

ZIOPHARM ONCOLOGY INC

Form S-3

March 01, 2007

As filed with the Securities and Exchange Commission March 1, 2007

Registration No. 333-

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

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

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**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.)

**1180 Avenue of the Americas, 19th Floor**  
**New York, NY 10036**  
**(646) 214-0700**

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

**Dr. Jonathan Lewis**  
**Chief Executive Officer**  
**ZIOPHARM Oncology, Inc.**  
**1180 Avenue of the Americas, 19th Floor**  
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service)

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**Approximate date of proposed sale to the public:** From time to time after the effective date of this Registration Statement, as shall be determined by the selling stockholders identified herein.

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

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

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

registration statement for the same offering. o \_\_\_\_\_

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. o \_\_\_\_\_

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. o

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. o

### CALCULATION OF REGISTRATION FEE

Title Of Each Class Of Securities To Be Registered	Amount To Be Registered (1)(2)	Proposed Maximum Offering Price Per Unit(3)	Proposed Maximum Aggregate Offering Price(3)	Amount Of Registration Fee(3)
Common stock, par value \$.001 per share	7,269,366 shares	\$ 5.53	\$ 40,199,593.98	\$ 1,234.13

(1) There is also being registered hereunder an indeterminate number of additional shares of common stock as shall be issuable pursuant to Rule 416 to prevent dilution resulting from stock splits, stock dividends or similar transactions.

(2) Includes 1,359,317 shares of common stock issuable upon the exercise of outstanding warrants.

(3) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457 of the Securities Act based upon a \$5.53 per share average of high and low prices of the Registrant's common stock on the NASDAQ Capital Market on February 23, 2007.

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

**A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This prospectus shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state.**

Subject to completion, dated March 1, 2007

**OFFERING PROSPECTUS**

**ZIOPHARM Oncology, Inc.**

**7,269,366 Shares**

**Common Stock**

The selling stockholders identified on pages 17-18 of this prospectus are offering on a resale basis a total of 7,269,366 shares of our common stock, of which 1,359,317 shares are issuable upon the exercise of outstanding warrants. We will not receive any proceeds from the sale of these shares by the selling stockholders.

Our common stock is listed on the NASDAQ Capital Market under the symbol "ZIOP." On February 23, 2007, the last sale price for our common stock as reported on the NASDAQ Stock Market, Inc. was \$5.53.

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**The securities offered by this prospectus involve a high degree of risk.  
See "Risk Factors" beginning on page 6.**

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

The date of this Prospectus is           , 2007.

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## PROSPECTUS SUMMARY

*This summary provides a brief overview of the key aspects of this offering. Because it is only a summary, it does not contain all of the detailed information contained elsewhere in this prospectus or in the documents incorporated by reference into this prospectus or included as exhibits to the registration statement that contains this prospectus. Accordingly, you are urged to carefully review this prospectus (including all documents incorporated by reference into this prospectus) in its entirety.*

### **Our Company**

We are a biopharmaceutical company that is seeking to develop and commercialize a diverse, risk-sensitive portfolio of in-licensed cancer drugs that address unmet medical needs. Our principal focus is on the licensing and development of proprietary drug candidate families that are related to cancer therapeutics that are already on the market or in development. We believe this strategy will result in lower risk and expedited drug development programs. We expect to commercialize our products on our own in North America but recognize that promising clinical trial results in cancers with a high incidence and prevalence might also be addressed in a commercial partnership with another company with the requisite financial resources. Currently, we are in phase I and/or II studies for three product candidates identified as ZIO-101, ZIO-201, and ZIO-301. We intend to continue with clinical development to register ZIO-101 for the treatment of advanced myeloma, ZIO-201 to treat advanced sarcoma and ZIO-301 for an as yet undetermined solid tumor indication. We will continue with preclinical study of our products and back-up candidates, dosing forms and schedules, while evaluating additional later stage clinical candidates.

None of our product candidates have been approved by the United States Food and Drug Administration (the “FDA”) or any other regulatory body. Further, we have not received any commercial revenues to date, and until we receive the necessary approvals from the FDA or a similar foreign regulatory authority, we will not have any commercial revenues.

