UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

ZIOPHARM Oncology, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or jurisdiction of incorporation or organization) 84-1475642 (I.R.S. Employer Identification No.)

One First Avenue, Parris Building 34, Navy Yard Plaza Boston, Massachusetts 02129 (617) 259-1970

(Address and telephone number of registrant's principal executive offices and principal place of business)

Caesar Belbel
Chief Legal Officer
ZIOPHARM Oncology, Inc.
One First Avenue, Building 34, Navy Yard Plaza
Boston, Massachusetts 02129
(617) 259-1970
(Name, address and telephone number of agent for service)

Copies to:
Marc Recht, Esq.
Cooley LLP
500 Boylston Street, 14th Floor
Boston, Massachusetts 02116
(617) 937-2300

Approximate date 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. \Box

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

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

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement

number of the earlier effective registration statement for the same offering.

If this form is a registration statement pursuant to General Instruction LD, or a post-effective amendment thereto that shall become effective upon filing with the

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.

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, or a smaller reporting company. See definition of

"large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer □ Non-accelerated filer □ (Do not check if a smaller reporting company)

Accelerated filer
Smaller reporting company

|X|

CALCULATION OF REGISTRATION FEE

Title Of Each Class Of Securities To Be Registered	Amount To Be Registered (1)	Proposed Maximum Offering Price Per Security (1)	Proposed Maximum Aggregate Offering Price (1)	Amount Of Registration Fee (1)
Common stock, par value \$0.001 per share				
Preferred Stock, par value \$0.001 per share				
Warrants				
Debt Securities				
Total				

(1) Pursuant to Form S-3 General Instruction II.E information is not required to be included. An indeterminate amount of the securities of each identified class is being registered as may from time to time be offered hereunder at indeterminate prices, along with an indeterminate number of securities that may be issued upon exercise, settlement, exchange or conversion of securities offered or sold hereunder. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers any additional securities that may be offered or issued in connection with any stock split, stock dividend or pursuant to anti-dilution provisions of any of the securities. Separate consideration may or may not be received for securities that are issuable upon conversion, exercise or exchange of other securities. In accordance with Rules 456(b) and 457(r) under the Securities Act, the registrant is deferring payment of all registration fees and will pay the registration fees subsequently in advance or on a "pay-as-you-go" basis.

PROSPECTUS



ZIOPHARM Oncology, Inc.

Common Stock Preferred Stock Warrants Debt Securities

From time to time, we may offer and sell any combination of common stock, preferred stock, warrants and debt securities, in one or more offerings. We may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants. We may offer these securities separately or as units, which may include combinations of the securities.

This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. 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 any documents incorporated by reference, before buying any of the securities being offered.

Our common stock is listed on the NASDAQ Capital Market under the symbol "ZIOP." On January 30, 2015, the closing price of our common stock, as reported on the NASDAQ Capital Market, was \$8.95.

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

We may offer these securities in amounts, at prices and on terms determined at the time of offering. The securities may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts and options to purchase additional securities will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a 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 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.

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

The date of this Prospectus is February 2, 2015.

TABLE OF CONTENTS

	Page
About This Prospectus	i
Prospectus Summary	1
Risk Factors	10
Special Note Regarding Forward-Looking Statements	11
Ratio Of Earnings To Fixed Charges And To Combined Fixed Charges And Preference Dividends	12
Jse Of Proceeds	13
<u>Dilution</u>	13
Description Of Capital Stock	14
Description Of Debt Securities	17
Description Of Warrants	24
Certain Provisions Of Delaware Law, The Certificate Of Incorporation And Bylaws	26
Plan Of Distribution	28
<u>Legal Matters</u>	30
Experts Control of the Control of th	30
Where You Can Find More Information	30
ncorporation Of Information By Reference	31

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the Commission, using a "shelf" registration process. Under this shelf registration process, from time to time, we may sell any combination of the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities we may offer. Each time we offer and sell securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of the applicable offering. The prospectus supplement may include a discussion of risks or other special considerations applicable to us or the offered securities. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement, and any related free writing prospectus that we may authorize to be provided to you, may also add, update or change the information contained in this prospectus or in the documents incorporated by reference into this prospectus. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement, you must rely on the information in the prospectus supplement. We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the headings "Where You Can Find More Information" and "Incorporation of Information by Reference" before buying any of the securities being offered. THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

You should rely only on the information contained in, or incorporated by reference into, this prospectus or any applicable prospectus supplement, along with the information contained in any related free writing prospectus that we have authorized for use in connection with a specific offering. We have not authorized anyone to provide you with different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. 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. The information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document, and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

PROSPECTUS SUMMARY

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

Company overview

ZIOPHARM Oncology, Inc. is a biopharmaceutical company that seeks to acquire, develop and commercialize, on its own or with commercial partners, a diverse portfolio of cancer therapies that can address unmet medical needs through synthetic biology. Pursuant to an exclusive channel agreement with Intrexon Corporation, or Intrexon, we obtained rights to Intrexon's synthetic biology platform for use in the field of oncology, which included a clinical stage product candidate, Ad-RTS-IL-12 used with the oral activator veledimex. The synthetic biology platform is an industrialized engineering approach for molecular and cell biology and gene control. It employs an inducible gene-delivery system that enables controlled in vivo expression of genes that produce therapeutic proteins to treat cancer. Ad-RTS-IL-12 + veledimex uses this gene delivery system to produce Interleukin-12, or IL-12, a potent, naturally occurring anti-cancer protein. We have completed two Phase 2 studies evaluating Ad-RTS-IL-12 + veledimex, the first for the treatment of metastatic melanoma, and the second for the treatment of metastatic breast cancer; data from these Phase 2 studies was presented in December 2014. We are continuing to pursue intratumoral injection of Ad-RTS-IL-12 + veledimex in breast cancer and brain cancer.

In addition to our synthetic biology programs, we recently obtained an exclusive, worldwide license to certain immuno-oncology technologies owned and licensed by The University of Texas M.D. Anderson Cancer Center, or MD Anderson, including technologies relating to novel chimeric antigen receptors, or CARs, natural killer, or NK cells and T cell receptors, or TCRs. Combining these technologies with Intrexon's technology suite and clinically tested RheoSwitch Therapeutic System®, or RTS®, IL-12 modules, we plan to develop CAR-T and other immune cells that will target and kill cancer cells. We plan to leverage the synergy between the platforms to accelerate a promising synthetic immuno-oncology pipeline, with up to five CAR-T therapies expected to enter the clinic in 2015 and programs for the development of allogeneic CAR-T therapies that can be used off-the-shelf expected to be initiated in 2016.

We plan to continue to combine Intrexon's technology suite with our capabilities to translate science to the patient to identify and develop additional products to stimulate or inhibit or stimulate key pathways, including those used by the body's immune system, to treat cancer."

We also have a portfolio of small molecule drug candidates, which are no longer a strategic focus of our development activities and for some of which we are seeking partners to pursue further development and potential commercialization.

Enabling technologies

Synthetic biology

Synthetic biology entails the application of engineering principles to biological systems for the purpose of designing and constructing new biological systems or redesigning/modifying existing biological systems. Biological systems are governed by DNA, the building block of gene programs, which control cellular processes by coding for the production of proteins and other molecules that have a functional purpose and by regulating the activities of these molecules. This regulation occurs via complex biochemical and cellular reactions working through intricate cell signaling pathways, and control over these molecules modifies the output of biological systems. Synthetic biology has been enabled by the application of information technology and advanced statistical analysis, also known as bioinformatics, to genetic engineering, as well as by improvements in DNA synthesis. Synthetic biology aims to engineer gene-based programs or codes to modify cellular function to achieve a desired biological outcome. Its application is intended to allow more precise control of drug concentration and dose, thereby improving the therapeutic index associated with the resulting drug.

On January 6, 2011, we entered into an Exclusive Channel Partner Agreement with Intrexon, which we refer to as the Channel Agreement, to develop and commercialize novel DNA-based therapeutics in the field of cancer treatment by combining Intrexon's synthetic biology platform with our capabilities to translate science to the patient. As a result, our DNA synthetic biology platform employs an inducible gene-delivery system that enables regulated and controlled delivery of genes that produce therapeutic proteins to treat cancer. The first example of this regulated controlled delivery is achieved by producing IL-12, a potent, naturally occurring anti-cancer protein, under the control of Intrexon's proprietary biological "switch" to turn on and off (and on and off repeatedly) the therapeutic protein expression at the tumor site. We and Intrexon refer to this "switch" as the RheoSwitch Therapeutic System® or RTS® platform. Our initial drug candidate being developed using the synthetic biology platform is Ad-RTS-IL-12 + veledimex.

More detailed descriptions of our clinical development for each are set forth in this report under the caption "—Product candidates" below.

Immuno-oncology

Immuno-oncology, which utilizes a patient's own immune system to treat cancer, is one of the most actively pursued areas of research by biotechnology and pharmaceutical companies today. Cancer cells contain mutated proteins and may overexpress other proteins usually found in the body at low levels. The immune system typically recognizes unusual or aberrant cell protein expression and eliminates these cells in a highly efficient process known as immune surveillance. A central player in immune surveillance is a type of white blood cell known as the T cell. In healthy individuals, T cells identify and kill infected or abnormal cells, including cancer cells. Cancer cells develop the ability to evade immune surveillance, which is a key factor in their growth, spread, and persistence. In the last five years, there has been substantial scientific progress in countering these evasion mechanisms using immunotherapies, or therapies that activate the immune system.

On January 13, 2015, we, together with Intrexon, entered into a license agreement with MD Anderson, which we refer to as the MD Anderson License. Pursuant to the MD Anderson License, we and Intrexon hold an exclusive, worldwide license to certain technologies owned and licensed by MD Anderson including technologies relating to novel CAR-T cell therapies arising from the laboratory of Laurence Cooper, M.D., Ph.D., professor of pediatrics at MD Anderson, as well as either co-exclusive or non-exclusive licenses under certain related technologies.

Combining the non-viral genetic engineering technologies we licensed from MD Anderson together with Intrexon's industrialized approach to gene engineering and cell control, we believe we can rapidly and efficiently reprogram T cells to express a particular CAR or TCR construct that will enable the T cell to recognize and target

cancer cells. CAR-T cells target cell surface tumor antigens, such as CD-19, that exist on cancer cells and that are independent of human leukocyte antigens, or HLAs, and which we refer to as "public" antigens. TCR+ cells target tumor antigens that are dependent on HLAs and which we refer to as "private" antigens. Natural killer cells target tumors with loss of HLAs, or tumors with no antigens. Most CAR-T cell and TCR products currently being developed by competitors are autologous, or derived from the patient's own blood, and gene engineered with viral technology. As a result, the patient's blood must be harvested, shipped to a manufacturing facility where it is modified using a retrovirus to express the CAR or TCR, and then shipped back to be infused into the patient. The process can take several weeks to a month and is very labor intensive and costly. Currently, this complex technique can only be done in very sophisticated laboratories. We believe we will be able to manufacture our CAR-T cells and TCRs using non-viral methods, which we expect will enable a simpler process requiring only days or hours and result in a lower cost of manufacturing. Our non-viral methods could also potentially enable autologous point of care treatment, where a patient's own T cells would be modified at or near the point of care, for example, utilizing a local blood bank, to express the CAR-T or TCR construct and then infused back into the patient, potentially during the same visit. In addition, we intend to use our non-viral methods to develop allogeneic treatments that can be used off-the-shelf. An allogeneic off-the-shelf treatment would enable a patient to be treated with a CAR-T or TCR construct that is created from a separate healthy donor, personalized for that patient, and then distributed to the point of care. Our non-viral methods, which we believe are nimble, fast and less costly than other approaches, together with our industrialized, scalable engineering approach are expected to enable highly efficient and less costly manufacturing approaches to gene engineered cell-based therapy. In addition, our proprietary RheoSwitch Therapeutic System® may give us the ability to control in vivo gene expression (on-off-on-off etc.) in CAR-T or TCR cells, which we believe could result in significantly lower toxicity compared to other products currently in development.

Product candidates

The following chart identifies our current synthetic biology product candidates and their stage of development, each of which are described in more detail below.

