herein otherwise expressly provided, no adjustment in the Warrant Price shall be made by reason of the issuance of any securities of the Company or for any other reason whatsoever.

(f) No fractional Warrant Securities shall be issued upon the exercise of Warrants. If more than one Warrant shall be exercised at one time by the same holder, the number of full Warrant Securities which shall be issuable upon such exercise shall be computed on the basis of the aggregate number of Warrant Securities purchased pursuant to the Warrants so exercised. Instead of any fractional Warrant Security which would otherwise be issuable upon exercise of any Warrant, the Company shall pay a cash adjustment in respect of such fraction in an amount equal to the same fraction of the last reported sale price (or bid price if there were no sales) per Warrant Security, in either case as reported on the principal registered national securities exchange on which the Warrant Securities are listed or admitted to trading on the business day that next precedes the day of exercise or, if the Warrant Securities are not then listed or admitted to trading on any registered national securities exchange, the average of the closing high bid and low asked prices as reported on the OTC Bulletin Board Service (the "*OTC Bulletin Board*") operated by the Financial Industry Regulatory Authority, Inc. ("*FINRA*") or, if not available on the OTC Bulletin Board, then the average of the closing high bid and low asked prices as reported on any other U.S. quotation medium or inter-dealer quotation system on such date, or if on any such date the Warrant Securities are not listed or admitted to trading on a registered national securities exchange, are not included in the OTC Bulletin Board, and are not quoted on any other U.S. quotation medium or inter-dealer quotation system, an amount equal to the same fraction of the average of the closing bid and asked prices as furnished by any FINRA member firm selected from time to time by the Company for that purpose at the close of business on the business day that next precedes the day of exercise.

(g) Whenever the Warrant Price then in effect is adjusted as herein provided, the Company shall mail to each holder of the Warrants at such holder's address as it shall appear on the books of the Company a statement setting forth the adjusted Warrant Price then and thereafter effective under the provisions hereof, together with the facts, in reasonable detail, upon which such adjustment is based.

(h) Notwithstanding anything to the contrary herein, in no event shall the Warrant Price, as adjusted in accordance with the terms hereof, be less than the par value per share of [title of Preferred Stock purchasable through exercise of Warrants].

3.5 Notice to Warrant Holders. In case the Company shall (a) effect any dividend or distribution described in Section 3.4(b), (b) effect any Reorganization Event, (c) make any distribution on or in respect of the [title of Preferred Stock purchasable through exercise of Warrants] in connection with the dissolution, liquidation or winding up of the Company, or (d) reduce the then current Warrant Price pursuant to Section 3.4(d), then the Company shall mail to each holder of Warrants at such holder's address as it shall appear on the books of the Warrant Agent, at least ten days prior to the applicable date hereinafter specified, a notice stating (x) the record date for such dividend or distribution, or, if a record is not to be taken, the date as of which the holders of record of [title of Preferred Stock purchasable through exercise of Warrants] that will be entitled to such dividend or distribution are to be determined, (y) the date on which such Reorganization Event, dissolution, liquidation or winding up is expected to become effective, and the date as of which it is expected that holders of [title of Preferred Stock purchasable through exercise of Warrants] of record shall be entitled to exchange their shares of [title of Preferred Stock purchasable through exercise of Warrants] for securities or other property deliverable upon such Reorganization Event, dissolution, liquidation or winding up, or (z) the first date on which the then current Warrant Price shall be reduced pursuant to Section 3.4(d). No failure to mail such notice nor any defect therein or in the mailing thereof shall affect any such transaction or any adjustment in the Warrant Price required by Section 3.4.

3.6 [If the Warrants are subject to acceleration by the Company — Acceleration of Warrants by the Company.]

(a) At any time on or after [●], the Company shall have the right to accelerate any or all Warrants at any time by causing them to expire at the close of business on the day next preceding a specified date (the "**Acceleration Date**"), if the Market Price (as hereinafter defined) of the [title of Preferred Stock purchasable through exercise of Warrants] equals or exceeds [●] percent ([●]%) of the then effective Warrant Price on any twenty Trading Days (as hereinafter defined) within a period of thirty consecutive Trading Days ending no more than five Trading Days prior to the date on which the Company gives notice to the Warrant Agent of its election to accelerate the Warrants.

(b) "**Market Price**" for each Trading Day shall be, if the [title of Preferred Stock purchasable through exercise of Warrants] is listed or admitted to trading on any registered national securities exchange, the last reported sale price, regular way (or, if no such price is reported, the average of the reported closing bid and asked prices, regular way) of [title of Preferred Stock purchasable through exercise of Warrants], in either case as reported on the principal registered national securities exchange on which the [title of Preferred Stock purchasable through exercise of Warrants] is listed or admitted to trading or, if not listed or admitted to trading on any registered national securities exchange, the average of the closing high bid and low asked prices as reported on the OTC Bulletin Board operated by FINRA, or if not available on the OTC Bulletin Board, then the average of the closing high bid and low asked prices as reported on any other U.S. quotation medium or inter-dealer quotation system, or if on any such date the shares of [title of Preferred Stock purchasable through exercise of Warrants] are not listed or admitted to trading on a registered national securities exchange, are not included in the OTC Bulletin Board, and are not quoted on any other U.S. quotation medium or inter-dealer quotation system, the average of the closing bid and asked prices as furnished by any FINRA member firm selected from time to time by the Company for that purpose. "Trading Day" shall be each Monday through Friday, other than any day on which securities are not traded in the system or on the exchange that is the principal market for the [title of Preferred Stock purchasable through exercise of Warrants], as determined by the Board of Directors of the Company. In the event of an acceleration of less than all of the Warrants, the Warrant Agent shall select the Warrants to be accelerated by lot, pro rata or in such other manner as it deems, in its discretion, to be fair and appropriate.

(c) Notice of an acceleration specifying the Acceleration Date shall be sent by mail first class, postage prepaid, to each registered holder of a Warrant Certificate representing a Warrant accelerated at such holder's address appearing on the books of the Warrant Agent not more than sixty days nor less than thirty days before the Acceleration Date. Such notice of an acceleration also shall be given no more than twenty days, and no less than ten days, prior to the mailing of notice to registered holders of Warrants pursuant to this Section 3.6, by publication at least once in a newspaper of general circulation in the City of New York.

(d) Any Warrant accelerated may be exercised until [●] p.m., [City] time, on the business day next preceding the Acceleration Date. The Warrant Price shall be payable as provided in Section 2.]

ARTICLE 4 EXCHANGE AND TRANSFER OF WARRANT CERTIFICATES

4.1 Exchange and Transfer of Warrant Certificates Upon surrender at the corporate trust office of the Warrant Agent, Warrant Certificates evidencing Warrants may be exchanged for Warrant Certificates in other denominations evidencing such Warrants or the transfer thereof may be registered in whole or in part; provided that such other Warrant Certificates evidence Warrants for the same aggregate number of Warrant Securities as the Warrant Certificates so surrendered. The Warrant Agent shall keep, at its corporate trust office, books in which, subject to such reasonable regulations as it may prescribe, it shall register Warrant Certificates and exchanges and transfers of outstanding Warrant Certificates, upon surrender of the Warrant Certificates to the Warrant Agent at its corporate trust office for exchange or registration of transfer, properly endorsed or accompanied by appropriate instruments of registration of transfer and written instructions for transfer, all in form satisfactory to the Company and the Warrant Agent. No service charge shall be made for any exchange or registration of transfer of Warrant Certificates, but the Company may require payment of a sum sufficient to cover any stamp or other tax or other governmental charge that may be imposed in connection with any such exchange or registration of transfer. Whenever any Warrant Certificates are so surrendered for exchange or registration of transfer, an authorized officer of the Warrant Agent shall manually countersign and deliver to the person or persons entitled thereto a Warrant Certificate or Warrant Certificates duly authorized and executed by the Company, as so requested. The Warrant Agent shall not be required to effect any exchange or registration of transfer which will result in the issuance of a Warrant Certificate evidencing a Warrant for a fraction of a Warrant Security or a number of Warrants for a whole number of Warrant Securities and a fraction of a Warrant Security. All Warrant Certificates issued upon any exchange or registration of transfer of Warrant Certificates shall be the valid obligations of the Company, evidencing the same obligations and entitled to the same benefits under this Agreement as the Warrant Certificate surrendered for such exchange or registration of transfer.

4.2 Treatment of Holders of Warrant Certificates. The Company, the Warrant Agent and all other persons may treat the registered holder of a Warrant Certificate as the absolute owner thereof for any purpose and as the person entitled to exercise the rights represented by the Warrants evidenced thereby, any notice to the contrary notwithstanding.

4.3 Cancellation of Warrant Certificates. Any Warrant Certificate surrendered for exchange, registration of transfer or exercise of the Warrants evidenced thereby shall, if surrendered to the Company, be delivered to the Warrant Agent and all Warrant Certificates surrendered or so delivered to the Warrant Agent shall be promptly canceled by the Warrant Agent and shall not be reissued and, except as expressly permitted by this Agreement, no Warrant Certificate shall be issued hereunder in exchange therefor or in lieu thereof. The Warrant Agent shall deliver to the Company from time to time or otherwise dispose of canceled Warrant Certificates in a manner satisfactory to the Company.

ARTICLE 5 CONCERNING THE WARRANT AGENT

5.1 Warrant Agent. The Company hereby appoints [●] as Warrant Agent of the Company in respect of the Warrants and the Warrant Certificates upon the terms and subject to the conditions herein set forth, and [●] hereby accepts such appointment. The Warrant Agent shall have the powers and authority granted to and conferred upon it in the Warrant Certificates and hereby and such further powers and authority to act on behalf of the Company as the Company may hereafter grant to or confer upon it. All of the terms and provisions with respect to such powers and authority contained in the Warrant Certificates are subject to and governed by the terms and provisions hereof.