### **Our Product Candidates**

#### *ZIO-101*

*General.* ZIO-101 is an organic arsenic compound covered by issued U.S. patents and U.S. and international applications. A commercially available inorganic arsenic (arsenic trioxide (Trisenox<sup>®</sup>) or ATO) has been approved for the treatment of acute promyelocytic leukemia (APL) and is on the compendia listing for the therapy of multiple myeloma as well as having been studied for the treatment of various other cancers. ATO has been shown to be toxic to the heart, nerves and liver, limiting its use as a broad anti-cancer agent. Our preclinical studies demonstrated that ZIO-101 is considerably less toxic than ATO, particularly with regard to heart toxicity. In phase I testing, significantly higher doses of ZIO-101 have been safely administered than the approved dose of Trisenox<sup>®</sup>, confirming preclinical findings.

*In vitro* testing of ZIO-101 using the National Cancer Institute’s human cancer cell panel detected activity against cell lines derived from multiple cancers including lung, colon, brain, melanoma, ovarian and kidney cancer. Moderate activity was detected against breast and prostate cancer. In addition to cell lines derived from solid tumors, *in vitro* testing in both the National Cancer Institute’s cancer cell panel and *in vivo* testing in a leukemia animal model demonstrated substantial activity against hematological cancers (cancers of the blood and blood-forming tissues) such as leukemia, lymphoma, myelodysplastic syndromes and multiple myeloma. In addition, ZIO-101 has potent anti-angiogenic activity as demonstrated in *in vitro* as well as *in vivo* studies.

In a murine leukemia model, ZIO-101 demonstrated oral activity comparable to that achieved with systemic administration. Subsequent pharmacokinetic studies in dogs established oral bioavailability comparable to IV administration. Oral administration of an effective cancer drug would allow prolonged and potentially more effective

dosing regimens.

*Clinical Lead Indication: Multiple Myeloma.* We expect that advanced myeloma, a hematologic cancer, will be the target indication for our first regulatory approval for ZIO-101. Myeloma is a group of plasma cell cancers associated with the overproduction of monoclonal immunoglobulin (M-protein). Each year approximately 17,000 patients are diagnosed with multiple myeloma in the United States, while 65,000 patients are living with the disease. Primary treatment for myeloma is chemotherapy. Approximately 15-20% of patients with myeloma are resistant to aggressive primary treatment. Patients that initially respond to treatment usually develop resistance to primary therapy after several years. The average survival of patients with progressive or resistant disease is three to four years.

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The standard of care for progressive or resistant multiple myeloma is in transition. Velcade<sup>®</sup> and Revlimid<sup>®</sup> are approved to treat patients with myeloma that have had at least one prior therapy. Recent clinical trials offer evidence supporting the use of these therapies either alone or in combination with other agents. However, neither treatment is universally effective. The ongoing need for new and non-cross resistant therapies for the treatment of myeloma suggests that as new therapeutic options come to market, the market will continue to grow. Penetration into the market for new agents is to a large extent independent of the number of therapies available, as most patients generally will fail all available agents at some point. A more rapid market penetration can be expected for new therapies with a wide therapeutic window and where efficacy is equal to or greater than currently available agents.

*Clinical Development Plan for ZIO-101.* ZIO-101 safety, pharmacokinetics, and drug activity continue to be evaluated in phase I studies. These trials have involved different patient populations, namely solid tumors, multiple myeloma, and hematologic malignancies. One study is completed (multiple myeloma) while two studies are nearing completion. In summary, ZIO-101 has shown single agent activity in hematologic cancers (including multiple myeloma) and solid tumors. Phase II clinical trials in each of these populations have been initiated. In addition, a number of additional studies are planned, including a phase I trial utilizing an oral formulation of ZIO-101.

Upon the completion of the phase II multiple myeloma program in 2007, the Company anticipates having an end of phase II meeting with the FDA to discuss a Fast Track development program for advanced myeloma under Special Protocol Assessment (SPA).

#### *ZIO-201*

*General.* ZIO-201, or isophosphoramidate mustard (IPM), is a proprietary active metabolite of the pro-drug ifosfamide. A number of patent applications have been filed in the U.S. and internationally. Ifosfamide, as well as the related drug cyclophosphamide, are alkylating agents. Cyclophosphamide is believed to be the most widely used alkylating agent in cancer therapy. Ifosfamide has been shown to be effective at high doses by itself, or in combination with other agents, in treating sarcoma and lymphoma and it is approved in the U.S for the treatment of testicular cancer. Although ifosfamide-based treatment generally represents the standard of care for sarcoma, it is not licensed for this indication by the FDA.