Compound	Pre Clinical	Phase 1	Phase 2
Ad-RTS-IL-12		IND	
Breast			
GBM			
CAR/Cytokine Products			
B-cell Malignancies			
Myeloid Malignancies			
RTS-controlled T cell			
Solid Tumors			
Universal Donor			

Synthetic biology programs

Ad-RTS-IL-12 + veledimex

Ad-RTS-IL-12 + veledimex has been evaluated in two Phase 2 studies, the first for the treatment of metastatic melanoma, and the second for the treatment of unresectable recurrent or metastatic breast cancer. Ad-RTS-IL-12 + veledimex is our lead product candidate, which uses our gene delivery system to produce IL-12, a potent, naturally occurring anti-cancer protein.

More specifically, IL-12 is a potent immunostimulatory cytokine which activates and recruits dendritic cells that facilitate the cross-priming of tumor antigen-specific T cells. Intratumoral administration of Ad-RTS-IL-12 + veledimex, which allows for adjustment of IL-12 gene expression upon varying the dose of veledimex, is designed to reduce the toxicity elicited by systemic delivery of IL-12, and increase efficacy through high intratumoral expression.

We reported the controlled local expression of IL-12 as an immunotherapeutic treatment of glioma (brain cancer) in animal models through the use of the RTS® at the October 2013 AACR-NCI-EORTC conference. Veledimex brain penetration was demonstrated in normal mice and monkeys with intact blood brain barriers. Treatment with Ad-RTS-IL-12 + veledimex and DC-RTS-IL-12 + veledimex both demonstrated dose-related increase in survival in the mouse GL-261 glioma model with no adverse clinical signs observed. In December 2013, we announced the unanimous approval of the Recombinant DNA Advisory Committee of the National Institutes of Health, or the RAC/NIH, for the initiation of a Phase 1 study of Ad-RTS-IL-12 + veledimex, in subjects with recurrent or progressive high grade gliomas. The U.S Food and Drug Administration, or FDA, has requested additional nonclinical information to support the Phase 1 study and this data has been generated. Subject to reaching agreement with the FDA, we anticipate initiation of the Phase 1 study during the first half of 2015. Glioblastoma is by far the most frequent malignant brain tumor and is associated with a particularly aggressive course and dismal prognosis. The current standard of care is based on surgical resection to the maximum feasible extent, followed by radiotherapy and concomitant adjuvant temozolomide. Such aggressive treatment, however, is associated with only modest improvements in survival resulting in a very high unmet medical need.

At the American Association for Cancer Research, or AACR, 2014 Annual Meeting, in April 2014, we presented data from a preclinical study conducted jointly by us and Intrexon demonstrating the anti-tumor effects and tolerability of Ad-RTS-mIL-12 in a glioblastoma murine model. Veledimex was found to effectively cross the blood brain barrier, with dose-related increases in plasma and brain tissue exposure, and no accumulation in brain tissue following repeat dosing. The study data demonstrated that administration of Ad-RTS-mIL-12 + veledimex resulted in dose-related increases in survival of four- to five-fold, without exhibiting an adverse safety profile, when compared to median survival in vehicle control groups.

At the 17th Annual Meeting of the American Society of Gene and Cell Therapy, or ASGCT, in May 2014, we presented results demonstrating the potent anti-tumor and anti-cancer stem cell effects of Ad-RTS-IL-12 in a preclinical glioma model. Results from human and laboratory studies of Ad-RTS-IL-12 demonstrated that precise control of IL-12 gene expression levels can be achieved using Intrexon's RTS®. Rapid, tight modulation of in vivo expression of IL-12 using the activator ligand, veledimex, was demonstrated across these studies. When IL-12 expression was "switched on" it rapidly led to expression and an immune response. This immune response was characterized by an increase in tumor infiltrating lymphocytes with system wide immune activation. The data presented in May 2014 further demonstrated that Ad-RTS-IL-12 has potent anti-cancer effects in a glioma model, showing both a reduction in tumor mass and prolonged survival when compared to existing treatment standards. The data also showed a significant reduction in cancer stem cells, as measured by dramatically reduced nestin levels. Cancer stem cells are thought to play a critical role in recurrence and metastasis.

At the AACR 2014 Immunology and Immunotherapy Meeting in December 2014, together with Intrexon, we presented clinical results from the Ad-RTS-hIL-12 + veledimex studies in patients with advanced breast cancer and

melanoma demonstrating local and systemic IL-12-mediated anti-cancer activity, as well as safety and control of both immune- and IL-12-mediated toxicity with use of the RTS® gene switch. In two open-label Phase 2 clinical studies, twelve patients with metastatic advanced stage breast cancer and twenty-six patients with metastatic melanoma were administered Ad-RTS-hIL-12. Following intra-tumoral injection of Ad-RTS-hIL-12, expression of IL-12 within patients was controlled by the RTS® gene switch using the oral activator ligand, veledimex, at doses ranging from 5mg to 160mg. All subjects had heavy tumor burden and disease progression at the time of enrollment, with mean number of prior therapies at 14 and 10 for breast cancer and melanoma patients, respectively. Treatment with Ad-RTS-hIL-12 + veledimex resulted in an increase in the immune cytokine IL-12 and downstream cytokines, IFN-g, IP-10 and IL-10, resulting in a significant increase in the number of CD8+ T-cells. Among seven evaluable subjects in the Phase 2 clinical study of Ad-RTS-IL-12 + veledimex in patients with recurrent or metastatic breast cancer, three had stable disease, including one triple negative breast cancer subject who crossed the primary endpoint of 16 week progression free survival, for a disease control rate (stable disease or better) of 43%. Target lesions and tumor burden were significantly reduced in approximately 40% of patients. In the Phase 1/2 study of Ad-RTS-hIL-12 + veledimex in subjects with unresectable stage III/IV melanoma, of eighteen evaluable subjects, one had a partial response and six had stable disease, for a disease control rate of 39%. In melanoma patients for whom a response was observed, there was evidence of local and systemic anti-cancer activity. The adverse event profile of Ad-RTS-hIL-12 + veledimex in both melanoma and breast cancer was predictable, reversible and characteristic of immune activation. The most common³ Grade 3 treatment emergent adverse events, or TEAEs, in breast cancer and melanoma included neutropenia and electrolyte abnormalities (21%) each, LFTs increased (16%), leukopenia (13%) and pyrexia, hypotension, lymphopenia, anemia, and cytokine release syndrome (11%) each. Importantly, all TEAEs and SAEs ³ Grade 3 reversed rapidly upon discontinuation of veledimex oral dosing.

Also at the AACR 2014 Immunology and Immunotherapy Meeting in December 2014, together with Intrexon, we presented preclinical data supporting the potential for cytolytic activity against solid tumor targets with allogeneic, genetically-modified stem cells enabled for controlled release of celllinking moieties, or CLMs, within the tumor micro-environment and preclinical data describing the development of a novel, high-throughput screening technology for rapidly identifying bi-specific antibodies capable of inducing targeted immunologic activity through the activation of T-cells or other immune cells against tumors. CLMs are small bi-specific antibody fragments capable of directing potent T-cell mediated tumor lysis by bridging the immunologic synapses of T-cells and surface targets on tumor cells. Previous studies have shown that the systemic distribution and pharmacokinetic profile of bi-specific antibodies limit their utility for many target/effector combinations. In two preclinical studies, Intrexon and Ziopharm researchers interrogated a large number of CLM-based effectors for their ability to activate white blood cells from peripheral blood and lyse receptor target-positive tumor cells. Allogeneic, tumor targeting stem cells were then genetically modified to express CLMs within the tumor microenvironment using the RTS® platform as a mechanism for providing spatial and temporal control. The first study demonstrated the ability of Intrexon's proprietary image-based screening systems and rapid DNA assembly to screen a large number of EGFR and HER2 receptor-targeted CLM variants for their ability to recruit CD3+ T-cells and mediate selective cell killing against target positive cells in peripheral blood co-cultures. The image-based screening platform allowed for real time target cell killing information to be obtained, as well as kinetic cell morphologic analyses to understand the dynamics of killing activity, thereby shortening the developmental timeline to lead candidate selection. The second study validated these CLM candidates in scalable, allogeneic endometrial regenerative cells, or ERCs, genetically modified to express an anti-CD3-anti-EGFR CLM under RTS® ligand inducible control. Expression of CLMs under the RTS® inducible promoter provided effective control of CLM secretion and modulation of killing activity, with veledimex-dependent cytotoxicity of greater than 80% against an EGFR+ KRAS mutant lung cancer cell model. CLM-expressing ERCs were found to be effective in coculture killing assays at cellular doses as low as 1% of target cells. These data supported the feasibility of localized cytolytic activity of CLM-secreting allogeneic cell therapy products against EGFR+ KRAS mutant solid tumor malignancies.

We have completed the Phase 2 monotherapy studies in melanoma and breast cancer using Ad-RTS-IL-12 + veledimex. Additionally, we expect a future trial with IL-12 in combination therapies with standard of care for

breast cancer. As the treatment of advanced melanoma has undergone and continues to undergo a rapid evolution with the introduction and approval of highly promising new single and combination agents, the standard of care in this indication has become uncertain, resulting in a much more competitive and commercially unpredictable environment. As a result, we are pursuing intratumoral injection of Ad-RTS-IL-12 + veledimex in brain cancer and breast cancer, and will pause further development of Ad-RTS-IL-12 + veledimex in melanoma with intratumoral injection. However, through current strategic initiatives, we expect to utilize RTS-IL-12 + veledimex in cell based immunotherapy of melanoma and other cancers. We plan to initiate a Phase 1 trial to evaluate Ad-RTS-IL-12 + veledimex as a single agent in the treatment of patients with brain cancer in the first half of 2015.

CAR-T/cytokine programs

We are actively pursuing non-viral, genetic engineering technologies to develop novel CAR-T, NK and TCR cells. Combining this technology with Intrexon's industrialized synthetic biologic engineering and clinically tested and validated RTS IL-12 modules, represents a differentiated approach to genetically modified CAR-T cell and other immune cells. Employing novel cell engineering techniques and multigenic gene programs, we expect to implement next-generation non-viral adoptive cellular therapies based on designer cytokines and CARs under control of RTS® technology targeting both hematologic malignancies and solid tumors. We plan to leverage the synergy between the platforms to accelerate a promising synthetic immuno-oncology pipeline, with up to five CAR-T therapies expected to enter the clinic in 2015 and programs for the development of allogeneic CAR-T therapies that can be used off-the-shelf expected to be initiated in 2016.

Research suggests that T cells can be re-programmed to have a very strong anti-cancer therapeutic effect through the expression of CARs to redirect specificity to tumors without HLA restrictions. The signature event within this field has resulted from the infusion of T cells expressing CARs into patients with B cells leukemias and lymphomas. Many of these patients have responded to these new therapies with a durable and dramatic anti-tumor effect after infusing CD19-specific T cells. Despite the highly promising results that have been demonstrated by early researchers in the field, current technologies and approaches have shown a number of serious drawbacks, including toxicity, manufacturing complexity and expense. A particular problem is that infusions of T cells into patients with large amounts of disease have invariably led to significant issues of toxicity for recipient patients. These toxicities primarily involve three major, potentially catastrophic side-effects:

- 1. The rapid killing of tumor cells releases a large number intracellular constituents that are very toxic to various organs and is called "tumor lysis syndrome" that can be fatal,
- 2. the supra-physiologic release of cytokines ("cytokine storm") that causes fever, instability of blood pressure, mental status changes and on occasion, death, and
- 3. on-target, and off-tissue toxicity represented by the concomitant damage of normal B cells and loss of humoral (antibody) immunity.

We expect to be able to tightly control expansion and activation of CAR-T cells in the body, which has the potential to alleviate or abrogate these toxicities.