5.2 Conditions of Warrant Agent's Obligations. The Warrant Agent accepts its obligations herein set forth upon the terms and conditions hereof, including the following to all of which the Company agrees and to all of which the rights hereunder of the holders from time to time of the Warrant Certificates shall be subject:

(a) Compensation and Indemnification. The Company agrees promptly to pay the Warrant Agent the compensation to be agreed upon with the Company for all services rendered by the Warrant Agent and to reimburse the Warrant Agent for reasonable out-of-pocket expenses (including reasonable counsel fees) incurred without negligence, bad faith or willful misconduct by the Warrant Agent in connection with the services rendered hereunder by the Warrant Agent. The Company also agrees to indemnify the Warrant Agent for, and to hold it harmless against, any loss, liability or expense incurred without negligence, bad faith or willful misconduct on the part of the Warrant Agent, arising out of or in connection with its acting as Warrant Agent hereunder, including the reasonable costs and expenses of defending against any claim of such liability.

(b) Agent for the Company. In acting under this Agreement and in connection with the Warrant Certificates, the Warrant Agent is acting solely as agent of the Company and does not assume any obligations or relationship of agency or trust for or with any of the holders of Warrant Certificates or beneficial owners of Warrants.

(c) **Counsel.** The Warrant Agent may consult with counsel satisfactory to it, which may include counsel for the Company, and the written advice of such counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in accordance with the advice of such counsel.

(d) **Documents.** The Warrant Agent shall be protected and shall incur no liability for or in respect of any action taken or omitted by it in reliance upon any Warrant Certificate, notice, direction, consent, certificate, affidavit, statement or other paper or document reasonably believed by it to be genuine and to have been presented or signed by the proper parties.

(e) **Certain Transactions.** The Warrant Agent, and its officers, directors and employees, may become the owner of, or acquire any interest in, Warrants, with the same rights that it or they would have if it were not the Warrant Agent hereunder, and, to the extent permitted by applicable law, it or they may engage or be interested in any financial or other transaction with the Company and may act on, or as depository, trustee or agent for, any committee or body of holders of Warrant Securities or other obligations of the Company as freely as if it were not the Warrant Agent hereunder. Nothing in this Agreement shall be deemed to prevent the Warrant Agent from acting as trustee under any indenture to which the Company is a party.

(f) **No Liability for Interest.** Unless otherwise agreed with the Company, the Warrant Agent shall have no liability for interest on any monies at any time received by it pursuant to any of the provisions of this Agreement or of the Warrant Certificates.

(g) **No Liability for Invalidity.** The Warrant Agent shall have no liability with respect to any invalidity of this Agreement or any of the Warrant Certificates (except as to the Warrant Agent's countersignature thereon).

(h) **No Responsibility for Representations.** The Warrant Agent shall not be responsible for any of the recitals or representations herein or in the Warrant Certificates (except as to the Warrant Agent's countersignature thereon), all of which are made solely by the Company.

(i) **No Implied Obligations.** The Warrant Agent shall be obligated to perform only such duties as are herein and in the Warrant Certificates specifically set forth and no implied duties or obligations shall be read into this Agreement or the Warrant Certificates against the Warrant Agent. The Warrant Agent shall not be under any obligation to take any action hereunder which may tend to involve it in any expense or liability, the payment of which within a reasonable time is not, in its reasonable opinion, assured to it. The Warrant Agent shall not be accountable or under any duty or responsibility for the use by the Company of any of the Warrant Certificates authenticated by the Warrant Agent and delivered by it to the Company pursuant to this Agreement or for the application by the Company of the proceeds of the Warrant Certificates. The Warrant Agent shall have no duty or responsibility in case of any default by the Company in the performance of its covenants or agreements contained herein or in the Warrant Certificates or in the case of the receipt of any written demand from a holder of a Warrant Certificate with respect to such default, including, without limiting the generality of the foregoing, any duty or responsibility to initiate or attempt to initiate any proceedings at law or otherwise or, except as provided in Section 6.2 hereof, to make any demand upon the Company.

5.3 Resignation, Removal and Appointment of Successors.

(a) The Company agrees, for the benefit of the holders from time to time of the Warrant Certificates, that there shall at all times be a Warrant Agent hereunder until all the Warrants have been exercised or are no longer exercisable.

(b) The Warrant Agent may at any time resign as agent by giving written notice to the Company of such intention on its part, specifying the date on which its desired resignation shall become effective; provided that such date shall not be less than three months after the date on which such notice is given unless the Company otherwise agrees. The Warrant Agent hereunder may be removed at any time by the filing with it of an instrument in writing signed by or on behalf of the Company and specifying such removal and the intended date when it shall become effective. Such resignation or removal shall take effect upon the appointment by the Company, as hereinafter provided, of a successor Warrant Agent (which shall be a bank or trust company authorized under the laws of the jurisdiction of its organization to exercise corporate trust powers) and the acceptance of such appointment by such successor Warrant Agent. The obligation of the Company under Section 5.2(a) shall continue to the extent set forth therein notwithstanding the resignation or removal of the Warrant Agent.

(c) In case at any time the Warrant Agent shall resign, or shall be removed, or shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or shall commence a voluntary case under the Federal bankruptcy laws, as now or hereafter constituted, or under any other applicable Federal or state bankruptcy, insolvency or similar law or shall consent to the appointment of or taking possession by a receiver, custodian, liquidator, assignee, trustee, sequestrator (or other similar official) of the Warrant Agent or its property or affairs, or shall make an assignment for the benefit of creditors, or shall admit in writing its inability to pay its debts generally as they become due, or shall take corporate action in furtherance of any such action, or a decree or order for relief by a court having jurisdiction in the premises shall have been entered in respect of the Warrant Agent in an involuntary case under the Federal bankruptcy laws, as now or hereafter constituted, or any other applicable Federal or state bankruptcy, insolvency or similar law, or a decree or order by a court having jurisdiction in the premises shall have been entered for the appointment of a receiver, custodian, liquidator, assignee, trustee, sequestrator (or similar official) of the Warrant Agent or of its property or affairs, or any public officer shall take charge or control of the Warrant Agent or of its property or affairs for the purpose of rehabilitation, conservation, winding up or liquidation, a successor Warrant Agent, qualified as aforesaid, shall be appointed by the Company by an instrument in writing, filed with the successor Warrant Agent. Upon the appointment as aforesaid of a successor Warrant Agent and acceptance by the successor Warrant Agent of such appointment, the Warrant Agent shall cease to be Warrant Agent hereunder.

(d) Any successor Warrant Agent appointed hereunder shall execute, acknowledge and deliver to its predecessor and to the Company an instrument accepting such appointment hereunder, and thereupon such successor Warrant Agent, without any further act, deed or conveyance, shall become vested with all the authority, rights, powers, trusts, immunities, duties and obligations of such predecessor with like effect as if originally named as Warrant Agent hereunder, and such predecessor, upon payment of its charges and disbursements then unpaid, shall thereupon become obligated to transfer, deliver and pay over, and such successor Warrant Agent shall be entitled to receive, all monies, securities and other property on deposit with or held by such predecessor, as Warrant Agent hereunder.

(e) Any corporation into which the Warrant Agent hereunder may be merged or converted or any corporation with which the Warrant Agent may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Warrant Agent shall be a party, or any corporation to which the Warrant Agent shall sell or otherwise transfer all or substantially all the assets and business of the Warrant Agent, provided that it shall be qualified as aforesaid, shall be the successor Warrant Agent under this Agreement without the execution or filing of any paper or any further act on the part of any of the parties hereto.

ARTICLE 6 MISCELLANEOUS

6.1 Amendment. This Agreement may be amended by the parties hereto, without the consent of the holder of any Warrant Certificate, for the purpose of curing any ambiguity, or of curing, correcting or supplementing any defective provision contained herein, or making any other provisions with respect to matters or questions arising under this Agreement as the Company and the Warrant Agent may deem necessary or desirable; provided that such action shall not materially adversely affect the interests of the holders of the Warrant Certificates.

6.2 Notices and Demands to the Company and Warrant Agent If the Warrant Agent shall receive any notice or demand addressed to the Company by the holder of a Warrant Certificate pursuant to the provisions of the Warrant Certificates, the Warrant Agent shall promptly forward such notice or demand to the Company.

6.3 Addresses. Any communication from the Company to the Warrant Agent with respect to this Agreement shall be addressed to [●], Attention: [●] and any communication from the Warrant Agent to the Company with respect to this Agreement shall be addressed to Ocuphire Pharma, Inc., 37000 Grand River Avenue, Suite 120, Farmington Hills, Michigan 48335, Attention: [●] (or such other address as shall be specified in writing by the Warrant Agent or by the Company).

6.4 Governing Law. This Agreement and each Warrant Certificate issued hereunder shall be governed by and construed in accordance with the laws of the State of New York.

6.5 Delivery of Prospectus. The Company shall furnish to the Warrant Agent sufficient copies of a prospectus meeting the requirements of the Securities Act of 1933, as amended, relating to the Warrant Securities deliverable upon exercise of the Warrants (the "*Prospectus*"), and the Warrant Agent agrees that upon the exercise of any Warrant, the Warrant Agent will deliver to the holder of the Warrant Certificate evidencing such Warrant, prior to or concurrently with the delivery of the Warrant Securities issued upon such exercise, a Prospectus. The Warrant Agent shall not, by reason of any such delivery, assume any responsibility for the accuracy or adequacy of such Prospectus.

6.6 Obtaining of Governmental Approvals. The Company will from time to time take all action which may be necessary to obtain and keep effective any and all permits, consents and approvals of governmental agencies and authorities and securities act filings under United States Federal and state laws (including without limitation a registration statement in respect of the Warrants and Warrant Securities under the Securities Act of 1933, as amended), which may be or become requisite in connection with the issuance, sale, transfer, and delivery of the Warrant Securities issued upon exercise of the Warrants, the issuance, sale, transfer and delivery of the Warrants or upon the expiration of the period during which the Warrants are exercisable.

6.7 Persons Having Rights under the Agreement Nothing in this Agreement shall give to any person other than the Company, the Warrant Agent and the holders of the Warrant Certificates any right, remedy or claim under or by reason of this Agreement.

6.8 Headings. The descriptive headings of the several Articles and Sections of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

6.9 Counterparts. This Agreement may be executed in any number of counterparts, each of which as so executed shall be deemed to be an original, but such counterparts shall together constitute but one and the same instrument.

6.10 Inspection of Agreement. A copy of this Agreement shall be available at all reasonable times at the principal corporate trust office of the Warrant Agent for inspection by the holder of any Warrant Certificate. The Warrant Agent may require such holder to submit such holder's Warrant Certificate for inspection by it.