Our preclinical studies have shown that, in animal and laboratory models, ZIO-201 evidences activity against leukemia and solid tumors. These studies also indicate that ZIO-201 has a better pharmacokinetic and safety profile than ifosfamide or cyclophosphamide, offering the possibility of safer and more efficacious therapy with ZIO-201.

In addition to IPM, other metabolites of ifosfamide are produced including acrolein, which is toxic to the kidneys and bladder. The presence of acrolein mandates the administration of a protective agent called mesna, which is inconvenient to use and expensive. Chloroacetaldehyde, another metabolite of ifosfamide, is toxic to the central nervous system, causing “fuzzy brain” syndrome for which there is currently no protective measure. Similar toxicity concerns pertain to high-dose cyclophosphamide, which is widely used in bone marrow and blood cell transplantation. Because ZIO-201 is independently active—without acrolein or chloroacetaldehyde metabolites—the Company believes that the administration of ZIO-201 (without the administration of mesna) may avoid many of the toxicities of ifosfamide without compromising efficacy.

In addition to anticipated lower toxicity, ZIO-201 may have other advantages over ifosfamide and cyclophosphamide. ZIO-201 cross-links DNA differently than the active metabolite of cyclophosphamide, resulting in a different activity profile. Moreover, in some preclinical studies, ZIO-201 shows activity in cisplatin-, ifosfamide- and/or cyclophosphamide-resistant cancer cells. In xenografts of human breast cancer and in a mouse leukemia model, ZIO-201 has anti-tumor activity when administered orally, a potential additional advantage over ifosfamide and cyclophosphamide.





*Clinical Lead Indications: Sarcomas.* Sarcomas are cancers of the bone, cartilage, fat, muscle, blood vessels, or other connective or supportive tissue. There are more than 50 histological or tissue types of soft tissue sarcomas. The prognosis for patients with soft tissue sarcomas depends on several factors, including the patient's age, size of the primary tumor, histological grade, and stage of the tumor. Factors associated with a poorer prognosis include age greater than 60 years, tumors larger than five centimeters, and high-grade histology. While small, low-grade tumors are usually curable by surgery alone; higher-grade or larger sarcomas are associated with higher local treatment failure rates and increased metastatic potential.

ZIO-201 may be a useful agent that, either alone or in combination with other agents, can deliver therapeutic activity with fewer side effects of the type that have been associated with ifosfamide. In the United States, ifosfamide is regularly included in combination regimens for the treatment of sarcomas, testicular cancers, head and neck cancer and some types of non-Hodgkin's lymphomas and other solid tumors. The Company believes that ZIO-201 may be able to replace ifosfamide in any or all of these combination protocols.

*Clinical Development Plan for ZIO-201.* ZIO-201 has now been evaluated in two phase I studies, one in advanced cancers and one in advanced sarcoma. In both phase I trials, ZIO-201 was given without mesna. There was no hemorrhagic cystitis or CNS-toxicity. Bone marrow toxicity was modest. One subject with mesothelioma had stable disease >13 months and two patients with sarcoma had a response of at least stable disease.

A phase II trial in advanced sarcoma has been initiated while the phase I study in advanced cancers continues. A number of additional studies are planned for 2007 including a phase II study in lymphoma, a phase I/II study in pediatric malignancies, and a possible phase I study with an oral formulation. Other routes of administration where alkylating agents are active are being evaluated i.e., intrathecal and intraperitoneal.

The Company anticipates evaluating the phase II sarcoma study in the second half of 2007, followed by an end of phase II meeting with the FDA to discuss a Fast Track development program for advanced sarcoma under an SPA.