MD Anderson's platform, which uses the exclusive Sleeping Beauty system, or SB system, generates and characterizes new CAR-T designs, which enables a high throughput approach to evaluate the CAR-T. This "EZ-CAR-T" non-viral system is used to fashion immuno-receptors that differ in specificity and ability to activate T cells. These CAR-T molecules are evaluated in a "go/no go" system based on serial killing and protection of T cells from activation-induced cell death. Non-viral gene transfer using the SB system is unique in the field of oncology. Examples of cell engineering techniques that we expect to employ with the SB system are induced pluripotent stem cell (iPSC) processing technologies combined with Laser-enabled Analysis and Processing, or LEAP®, which consists of computerized image-based selection and laser processing for very rapid cell identification and purification as well as AttSite® Recombinases, which involves stable, targeted gene integration

and expression with proprietary serine recombinases. We believe the advanced DNA vectors derived from SB can be used to avoid the expense and manufacturing difficulty associated with creating CAR-T cells using viral vectors. After electroporation, the transposon/transposase improves the efficiency of integration of plasmids used to express CAR and other transgenes in T cells. Propagation of genetically modified T cells on activating and propagating cells, or AaPC, provide a competitive advantage over other non-viral methods of modification. The SB system combined with artificial antigen-presenting cells can selectively propagate and thus retrieve CAR+ T cells suitable for human application. T cells can also be genetically modified using these technologies to target a panel (several) cancer antigen targets. We are on the verge of implementing technology to manufacture "minimally-manipulated" T cells within days of gene transfer by electroporation.

We expect this platform will rapidly integrate with Intrexon's RTS® and multigenic control gene programs. The programs are also designed and built for rapid transition to universal donor products or minimally manipulated point of care products. Dr. Laurence Cooper and colleagues at MD Anderson recently published research which demonstrated that transformed, primary, and pluripotent stem cells can be permanently modified to eliminate HLA-A expression, demonstrating how to generate *a priori* cells from one allogeneic donor for infusion into multiple recipients representing a significant step towards our goal of on-demand therapy that can be pre-deployed at multiple sites and infused when needed. The primary factor limiting the development of a universal donor product is the existence of graft-vs-host response, or GVHD. GVHD occurs because the newly transplanted cells regard the recipient's body as foreign. When this happens, the newly transplanted cells attack the recipient's body. Additional research from Dr. Cooper and colleagues at MD Anderson suggests that "universal" allogeneic T cells generated from one donor could be administered to multiple recipients. This is achieved by genetically editing CD19-specific CAR+ T cells to eliminate expression of the endogenous aß TCR, the gene responsible for triggering GVHD, without compromising CAR-dependent effector functions. Genetically modified T cells are generated using the SB system to stably introduce the CD19-specific CAR with subsequent permanent deletion of a or b TCR chains with nucleases. The translation of the SB system and AaPC for use in clinical trials highlights how a nimble and cost-effective approach to developing genetically modified T cells can be used to implement clinical trials infusing next-generation T cells with improved therapeutic potential. We are expanding our initial trials targeting CD19 and planning to conduct additional trials with re-designed CAR-Ts expanding beyond CD19+ tumor cells.

Anticipated Milestones

We expect the following milestones to occur in 2015 and 2016:

- Intra-tumoral IL-12 RheoSwitch® programs:
 - Early data is expected in the fourth quarter of 2015 for our Phase 1/2 study in Breast Cancer with standard of care.
 - Early data is expected in the fourth quarter of 2015 for our Phase 1 study of Glioblastoma multiforme (GBM).
- · CAR-T programs:
 - We expect to initiate two Phase 1 studies of next-generation CD19 CARs in the second quarter of 2015.
 - We expect to initiate a Phase 1 study of next-generation CAR with an inducible cytokine in the fourth quarter of 2015.
 - We expect to initiate a novel CAR for myeloid malignancies in the fourth quarter of 2015.
 - We expect to receive interim data on two Phase 1 CARs studies in advanced leukemia and lymphomas in the fourth quarter of 2015.

- We expect to initiate other leukemia and solid tumor CAR-T cell studies in 2016.
- We expect to initiate allogeneic, off-the-shelf T-cell studies in 2016.

Data from all programs is expected in 2015 and 2016. We are also evaluating additional potential preclinical candidates and continuing discovery efforts aimed at identifying other potential product candidates under our Channel Agreement with Intrexon. In addition, we may seek to enhance our pipeline in synthetic biology through focused strategic transactions, which may include acquisitions, partnerships and in-licensing activities. We are actively seeking to out-license some or all of our small molecule programs to further support our synthetic biology efforts.

Small molecule programs

In addition to our synthetic biology programs discussed above, we have certain rights to three small molecule programs, palifosfamide (or isophosphoramide mustard), darinaparsin and indibulin, all of which we are no longer actively pursuing. With respect to palifosfamide, in March 2013, we announced that the pivotal Phase 3 study, PICASSO 3, did not meet its primary endpoint of progression-free survival, and that we would terminate our development program in metastatic soft tissue sarcoma. In addition, we recently received the overall survival endpoint data from our study of palifosfamide in combination with carboplatin and etoposide chemotherapy versus carboplatin and etoposide alone in chemotherapy naïve patients with metastatic small cell lung cancer, which we refer to as MATISSE, which data will be submitted for presentation at a scientific forum during the first half of 2015.

We are seeking transactions with third parties for the possible out-license of palifosfamide. With respect to darinaparsin, we have entered into an amended and restated global licensing agreement with Solasia Pharma K.K., or Solasia, on July 31, 2014 granting Solasia an exclusive worldwide license to develop and commercialize darinaparsin, and related organoarsenic molecules, in both intravenous and oral forms in all indications for human use. In exchange, we will be eligible to receive from Solasia development-and sales-based milestones, a royalty on net sales of darinaparsin, once commercialized, and a percentage of any sublicense revenues generated by Solasia. During 2014, we determined to no longer pursue clinical development of indibulin.

Recent developments

Expected cash as of December 31, 2014

Based upon preliminary estimates, we expect to have approximately \$43 million in cash and cash equivalents as of December 31, 2014. We have not yet completed our year-end financial close process for the year ended December 31, 2014. This estimate of our cash and cash equivalents as of December 31, 2014 is based on preliminary estimates of our financial results that we expect to report for the period. These estimates are subject to completion of our financial closing procedures. Our independent registered public accounting firm, McGladrey LLP, has not audited, reviewed or compiled these estimates. These estimates are not a comprehensive statement of our financial results for the year ended December 31, 2014 and our actual results may differ materially from these estimates as a result of the completion of our financial closing procedures, final adjustments and other developments arising between now and the time that our financial results for this period are finalized.

Development plans

Our current plan is to raise additional capital to support further development activities for our strategic product candidates. Based upon our current plans and without taking into account the net proceeds of this offering, we anticipate that our cash resources will be sufficient to fund our operations into the third quarter of 2015. This forecast of cash resources is forward-looking information that involves risks and uncertainties, and the actual

amount of our expenses could vary materially and adversely as a result of a number of factors, including the factors discussed in the "Risk Factors" section of the applicable prospectus supplement and the uncertainties applicable to our forecast for the overall sufficiency of our capital resources. We have based our estimates on assumptions that may prove to be wrong, and our expenses could prove to be significantly higher than we currently anticipate. In particular, pursuant to the MD Anderson License, MD Anderson agreed to transfer to us certain existing research programs described in the MD Anderson License and we, together with Intrexon, agreed to enter into a research and development agreement pursuant to which we will provide funding for certain research and development activities of MD Anderson for a period of three years from the date of the MD Anderson License, in an amount between \$15 and \$20 million per year. In addition, we also expect to enter into additional collaboration and technology transfer agreements with MD Anderson and Intrexon to accelerate technology and clinical development of these product candidates. We expect to increase the level of our overall research and development expenses significantly going forward as a result of each of these items. Further, in light of our entry into the MD Anderson License, we expect to establish operations in Houston, Texas that will enable us to join and collaborate with the MD Anderson academic and medical community, which may require that we add headcount in the future, and which could add to our general and administrative expenses going forward. Although our forecasts for expenses and the sufficiency of our capital resources takes into account our plans to develop the technology licensed from MD Anderson and our obligations under the MD Anderson License, the MD Anderson License was entered into on January 13, 2015 and is only beginning to be implemented, therefore the actual costs associated therewith may be significantly in excess of forecasted amoun

Corporate Information

We originally incorporated in Colorado in September 1998 (under the name Net Escapes, Inc.) and later changed our name to "EasyWeb, Inc." in February 1999. We re-incorporated in Delaware on May 16, 2005 under the same name. On September 13, 2005, we completed a "reverse" acquisition of privately held ZIOPHARM, Inc., a Delaware corporation. To effect this transaction, we caused ZIO Acquisition Corp., our wholly-owned subsidiary, to merge with and into ZIOPHARM, Inc., with ZIOPHARM, Inc. surviving as our wholly owned subsidiary. In accordance with the terms of the merger, the outstanding common stock of ZIOPHARM, Inc. automatically converted into the right to receive an aggregate of approximately 97.3% of our outstanding common stock (after giving effect to the transaction). Following the merger, we caused ZIOPHARM, Inc. to merge with and into us and we changed our name to "ZIOPHARM Oncology, Inc." Although EasyWeb, Inc. was the legal acquirer in the transaction, we accounted for the transaction as a reverse acquisition under generally accepted accounting principles. As a result, ZIOPHARM, Inc. became the registrant with the Commission and the historical financial statements of ZIOPHARM, Inc. became our historical financial statements.

Our principal executive offices are located at One First Avenue, Parris Building 34, Navy Yard Plaza, Boston, Massachusetts 02129, and our telephone number is (617) 259-1970. Our internet site is www.ziopharm.com. Information found on, or accessible through, our website is not a part of, and is not incorporated into, this prospectus, and you should not consider it part of this prospectus or part of any prospectus supplement.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully review the risks and uncertainties described 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 and the applicable prospectus supplement, before deciding whether to purchase any of the securities being offered. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities, and the occurrence of any of these risks might cause you to lose all or part of your investment. Moreover, the risks described are not the only ones that we face. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain, and any prospectus supplement or free writing prospectus may 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. All statements other than statements of historical facts contained in this prospectus and the documents incorporated by reference herein contain, and any prospectus supplement or free writing prospectus are forward-looking statements. These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors which 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. Forward-looking statements may include, but are not limited to statements about:

- the progress, timing and results of preclinical and clinical trials involving our drug candidates;
- the progress of our research and development programs;
- our plans or others' plans to conduct future clinical trials or research and development efforts;
- the risk that final trial data may not support interim analysis of the viability of our drug candidates;
- our plans and expectations regarding partnering our drug candidates;
- the benefits to be derived from relationships with our collaborators;
- the receipt or anticipated receipt of regulatory clearances and approvals;
- estimates of the potential markets for our drug candidates;
- our ability to adequately protect our intellectual property rights;
- · the use of proceeds from this offering;
- our estimates of future revenues and profitability;
- · completive risks in our industry;
- our estimates regarding our capital requirements and our ability to control costs; and
- our need for additional funding and the period through which we anticipate our resources will sufficient to fund operations.

In some cases, you can identify forward-looking statements by terms such as "may", "will", "should", "could", "would", "expects", "plans", "anticipates", "believes", "estimates", "projects", "predicts", "potential" and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in greater detail under the heading "Risk Factors" in the applicable prospectus supplement or free writing prospectus and in our reports filed from time to time under the Securities Act and/or the Exchange Act. We encourage you to read these filings as they are made. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement.

You should read this prospectus, the documents incorporated by reference herein, and any prospectus supplement or free writing prospectus that we have authorized for use in connection with this offering completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements.

RATIO OF EARNINGS TO FIXED CHARGES AND TO COMBINED FIXED CHARGES AND PREFERENCE DIVIDENDS

The following table shows our ratio of earnings to fixed charges and the ratio of earnings to combined fixed charges and preference dividends for the periods indicated.

	Year Ended December 31,				Nine Months Ended September 30,	
	2009	2010	2011	2012	2013	2014
Ratio of earnings to fixed charges	_	_	_	_	_	
Ratio of earnings to combined fixed charges and preference dividends	_	_	_	_	_	_

For purposes of computing the ratio of earnings to fixed charges and the ratio of earnings to our combined fixed charges and preference dividends, earnings consist of our net income (loss) before tax benefit (provision) for the period plus fixed charges. Fixed charges consist of interest expense and amortized premiums, discounts and capitalized expenses related to indebtedness. The ratio of earnings to fixed charges and the ratio of earnings to combined fixed charges and preference dividends were less than one-to-one for each of the periods presented. Earnings were insufficient to cover fixed charges by \$7.6 million in 2009, \$32.7 million in 2010, \$63.8 million in 2011, \$96.1 million in 2012, \$57.1 million in 2013 and \$21.4 million in the nine months ended September 30, 2014.

USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds from the sale of our securities offered by this prospectus. Unless we indicate otherwise in the applicable prospectus supplement or in any related free writing prospectus we have authorized for use in connection with a specific offering, we anticipate that any net proceeds will be used for working capital and general corporate purposes. We will set forth in the applicable prospectus supplement or free writing prospectus our intended use for the net proceeds received from the sale of securities sold pursuant to that prospectus supplement or free writing prospectus.

DILUTION

We will set forth in a prospectus supplement the following information regarding any material dilution of the equity interests of investors purchasing securities in an offering under this prospectus:

- the net tangible book value per share of our equity securities before and after the offering;
- · the amount of the increase in such net tangible book value per share attributable to the cash payments made by purchasers in the offering; and
- · the amount of the immediate dilution from the public offering price which will be absorbed by such purchasers.

DESCRIPTION OF CAPITAL STOCK

As of the date of this prospectus, our authorized capital stock consists of 280,000,000 shares, comprised of 250,000,000 shares of common stock, par value \$.001 per share, and 30,000,000 shares of preferred stock, par value \$.001 per share. As of January 30, 2015, there were 104,428,495 shares of common stock and no shares of preferred stock issued and outstanding. Our common stock is traded on the NASDAQ Capital Market under the symbol "ZIOP".

The following description summarizes the material terms of our capital stock. This summary is, however, subject to the provisions of our certificate of incorporation and bylaws. For greater detail about our capital stock, please refer to our certificate of incorporation and bylaws.

Common Stock

Voting. The holders of our common stock are entitled to one vote for each outstanding share of common stock owned by such stockholder on every matter properly submitted to the stockholders for their vote. Stockholders are not entitled to vote cumulatively for the election of directors. 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. At any meeting of the stockholders, a quorum as to any matter shall consist of a majority of the votes entitled to be cast on the matter, except where a larger quorum is required by law, by our certificate of incorporation or by our bylaws.

Dividend Rights. Holders of our common stock are entitled to receive ratably dividends and other distributions of cash or any other right or property as may be declared by our board of directors out of our assets or funds legally available for such dividends or distributions. The dividend rights of holders of common stock are subject to the dividend rights of the holders of any series of preferred stock that may be issued and outstanding from time to time.

Liquidation Rights. In the event of any voluntary or involuntary liquidation, dissolution or winding up of our affairs, holders of our common stock would be entitled to share ratably in our assets that are legally available for distribution to stockholders after payment of liabilities. If we have any preferred stock outstanding at such time, the holders of such preferred stock may be entitled to distribution and/or liquidation preferences that require us to pay the applicable distribution to the holders of preferred stock before paying distributions to the holders of common stock.

Rights and Preferences. Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our 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 our preferred stock that we may designate and issue in the future.

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

See "Certain Provisions of Delaware Law, the Certificate of Incorporation and Bylaws" for a description of provisions of our certificate of incorporation and bylaws which may have the effect of delaying, deferring or preventing changes in the our control.

Preferred Stock

Pursuant to our amended and restated certificate of incorporation, our board of directors has the authority, without stockholder approval, subject to limitations prescribed by law, to provide for the issuance of up to 30,000,000 shares of preferred stock in one or more series, and by filing a certificate pursuant to the applicable law of the State of Delaware, to establish from time to time the number of shares to be included in each such series, and to fix the designation, powers, preferences and rights of the shares of each series and any qualifications, limitations or restrictions thereof, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

We will fix the designations, voting powers, preferences and rights of the preferred stock of each series, 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 Commission, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of that series of preferred stock. This description will include:

- the title and stated value;
- the number of shares offered;
- the liquidation preference per share;
- the purchase price per share;
- the dividend rate(s), period(s) and/or payment date(s) or method(s) of calculation for dividends;
- whether dividends are cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- our right, if any, to defer payment of dividends and the maximum length of any such deferral period;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- · the provision 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;
- the terms and conditions, if applicable, upon which the preferred stock will be convertible into common stock, including the conversion price (or manner of calculation) and 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, if any, of the preferred stock;
- preemptive rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- whether interests in the preferred stock will be represented by depositary shares;
- a discussion of any material and/or special U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon the liquidation, dissolution or winding up of our affairs:
- any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the class or series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of our affairs; and
- any other specific terms, preferences, rights, limitations or restrictions of the preferred stock.

Our board of directors could authorize the issuance of shares of preferred stock with terms and conditions that could have the effect of discouraging a takeover or other transaction that might involve a premium price for holders of the shares or which holders might believe to be in their best interests. The issuance of preferred stock could adversely affect the voting power, conversion or other rights of holders of common stock and reduce the likelihood that common stockholders will receive dividend payments and payments upon liquidation.

The laws of the state of Delaware, the state of our incorporation, provide that the holders of preferred stock will have the right to vote separately as a class on any proposal involving fundamental changes in the rights of holders of such preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

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

DESCRIPTION OF DEBT SECURITIES

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

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

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

General

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

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

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

- the title of the series of debt securities;
- any limit upon the aggregate principal amount that may be issued;
- the maturity date or dates;
- the form of the debt securities of the series;
- the applicability of any guarantees;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- whether the debt securities rank as senior debt, senior subordinated debt, subordinated debt or any combination thereof, and the terms of any subordination;

- if the price (expressed as a percentage of the aggregate principal amount thereof) at which such debt securities will be issued is a price other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof, or if applicable, the portion of the principal amount of such debt securities that is convertible into another security or the method by which any such portion shall be determined;
- the interest rate or rates, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- if applicable, the date or dates after which, or the period or periods during which, and the price or prices at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- the date or dates, if any, on which, and the price or prices at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
- any and all terms, if applicable, relating to any auction or remarketing of the debt securities of that series and any security for our obligations with respect to such debt securities and any other terms which may be advisable in connection with the marketing of debt securities of that series;
- whether the debt securities of the series shall be issued in whole or in part in the form of a global security or securities; the terms and conditions, if any, upon which such global security or securities may be exchanged in whole or in part for other individual securities; and the depositary for such global security or securities;
- if applicable, the provisions relating to conversion or exchange of any debt securities of the series and the terms and conditions upon which such debt securities will be so convertible or exchangeable, including the conversion or exchange price, as applicable, or how it will be calculated and may be adjusted, any mandatory or optional (at our option or the holders' option) conversion or exchange features, the applicable conversion or exchange period and the manner of settlement for any conversion or exchange;
- if other than the full principal amount thereof, the portion of the principal amount of debt securities of the series which shall be payable upon declaration of acceleration of the maturity thereof;
- additions to or changes in the covenants applicable to the particular debt securities being issued, including, among others, the consolidation, merger or sale covenant;
- additions to or changes in the events of default with respect to the securities and any change in the right of the trustee or the holders to declare the principal, premium, if any, and interest, if any, with respect to such securities to be due and payable;
- additions to or changes in or deletions of the provisions relating to covenant defeasance and legal defeasance;
- · additions to or changes in the provisions relating to satisfaction and discharge of the indenture;
- additions to or changes in the provisions relating to the modification of the indenture both with and without the consent of holders of debt securities issued under the indenture;
- the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;

- whether interest will be payable in cash or additional debt securities at our or the holders' option and the terms and conditions upon which the election may be made;
- the terms and conditions, if any, upon which we will pay amounts in addition to the stated interest, premium, if any and principal amounts of the debt securities of the series to any holder that is not a "United States person" for federal tax purposes;
- any restrictions on transfer, sale or assignment of the debt securities of the series; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, any other additions or changes in the provisions of the indenture, and any terms that may be required by us or advisable under applicable laws or regulations.

Conversion or Exchange Rights

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

Consolidation, Merger or Sale

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

Events of Default under the Indenture

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

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

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate

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

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

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

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

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

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

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

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

Modification of Indenture; Waiver

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

- to cure any ambiguity, defect or inconsistency in the indenture or in the debt securities of any series;
- to comply with the provisions described above under "Description of Debt Securities Consolidation, Merger or Sale;"

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

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

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

Discharge

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

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

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

Form, Exchange and Transfer

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

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

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

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional 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.

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 supplements and in any related free writing prospectuses that we may authorize to be distributed to you, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may consist of warrants to purchase common stock, preferred stock or debt securities and 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 describe 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 prospectuses, 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.

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.

CERTAIN PROVISIONS OF DELAWARE LAW, THE CERTIFICATE OF INCORPORATION AND BYLAWS

Limitations on Directors' Liability

Our amended and restated certificate of incorporation and our bylaws contain provisions indemnifying our directors and officers to the fullest extent permitted by law. In addition, as permitted by Delaware law, our amended and restated certificate of incorporation provides that no director will be liable to us or our stockholders for monetary damages for breach of certain fiduciary duties as a director. The effect of this provision is to restrict our rights and the rights of our stockholders in derivative suits to recover monetary damages against a director for breach of certain fiduciary duties as a director, except that a director will be personally liable for:

- the benefits to be derived from relationships with our collaborators;
- any breach of his or her duty of loyalty to the registrant or its stockholders;
- acts or omissions not in good faith which involve intentional misconduct or a knowing violation of law;
- the payment of dividends or the redemption or purchase of stock in violation of Delaware law; or
- any transaction from which the director derived an improper personal benefit.

This provision does not affect a director's liability under the federal securities laws.

To the extent that our directors, officers and controlling persons are indemnified under the provisions contained in our amended and restated certificate of incorporation, Delaware law or contractual arrangements against liabilities arising under the Securities Act, we have been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act, and is therefore unenforceable.

Provisions that May Have an Anti-Takeover Effect

Certain provisions set forth in our amended and restated certificate of incorporation, bylaws and in Delaware law, which are summarized below, are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by our board of directors and to discourage certain types of transactions that may involve an actual or threatened change of control. In that regard, these provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our common stock that could result from actual or rumored takeover attempts. Such provisions also may have the effect of preventing changes in our management.

Blank Check Preferred Stock. Our amended and restated certificate of incorporation contains provisions that permit our board of directors to issue, without any further vote or action by the stockholders, up to 30,000,000 shares of preferred stock in one or more series and, with respect to each such series, to fix the number of shares constituting the series and the designation of the series, the voting powers (if any) of the shares of the series, and the preferences and relative, participating, optional and other special rights, if any, and any qualifications, limitations or restrictions, of the shares of such series. As a result, our board of directors could authorize the issuance of shares of preferred stock with terms and conditions that could have the effect of delaying, deferring or preventing a transaction or a change in control that might involve a premium price for holders of the registrant's common stock or otherwise be in their best interest.

Special Meetings of Stockholders. Our bylaws provide that special meetings of stockholders may be called only by the board of directors. Stockholders are not permitted to call a special meeting of stockholders or to require that the board of directors call such a special meeting.

Delaware Takeover Statute.

We are subject to Section 203 of the Delaware General Corporation Law, or DGCL, which regulates acquisitions of some Delaware corporations. In general, Section 203 prohibits, with some exceptions, a Delaware corporation that is a public company from engaging in any "business combination" with any "interested stockholder" for a period of three years following the date that such stockholder became an interested stockholder, unless:

- prior to such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- on consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned (x) by persons who are directors and also officers and (y) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 of the DGCL defines "business combination" to include:

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

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

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

- · at a fixed price or prices, which may be changed;
- at market prices prevailing at the times of sale;
- at prices related to such prevailing market prices; or
- · at negotiated prices.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of the underwriters, if any;
- the purchase price of the securities or other consideration therefor, and the proceeds, if any, we will receive from the sale;
- · any options under which underwriters may purchase additional securities from us;
- · any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- · any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Only underwriters named in the prospectus supplement will be underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any option to purchase additional securities. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

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

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the option to purchase additional securities or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon by Cooley LLP, Boston, Massachusetts.