In Witness Whereof, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

Ocuphire Pharma, Inc., as the Company

By: _____
Name: _____
Title: _____

ATTEST: _____

COUNTERSIGNED

[•], as the Warrant Agent

By: _____
Name: _____
Title: _____

ATTEST: _____

[SIGNATURE PAGE TO OCUPHIRE PHARMA, INC. DEBT SECURITIES WARRANT
AGREEMENT]

EXHIBIT A

FORM OF WARRANT CERTIFICATE
[FACE OF WARRANT CERTIFICATE]

[Form of Legend if Warrants are not immediately exercisable.]

[Prior to [●], Warrants evidenced by this Warrant Certificate cannot be exercised.]

EXERCISABLE ONLY IF COUNTERSIGNED BY THE WARRANT AGENT AS PROVIDED HEREIN

VOID AFTER [●] P.M., [City] time, ON [●].

OCUPHIRE PHARMA, INC.
WARRANT CERTIFICATE REPRESENTING
WARRANTS TO PURCHASE
[TITLE OF WARRANT SECURITIES]

No. [●]

[●] Warrants

This certifies that [●] or registered assigns is the registered owner of the above indicated number of Warrants, each Warrant entitling such owner to purchase, at any time [after [●] p.m., [City] time, [on [●] and] on or before [●] p.m., [City] time, on [●], [●] shares of [TITLE OF WARRANT SECURITIES], par value \$0.0001 per share (the "*Warrant Securities*"), of Ocuphire Pharma, Inc., a Delaware corporation (the "*Company*") on the following basis: during the period from [●], through and including [●], the exercise price per Warrant Security will be \$[●], subject to adjustment as provided in the Warrant Agreement (as hereinafter defined) (the "*Warrant Price*"). The Holder may exercise the Warrants evidenced hereby by providing certain information set forth on the back hereof and by paying in full, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds], the Warrant Price for each Warrant Security with respect to which this Warrant is exercised to the Warrant Agent (as hereinafter defined) and by surrendering this Warrant Certificate, with the purchase form on the back hereof duly executed, at the corporate trust office of [name of Warrant Agent], or its successor as warrant agent (the "*Warrant Agent*"), which is, on the date hereof, at the address specified on the reverse hereof, and upon compliance with and subject to the conditions set forth herein and in the Warrant Agreement (as hereinafter defined).

The term "*Holder*" as used herein shall mean the person in whose name at the time this Warrant Certificate shall be registered upon the books to be maintained by the Warrant Agent for that purpose pursuant to Section 4 of the Warrant Agreement.

The Warrants evidenced by this Warrant Certificate may be exercised to purchase a whole number of Warrant Securities in registered form. Upon any exercise of fewer than all of the Warrants evidenced by this Warrant Certificate, there shall be issued to the Holder hereof a new Warrant Certificate evidencing Warrants for the number of Warrant Securities remaining unexercised.

This Warrant Certificate is issued under and in accordance with the Warrant Agreement dated as of [●] (the "*Warrant Agreement*"), between the Company and the Warrant Agent and is subject to the terms and provisions contained in the Warrant Agreement, to all of which terms and provisions the Holder of this Warrant Certificate consents by acceptance hereof. Copies of the Warrant Agreement are on file at the above-mentioned office of the Warrant Agent.

Transfer of this Warrant Certificate may be registered when this Warrant Certificate is surrendered at the corporate trust office of the Warrant Agent by the registered owner or such owner's assigns, in the manner and subject to the limitations provided in the Warrant Agreement.

After countersignature by the Warrant Agent and prior to the expiration of this Warrant Certificate, this Warrant Certificate may be exchanged at the corporate trust office of the Warrant Agent for Warrant Certificates representing Warrants for the same aggregate number of Warrant Securities.

This Warrant Certificate shall not entitle the Holder hereof to any of the rights of a holder of the Warrant Securities, including, without limitation, the right to receive payments of dividends or distributions, if any, on the Warrant Securities (except to the extent set forth in the Warrant Agreement) or to exercise any voting rights.

Reference is hereby made to the further provisions of this Warrant Certificate set forth on the reverse hereof, which further provisions shall for all purposes have the same effect as if set forth at this place.

This Warrant Certificate shall not be valid or obligatory for any purpose until countersigned by the Warrant Agent.

In Witness Whereof, the Company has caused this Warrant to be executed in its name and on its behalf by the facsimile signatures of its duly authorized officers.

Dated: _____

Ocuphire Pharma, Inc., as the Company

By: _____
Name: _____
Title: _____

ATTEST: _____

COUNTERSIGNED

[●], as Warrant Agent

By: _____
Name: _____
Title: _____

ATTEST: _____

[REVERSE OF WARRANT CERTIFICATE]

(Instructions for Exercise of Warrant)

To exercise any Warrants evidenced hereby for Warrant Securities (as hereinafter defined), the Holder must pay, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds], the Warrant Price in full for Warrants exercised, to [●] [address of Warrant Agent], Attention: [●], which payment must specify the name of the Holder and the number of Warrants exercised by such Holder. In addition, the Holder must complete the information required below and present this Warrant Certificate in person or by mail (certified or registered mail is recommended) to the Warrant Agent at the appropriate address set forth above. This Warrant Certificate, completed and duly executed, must be received by the Warrant Agent within five business days of the payment.

(To be executed upon exercise of Warrants)

The undersigned hereby irrevocably elects to exercise _____ Warrants, evidenced by this Warrant Certificate, to purchase _____ shares of the [TITLE OF WARRANT SECURITIES], par value \$0.0001 per share (the "*Warrant Securities*"), of Ocuphire Pharma, Inc. and represents that the undersigned has tendered payment for such Warrant Securities, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds], to the order of Ocuphire Pharma, Inc., c/o [insert name and address of Warrant Agent], in the amount of \$_____ in accordance with the terms hereof. The undersigned requests that said Warrant Securities be in fully registered form in the authorized denominations, registered in such names and delivered all as specified in accordance with the instructions set forth below.

If the number of Warrants exercised is less than all of the Warrants evidenced hereby, the undersigned requests that a new Warrant Certificate evidencing the Warrants for the number of Warrant Securities remaining unexercised be issued and delivered to the undersigned unless otherwise specified in the instructions below.

Dated: _____

Name: _____

Please Print

Address: _____

(Insert Social Security or Other Identifying
Number of Holder)

Signature Guaranteed: _____

Signature

(Signature must conform in all respects to name of holder as specified on the face of this Warrant Certificate and must bear a signature guarantee by a FINRA member firm).

This Warrant may be exercised at the following addresses: By hand at:

[•]

By mail at:

[Instructions as to form and delivery of Warrant Securities and, if applicable, Warrant Certificates evidencing Warrants for the number of Warrant Securities remaining unexercised — complete as appropriate.]

ASSIGNMENT

[Form of assignment to be executed if Warrant Holder desires to transfer Warrant]

FOR VALUE RECEIVED, _____ hereby sells, assigns and transfers unto:

(Please print name and address including zip code)

Please print Social Security or other identifying number

the right represented by the within Warrant to purchase _____ shares of [Title of Warrant Securities] of Ocuphire Pharma, Inc. to which the within Warrant relates and appoints _____ attorney to transfer such right on the books of the Warrant Agent with full power of substitution in the premises.

Dated:

Name: _____

Signature

(Signature must conform in all respects to name of holder as specified on the face of the Warrant)

Signature Guaranteed

OCUPHIRE PHARMA, INC.

AND

_____, AS WARRANT AGENT

FORM OF DEBT SECURITIES
WARRANT AGREEMENT

DATED AS OF _____

**OCUPHIRE PHARMA, INC. FORM OF DEBT SECURITIES WARRANT
AGREEMENT**

THIS DEBT SECURITIES WARRANT AGREEMENT (this “*Agreement*”), dated as of [●], between **Ocuphire Pharma, Inc.**, a Delaware corporation (the “*Company*”), and [●], a [corporation] [national banking association] organized and existing under the laws of [●] and having a corporate trust office in [●], as warrant agent (the “*Warrant Agent*”).

Recitals

Whereas, the Company has entered into an indenture dated as of [●] (the “*Indenture*”), with [●], as trustee (such trustee, and any successors to such trustee, herein called the “*Trustee*”), providing for the issuance from time to time of its debt securities, to be issued in one or more series as provided in the Indenture (the “*Debt Securities*”);

Whereas, the Company proposes to sell [*If Warrants are sold with other securities*— [title of such other securities being offered] (the “*Other Securities*”) with] warrant certificates evidencing one or more warrants (the “*Warrants*” or, individually, a “*Warrant*”) representing the right to purchase [title of Debt Securities purchasable through exercise of Warrants] (the “*Warrant Debt Securities*”), such warrant certificates and other warrant certificates issued pursuant to this Agreement being herein called the “*Warrant Certificates*”; and

Whereas, the Company desires the Warrant Agent to act on behalf of the Company, and the Warrant Agent is willing so to act, in connection with the issuance, registration, transfer, exchange, exercise and replacement of the Warrant Certificates, and in this Agreement wishes to set forth, among other things, the form and provisions of the Warrant Certificates and the terms and conditions on which they may be issued, registered, transferred, exchanged, exercised and replaced.

Agreement

Now, **Therefore**, in consideration of the premises and of the mutual agreements herein contained, the parties hereto agree as follows:

**ARTICLE 1
ISSUANCE OF WARRANTS AND EXECUTION AND
DELIVERY OF WARRANT CERTIFICATES**

1.1 Issuance of Warrants. [*If Warrants alone* — Upon issuance, each Warrant Certificate shall evidence one or more Warrants.] [*If Other Securities and Warrants* — Warrant Certificates will be issued in connection with the issuance of the Other Securities but shall be separately transferable and each Warrant Certificate shall evidence one or more Warrants.] Each Warrant evidenced thereby shall represent the right, subject to the provisions contained herein and therein, to purchase one Warrant Debt Security. [*If Other Securities and Warrants* — Warrant Certificates will be issued with the Other Securities and each Warrant Certificate will evidence [●] Warrants for each [\$●] principal amount] [[●] shares] of Other Securities issued.]