### *ZIO-301*

*General.* ZIO-301 (indibulin) is a novel small molecular weight tubulin polymerization inhibitor that has been acquired from Baxter Healthcare. The microtubule component, tubulin, is one of the best established anti-tumor targets in the treatment of cancer today. A number of other tubulin targeting drugs are currently on the market, including paclitaxel (Taxol<sup>®</sup>) and the vinca alkaloids (vincristine, vinorelbine). The use of these drugs is associated with important toxicities, notably peripheral neuropathy. In contrast, no peripheral neurotoxicity has been observed with ZIO-301 either in preclinical testing or in phase I testing to date. In addition, its activity as an oral formulation could offer significant patient convenience, since to date no oral formulations of paclitaxel or related compounds have been developed.

ZIO-301 has a different pharmacological profile from other tubulin inhibitors currently on the market (paclitaxel, docetaxel, vinorelbine, vincristine and vinblastin). It binds to a unique site on tubulin and is active in multi-drug (MDR-1, MRP-1) and taxane resistant tumors. ZIO-301 binding causes destabilization of microtubules *in vitro*, an effect similar to that of the vinca alkaloid family or colchicine, but opposite to that of paclitaxel and related drugs.

Testing of ZIO-301 for *in vitro* growth inhibitory activity against a panel of human and rodent tumor-derived cell lines revealed that the drug candidate is active in a broad spectrum of cell lines of different organ origin. *In vivo*, ZIO-301 is active in a number of xenograft and rodent tumor models. Its unique pharmacodynamic properties in preclinical studies and its excellent safety profile observed so far in the ongoing phase I study warrants further evaluation in the clinic.

*Potential Lead Indications for ZIO-301.* Bladder, head & neck, prostate, colorectal, renal. At the current time, the Company anticipates pursuing a Fast Track development program in a niche indication following the completion of

phase II testing that would initiate this year. Registration in one of these indications would then be followed by label expansion trials that will have been already initiated in anticipation of registration. In addition, the development of an IV formulation could further expand the market opportunity.

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*Clinical Development Plan for ZIO-301.* A phase I study is currently underway in the Netherlands with ZIO-301 to evaluate safety, pharmacokinetics (PK), maximum tolerated dose (MTD) and dose limiting toxicity (DLT) in patients with advanced solid tumors. MTD has not yet been reached in the phase I study. Drug activity has been observed in patients with several histologic subtypes. The clinical regulatory strategy is to include a phase II study of ZIO-301 in the United States in 2007.

## **Our History**

We were 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 were 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 Easy Web was the legal acquirer in the transaction, ZIOPHARM, Inc. became the registrant with the Securities and Exchange Commission because under generally accepted accounting principles the transaction was accounted for as a reverse acquisition. Accordingly, the historical financial statements of ZIOPHARM, Inc. have become our historical financial statements.

## **Our Corporate and Business Offices**

Our corporate office is located at 1180 Avenue of the Americas, 19th Floor, New York, NY 10036, and our telephone number is (646) 214-0700. Our business and development operations are located in Charlestown, Massachusetts. Our internet site is [www.ziopharm.com](http://www.ziopharm.com). None of the information on our internet site is part of this prospectus.

## **Recent Developments**

### **February 2007 Financing**

On February 23, 2007, we issued and sold in a private placement transaction an aggregate of 5,910,049 shares of our common stock at a price of \$5.225 per share. In addition to the shares of common stock, we also issued to each investor a five-year warrant to purchase, at an exercise price of \$5.75 per share, an additional number of shares of our common stock equal to 20 percent of the shares purchased by such investor in the offering. In the aggregate, these warrants entitle investors to purchase an additional 1,182,015 shares of our common stock. The total gross proceeds resulting from the sale of these shares and warrants was approximately \$30.9 million, before deducting selling commissions and expenses.

We engaged Oppenheimer & Co. Inc., Paramount BioCapital, Inc. and Griffin Securities, Inc. as co-placement agents in connection with the offering. In consideration with the offering, we paid aggregate cash commissions and fees of approximately \$1.9 million and issued five-year placement agent warrants to purchase an aggregate of 177,302 shares (three percent of the shares sold in the private placement) at an exercise price of \$5.75 per share.

The shares being offered hereby are comprised of the 5,910,049 shares of common stock and the 1,182,015 shares issuable upon exercise of the warrants issued to the investors in the private placement, as well as the 177,302 shares issuable upon exercise of the placement agent warrants.