EXPERTS

The financial statements and the effectiveness of internal control over financial reporting incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2013 and for the period from September 9, 2003 (date of inception) through December 31, 2013, have been audited by McGladrey LLP, an independent registered public accounting firm, as stated in their report incorporated by reference herein and have been so incorporated in reliance upon such reports and upon the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the Commission. You may read and copy these reports, proxy statements and other information at the Commission's public reference room at 100 F Street, N.E., Washington, D.C. 20549 or at the Commission's other public reference facilities. Please call the Commission at 1-800-SEC-0330 for more information about the operation of the public reference rooms. You can request copies of these documents by writing to the Commission and paying a fee for the copying costs. In addition, the Commission maintains an Internet site at http://www.sec.gov that contains reports, proxy and information statements and other information regarding issuers that file electronically with the Commission. Our Commission filings are available on the Commission's Internet site. We maintain a website at http://www.ziopharm.com. Information found on, or accessible through, our website is not a part of, and is not incorporated into, this prospectus, and you should not consider it part of this prospectus or part of any prospectus supplement.

INCORPORATION OF INFORMATION BY REFERENCE

We are allowed to incorporate by reference information contained in documents that we file with the Commission. This means that we can disclose important information to you by referring you to those documents and that the information in this prospectus is not complete and you should read the information incorporated by reference for more detail. Information in this prospectus supersedes information incorporated by reference that we filed with the Commission prior to the date of this prospectus, while information that we file later with the Commission will automatically update and supersede the information in this prospectus.

We incorporate by reference the documents listed below and any future filings we will make with the Commission under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of such registration statement, and (ii) from the date of this prospectus but prior to the termination of the offering of the securities covered by this prospectus (other than Current Reports or portions thereof furnished under Item 2.02 or 7.01 of Form 8-K):

- Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed on March 3, 2014;
- The information specifically incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended December 31, 2013 from our Definitive Proxy Statement on Schedule 14A, filed on April 30, 2014;
- Quarterly Reports on Form 10-Q for the quarters ended March 31, 2014, June 30, 2014, and September 30, 2014, filed on May 8, 2014, August 7, 2014, and October 30, 2014, respectively;
- Current Reports on Form 8-K filed on January 8, 2014, January 15, 2014, February 10, 2014, March 3, 2014 (excluding Item 2.02), March 28, 2014, April 8, 2014, May 8, 2014 (excluding Item 2.02), May 22, 2014 (excluding Item 7.01), June 19, 2014, July 31, 2014, August 7, 2014 (excluding Item 2.02), September 16, 2014, October 30, 2014 (excluding Item 2.02), December 3, 2014 (excluding Item 7.01), January 14, 2015, second filing on January 14, 2015 (excluding Item 7.01), and January 28, 2015; and
- The description of our common stock set forth in the registration statement on Form 8-A registering our common stock under Section 12 of the Exchange Act, which was filed with the Commission on September 20, 2006, including any amendments or reports filed for purposes of updating such description.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered a copy of any or all of the documents that are incorporated by reference in this prospectus but not delivered with this prospectus, including exhibits that are specifically incorporated by reference in such documents. You may request a copy of such documents at no cost, by writing or telephoning us at the following address or telephone number:

ZIOPHARM Oncology, Inc. One First Avenue, Parris Building 34, Navy Yard Plaza Boston, Massachusetts 02129 Attention: Chief Legal Officer (617) 259-1970

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses Of Issuance And Distribution.

The following table sets forth the fees and expenses, other than underwriting compensation, payable in connection with the registration of securities hereunder. All amounts are estimates except for the Commission registration fee. The assumed amount has been used to demonstrate the expenses of an offering and does not represent an estimate of the amount of securities that may be registered or distributed because such amount is unknown at this time.

Commission registration fee	\$ *
Legal fees and expenses	\$ **
Accounting fees and expenses	\$ **
Printing and engraving expenses	\$ **
Miscellaneous expenses	\$ **
Blue sky fees and expenses	\$ **
Total	\$ **

- In accordance with Rules 456(b) and 457(r) of the Securities Act of 1933, as amended, or the Securities Act, we are deferring payment of the registration fee for the securities offered by this prospectus.
- ** These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be estimated at this time. The applicable prospectus supplement will set forth the amount of expenses of any offering of securities.

Item 15. Indemnification of Directors and Officers.

Under Article 6 of the registrant's bylaws, each director and officer of the registrant will be indemnified to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was a director or officer of the registrant or, while a director or officer of the registrant, is or was serving at the request of the registrant as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such director or officer. However, the registrant shall be required to indemnify a director or officer in connection with a proceeding commenced by such director or officer only if the commencement of such proceeding (or part thereof) by the director or officer was authorized by the Board. The registrant's Amended and Restated Certificate of Incorporation also eliminates the liability of directors of the registrant for monetary damages to the fullest extent permissible under Delaware

Section 145 of the Delaware General Corporation Law states:

(a) A corporation shall have power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a

presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful.

- (b) A corporation shall have power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.
- (c) To the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of this section, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.
- (d) Any indemnification under subsections (a) and (b) of this section (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the present or former director, officer, employee or agent is proper in the circumstances because the person has met the applicable standard of conduct set forth in subsections (a) and (b) of this section. Such determination shall be made, with respect to a person who is a director or officer of the corporation at the time of such determination:
 - (1) By a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum; or
 - (2) By a committee of such directors designated by majority vote of such directors, even though less than a quorum; or
 - (3) If there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion; or
 - (4) By the stockholders.
- (e) Expenses (including attorneys' fees) incurred by an officer or director of the corporation in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the corporation as authorized in this section. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents of the corporation or by persons serving at the request of the corporation as directors, officers, employees or agents of another corporation, partnership, joint venture, trust or other enterprise may be so paid upon such terms and conditions, if any, as the corporation deems appropriate.
- (f) The indemnification and advancement of expenses provided by, or granted pursuant to, the other subsections of this section shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in

another capacity while holding such office. A right to indemnification or to advancement of expenses arising under a provision of the certificate of incorporation or a bylaw shall not be eliminated or impaired by an amendment to the certificate of incorporation or the bylaws after the occurrence of the act or omission that is the subject of the civil, criminal, administrative or investigative action, suit or proceeding for which indemnification or advancement of expenses is sought, unless the provision in effect at the time of such act or omission explicitly authorizes such elimination or impairment after such action or omission has occurred.

- (g) A corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under this section.
- (h) For purposes of this section, references to "the corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under this section with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued.
- (i) For purposes of this section, references to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on a person with respect to any employee benefit plan; and references to "serving at the request of the corporation" shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this section.
- (j) The indemnification and advancement of expenses provided by, or granted pursuant to, this section shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.
- (k) The Court of Chancery is hereby vested with exclusive jurisdiction to hear and determine all actions for advancement of expenses or indemnification brought under this section or under any bylaw, agreement, vote of stockholders or disinterested directors, or otherwise. The Court of Chancery may summarily determine a corporation's obligation to advance expenses (including attorneys' fees).

The registrant maintains insurance on behalf of its officers and directors, insuring them against liabilities that they may incur in such capacities or arising out of this status.

The above discussion of the registrant's Amended and Restated Certificate of Incorporation and Bylaws and of Section 145 of the Delaware General Corporation Law is not intended to be exhaustive and is respectively qualified in its entirety by such Amended and Restated Certificate of Incorporation, Bylaws and statute.

To the extent that our directors, officers and controlling persons are indemnified under the provisions contained in our amended and restated certificate of incorporation, Delaware law or contractual arrangements against liabilities arising under the Securities Act, we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, as amended, and is therefore unenforceable.

Item 16. Exhibits.

The following exhibits are filed as part of this Registration Statement:

Exhibit No.	Description of Document
1.1*	Underwriting Agreement
3.1	Amended and Restated Certificate of Incorporation, as filed with the Delaware Secretary of State on April 26, 2006 (incorporated by reference to Exhibit 3.1 to the registrant's Current Report on Form 8-K filed April 26, 2006)
3.2	Bylaws, as amended to date (incorporated by reference to Exhibit 3.3 to the registrant's Current Report on Form 8-K filed September 19, 2005)
4.1	Specimen common stock certificate (incorporated by reference to Exhibit 4.1 to the registrant's Registration Statement on Form SB-2 (SEC File No. 333-129020) filed October 14, 2005)
4.2*	Specimen preferred stock certificate
4.3*	Form of Debt Securities
4.4	Form of Indenture between the registrant and one or more trustees to be named
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
5.1	Legal opinion of Cooley LLP
12.1	Statement of Computation of Ratio of Earnings to Fixed Charges and Ratio of Combined Fixed Charges and Preferred Stock Dividends
23.1	Consent of Independent Registered Public Accounting Firm
23.2	Consent of Cooley LLP (included as part of Exhibit 5.1)
24.1	Power of Attorney (included on signature page)
25.1**	Statement of Eligibility of Trustee on Form T-1

^{*} To be filed by amendment or as an exhibit to a report pursuant to Section 13(a), 13(c) or 15(d) of the Exchange Act.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes:

- (a) (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");
- (ii) to reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this 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

^{**} To be filed pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939 at the time of an offering of debt securities.

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 a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement.

- (2) That, for the purposes of determining any liability under the Securities Act, 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 the time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
 - (4) That, for the purpose of determining liability under the Securities Act to any purchaser:
- (i) each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- (ii) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement or prospectus that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for the purpose of determining liability of the Registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of such 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, such 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 such 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 such undersigned Registrant or used or referred to by such undersigned Registrant;

- (iii) the portion of any other free writing prospectus relating to the offering containing material information about such undersigned Registrant or its securities provided by or on behalf of such undersigned Registrant; and
 - (iv) any other communication that is an offer in the offering made by such undersigned Registrant to the purchaser.
 - (6) 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 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.
- (b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this 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.
- (c) If applicable, the undersigned Registrant hereby undertakes to supplement the prospectus, after the expiration of the subscription period, to set forth the results of the subscription offer, the transaction by the underwriters during the subscription period, the amount of unsubscribed securities to be purchased by the underwriters, and the terms of any subsequent reoffering thereof. If any public offering by the underwriters is to be made on terms differing from those set forth on the cover page of the prospectus, a post-effective amendment will be filed to set forth the terms of such offering.
- (d) The undersigned Registrant hereby undertakes 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.
- (e) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the indemnification provisions described herein, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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 Boston, Commonwealth of Massachusetts, on February 2, 2015.

ZIOPHARM Oncology, Inc.

By: /s/ Jonathan Lewis
Jonathan Lewis
Chief Executive Officer
(Principal Executive Officer)

POWER OF ATTORNEY

Each person whose signature appears below hereby constitutes and appoints Jonathan Lewis, Caesar J. Belbel and Kevin G. Lafond, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments and registration statements filed pursuant to Rule 462) to this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ Jonathan Lewis Jonathan Lewis	Director and Chief Executive Officer (Principal Executive Officer)	February 2, 2015
/s/ Kevin G. Lafond Kevin G. Lafond	Vice President, Chief Accounting Officer and Treasurer (Principal Financial and Accounting Officer)	February 2, 2015
/s/ Murray Brennan Murray Brennan	Director	February 2, 2015
/s/ James Cannon James Cannon	_ Director	February 2, 2015
/s/ Wyche Fowler, Jr. Wyche Fowler, Jr.	Director	February 2, 2015
/s/ Randal J. Kirk Randal J. Kirk	_ Director	February 2, 2015
/s/ Timothy McInerney Timothy McInerney	_ Director	February 2, 2015
/s/ Michael Weiser Michael Weiser	_ Director	February 2, 2015

EXHIBIT INDEX

Exhibit No.	Description of Document
1.1*	Underwriting Agreement
3.1	Amended and Restated Certificate of Incorporation, as filed with the Delaware Secretary of State on April 26, 2006 (incorporated by reference to Exhibit 3.1 to the registrant's Current Report on Form 8-K filed April 26, 2006)
3.2	Bylaws, as amended to date (incorporated by reference to Exhibit 3.3 to the registrant's Current Report on Form 8-K filed September 19, 2005)
4.1	Specimen common stock certificate (incorporated by reference to Exhibit 4.1 to the registrant's Registration Statement on Form SB-2 (SEC File No. 333-129020) filed October 14, 2005)
4.2*	Specimen preferred stock certificate
4.3*	Form of Debt Securities
4.4	Form of Indenture between the registrant and one or more trustees to be named
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
5.1	Legal opinion of Cooley LLP
12.1	Statement of Computation of Ratio of Earnings to Fixed Charges and Ratio of Combined Fixed Charges and Preferred Stock Dividends
23.1	Consent of Independent Registered Public Accounting Firm
23.2	Consent of Cooley LLP (included as part of Exhibit 5.1)
24.1	Power of Attorney (included on signature page)
25.1**	Statement of Eligibility of Trustee on Form T-1

To be filed by amendment or as an exhibit to a report pursuant to Section 13(a), 13(c) or 15(d) of the Exchange Act. To be filed pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939 at the time of an offering of debt securities.