1.2 Execution and Delivery of Warrant Certificates. Each Warrant Certificate, whenever issued, shall be in registered form substantially in the form set forth in Exhibit A hereto, shall be dated the date of its countersignature by the Warrant Agent and may have such letters, numbers, or other marks of identification or designation and such legends or endorsements printed, lithographed or engraved thereon as the officers of the Company executing the same may approve (execution thereof to be conclusive evidence of such approval) and as are not inconsistent with the provisions of this Agreement, or as may be required to comply with any law or with any rule or regulation made pursuant thereto or with any rule or regulation of any securities exchange on which the Warrants may be listed, or to conform to usage. The Warrant Certificates shall be signed on behalf of the Company by any of its present or future chief executive officers, presidents, senior vice presidents, vice presidents, chief financial officers, chief legal officers, treasurers, assistant treasurers, controllers, assistant controllers, secretaries or assistant secretaries under its corporate seal reproduced thereon. Such signatures may be manual or facsimile signatures of such authorized officers and may be imprinted or otherwise reproduced on the Warrant Certificates. The seal of the Company may be in the form of a facsimile thereof and may be impressed, affixed, imprinted or otherwise reproduced on the Warrant Certificates.

No Warrant Certificate shall be valid for any purpose, and no Warrant evidenced thereby shall be exercisable, until such Warrant Certificate has been countersigned by the manual signature of the Warrant Agent. Such signature by the Warrant Agent upon any Warrant Certificate executed by the Company shall be conclusive evidence that the Warrant Certificate so countersigned has been duly issued hereunder.

In case any officer of the Company who shall have signed any of the Warrant Certificates either manually or by facsimile signature shall cease to be such officer before the Warrant Certificates so signed shall have been countersigned and delivered by the Warrant Agent, such Warrant Certificates may be countersigned and delivered notwithstanding that the person who signed such Warrant Certificates ceased to be such officer of the Company; and any Warrant Certificate may be signed on behalf of the Company by such persons as, at the actual date of the execution of such Warrant Certificate, shall be the proper officers of the Company, although at the date of the execution of this Agreement any such person was not such officer.

The term “*holder*” or “*holder of a Warrant Certificate*” as used herein shall mean any person in whose name at the time any Warrant Certificate shall be registered upon the books to be maintained by the Warrant Agent for that purpose.

1.3 Issuance of Warrant Certificates. Warrant Certificates evidencing the right to purchase Warrant Debt Securities may be executed by the Company and delivered to the Warrant Agent upon the execution of this Agreement or from time to time thereafter. The Warrant Agent shall, upon receipt of Warrant Certificates duly executed on behalf of the Company, countersign such Warrant Certificates and shall deliver such Warrant Certificates to or upon the order of the Company.

ARTICLE 2
WARRANT PRICE, DURATION AND EXERCISE OF WARRANTS

2.1 Warrant Price. During the period specified in Section 2.2, each Warrant shall, subject to the terms of this Agreement and the applicable Warrant Certificate, entitle the holder thereof to purchase the principal amount of Warrant Debt Securities specified in the applicable Warrant Certificate at an exercise price of [●]% of the principal amount thereof [plus accrued amortization, if any, of the original issue discount of the Warrant Debt Securities] [plus accrued interest, if any, from the most recent date from which interest shall have been paid on the Warrant Debt Securities or, if no interest shall have been paid on the Warrant Debt Securities, from the date of their initial issuance.] [The original issue discount (\$[●] for each \$1,000 principal amount of Warrant Debt Securities) will be amortized at a [●]% annual rate, computed on a[n] [semi-] annual basis [using a 360-day year consisting of twelve 30-day months].] Such purchase price for the Warrant Debt Securities is referred to in this Agreement as the “*Warrant Price*.”

2.2 Duration of Warrants. Each Warrant may be exercised in whole or in part at any time, as specified herein, on or after [the date thereof] [●] and at or before [●] p.m., [City] time, on [●] or such later date as the Company may designate by notice to the Warrant Agent and the holders of Warrant Certificates mailed to their addresses as set forth in the record books of the Warrant Agent (the “*Expiration Date*”). Each Warrant not exercised at or before [●] p.m., [City] time, on the Expiration Date shall become void, and all rights of the holder of the Warrant Certificate evidencing such Warrant under this Agreement shall cease.

2.3 Exercise of Warrants.

(a) During the period specified in Section 2.2, the Warrants may be exercised to purchase a whole number of Warrant Debt Securities in registered form by providing certain information as set forth on the reverse side of the Warrant Certificate and by paying in full, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds] the Warrant Price for each Warrant Debt Security with respect to which a Warrant is being exercised to the Warrant Agent at its corporate trust office, provided that such exercise is subject to receipt within five business days of such payment by the Warrant Agent of the Warrant Certificate with the form of election to purchase Warrant Debt Securities set forth on the reverse side of the Warrant Certificate properly completed and duly executed. The date on which payment in full of the Warrant Price is received by the Warrant Agent shall, subject to receipt of the Warrant Certificate as aforesaid, be deemed to be the date on which the Warrant is exercised; provided, however, that if, at the date of receipt of such Warrant Certificates and payment in full of the Warrant Price, the transfer books for the Warrant Debt Securities purchasable upon the exercise of such Warrants shall be closed, no such receipt of such Warrant Certificates and no such payment of such Warrant Price shall be effective to constitute the person so designated to be named as the holder of record of such Warrant Debt Securities on such date, but shall be effective to constitute such person as the holder of record of such Warrant Debt Securities for all purposes at the opening of business on the next succeeding day on which the transfer books for the Warrant Debt Securities purchasable upon the exercise of such Warrants shall be opened, and the certificates for the Warrant Debt Securities in respect of which such Warrants are then exercised shall be issuable as of the date on such next succeeding day on which the transfer books shall next be opened, and until such date the Company shall be under no duty to deliver any certificate for such Warrant Debt Securities. The Warrant Agent shall deposit all funds received by it in payment of the Warrant Price in an account of the Company maintained with it and shall advise the Company by telephone at the end of each day on which a payment for the exercise of Warrants is received of the amount so deposited to its account. The Warrant Agent shall promptly confirm such telephone advice to the Company in writing.

(b) The Warrant Agent shall, from time to time, as promptly as practicable, advise the Company of (i) the number of Warrant Debt Securities with respect to which Warrants were exercised, (ii) the instructions of each holder of the Warrant Certificates evidencing such Warrants with respect to delivery of the Warrant Debt Securities to which such holder is entitled upon such exercise, (iii) delivery of Warrant Certificates evidencing the balance, if any, of the Warrants for the remaining Warrant Debt Securities after such exercise, and (iv) such other information as the Company or the Trustee shall reasonably require.

(c) As soon as practicable after the exercise of any Warrant, the Company shall issue pursuant to the Indenture, in authorized denominations, to or upon the order of the holder of the Warrant Certificate evidencing such Warrant the Warrant Debt Securities to which such holder is entitled, in fully registered form, registered in such name or names as may be directed by such holder. If fewer than all of the Warrants evidenced by such Warrant Certificate are exercised, the Company shall execute, and an authorized officer of the Warrant Agent shall manually countersign and deliver, a new Warrant Certificate evidencing Warrants for the number of Warrant Debt Securities remaining unexercised.

(d) The Company shall not be required to pay any stamp or other tax or other governmental charge required to be paid in connection with any transfer involved in the issue of the Warrant Debt Securities, and in the event that any such transfer is involved, the Company shall not be required to issue or deliver any Warrant Debt Securities until such tax or other charge shall have been paid or it has been established to the Company's satisfaction that no such tax or other charge is due.

(e) Prior to the issuance of any Warrants there shall have been reserved, and the Company shall at all times through the Expiration Date keep reserved, out of its authorized but unissued Warrant Debt Securities, a number of shares sufficient to provide for the exercise of the Warrants.

ARTICLE 3
OTHER PROVISIONS RELATING TO RIGHTS OF HOLDERS OF
WARRANT CERTIFICATES

3.1 No Rights as Holder of Warrant Debt Securities Conferred by Warrants or Warrant Certificates. No Warrant Certificate or Warrant evidenced thereby shall entitle the holder thereof to any of the rights of a holder of Warrant Debt Securities, including, without limitation, the right to receive the payment of principal of (or premium, if any) or interest, if any, on the Warrant Debt Securities or to enforce any of the covenants in the Indenture.

3.2 Lost, Stolen, Mutilated or Destroyed Warrant Certificates Upon receipt by the Warrant Agent of evidence reasonably satisfactory to it and the Company of the ownership of and the loss, theft, destruction or mutilation of any Warrant Certificate and/or indemnity reasonably satisfactory to the Warrant Agent and the Company and, in the case of mutilation, upon surrender of the mutilated Warrant Certificate to the Warrant Agent for cancellation, then, in the absence of notice to the Company or the Warrant Agent that such Warrant Certificate has been acquired by a bona fide purchaser, the Company shall execute, and an authorized officer of the Warrant Agent shall manually countersign and deliver, in exchange for or in lieu of the lost, stolen, destroyed or mutilated Warrant Certificate, a new Warrant Certificate of the same tenor and evidencing Warrants for a like principal amount of Warrant Debt Securities. Upon the issuance of any new Warrant Certificate under this Section 3.2, 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 Warrant Agent) in connection therewith. Every substitute Warrant Certificate executed and delivered pursuant to this Section 3.2 in lieu of any lost, stolen or destroyed Warrant Certificate shall represent an additional contractual obligation of the Company, whether or not the lost, stolen or destroyed Warrant Certificate shall be at any time enforceable by anyone, and shall be entitled to the benefits of this Agreement equally and proportionately with any and all other Warrant Certificates duly executed and delivered hereunder. The provisions of this Section 3.2 are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement of mutilated, lost, stolen or destroyed Warrant Certificates.

3.3 Holder of Warrant Certificate May Enforce Rights. Notwithstanding any of the provisions of this Agreement, any holder of a Warrant Certificate, without the consent of the Warrant Agent, the Trustee, the holder of any Warrant Debt Securities or the holder of any other Warrant Certificate, may, in such holder's own behalf and for such holder's own benefit, enforce, and may institute and maintain any suit, action or proceeding against the Company suitable to enforce, or otherwise in respect of, such holder's right to exercise the Warrants evidenced by such holder's Warrant Certificate in the manner provided in such holder's Warrant Certificates and in this Agreement.