## **Risk Factors**

As with most pharmaceutical product candidates, the development of ZIO-101, ZOI-201 and ZIO-301 is subject to numerous risks, including the risk of delays in or discontinuation of development from lack of financing, inability to obtain necessary regulatory approvals to market the products, unforeseen safety issues relating to the products and dependence on third party collaborators to conduct research and development of the products. Because we are a development stage company with a limited history of operations, we are also subject to many risks associated with early-stage companies. For a more detailed discussion of the risks you should consider before purchasing shares of our common stock, you are urged to carefully review and consider the section entitled “Risk Factors” beginning on page 6 of this prospectus.

**The Offering**

The selling stockholders identified on pages 17-18 of this prospectus are offering on a resale basis a total of 7,269,366 shares of our common stock, of which 1,359,317 shares are issuable upon the exercise of outstanding warrants.

Common stock offered	7,269,366 shares
Common stock outstanding before the offering <sup>(1)</sup>	21,182,948 shares
Common stock outstanding after the offering <sup>(2)</sup>	22,542,265 shares
Common Stock NASDAQ Capital Market symbol	ZIOP

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(1) Based on the number of shares outstanding as of February 26, 2007, not including 7,038,628 shares issuable upon exercise of various warrants and options to purchase common stock.

(2) Assumes the issuance of all shares offered hereby that are issuable upon exercise of outstanding warrants.

## RISK FACTORS

*An investment in our common stock is very risky. You may lose the entire amount of your investment. Prior to making an investment decision, you should carefully review this entire prospectus and consider the following risk factors:*

### **Risks Related to our Business**

*We may not be able to commercialize any products, generate significant revenues or attain profitability.*

We have never generated revenue and have incurred significant net losses in each year since our inception. For the year ended December 31, 2006, we had a net loss of \$17.9 million and we had incurred approximately \$33.2 million of cumulative net losses since our inception in 2003. We expect to continue to incur significant operating and capital expenditures and anticipate that our expenses will increase substantially in the foreseeable future as we:

- Continue to undertake preclinical development and clinical trials for product candidates;

- Scale up the formulation and manufacturing of our product candidates;

- Scale up the formulation and manufacturing of our product candidates;

- Seek regulatory approvals for product candidates;

- Implement additional internal systems and infrastructure; and

- Hire additional personnel.

Because we expect to incur losses for the foreseeable future, we will need to generate significant revenues in order to achieve and maintain profitability. Even if we succeed in developing and commercializing one or more of our product candidates, which success is not assured, we may not be able to generate significant revenues. If we do generate significant revenues, we may never achieve or maintain profitability. Our failure to achieve or maintain profitability could negatively impact the trading price of our common stock.

*If we are not able to successfully develop and commercialize our product candidates, we may not generate sufficient revenues to continue our business operations.*

To date, none of our product candidates have been approved for commercial sale in any country. The process to develop, obtain regulatory approval for and commercialize potential drug candidates is long, complex and costly. Until and unless we receive approval from the FDA and/or other regulatory authorities for our product candidates, we cannot sell our drugs and will not have product revenues. Even if we obtain regulatory approval for one or more of our product candidates, if we are unable to successfully commercialize our products, we may not be able to earn sufficient revenues to continue our business without raising significant additional capital, which may not be available.

*We may need to raise additional capital to fund our operations. If we are unable to raise additional capital when needed, we may have to discontinue our product development programs. The manner in which we raise any additional funds may affect the value of your investment in our common stock.*

As of December 31, 2006, we had incurred approximately \$33.2 million of cumulative net losses and had approximately \$28.4 million of cash, cash equivalents, and short-term investments. In February 2007, we completed an offering of common stock and warrants in which we received proceeds of approximately \$29.0 million after paying cash commissions, fees and offering expenses. Currently, we expect that we will have sufficient cash to fund our operations late into the fourth quarter of 2008. Although we expect our cash on-hand to fund our operations late into

the fourth quarter of 2008, changes may occur that would consume our existing capital prior to that time, including the progress of our research and development efforts, changes in governmental regulation and acquisitions of additional product candidates.