ZIOPHARM Oncology, Inc., Issuer

AND

[TRUSTEE], Trustee

INDENTURE

Dated as of [—], 20

Debt Securities

TABLE OF CONTENTS

		PAGE
ARTICLE 1	DEFINITIONS	1
Section 1.01	Definitions of Terms	1
ARTICLE 2	ISSUE, DESCRIPTION, TERMS, EXECUTION, REGISTRATION AND EXCHANGE OF SECURITIES	4
Section 2.01	Designation and Terms of Securities	4
Section 2.02	Form of Securities and Trustee's Certificate	6
Section 2.03	Denominations: Provisions for Payment	6
Section 2.04	Execution and Authentications	7
Section 2.05	Registration of Transfer and Exchange	8
Section 2.06	Temporary Securities	9
Section 2.07	Mutilated, Destroyed, Lost or Stolen Securities	9
Section 2.08	Cancellation	10
Section 2.09	Benefits of Indenture	10
Section 2.10	Authenticating Agent	10
Section 2.11	Global Securities	10
Section 2.12	CUSIP Numbers	11
ARTICLE 3	REDEMPTION OF SECURITIES AND SINKING FUND PROVISIONS	11
Section 3.01	Redemption	11
Section 3.02	Notice of Redemption	11
Section 3.03	Payment Upon Redemption	12
Section 3.04	Sinking Fund	13
Section 3.05	Satisfaction of Sinking Fund Payments with Securities	13
Section 3.06	Redemption of Securities for Sinking Fund	13
ARTICLE 4	COVENANTS	13
Section 4.01	Payment of Principal, Premium and Interest	13
Section 4.02	Maintenance of Office or Agency	14
Section 4.03	Paying Agents	14
Section 4.04	Appointment to Fill Vacancy in Office of Trustee	15
ARTICLE 5	SECURITYHOLDERS' LISTS AND REPORTS BY THE COMPANY AND THE TRUSTEE	15
Section 5.01	Company to Furnish Trustee Names and Addresses of Securityholders	15
Section 5.02	Preservation Of Information; Communications With Securityholders	15
Section 5.03	Reports by the Company	15
Section 5.04	Reports by the Trustee	16
ARTICLE 6	REMEDIES OF THE TRUSTEE AND SECURITYHOLDERS ON EVENT OF DEFAULT	16
Section 6.01	Events of Default	16
Section 6.02	Collection of Indebtedness and Suits for Enforcement by Trustee	17

TABLE OF CONTENTS (CONTINUED)

	(CONTINUED)	PAGE
Section 6.03	Application of Moneys Collected	18
Section 6.04	Limitation on Suits	19
Section 6.05	Rights and Remedies Cumulative; Delay or Omission Not Waiver	19
Section 6.06	Control by Securityholders	19
Section 6.07	Undertaking to Pay Costs	20
ARTICLE 7	CONCERNING THE TRUSTEE	20
Section 7.01	Certain Duties and Responsibilities of Trustee	20
Section 7.02	Certain Rights of Trustee	21
Section 7.03	Trustee Not Responsible for Recitals or Issuance or Securities	23
Section 7.04	May Hold Securities	23
Section 7.05	Moneys Held in Trust	23
Section 7.06	Compensation and Reimbursement	23
Section 7.07	Reliance on Officer's Certificate	24
Section 7.08	Disqualification; Conflicting Interests	24
Section 7.09	Corporate Trustee Required; Eligibility	24
Section 7.10	Resignation and Removal; Appointment of Successor	24
Section 7.11	Acceptance of Appointment By Successor	25
Section 7.12	Merger, Conversion, Consolidation or Succession to Business	26
Section 7.13	Preferential Collection of Claims Against the Company	26
Section 7.14	Notice of Default	26
ARTICLE 8	CONCERNING THE SECURITYHOLDERS	27
Section 8.01	Evidence of Action by Securityholders	27
Section 8.02	Proof of Execution by Securityholders	27
Section 8.03	Who May be Deemed Owners	27
Section 8.04	Certain Securities Owned by Company Disregarded	27
Section 8.05	Actions Binding on Future Securityholders	28
ARTICLE 9	SUPPLEMENTAL INDENTURES	28
Section 9.01	Supplemental Indentures Without the Consent of Securityholders	28
Section 9.02	Supplemental Indentures With Consent of Securityholders	29
Section 9.03	Effect of Supplemental Indentures	29
Section 9.04	Securities Affected by Supplemental Indentures	29
Section 9.05	Execution of Supplemental Indentures	30
ARTICLE 10	SUCCESSOR ENTITY	30
Section 10.01	Company May Consolidate, Etc	30
Section 10.02	Successor Entity Substituted	30

TABLE OF CONTENTS (CONTINUED)

RTICLE 11	SATISFACTION AND DISCHARGE	PAGE 31
Section 11.01	Satisfaction and Discharge of Indenture	31
Section 11.02	Discharge of Obligations	31
Section 11.03	Deposited Moneys to be Held in Trust	31
Section 11.04	Payment of Moneys Held by Paying Agents	32
Section 11.05	Repayment to Company	32
RTICLE 12	IMMUNITY OF INCORPORATORS, STOCKHOLDERS, OFFICERS AND DIRECTORS	32
Section 12.01	No Recourse	32
RTICLE 13	MISCELLANEOUS PROVISIONS	32
Section 13.01	Effect on Successors and Assigns	32
Section 13.02	Actions by Successor	33
Section 13.03	Surrender of Company Powers	33
Section 13.04	Notices	33
Section 13.05	Governing Law; Jury Trial Waiver	33
Section 13.06	Treatment of Securities as Debt	33
Section 13.07	Certificates and Opinions as to Conditions Precedent	33
Section 13.08	Payments on Business Days	34
Section 13.09	Conflict with Trust Indenture Act	34
Section 13.10	Counterparts	34
Section 13.11	Separability	34
Section 13.12	Compliance Certificates	34
Section 13.13	U.S.A Patriot Act	34
Section 13.14	Force Majeure	35
Section 13.15	Table of Contents; Headings	35

INDENTURE

INDENTURE, dated as of [—], 20 , among **ZIOPHARM ONCOLOGY**, **INC.**, a Delaware **corporation** (the "Company"), and [TRUSTEE], as trustee (the "Trustee"):

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

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

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

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

ARTICLE 1

DEFINITIONS

Section 1.01 Definitions of Terms.

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

"Authenticating Agent" means 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 ZIOPHARM ONCOLOGY, 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.
- "*Depositary*" means, with respect to Securities of any series for which the Company shall determine that such Securities will be issued as a Global Security, The Depository Trust Company, another clearing agency, or any successor registered as a clearing agency under the Exchange Act, or other applicable statute or regulation, which, in each case, shall be designated by the Company pursuant to either Section 2.01 or 2.11.
- "Event of Default" means, with respect to Securities of a particular series, any event specified in Section 6.01, continued for the period of time, if any, therein designated.
- "Exchange Act" means the United States Securities and Exchange Act of 1934, as amended, and the rules and regulations promulgated by the Commission thereunder.
- "Global Security" means a Security issued to evidence all or a part of any series of Securities which is executed by the Company and authenticated and delivered by the Trustee to the Depositary or pursuant to the Depositary's instruction, all in accordance with the Indenture, which shall be registered in the name of the Depositary 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 depositary receipt issued by a bank or trust company as custodian with respect to any such Governmental Obligation or a specific payment of principal of or interest on any such Governmental Obligation held by such custodian for the account of the holder of such depositary receipt; provided, however, that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depositary receipt from any amount received by the custodian in respect of the Governmental Obligation or the specific payment of principal of or interest on the Governmental Obligation evidenced by such depositary receipt.
- "herein", "hereof" and "hereunder", and other words of similar import, refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.
- "*Indenture*" means this instrument as originally executed or as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into in accordance with the terms hereof and shall include the terms of particular series of Securities established as contemplated by Section 2.01.
- "Interest Payment Date", when used with respect to any installment of interest on a Security of a particular series, means the date specified in such Security or in a Board Resolution or in an indenture supplemental hereto with respect to such series as the fixed date on which an installment of interest with respect to Securities of that series is due and payable.
- "Officer" means, with respect to the Company, the chairman of the Board of Directors, a chief executive officer, a president, a chief financial officer, a chief operating officer, any executive vice president, any senior vice president, any vice president, the treasurer or any assistant treasurer, the controller or any assistant controller or the secretary or any assistant secretary.

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

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

"Outstanding", when used with reference to Securities of any series, means, subject to the provisions of Section 8.04, as of any particular time, all Securities of that series theretofore authenticated and delivered by the Trustee under this Indenture, except (a) Securities theretofore canceled by the Trustee or any paying agent, or delivered to the Trustee or any paying agent for cancellation or that have previously been canceled; (b) Securities or portions thereof for the payment or redemption of which moneys or Governmental Obligations in the necessary amount shall have been deposited in trust with the Trustee or with any paying agent (other than the Company) or shall have been set aside and segregated in trust by the Company (if the Company shall act as its own paying agent); provided, however, that if such Securities or portions of such Securities are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given as provided in Article 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 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 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 mailed, first class postage prepaid, to each Securityholder at his or her address as it appears in the Security Register (as hereinafter defined), not less than 10 days prior to such special record date. Notice of the proposed payment of such Defaulted Interest and the special record date therefor having been mailed as aforesaid, such Defaulted Interest shall be paid to the Persons in whose names such Securities (or their respective Predecessor Securities) are registered on such special record date.

(2) The Company may make 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 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 (the "Security Registrar").

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

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

- **(c)** Except as provided pursuant to Section 2.01 pursuant to a Board Resolution, and set forth in an Officer's Certificate, or established in one or more indentures supplemental to this Indenture, no service charge shall be made for any exchange or registration of transfer of Securities, or issue of new Securities in case of partial redemption of any series 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 shall not be required (i) to issue, exchange or register the transfer of any Securities during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of less than all the Outstanding Securities of the same series and ending at the close of business on the day of such mailing, nor (ii) to register the transfer of or exchange any Securities of any series or portions thereof called for redemption 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 depositary 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 holders), 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 Depositary or its nominee, (iii) shall be delivered by the Trustee to the Depositary or pursuant to the Depositary's instruction (or if the Depositary 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 Depositary or to a successor Depositary."

(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 Depositary for such series, or to a successor Depositary for such series selected or approved by the Company or to a nominee of such successor Depositary.

(c) If at any time the Depositary for a series of the Securities notifies the Company that it is unwilling or unable to continue as Depositary for such series or if at any time the Depositary 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 Depositary 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 Depositary 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 Depositary, pursuant to instructions from its direct or indirect participants or otherwise, shall instruct the Trustee. The Trustee shall deliver such Securities to the Depositary 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), 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 holders at their last addresses as they shall appear upon the Security Register, unless a shorter period is specified in the Securities to be redeemed. Any notice that is mailed in the manner herein provided shall be conclusively presumed to have been duly given, whether or not the registered holder receives the notice. In any case, failure duly to give such notice to the holder of any Security of any series

designated for redemption in whole or in part, or any defect in the notice, shall not affect the validity of the proceedings for the redemption of any other Securities of such series or any other series. In the case of any redemption of Securities prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, the Company shall furnish the Trustee with an Officer's Certificate evidencing compliance with any such restriction.

Each such notice of redemption shall 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 Trustee shall select, by lot or in such other manner as it 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 the date fixed for redemption and interest on such Securities or portions of Securities shall cease to accrue on and after the date fixed for redemption, unless the Company shall default in the payment of such redemption price and accrued interest with respect to any such Security or portion thereof. On presentation and surrender of such Securities on or after the date fixed for redemption at the place of payment specified in the notice, said Securities shall be paid and redeemed at the applicable redemption price for such series, together with interest accrued thereon to the date fixed for redemption (but if the date fixed for redemption is an Interest Payment Date, the interest installment payable on such date shall be payable to the registered holder at the close of business on the applicable record date pursuant to Section 2.03).
- **(b)** Upon presentation of any Security of such series that is to be redeemed in part only, the Company shall execute and the Trustee shall authenticate and the office or agency where the Security is presented shall deliver to the holder thereof, at the expense of the Company, a new Security of the same series of authorized denominations in principal amount equal to the unredeemed portion of the Security so presented.