3.4 Merger, Sale, Conveyance or Lease. In case of (a) any share exchange, merger or similar transaction of the Company with or into another person or entity (other than a share exchange, merger or similar transaction in which the Company is the acquiring or surviving corporation) or (b) the sale, exchange, lease, transfer or other disposition of all or substantially all of the properties and assets of the Company as an entirety (in any such case, a **"Reorganization Event"**), then, as a condition of such Reorganization Event, lawful provisions shall be made, and duly executed documents evidencing the same from the Company's successor shall be delivered to the holders of the Warrants, so that such successor shall succeed to and be substituted for the Company, and assume all the Company's obligations under, this Agreement and the Warrants. The Company shall thereupon be relieved of any further obligation hereunder or under the Warrants, and the Company as the predecessor corporation may thereupon or at any time thereafter be dissolved, wound up or liquidated. Such successor or assuming entity thereupon may cause to be signed, and may issue either in its own name or in the name of the Company, any or all of the Warrants issuable hereunder which heretofore shall not have been signed by the Company, and may execute and deliver securities in its own name, in fulfillment of its obligations to deliver Warrant Debt Securities upon exercise of the Warrants. All the Warrants so issued shall in all respects have the same legal rank and benefit under this Agreement as the Warrants theretofore or thereafter issued in accordance with the terms of this Agreement as though all of such Warrants had been issued at the date of the execution hereof. In any case of any such Reorganization Event, such changes in phraseology and form (but not in substance) may be made in the Warrants thereafter to be issued as may be appropriate. The Warrant Agent may receive a written opinion of legal counsel as conclusive evidence that any such Reorganization Event complies with the provisions of this Section 3.4.

3.5 Notice to Warrant Holders. In case the Company shall (a) effect any Reorganization Event or (b) make any distribution on or in respect of the [title of Warrant Debt Securities] in connection with the dissolution, liquidation or winding up of the Company, then the Company shall mail to each holder of Warrants at such holder's address as it shall appear on the books of the Warrant Agent, at least ten days prior to the applicable date hereinafter specified, a notice stating the date on which such Reorganization Event, dissolution, liquidation or winding up is expected to become effective, and the date as of which it is expected that holders of [title of Warrant Debt Securities] of record shall be entitled to exchange their shares of [title of Warrant Debt Securities] for securities or other property deliverable upon such Reorganization Event, dissolution, liquidation or winding up. No failure to mail such notice nor any defect therein or in the mailing thereof shall affect any such transaction.

ARTICLE 4
EXCHANGE AND TRANSFER OF WARRANT CERTIFICATES

4.1 Exchange and Transfer of Warrant Certificates. Upon surrender at the corporate trust office of the Warrant Agent, Warrant Certificates evidencing Warrants may be exchanged for Warrant Certificates in other denominations evidencing such Warrants or the transfer thereof may be registered in whole or in part; provided that such other Warrant Certificates evidence Warrants for the same aggregate principal amount of Warrant Debt Securities as the Warrant Certificates so surrendered. The Warrant Agent shall keep, at its corporate trust office, books in which, subject to such reasonable regulations as it may prescribe, it shall register Warrant Certificates and exchanges and transfers of outstanding Warrant Certificates, upon surrender of the Warrant Certificates to the Warrant Agent at its corporate trust office for exchange or registration of transfer, properly endorsed or accompanied by appropriate instruments of registration of transfer and written instructions for transfer, all in form satisfactory to the Company and the Warrant Agent. No service charge shall be made for any exchange or registration of transfer of Warrant Certificates, but the Company may require payment of a sum sufficient to cover any stamp or other tax or other governmental charge that may be imposed in connection with any such exchange or registration of transfer. Whenever any Warrant Certificates are so surrendered for exchange or registration of transfer, an authorized officer of the Warrant Agent shall manually countersign and deliver to the person or persons entitled thereto a Warrant Certificate or Warrant Certificates duly authorized and executed by the Company, as so requested. The Warrant Agent shall not be required to effect any exchange or registration of transfer which will result in the issuance of a Warrant Certificate evidencing a Warrant for a fraction of a Warrant Debt Security or a number of Warrants for a whole number of Warrant Debt Securities and a fraction of a Warrant Debt Security. All Warrant Certificates issued upon any exchange or registration of transfer of Warrant Certificates shall be the valid obligations of the Company, evidencing the same obligations and entitled to the same benefits under this Agreement as the Warrant Certificate surrendered for such exchange or registration of transfer.

4.2 Treatment of Holders of Warrant Certificates. The Company, the Warrant Agent and all other persons may treat the registered holder of a Warrant Certificate as the absolute owner thereof for any purpose and as the person entitled to exercise the rights represented by the Warrants evidenced thereby, any notice to the contrary notwithstanding.

4.3 Cancellation of Warrant Certificates. Any Warrant Certificate surrendered for exchange, registration of transfer or exercise of the Warrants evidenced thereby shall, if surrendered to the Company, be delivered to the Warrant Agent and all Warrant Certificates surrendered or so delivered to the Warrant Agent shall be promptly canceled by the Warrant Agent and shall not be reissued and, except as expressly permitted by this Agreement, no Warrant Certificate shall be issued hereunder in exchange therefor or in lieu thereof. The Warrant Agent shall deliver to the Company from time to time or otherwise dispose of canceled Warrant Certificates in a manner satisfactory to the Company.

ARTICLE 5 CONCERNING THE WARRANT AGENT

5.1 Warrant Agent. The Company hereby appoints [●] as Warrant Agent of the Company in respect of the Warrants and the Warrant Certificates upon the terms and subject to the conditions herein set forth, and [●] hereby accepts such appointment. The Warrant Agent shall have the powers and authority granted to and conferred upon it in the Warrant Certificates and hereby and such further powers and authority to act on behalf of the Company as the Company may hereafter grant to or confer upon it. All of the terms and provisions with respect to such powers and authority contained in the Warrant Certificates are subject to and governed by the terms and provisions hereof.

5.2 Conditions of Warrant Agent's Obligations. The Warrant Agent accepts its obligations herein set forth upon the terms and conditions hereof, including the following to all of which the Company agrees and to all of which the rights hereunder of the holders from time to time of the Warrant Certificates shall be subject:

(a) Compensation and Indemnification. The Company agrees promptly to pay the Warrant Agent the compensation to be agreed upon with the Company for all services rendered by the Warrant Agent and to reimburse the Warrant Agent for reasonable out-of-pocket expenses (including reasonable counsel fees) incurred without negligence, bad faith or willful misconduct by the Warrant Agent in connection with the services rendered hereunder by the Warrant Agent. The Company also agrees to indemnify the Warrant Agent for, and to hold it harmless against, any loss, liability or expense incurred without negligence, bad faith or willful misconduct on the part of the Warrant Agent, arising out of or in connection with its acting as Warrant Agent hereunder, including the reasonable costs and expenses of defending against any claim of such liability.

(b) Agent for the Company. In acting under this Agreement and in connection with the Warrant Certificates, the Warrant Agent is acting solely as agent of the Company and does not assume any obligations or relationship of agency or trust for or with any of the holders of Warrant Certificates or beneficial owners of Warrants.

(c) **Counsel.** The Warrant Agent may consult with counsel satisfactory to it, which may include counsel for the Company, and the written advice of such counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in accordance with the advice of such counsel.

(d) **Documents.** The Warrant Agent shall be protected and shall incur no liability for or in respect of any action taken or omitted by it in reliance upon any Warrant Certificate, notice, direction, consent, certificate, affidavit, statement or other paper or document reasonably believed by it to be genuine and to have been presented or signed by the proper parties.

(e) **Certain Transactions.** The Warrant Agent, and its officers, directors and employees, may become the owner of, or acquire any interest in, Warrants, with the same rights that it or they would have if it were not the Warrant Agent hereunder, and, to the extent permitted by applicable law, it or they may engage or be interested in any financial or other transaction with the Company and may act on, or as depository, trustee or agent for, any committee or body of holders of Warrant Debt Securities or other obligations of the Company as freely as if it were not the Warrant Agent hereunder. Nothing in this Agreement shall be deemed to prevent the Warrant Agent from acting as trustee under any indenture to which the Company is a party, including, without limitation, as Trustee under the Indenture.

(f) **No Liability for Interest.** Unless otherwise agreed with the Company, the Warrant Agent shall have no liability for interest on any monies at any time received by it pursuant to any of the provisions of this Agreement or of the Warrant Certificates.

(g) **No Liability for Invalidity.** The Warrant Agent shall have no liability with respect to any invalidity of this Agreement or any of the Warrant Certificates (except as to the Warrant Agent's countersignature thereon).

(h) **No Responsibility for Representations.** The Warrant Agent shall not be responsible for any of the recitals or representations herein or in the Warrant Certificates (except as to the Warrant Agent's countersignature thereon), all of which are made solely by the Company.

(i) **No Implied Obligations.** The Warrant Agent shall be obligated to perform only such duties as are herein and in the Warrant Certificates specifically set forth and no implied duties or obligations shall be read into this Agreement or the Warrant Certificates against the Warrant Agent. The Warrant Agent shall not be under any obligation to take any action hereunder which may tend to involve it in any expense or liability, the payment of which within a reasonable time is not, in its reasonable opinion, assured to it. The Warrant Agent shall not be accountable or under any duty or responsibility for the use by the Company of any of the Warrant Certificates authenticated by the Warrant Agent and delivered by it to the Company pursuant to this Agreement or for the application by the Company of the proceeds of the Warrant Certificates. The Warrant Agent shall have no duty or responsibility in case of any default by the Company in the performance of its covenants or agreements contained herein or in the Warrant Certificates or in the case of the receipt of any written demand from a holder of a Warrant Certificate with respect to such default, including, without limiting the generality of the foregoing, any duty or responsibility to initiate or attempt to initiate any proceedings at law or otherwise or, except as provided in Section 6.2 hereof, to make any demand upon the Company.