Section 3.04 Sinking Fund.

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

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

Section 3.05 Satisfaction of Sinking Fund Payments with Securities.

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

Section 3.06 Redemption of Securities for Sinking Fund.

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

ARTICLE 4

COVENANTS

Section 4.01 Payment of Principal, Premium and Interest.

The Company will duly and punctually pay or cause to be paid the principal of (and premium, if any) and interest on the Securities of that series at the time and place and in the manner provided herein and established with respect to such Securities. Payments of principal on the 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 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 SEC 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 SEC 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 SEC 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 transmit by mail, first class postage prepaid, to the Securityholders, as their names and addresses appear upon the Security Register, a brief report dated as of such May 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 been 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 holder thereof or to authorize the Trustee to vote in respect of the claim of any Securityholder in any such proceeding.

Section 6.03 Application of Moneys Collected.

Any moneys 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 holder previously shall have given to the Trustee written notice of an Event of Default and of the continuance thereof with respect to the Securities of such series specifying such Event of Default, as hereinbefore provided; (ii) the holders of not less than 25% in aggregate principal amount of the Securities of such series then Outstanding shall have made written request upon the Trustee to institute such action, suit or proceeding in its own name as Trustee hereunder; (iii) such holder or holders shall have offered to the Trustee 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 (a) the party providing such written instructions, subsequent to such transmission of written instructions, shall provide the originally executed instructions or directions to the Trustee in a timely manner, and (b) such originally executed instructions or directions 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 or 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.
- (I) The Trustee shall not be deemed to have knowledge of any Default or Event of Default (other than an Event of Default relating to the failure to pay the interest on, or the principal of, the 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 controlling, controlled by, or under common control with the Company, serve as Trustee. In case at any time the Trustee shall cease to be eligible in accordance with the provisions of this Section, the Trustee shall resign immediately in the manner and with the effect specified in Section 7.10.

Section 7.10 Resignation and Removal; Appointment of Successor.

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

- **(b)** In case at any time any one of the following shall occur:
- (i) the Trustee shall fail to comply with the provisions of Section 7.08 after written request therefor by the Company or by any Securityholder who has been a bona fide holder of a Security or Securities for at least six months; or
- (ii) the Trustee shall cease to be eligible in accordance with the provisions of Section 7.09 and shall fail to resign after written request therefor by the Company or by any such Securityholder; or
- (iii) the Trustee shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or commence a voluntary bankruptcy proceeding, or a receiver of the Trustee or of its property shall be appointed or consented to, or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation;

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

- **(c)** The holders of a majority in aggregate principal amount of the Securities of any series at the time Outstanding may at any time remove the Trustee with respect to such series by so notifying the Trustee and the Company and may appoint a successor Trustee for such series with the consent of the Company.
- **(d)** Any resignation or removal of the Trustee and appointment of a successor trustee with respect to the Securities of a series pursuant to any of the provisions of this Section shall become effective upon acceptance of appointment by the successor trustee as provided in Section 7.11.
- **(e)** Any successor trustee appointed pursuant to this Section may be appointed with respect to the Securities of one or more series or all of such series, and at any time there shall be only one Trustee with respect to the Securities of any particular series.

Section 7.11 Acceptance of Appointment By Successor.

- (a) In case of the appointment hereunder of a successor trustee with respect to all Securities, every such successor trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on the request of the Company or the successor trustee, such retiring Trustee shall, upon payment of its charges, execute and deliver an instrument transferring to such successor trustee all the rights, powers, and trusts of the retiring Trustee and shall duly assign, transfer and deliver to such successor trustee all property and money held by such retiring Trustee hereunder.
- (b) In case of the appointment hereunder of a successor trustee with respect to the Securities of one or more (but not all) series, the Company, 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, to the extent contemplated by such supplemental indenture, the property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor trustee relates.

- **(c)** Upon request of any such successor trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor trustee all such rights, powers and trusts referred to in paragraph (a) or (b) of this Section, as the case may be.
- (d) No successor trustee shall accept its appointment unless at the time of such acceptance such successor trustee shall be qualified and eligible under this Article.
- **(e)** Upon acceptance of appointment by a successor trustee as provided in this Section, the Company shall transmit notice of the succession of such trustee hereunder by mail, first class postage prepaid, to the Securityholders, as their names and addresses appear upon the Security Register. If the Company fails to transmit such notice within ten days after acceptance of appointment by the successor trustee, the successor trustee shall cause such notice to be transmitted at the expense of the Company.

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

Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to 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 mail 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) transmit by mail, first class postage prepaid, a notice, setting forth in general terms the substance of such supplemental indenture, to the Securityholders of all series affected thereby .as their names and addresses appear upon the Security Register. Any failure of the Company to mail, or cause the mailing of, such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture.

ARTICLE 10

SUCCESSOR ENTITY

Section 10.01 Company May Consolidate, Etc.

Nothing contained in this Indenture shall prevent any consolidation or merger of the Company with or into any other Person (whether or not affiliated with the Company) or successive consolidations or mergers in which the Company or its successor or successors shall be a party or parties, or shall prevent any sale, conveyance, transfer or other disposition of the property of the Company or its successor or successors as an entirety, or substantially as an entirety, to any other 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 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 except for the provisions of Sections 2.03, 2.05, 2.07, 4.01, 4.02, 4.03 and 7.10, that shall survive until the date of maturity or redemption date, as the case may be, and Sections 7.06 and 11.05, that shall survive to such date and thereafter, and the Trustee, on demand of the Company and at the cost and expense of the Company shall execute proper instruments acknowledging satisfaction

Section 11.02 Discharge of Obligations.

If at any time all such Securities of a particular series not heretofore delivered to the Trustee for cancellation or that have not become due and payable as described in Section 11.01 shall have been paid by the Company by depositing irrevocably with the Trustee as trust funds moneys or an amount of Governmental Obligations sufficient to pay at maturity or upon redemption all such Securities of that series not theretofore delivered to the Trustee for cancellation, including principal (and premium, if any) and interest due or to become due to such date of maturity or date fixed for redemption, as the case may be, and if the Company shall also pay or cause to be paid all other sums payable hereunder by the Company with respect to such series, then after the date such moneys or Governmental Obligations, as the case may be, are deposited with the Trustee the obligations of the Company under this Indenture with respect to such series shall cease to be of further effect except for the provisions of Sections 2.03, 2.05, 2.07, 4,01, 4.02, 4,03, 7.06, 7.10 and 11.05 hereof that shall survive until such Securities shall mature and be paid.

Thereafter, Sections 7.06 and 11.05 shall survive.

Section 11.03 Deposited Moneys to be Held in Trust.

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

Section 11.04 Payment of Moneys Held by Paying Agents.

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

Section 11.05 Repayment to Company.

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

ARTICLE 12

IMMUNITY OF INCORPORATORS, STOCKHOLDERS, OFFICERS AND DIRECTORS

Section 12.01 No Recourse.

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

ARTICLE 13

MISCELLANEOUS PROVISIONS

Section 13.01 Effect on Successors and Assigns.

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

Section 13.02 Actions by Successor.

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

Section 13.03 Surrender of Company Powers.

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

Section 13.04 Notices.

Except as otherwise expressly provided herein, any notice, request or demand that by any provision of this Indenture is required or permitted to be given, made or served by the Trustee, 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 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 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 Separability.

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

Section 13.12 Compliance Certificates.

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

Section 13.13 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.

ZIOPHARM ONCOLOGY, INC.

Ву:
Name:
Title:
[TRUSTEE], as Trustee
By:
Name:
Tielo

CROSS-REFERENCE TABLE (1)

ETABLE (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.

ZIOPHARM ONCOLOGY, INC.

AND

, AS WARRANT AGENT

FORM OF COMMON STOCK WARRANT AGREEMENT

DATED AS OF

ZIOPHARM ONCOLOGY, INC.

FORM OF COMMON STOCK WARRANT AGREEMENT

THIS COMMON STOCK WARRANT AGREEMENT (this "*Agreement*"), dated as of [—], between **ZIOPHARM ONCOLOGY, 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*").

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 \$0.001 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.

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 Warrant 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 Warrant 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 Certificates duly executed and delivered hereunder. The provisions 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 therefore,

- (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 he 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.
- **3.5 Notice To Warrantholders.** 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, Insert — 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.
- **(c)** 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.
- (d) 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.

(e) 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 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 Warrant 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, evide
- **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 Warrant 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 depositary, 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 Warrant 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 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 ZIOPHARM Oncology, Inc. One First Avenue, Parris Building 34, Navy Yard Plaza, Boston, Massachusetts 02129, 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 are exercisable.
- **6.7 Persons Having Rights Under Warrant 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 his Warrant Certificate for inspection by it.

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

By:	
Name:	
Title:	
ATTEST:	
COUNTERSIGNED [—], as Warrant Agent	
By:	
Name:	
Title:	
ATTEST:	

ZIOPHARM ONCOLOGY, INC., as Company

[SIGNATURE PAGE TO FORM OF COMMON STOCK 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 Warrants

[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 [—].

ZIOPHARM ONCOLOGY, INC. WARRANT CERTIFICATE REPRESENTING WARRANTS TO PURCHASE COMMON STOCK, PAR VALUE \$0.001 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 \$0.001 per share (the "Warrant Securities"), of ZIOPHARM Oncology, 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 Agreement, to all of which 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.

uthorized officers.		
Dated:		
	ZIOPHARM ONCOLO Company	OGY, INC. as
	Ву:	
	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 \$0.001 per share (the "*Warrant Securities*"), of ZIOPHARM Oncology, Inc. and represents that he 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 ZIOPHARM Oncology, 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 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 transf	fers 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 relates and appoints attorney [—] to transfer such right on the books of	of Warrant Securities] of ZIOPHARM Oncology, Inc. to which the within Warrant f 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 spec	cified on the face of the Warrant)
Signature Guaranteed	
	6.

ZIOPHARM ONCOLOGY, INC.

AND

, AS WARRANT AGENT

FORM OF PREFERRED STOCK WARRANT AGREEMENT

DATED AS OF

ZIOPHARM ONCOLOGY, INC.

FORM OF PREFERRED STOCK WARRANT AGREEMENT

THIS PREFERRED STOCK WARRANT AGREEMENT (this "Agreement"), dated as of [—], between ZIOPHARM ONCOLOGY, 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").

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] (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.

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 Warrant 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 Warrant 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 Certificates duly executed and delivered hereunder. The provisions 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] 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 [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 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) [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 he 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 the exercise of the 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 the exercise of the Warrants] other than the issuance of additional shares of [title of Preferred Stock purchasable through the exercise of the 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 the exercise of the 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.
- **3.5 Notice To Warrantholders**. 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 the exercise of the 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 the 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 the exercise of the Warrants] of record shall be entitled to exchange their shares of [title of Preferred Stock purchasable through the exercise 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, Insert — 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 the exercise of the 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 the exercise of the 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 the exercise of the Warrants], in either case as reported on the principal registered national securities exchange on which the [title of Preferred Stock purchasable through the exercise of the 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 the exercise of the 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 the exercise of the Warrants], as determined by the Board of Directors of the Company.

- (c) 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.
- (d) 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.
- **(e)** 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 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 Warrant 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, evide
- **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 Warrant 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 depositary, 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 Warrant 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 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 ZIOPHARM Oncology, Inc., One First Avenue, Parris Building 34, Navy Yard Plaza, Boston, Massachusetts 02129, 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 Warrant 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 his Warrant Certificate for inspection by it.

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

ZIOPHARM ONCOLOGY, INC. , as Company	
Ву:	
Name:	
Title:	
ATTEST:	
COUNTERSIGNED [—], as Warrant Agent	
Ву:	
Name:	
Title:	
ATTEST:	
	By: Name: Title: ATTEST: COUNTERSIGNED [—], as Warrant Agent By: Name: Title:

[SIGNATURE PAGE TO PREFERRED STOCK 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 [—].