5.3 Resignation, Removal and Appointment of Successors.

(a) The Company agrees, for the benefit of the holders from time to time of the Warrant Certificates, that there shall at all times be a Warrant Agent hereunder until all the Warrants have been exercised or are no longer exercisable.

(b) The Warrant Agent may at any time resign as agent by giving written notice to the Company of such intention on its part, specifying the date on which its desired resignation shall become effective; provided that such date shall not be less than three months after the date on which such notice is given unless the Company otherwise agrees. The Warrant Agent hereunder may be removed at any time by the filing with it of an instrument in writing signed by or on behalf of the Company and specifying such removal and the intended date when it shall become effective. Such resignation or removal shall take effect upon the appointment by the Company, as hereinafter provided, of a successor Warrant Agent (which shall be a bank or trust company authorized under the laws of the jurisdiction of its organization to exercise corporate trust powers) and the acceptance of such appointment by such successor Warrant Agent. The obligation of the Company under Section 5.2(a) shall continue to the extent set forth therein notwithstanding the resignation or removal of the Warrant Agent.

(c) In case at any time the Warrant Agent shall resign, or shall be removed, or shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or shall commence a voluntary case under the Federal bankruptcy laws, as now or hereafter constituted, or under any other applicable Federal or state bankruptcy, insolvency or similar law or shall consent to the appointment of or taking possession by a receiver, custodian, liquidator, assignee, trustee, sequestrator (or other similar official) of the Warrant Agent or its property or affairs, or shall make an assignment for the benefit of creditors, or shall admit in writing its inability to pay its debts generally as they become due, or shall take corporate action in furtherance of any such action, or a decree or order for relief by a court having jurisdiction in the premises shall have been entered in respect of the Warrant Agent in an involuntary case under the Federal bankruptcy laws, as now or hereafter constituted, or any other applicable Federal or state bankruptcy, insolvency or similar law, or a decree or order by a court having jurisdiction in the premises shall have been entered for the appointment of a receiver, custodian, liquidator, assignee, trustee, sequestrator (or similar official) of the Warrant Agent or of its property or affairs, or any public officer shall take charge or control of the Warrant Agent or of its property or affairs for the purpose of rehabilitation, conservation, winding up or liquidation, a successor Warrant Agent, qualified as aforesaid, shall be appointed by the Company by an instrument in writing, filed with the successor Warrant Agent. Upon the appointment as aforesaid of a successor Warrant Agent and acceptance by the successor Warrant Agent of such appointment, the Warrant Agent shall cease to be Warrant Agent hereunder.

(d) Any successor Warrant Agent appointed hereunder shall execute, acknowledge and deliver to its predecessor and to the Company an instrument accepting such appointment hereunder, and thereupon such successor Warrant Agent, without any further act, deed or conveyance, shall become vested with all the authority, rights, powers, trusts, immunities, duties and obligations of such predecessor with like effect as if originally named as Warrant Agent hereunder, and such predecessor, upon payment of its charges and disbursements then unpaid, shall thereupon become obligated to transfer, deliver and pay over, and such successor Warrant Agent shall be entitled to receive, all monies, securities and other property on deposit with or held by such predecessor, as Warrant Agent hereunder.

(e) Any corporation into which the Warrant Agent hereunder may be merged or converted or any corporation with which the Warrant Agent may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Warrant Agent shall be a party, or any corporation to which the Warrant Agent shall sell or otherwise transfer all or substantially all the assets and business of the Warrant Agent, provided that it shall be qualified as aforesaid, shall be the successor Warrant Agent under this Agreement without the execution or filing of any paper or any further act on the part of any of the parties hereto.

ARTICLE 6 MISCELLANEOUS

6.1 Amendment. This Agreement may be amended by the parties hereto, without the consent of the holder of any Warrant Certificate, for the purpose of curing any ambiguity, or of curing, correcting or supplementing any defective provision contained herein, or making any other provisions with respect to matters or questions arising under this Agreement as the Company and the Warrant Agent may deem necessary or desirable; provided that such action shall not materially adversely affect the interests of the holders of the Warrant Certificates.

6.2 Notices and Demands to the Company and Warrant Agent. If the Warrant Agent shall receive any notice or demand addressed to the Company by the holder of a Warrant Certificate pursuant to the provisions of the Warrant Certificates, the Warrant Agent shall promptly forward such notice or demand to the Company.

6.3 Addresses. Any communication from the Company to the Warrant Agent with respect to this Agreement shall be addressed to [●], Attention: [●] and any communication from the Warrant Agent to the Company with respect to this Agreement shall be addressed to Ocuphire Pharma, Inc., 37000 Grand River Avenue, Suite 120, Farmington Hills, Michigan 48335, Attention: [●] (or such other address as shall be specified in writing by the Warrant Agent or by the Company).

6.4 Governing Law. This Agreement and each Warrant Certificate issued hereunder shall be governed by and construed in accordance with the laws of the State of New York.

6.5 Delivery of Prospectus. The Company shall furnish to the Warrant Agent sufficient copies of a prospectus meeting the requirements of the Securities Act of 1933, as amended, relating to the Warrant Debt Securities deliverable upon exercise of the Warrants (the "*Prospectus*"), and the Warrant Agent agrees that upon the exercise of any Warrant, the Warrant Agent will deliver to the holder of the Warrant Certificate evidencing such Warrant, prior to or concurrently with the delivery of the Warrant Debt Securities issued upon such exercise, a Prospectus. The Warrant Agent shall not, by reason of any such delivery, assume any responsibility for the accuracy or adequacy of such Prospectus.

6.6 Obtaining of Governmental Approvals. The Company will from time to time take all action which may be necessary to obtain and keep effective any and all permits, consents and approvals of governmental agencies and authorities and securities act filings under United States Federal and state laws (including without limitation a registration statement in respect of the Warrants and Warrant Debt Securities under the Securities Act of 1933, as amended), which may be or become requisite in connection with the issuance, sale, transfer, and delivery of the Warrant Debt Securities issued upon exercise of the Warrants, the issuance, sale, transfer and delivery of the Warrants or upon the expiration of the period during which the Warrants are exercisable.

6.7 Persons Having Rights under the Agreement Nothing in this Agreement shall give to any person other than the Company, the Warrant Agent and the holders of the Warrant Certificates any right, remedy or claim under or by reason of this Agreement.

6.8 Headings. The descriptive headings of the several Articles and Sections of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

6.9 Counterparts. This Agreement may be executed in any number of counterparts, each of which as so executed shall be deemed to be an original, but such counterparts shall together constitute but one and the same instrument.

6.10 Inspection of Agreement. A copy of this Agreement shall be available at all reasonable times at the principal corporate trust office of the Warrant Agent for inspection by the holder of any Warrant Certificate. The Warrant Agent may require such holder to submit such holder's Warrant Certificate for inspection by it.

In Witness Whereof, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

Ocuphire Pharma, Inc., as the Company

By: _____
Name: _____
Title: _____

ATTEST: _____

COUNTERSIGNED

[●], as the Warrant Agent

By: _____
Name: _____
Title: _____

ATTEST: _____

[SIGNATURE PAGE TO OCUPHIRE PHARMA, INC. DEBT SECURITIES WARRANT
AGREEMENT]

Exhibit A

**FORM OF WARRANT CERTIFICATE
[FACE OF WARRANT CERTIFICATE]**

[Form of Legend if Warrants are not immediately exercisable.]

[Prior to [●], Warrants evidenced by this Warrant Certificate cannot be exercised.]

EXERCISABLE ONLY IF COUNTERSIGNED BY THE WARRANT AGENT AS PROVIDED HEREIN

VOID AFTER [●] P.M., [City] time, ON [●].

OCUPHIRE PHARMA, INC.
WARRANT CERTIFICATE REPRESENTING
WARRANTS TO PURCHASE
[TITLE OF WARRANT DEBT SECURITIES]

No. [●]

[●] Warrants

This certifies that [●] or registered assigns is the registered owner of the above indicated number of Warrants, each Warrant entitling such owner to purchase, at any time [after [●] p.m., [City] time, [on [●] and] on or before [●] p.m., [City] time, on [●], \$[●] principal amount of [TITLE OF WARRANT DEBT SECURITIES] (the “*Warrant Debt Securities*”), of Ocuphire Pharma, Inc., a Delaware corporation (the “*Company*”) issued or to be issued under the Indenture (as hereinafter defined), on the following basis: during the period from [●], through and including [●], each Warrant shall entitle the Holder thereof, subject to the provisions of this Agreement, to purchase the principal amount of Warrant Debt Securities stated in the Warrant Certificate at the warrant price (the “*Warrant Price*”) of [●]% of the principal amount thereof [plus accrued amortization, if any, of the original issue discount of the Warrant Debt Securities] [plus accrued interest, if any, from the most recent date from which interest shall have been paid on the Warrant Debt Securities or, if no interest shall have been paid on the Warrant Debt Securities, from the date of their original issuance]. [The original issue discount (\$[●] for each \$1,000 principal amount of Warrant Debt Securities) will be amortized at a [●]% annual rate, computed on a[n] [semi-]annual basis [using a 360-day year consisting of twelve 30-day months]. The Holder may exercise the Warrants evidenced hereby by providing certain information set forth on the back hereof and by paying in full, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds], the Warrant Price for each Warrant Debt Security with respect to which this Warrant is exercised to the Warrant Agent (as hereinafter defined) and by surrendering this Warrant Certificate, with the purchase form on the back hereof duly executed, at the corporate trust office of [name of Warrant Agent], or its successor as warrant agent (the “*Warrant Agent*”), which is, on the date hereof, at the address specified on the reverse hereof, and upon compliance with and subject to the conditions set forth herein and in the Warrant Agreement (as hereinafter defined).

The term “*Holder*” as used herein shall mean the person in whose name at the time this Warrant Certificate shall be registered upon the books to be maintained by the Warrant Agent for that purpose pursuant to Section 4 of the Warrant Agreement.

The Warrants evidenced by this Warrant Certificate may be exercised to purchase Warrant Debt Securities in the principal amount of \$1,000 or any integral multiple thereof in registered form. Upon any exercise of fewer than all of the Warrants evidenced by this Warrant Certificate, there shall be issued to the Holder hereof a new Warrant Certificate evidencing Warrants for the aggregate principal amount of Warrant Debt Securities remaining unexercised.

This Warrant Certificate is issued under and in accordance with the Warrant Agreement dated as of [●] (the “*Warrant Agreement*”), between the Company and the Warrant Agent and is subject to the terms and provisions contained in the Warrant Agreement, to all of which terms and provisions the Holder of this Warrant Certificate consents by acceptance hereof. Copies of the Warrant Agreement are on file at the above-mentioned office of the Warrant Agent.

The Warrant Debt Securities to be issued and delivered upon the exercise of Warrants evidenced by this Warrant Certificate will be issued under and in accordance with an Indenture, dated as of [●] (the "*Indenture*"), between the Company and [●], as trustee (such trustee, and any successors to such trustee, the "*Trustee*") and will be subject to the terms and provisions contained in the Warrant Debt Securities and in the Indenture. Copies of the Indenture, including the form of the Warrant Debt Securities, are on file at the corporate trust office of the Trustee.

Transfer of this Warrant Certificate may be registered when this Warrant Certificate is surrendered at the corporate trust office of the Warrant Agent by the registered owner or such owner's assigns, in the manner and subject to the limitations provided in the Warrant Agreement.

After countersignature by the Warrant Agent and prior to the expiration of this Warrant Certificate, this Warrant Certificate may be exchanged at the corporate trust office of the Warrant Agent for Warrant Certificates representing Warrants for the same aggregate principal amount of Warrant Debt Securities.

This Warrant Certificate shall not entitle the Holder hereof to any of the rights of a holder of the Warrant Debt Securities, including, without limitation, the right to receive payments of principal of (and premium, if any) or interest, if any, on the Warrant Debt Securities or to enforce any of the covenants of the Indenture.

Reference is hereby made to the further provisions of this Warrant Certificate set forth on the reverse hereof, which further provisions shall for all purposes have the same effect as if set forth at this place.

This Warrant Certificate shall not be valid or obligatory for any purpose until countersigned by the Warrant Agent.

In Witness Whereof, the Company has caused this Warrant to be executed in its name and on its behalf by the facsimile signatures of its duly authorized officers.

Dated: _____

Ocuphire Pharma, Inc., as the Company

By: _____
Name: _____
Title: _____

ATTEST: _____

COUNTERSIGNED

[•], as Warrant Agent

By: _____
Name: _____
Title: _____

ATTEST: _____

[REVERSE OF WARRANT CERTIFICATE]

(Instructions for Exercise of Warrant)

To exercise any Warrants evidenced hereby for Warrant Debt Securities (as hereinafter defined), the Holder must pay, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds], the Warrant Price in full for Warrants exercised, to [●] [address of Warrant Agent], Attention: [●], which payment must specify the name of the Holder and the number of Warrants exercised by such Holder. In addition, the Holder must complete the information required below and present this Warrant Certificate in person or by mail (certified or registered mail is recommended) to the Warrant Agent at the appropriate address set forth above. This Warrant Certificate, completed and duly executed, must be received by the Warrant Agent within five business days of the payment.

(To be executed upon exercise of Warrants)

The undersigned hereby irrevocably elects to exercise _____ Warrants, evidenced by this Warrant Certificate, to purchase _____ \$[●] principal amount of the [TITLE OF WARRANT DEBT SECURITIES] (the "*Warrant Debt Securities*"), of Ocuphire Pharma, Inc. and represents that the undersigned has tendered payment for such Warrant Debt Securities, in lawful money of the United States of America, [in cash or by certified check or official bank check in New York Clearing House funds] [by bank wire transfer in immediately available funds], to the order of Ocuphire Pharma, Inc., c/o [insert name and address of Warrant Agent], in the amount of \$ _____ in accordance with the terms hereof. The undersigned requests that said principal amount of Warrant Debt Securities be in fully registered form in the authorized denominations, registered in such names and delivered all as specified in accordance with the instructions set forth below.

If the number of Warrants exercised is less than all of the Warrants evidenced hereby, the undersigned requests that a new Warrant Certificate evidencing the Warrants for the aggregate principal amount of Warrant Debt Securities remaining unexercised be issued and delivered to the undersigned unless otherwise specified in the instructions below.

Dated: _____ Name: _____
Please Print

Address: _____

(Insert Social Security or Other Identifying
Number of Holder)

Signature Guaranteed: _____
Signature

(Signature must conform in all respects to name of holder as specified on the face of this Warrant Certificate and must bear a signature guarantee by a FINRA member firm).

This Warrant may be exercised at the following addresses: By hand at:

[•]

By mail at:

[Instructions as to form and delivery of Warrant Securities and, if applicable, Warrant Certificates evidencing Warrants for the number of Warrant Securities remaining unexercised — complete as appropriate.]

ASSIGNMENT

[Form of assignment to be executed if Warrant Holder desires to transfer Warrant] **FOR VALUE RECEIVED**, _____ hereby sells, assigns and transfers unto:

(Please print name and address including zip
code)

Please print Social Security or other
identifying number

the right represented by the within Warrant to purchase _____ shares of [Title of Warrant Securities] of Ocuphire Pharma, Inc. to which the within Warrant relates and appoints _____ attorney to transfer such right on the books of the Warrant Agent with full power of substitution in the premises.

Dated: _____

Name: _____

Signature

(Signature must conform in all respects to name of holder as specified on the face of the Warrant)

Signature Guaranteed



February 4, 2021

Ocuphire Pharma, Inc.
37000 Grand River Avenue, Suite 120
Farmington Hills, Michigan 48335

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Ocuphire Pharma, Inc., a Delaware corporation (the "Company"), in connection with a Registration Statement on Form S-3 (the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "Commission"), for the registration of the Securities (defined below) under the Securities Act of 1933, as amended (the "Securities Act").

The Registration Statement includes a form of prospectus (the "Prospectus"), which provides that it will be supplemented in the future by one or more supplements to the Prospectus (each, a "Prospectus Supplement"). The Prospectus, as supplemented by one or more Prospectus Supplements, may cover the offer, issue and sale of (A) (i) shares of common stock, \$0.0001 par value per share, of the Company (the "Common Stock"); (ii) one or more series of shares of preferred stock, \$0.0001 par value per share, of the Company (the "Preferred Stock"); (iii) warrants to purchase Preferred Stock, Common Stock or Debt Securities (as defined below) (the "Warrants"); and (iv) one or more series of debt securities of the Company (the "Debt Securities"); and (B) the resale of up to 6,967,400 shares (the "Resale Shares") of Common Stock issuable upon exercise of certain outstanding Series A Warrants and Series B Warrants to purchase shares of Common Stock (the "Series A/Series B Warrants") currently held by certain selling stockholders.

Any Debt Securities will be issued under one or more indentures in the form to be filed as an exhibit to the Registration Statement (the "Indenture") relating to the issuance of Debt Securities by the Company. The Warrants may be issued under one or more warrant agreements (each, a "Warrant Agreement") between the Company and a third party to be identified therein as warrant agent (each, a "Warrant Agent"). The Indenture and the Warrant Agreements are herein collectively referred to as the "Agreements." The shares of Common Stock, shares of Preferred Stock, Debt Securities, Warrants and the Resale Shares are herein collectively referred to as the "Securities."

In connection with this opinion letter, we have examined and relied upon originals or copies of such records, instruments, certificates, opinions, memoranda and other documents as in our judgment are necessary or appropriate to enable us to render the opinions expressed below. As to certain factual matters, we have relied upon a certificate of officers of the Company and have not independently sought to verify such matters. In rendering the opinions in this opinion letter, we have assumed the genuineness and authenticity of all signatures on original documents; the authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as copies; the accuracy, completeness and authenticity of certificates of public officials; and the due authorization, execution and delivery of all documents where authorization, execution and delivery are prerequisites to the legal effectiveness of such documents.

With respect to our opinions as to the Common Stock to be offered and sold by the Company and the Resale Shares to be offered and sold by the selling stockholders after exercise of the Series A/Series B Warrants, we have assumed that, at the time of issuance and sale, a sufficient number of shares of Common Stock will be authorized and available for issuance and, except for the Resale Shares, that the consideration for the issuance and sale of the Common Stock (or the conversion price for Preferred Stock or Debt Securities convertible into Common Stock or the exercise price for Warrants exercisable for Common Stock) is in an amount that is not less than the par value of the Common Stock. With respect to our opinion as to the Preferred Stock, we have assumed that, 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 the conversion price for Debt Securities convertible into Preferred Stock or the exercise price for Warrants exercisable for Preferred Stock) is in an amount that is not less than the par value of the Preferred Stock. We have also assumed that any Warrants offered under the Registration Statement, and any related Warrant Agreement, will be executed in the forms filed as exhibits to the Registration Statement or any required post-effective amendment thereto or incorporated by reference therein. We have also assumed that any Debt Securities offered under the Registration Statement will be issued pursuant to the form of Indenture filed as an exhibit to the Registration Statement or any required post-effective amendment thereto or incorporated by reference therein. We have also assumed that (i) with respect to Securities being issued upon conversion of any convertible Preferred Stock, the applicable convertible Preferred Stock will be duly authorized, validly issued, fully paid and non-assessable; and (ii) with respect to any Securities being issued upon conversion of any convertible Debt Securities or upon exercise of any Warrants, the applicable convertible Debt Securities or Warrants will be valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms.

With your consent, we have also assumed (i) that each of the Agreements, the Debt Securities and the Warrants (collectively, the "Documents") will be governed by the internal laws of the State of New York, (ii) that each of the Documents has been or will be duly authorized, executed and delivered by the parties thereto, (iii) that each of the Documents constitutes or will constitute legally valid and binding obligations of the parties thereto other than the Company, enforceable against each of them in accordance with their respective terms and (iv) that the status of each of the Documents as legally valid and binding obligations of the parties will not be affected by any (a) breaches of, or defaults under, agreements or instruments, (b) violations of statutes, rules, regulations or court or governmental orders, or (c) failures to obtain required consents, approvals or authorizations from, or to make required registrations, declarations or filings with, governmental authorities.