ZIOPHARM ONCOLOGY, INC.
WARRANT CERTIFICATE REPRESENTING
WARRANTS TO PURCHASE
[TITLE OF WARRANT SECURITIES]

No. [—	-	—I '	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] (the "Warrant Securities"), of ZIOPHARM Oncology, 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 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.

${\bf IN~WITNESS~WHEREOF},$ the Company has caused this Warrant to be authorized officers.	e executed in its	s name and on its behalf by the facsim	ile signatures of its duly
Dated:			
		ZIOPHARM ONCOLOGY, INC., Company	as
		By:	
		Name:	
		Title:	
		ATTEST:	
		COUNTERSIGNED [—], as Warrant Agent	
		By:	
		Name:	
		Title:	
		ATTEST:	
	3		

[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] (the "Warrant Securities"), of ZIOPHARM Oncology, Inc. and represents that he 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 ZIOPHARM Oncology, 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:
Address:	Please Print
Audiess.	
(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).

Sy mail at:
Instructions as to form and delivery of Warrant Securities and, if applicable, Warrant Certificates evidencing Warrants for the number of Warrant Securities emaining unexercised — complete as appropriate.]

This Warrant may be exercised at the following addresses:

By hand at:

ASSIGNMENT

[Form of assignment to be executed if Warrant Holder desires to transfer Warrant]

(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 ZIOPHARM Oncology, 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:

Signature

(Signature must conform in all respects to name of holder as specified on the face of the Warrant)

ZIOPHARM ONCOLOGY, INC.

AND
, AS WARRANT AGENT
FORM OF DEBT SECURITIES
WARRANT AGREEMENT
DATED AS OF

ZIOPHARM ONCOLOGY, INC.

FORM OF DEBT SECURITIES WARRANT AGREEMENT

THIS DEBT SECURITIES WARRANT AGREEMENT (this "Agreement"), dated as of [—], between ZIOPHARM ONCOLOGY, 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").

WHEREAS, the Company has entered into an indenture dated as of [[—] (the "Senior Indenture"), with [—], as trustee (such trustee, and any successors to such trustee, herein called the "Senior Trustee"), providing for the issuance from time to time of its unsubordinated debt securities, to be issued in one or more series as provided in the Senior Indenture (the "Debt Securities");] [[—] (the "Subordinated Indenture"), with [—], as trustee (such trustee, and any successors to such trustee, herein called the "Subordinated Trustee"), providing for the issuance from time to time of its subordinated debt securities, to be issued in one or more series as provided in the Subordinated 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.

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 ANDDELIVERY 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 Warrant 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 Warrant 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 [Senior] [Subordinated] 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 Holders 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 [Senior] [Subordinated] 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 Reorgan
- 3.5 Notice to Warrantholders. 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] 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 Certificates 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 Warrant 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 depositary, 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 Warrant Agreement shall be deemed to prevent the Warrant Agent from acting as [Senior] [Subordinated] Trustee under the [Senior] [Subordinated] 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 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 ZIOPHARM Oncology, Inc., One First Avenue, Parris Building 34, Navy Yard Plaza, Boston, Massachusetts 02129, 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 Warrant 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 his Warrant Certificate for inspection by it.

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

ZIOPHARM ONCOLOGY, INC., as Company
By:
Name:
Title:
ATTEST:
COUNTERSIGNED
[—], as Warrant Agent
By:
Name:
Title:
ATTEST:
111 120 17

[SIGNATURE PAGE TO 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 [—].

ZIOPHARM ONCOLOGY, 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 ZIOPHARM Oncology, Inc. (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, 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 add

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 "Senior Indenture"), between the Company and [—], as trustee (such trustee, and any successors to such trustee, the "Senior Trustee")] [dated as of [—], (the "Subordinated Indenture"), between the Company and [—], as trustee (such trustee, and any successors to such trustee, the "Subordinated Trustee")] and will be subject to the terms and provisions contained in the Warrant Debt Securities and in the Indenture. Copies of the [Senior] [Subordinated] Indenture, including the form of the Warrant Debt Securities, are on file at the corporate trust office of the [Senior] [Subordinated] 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.

l:		
		ZIOPHARM ONCOLOGY, INC., as Company
		Ву:
		Name:
		Title:
		ATTEST:
		COUNTERSIGNED [—], as Warrant Agent
		Ву:
		Name:
		Title:
		ATTEST:
	14	

[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, represented by this Warrant Certificate, to purchase \$[—] principal amount of the [Title of Warrant Debt Securities] (the "Warrant Debt Securities") of ZIOPHARM Oncology, Inc. and represents that he 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 ZIOPHARM Oncology, 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 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 sr	ecified on the face of this Warrant Certificate and must bear a signature guarantee by a FINR

(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 Debt Securities and, if applicable, Warrant Certificates evidencing Warrants for the number of Warrant Debt 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 \$[—] aggregate pri Oncology, Inc. to which the within Warrant relates and appoints attorney to substitution in the premises. Dated:	-
	Signature
(Signature must conform in all respects to na	ame of holder as specified on the face of the Warrant)
Signature Guaranteed	



Marc A. Recht T: +1 617 937 2316 mrecht@cooley.com

February 2, 2015

ZIOPHARM Oncology, Inc. One First Avenue, Parris Building 34, Navy Yard Plaza Boston, Massachusetts 02129

Ladies and Gentlemen:

We have acted as counsel to ZIOPHARM Oncology, Inc., a Delaware corporation (the "*Company*"), in connection with its filing of a registration statement on Form S-3 (the "*Registration Statement*") under the Securities Act of 1933, as amended (the "*Securities Act*"). The Company has provided us with a prospectus (the "*Prospectus*"), which forms part of the Registration Statement. The Prospectus provides that it will be supplemented in the future by one or more prospectus supplements (each, a "*Prospectus Supplement*"). The Registration Statement, including the Prospectus as supplemented from time to time by one or more Prospectus Supplements, will provide for the registration by the Company of:

- shares of common stock, \$0.001 par value per share, of the Company (the "Common Stock");
- shares of preferred stock, \$0.001 par value per share, of the Company (the "Preferred Stock");
- debt securities, in one or more series (the "Debt Securities"), which may be issued pursuant to an indenture to be dated on or about the date of the
 first issuance of Debt Securities thereunder, by and between a trustee to be selected by the Company (the "Trustee") and the Company, in the
 form filed as Exhibit 4.4 to the Registration Statement (the "Indenture"); and
- warrants to purchase Common Stock, Preferred Stock, or Debt Securities (the "*Warrants*"), which may be issued under warrant agreements, to be dated on or about the date of the first issuance of the applicable Warrants thereunder, by and between a warrant agent to be selected by the Company (the "*Warrant Agent*") and the Company, in the forms filed as Exhibits 4.5, 4.6 and 4.7 to the Registration Statement (each, a "*Warrant Agreement*").

The Common Stock, the Preferred Stock, the Debt Securities and the Warrants are collectively referred to herein as the "*Securities*." The Securities are being registered for offering and sale from time to time pursuant to Rule 415 under the Securities Act.

In connection with this opinion, we have examined and relied upon the originals, or copies certified to our satisfaction, of such records, documents, certificates, opinions, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently sought to verify such matters.

In rendering this opinion, 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 effectiveness of such documents. With respect to our opinion as to the Common Stock, we have assumed that, at the time of issuance and sale, a sufficient number of shares of Common Stock are authorized and available for issuance and that the consideration for the issuance and sale of the Common Stock (or Preferred Stock or Debt Securities convertible into Common Stock or 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 are authorized, designated and available for issuance and that the consideration for the issuance and sale of the Preferred Stock (or Debt Securities convertible into Preferred Stock or 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 Debt Securities or Warrants offered under the Registration Statement, and the related Indenture or Warrant Agreement, as applicable, will be executed in the forms filed as exhibits to the Registration Statement or incorporated by reference therein. We have also assumed that (i) with respect to any 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 Debt Securities or Warrants will be valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles

Our opinion herein is expressed solely with respect to the federal laws of the United States, the General Corporation Law of the State of Delaware (the "*DGCL*") and, as to the Debt Securities and Warrants constituting valid and legally binding obligations of the Company, solely with respect to the laws of the State of New York and the DGCL. Our opinion is 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 law, rule or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that:

1. With respect to the Common Stock offered under the Registration Statement, provided that (i) the Registration Statement and any required post-effective amendment thereto have all 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 amended and restated certificate of incorporation (the "Certificate of Incorporation") and amended and restated 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 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.

- With respect to the Preferred Stock offered under the Registration Statement, provided that (i) the Registration Statement and any required post-effective amendment thereto have all 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; (iii) the terms of the shares of Preferred Stock and their issuance and sale do not violate any applicable law, are in conformity with the Certificate of Incorporation and 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 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.
- With respect to any series of the Debt Securities issued under the Indenture and offered under the Registration Statement, provided that (i) the 3. Registration Statement and any required post-effective amendment thereto have all 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 Indenture has been duly authorized by the Company and the Trustee by all necessary corporate action; (iii) the Indenture in substantially the form filed as an exhibit to the Registration Statement, has been duly executed and delivered by the Company and the Trustee; (iv) the terms of the Debt Securities and their issuance and sale have been duly authorized by the Company by all necessary corporate action; (v) 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, the Prospectus and the related Prospectus Supplement(s) so as not to violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company, so as to be in conformity with the Certificate of Incorporation and Bylaws, and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (vi) the Debt Securities have been duly executed and delivered by the Company and authenticated by the Trustee pursuant to the Indenture and delivered against payment therefor, then the Debt Securities, when issued and sold in accordance with the Indenture and a duly authorized, executed and delivered purchase, underwriting or similar agreement, or upon exercise of any Warrants under the applicable Warrant Agreement, will be valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforcement thereof may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance.
- 4. With respect to the Warrants issued under a Warrant Agreement and offered under the Registration Statement, provided that (i) the Registration Statement and any required post-effective amendment thereto have all 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 Warrant Agreement has been duly authorized by the Company and the Warrant Agent by all necessary corporate action; (iii) the Warrant Agreement has been duly executed and delivered by the Company and the Warrant Agent; (iv) the terms of the Warrants and of their issuance and sale have been duly authorized by the Company by all necessary corporate action; (v) the terms of the Warrants and their issuance and sale have been duly established in conformity with the Warrant Agreement and as described in

the Registration Statement, the Prospectus and the related Prospectus Supplement(s) so as not to violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company, so as to be in conformity with the Certificate of Incorporation and Bylaws, and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (vi) the Warrants have been duly executed and delivered by the Company and authenticated by the Warrant Agent pursuant to the Warrant Agreement and delivered against payment therefor, then the Warrants, when issued and sold in accordance with the Warrant Agreement and a duly authorized, executed and delivered purchase, underwriting or similar agreement, will be valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforcement thereof may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the Prospectus which forms part of the Registration Statement. This opinion is expressed as of the date hereof, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable law.

Sincerely,

COOLEY LLP

By: /s/ Marc A. Recht

Marc A. Recht

ZIOPHARM Oncology, Inc. Computation of Ratio of Earnings to Fixed Charges and to Combined Fixed Changes and Preference Dividends

						Nine Months Ended
		Year Ended December 31,			September 30,	
\$ In Thousands, Except Ratio	2009	2010	2011	2012	2013	2014
Fixed charges:						
Interest Expense	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Amortized premiums discounts and capitalized expenses related to						
indebtedness						
	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u> </u>
Earnings (loss):						
Net income (loss) before tax benefit (provision)	\$(7,649)	\$(32,670)	\$(63,778)	\$(96,132)	\$(57,107)	\$ (21,380)
Add fixed charges						
	\$(7,649)	\$(32,670)	\$(63,778)	\$(96,132)	\$(57,107)	\$ (21,380)
Ratio of earnings to fixed charges	*	*	*	*	*	*
Deficiency of earnings to fixed charges	\$(7,649)	\$(32,670)	\$(63,778)	\$(96,132)	\$(57,107)	\$ (21,380)

^{*} Less than one to one coverage

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-3 of ZIOPHARM Oncology, Inc. of our report dated March 3, 2014, relating to our audit of the financial statements and internal control over financial reporting, which appears in the Annual Report on Form 10-K of ZIOPHARM Oncology, Inc. for the year ended December 31, 2013.

We also consent to the reference to our Firm under the caption "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ McGladrey LLP

Boston, MA February 2, 2015