Our opinions herein are expressed solely with respect to (i) the internal laws of the State of New York; (ii) the Delaware General Corporation Law, as amended; and (iii) the federal laws of the United States, and we express no opinion with respect to the applicability thereto, or the effect thereon, of the laws of any other jurisdiction or, in the case of Delaware, any other laws, or as to any matters of municipal law or the laws of any local agencies within any state. Our opinions are based on these laws as in effect on the date hereof. We express no opinion as to whether the laws of any jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state antifraud law, rule or regulation relating to securities, or to the sale or issuance thereof. It is understood that this opinion letter is to be used only in connection with the offer and sale of the Securities while the Registration Statement is in effect and only speaks as of the date of this opinion letter.

On the basis of the foregoing and in reliance thereon, and subject to the qualifications herein stated, it is our opinion that:

1. With respect to the Common Stock offered by the Company under the Registration Statement, provided that (i) the Registration Statement and any required post-effective amendment thereto have become effective under the Securities Act and the Prospectus and any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws; (ii) the issuance of the Common Stock has been duly authorized by all necessary corporate action on the part of the Company; (iii) the issuance and sale of the Common Stock do not violate any applicable law, are in conformity with the Company's then operative certificate of incorporation (the "Certificate of Incorporation") and bylaws (the "Bylaws"), do not result in a default under or breach of any agreement or instrument binding upon the Company and comply with any applicable requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (iv) the certificates, if any, for the Common Stock have been duly executed by the Company, countersigned by the transfer agent therefor and duly delivered to the purchasers thereof against payment therefor, then the Common Stock, when issued and sold as contemplated in the Registration Statement, the Prospectus and the related Prospectus Supplement(s), and in accordance with any applicable duly authorized, executed and delivered purchase, underwriting or similar agreement, or upon conversion of any convertible Preferred Stock or convertible Debt Securities in accordance with their terms, or upon exercise of any Warrants in accordance with their terms, will be validly issued, fully paid and non-assessable.

2. With respect to the Preferred Stock offered by the Company under the Registration Statement, provided that (i) the Registration Statement and any required post-effective amendment thereto have become effective under the Securities Act and the Prospectus and any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws; (ii) the terms and issuance of the Preferred Stock have been duly authorized by all necessary corporate action on the part of the Company and any applicable amendment to the Company's Certificate of Incorporation, including any certificate of designation, fixing the terms of such Preferred Stock has been filed with the State of Delaware; (iii) the terms of the shares of the Preferred Stock and their issuance and sale do not violate any applicable law, are in conformity with the Certificate of Incorporation and the Bylaws, do not result in a default under or breach of any agreement or instrument binding upon the Company and comply with any applicable requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (iv) the certificates, if any, for the Preferred Stock have been duly executed by the Company, countersigned by the transfer agent therefor and duly delivered to the purchasers thereof against payment therefor, then the Preferred Stock, when issued and sold as contemplated in the Registration Statement, the Prospectus and the related Prospectus Supplement(s) and in accordance with any applicable duly authorized, executed and delivered purchase, underwriting or similar agreement, or upon conversion of any convertible Debt Securities in accordance with their terms, or upon exercise of any Warrants in accordance with their terms, will be validly issued, fully paid and non-assessable.

3. When (i) the Registration Statement and any required post-effective amendment thereto have become effective under the Securities Act and the Prospectus and any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws, (ii) all necessary corporate action has been taken by the Company to approve the creation, the terms and the issuance of the Warrants and the underlying securities, the terms of the offering of the Warrants and related matters, including the consideration to be received therefor, if any, and for the underlying securities, and, if applicable, to authorize the form, terms, execution and delivery of a Warrant Agreement or Warrant Agreements (including a form of certificate evidencing the Warrants, if applicable) relating to the Warrants, (iii) the Warrant Agreement or Warrant Agreements, if applicable, relating to the Warrants have been duly authorized and validly executed and delivered by the Company and the Warrant Agent, if any, appointed by the Company, (iv) the Warrants have been issued under a valid and legally binding Warrant Agreement, or agreements, if applicable, relating to the Warrants that conforms to the description thereof provided in a Prospectus Supplement and any related offering material and do not violate any applicable law, do not result in a default under or breach of any agreement or instrument binding upon the Company, are in conformity with the Certificate of Incorporation and Bylaws of the Company, and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company and (v) the Warrants or certificates representing the Warrants have been duly executed, countersigned and registered, if applicable, issued and delivered in accordance with the Prospectus and applicable Prospectus Supplement relating to the Registration Statement and in accordance with the appropriate Warrant Agreement, if any, and any applicable duly authorized, executed and delivered purchase, underwriting or similar agreement, as applicable, and such corporate action, in exchange for payment of the consideration for such Warrants, if any, provided for in such agreement, such Warrants will be binding obligations of the Company.

4. When (i) the Registration Statement and any required post-effective amendment thereto have become effective under the Securities Act and the Prospectus and any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws, (ii) all necessary corporate action has been taken by the Company to approve the creation, the terms and the issuance of such Debt Securities and the consideration to be received therefor in accordance with the Indenture and the Indenture has been duly authorized by the Company and the trustee by all necessary corporate action and has been executed and delivered by the Company and the trustee, (iii) the Indenture is qualified under the United States Trust Indenture Act of 1939, as amended, (iv) the terms of the Debt Securities and of their issuance and sale have been duly established in conformity with the Indenture and as described in the Registration Statement and any required post-effective amendment thereto, the related Prospectus and the applicable Prospectus Supplement(s), and by such corporate action, do not violate any applicable law, do not result in a default under or breach of any agreement or instrument binding upon the Company, are in conformity with the Certificate of Incorporation and Bylaws of the Company, and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (v) notes, certificates or other evidence of the Debt Securities have been duly executed, issued and delivered by the Company and authenticated by the Trustee pursuant to the Indenture and delivered to the purchasers thereof against payment therefor in accordance with such corporate action and the Prospectus and applicable Prospectus Supplement relating to the Registration Statement, and in accordance with any applicable duly authorized, executed and delivered purchase, underwriting or similar agreement, the Indenture or upon exercise of any Warrant under any Warrant Agreement in accordance with their terms, as applicable, such Debt Securities will be binding obligations of the Company. For purposes of rendering the opinions set forth in this paragraph 4, we have assumed that immediately prior to the issuance of any Debt Securities, the Indenture and any applicable supplemental indenture will be in full force and effect, with no unwaived Events of Default or breaches thereunder and will constitute the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.

5. Upon the valid exercise of the Series A/Series B Warrants in accordance with their terms, including proper execution and delivery to the persons exercising the Series A/Series B Warrants of certificates for the underlying the Resale Shares (in the form approved by the Company's Board of Directors), the Resale Shares issued will be validly issued, fully paid and non-assessable.

In giving the opinions set forth above, with respect to each Security opined on in this opinion letter we have assumed that (i) at or prior to the time of the delivery of such Security, the authorization of such Security will not have been modified or rescinded, and there will not have occurred any change in law affecting such Security, including its validity or enforceability and (ii) none of the terms of any such Security to be established subsequent to the date hereof, nor the issuance and delivery of such Security nor the compliance by the Company, with the terms of such Security, will violate any applicable law or will result in a violation of any provision of any instrument or agreement then binding upon the Company or any restriction imposed by any court or governmental body having jurisdiction over the Company.

Our opinions set forth above are subject to the effect of any applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting creditors' rights generally (including, without limitation, fraudulent conveyance, fraudulent transfer and voidable transaction laws), general principles of equity, including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing and the possible unavailability of specific performance or injunctive relief, regardless of whether considered in a proceeding in equity or at law and limitations regarding the availability of indemnification and contribution where such indemnification or contribution may be limited by applicable law or the application of principles of public policy.

We express no opinion as to the validity, binding effect or enforceability of (i) provisions that relate to choice of law, forum selection or submission to jurisdiction (including, without limitation, any express or implied waiver of any objection to venue in any court or of any objection that a court is an inconvenient forum), (ii) waivers by the Company of any statutory or constitutional rights, defenses or remedies, (iii) terms which excuse any person or entity from liability for, or require the Company to indemnify such person or entity against, such person's or entity's negligence or willful misconduct, (iv) obligations to pay any prepayment premium, default interest rate, early termination fee, late charges, monetary penalties, make-whole premiums or other form of liquidated damages, if the payment of such premium, interest rate, fee, late charge, monetary penalty, make-whole premium or damages may be construed as unreasonable in relation to actual damages or disproportionate to actual damages suffered as a result of such prepayment, default or termination, usury and other interest-related restrictions, (v) provisions providing that the terms of agreement may not be waived or modified except in writing, (vi) the creation, validity, attachment, perfection, or priority of any lien or security interest, (vii) advance waivers of claims, defenses, rights granted by law, or notice, opportunity for hearing, evidentiary requirements, statutes of limitation, trial by jury or at law, or other procedural rights, (viii) provisions for exclusivity, election or cumulation of rights or remedies, (ix) provisions authorizing or validating conclusive or discretionary determinations, (x) proxies, powers and trusts, (x) provisions prohibiting, restricting, or requiring consent to assignment or transfer of any right or property, or (xi) the severability, if invalid, of provisions to the foregoing effect.

February 4, 2021

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We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. We also hereby consent to the use of our name under the heading “Legal Matters” in the Prospectus included in the Registration Statement. In giving such consents, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission under the Securities Act.

Very truly yours,
/s/ Honigman LLP
Honigman LLP

PDT/EBJY/RZK/MSB/JHC/GSWA

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 Ocuphire Pharma, Inc. for the registration of its equity and debt securities and to the incorporation by reference therein of our report dated July 1, 2020, with respect to the financial statements of Ocuphire Pharma, Inc., included in Ocuphire Pharma, Inc.'s Current Report on Form 8-K/A dated December 30, 2020, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Detroit, Michigan
February 3, 2021

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our report dated February 21, 2020, relating to the financial statements of Rexahn Pharmaceuticals, Inc. (since renamed Ocuphire Pharma, Inc.) appearing in the entity's Annual Report on Form 10-K for the year ended December 31, 2019.

We also consent to the references to us under the caption "Experts" in the Prospectus.

/s/ Baker Tilly US, LLP

Baker Tilly US, LLP (formerly known as Baker Tilly Virchow Krause, LLP)
Philadelphia, Pennsylvania
February 3, 2021