Currently, we have no committed sources of additional capital. We do not know whether additional financing will be available on terms favorable to us when needed, if at all. If we fail to advance our current product candidates to later stage clinical trials, successfully commercialize one or more of our product candidates, or acquire new product candidates for development, we may have difficulty obtaining additional financing. To the extent that we raise additional capital by issuing equity securities, our stockholders may experience dilution. We may grant future investors rights superior to those of our common stockholders. If we raise additional funds through collaborations and licensing arrangements, it may be necessary to relinquish some rights to our technologies, product candidates or products, or grant licenses on terms that are not favorable to us. If we raise additional funds by incurring debt, we could incur significant interest expense and become subject to covenants in the related transaction documentation that could affect the manner in which we conduct our business.

If we do not succeed in raising additional funds on acceptable terms, we may be unable to complete planned preclinical and clinical trials or obtain approval of any product candidates from the FDA and other regulatory authorities. In addition, we could be forced to discontinue product development, reduce or forego sales and marketing efforts or forego attractive business opportunities, or discontinue our operations altogether.

***We have a limited operating history upon which to base an investment decision.***

We are a development-stage company that was incorporated in September 2003. To date, we have not demonstrated an ability to perform the functions necessary for the successful commercialization of any product candidates. The successful commercialization of any product candidates will require us to perform a variety of functions, including:

- Continuing to undertake preclinical development and clinical trials;
- Participating in regulatory approval processes;
- Formulating and manufacturing products; and
- Conducting sales and marketing activities.

Our operations have been limited to organizing and staffing our Company, acquiring, developing and securing our proprietary product candidates, undertaking preclinical trials and clinical trials of our product candidates ZIO-101, ZIO-201 and ZIO-301, and manufacturing ZIO-101 and ZIO- 201 and, in the near future, ZIO-301. These operations provide a limited basis for you to assess our ability to commercialize our product candidates and the advisability of investing in our securities.

***We intend to acquire rights to develop and commercialize additional product candidates. Because we currently neither have nor intend to establish internal research capabilities, we are dependent upon pharmaceutical and biotechnology companies and academic and other researchers to sell or license us their product candidates. The success of our strategy depends upon our ability to identify, select and acquire pharmaceutical product candidates.***

Proposing, negotiating and implementing an economically viable product acquisition or license is a lengthy and complex process. We compete for partnering arrangements and license agreements with pharmaceutical, biopharmaceutical and biotechnology companies, many of which have significantly more experience than us and have significantly more financial resources than we do. Our competitors may have stronger relationships with certain third parties with whom we are interested in partnering, such as academic research institutions, and may, therefore, have a competitive advantage in entering into partnering arrangements with those third parties. We may not be able to acquire rights to additional product candidates on terms that we find acceptable, or at all.

We expect that any product candidate to which we acquire rights will require significant additional development and other efforts prior to commercial sale, including extensive clinical testing and approval by the FDA and applicable foreign regulatory authorities. All product candidates are subject to the risks of failure inherent in pharmaceutical product development, including the possibility that the product candidate will not be shown to be sufficiently safe or effective for approval by regulatory authorities. Even if our product candidates are approved, they may not be manufactured or produced economically or commercialized successfully. If we are unable to successfully manage our growth, our business may be harmed.

In the future, if we are able to advance our product candidates to the point of, and thereafter through, clinical trials, we will need to expand our development, regulatory, manufacturing, marketing and sales capabilities or contract with third parties to provide these capabilities. Any future growth will place a significant strain on our management and on our administrative, operational and financial resources. Our future financial performance and our ability to commercialize our product candidates and to compete effectively will depend, in part, on our ability to manage any



future growth effectively. We actively evaluate additional product candidates to acquire for development. Such additional product candidates, if any, could significantly increase our capital requirements and place further strain on the time of our existing personnel, which may delay or otherwise adversely affect the development of our existing product candidates. We must manage our development efforts and clinical trials effectively, and hire, train and integrate additional management, administrative and sales and marketing personnel. We may not be able to accomplish these tasks, and our failure to accomplish any of them could prevent us from successfully growing our Company.

***We may not be able to successfully manage our growth.***

Our success will depend upon the expansion of our operations and the effective management of our growth, which will place a significant strain on our management and on our administrative, operational and financial resources. To manage this growth, we must expand our facilities, augment our operational, financial and management systems and hire and train additional qualified personnel. If we are unable to manage our growth effectively, our business may be harmed.

***Our business will subject us to the risk of liability claims associated with the use of hazardous materials and chemicals.***

Our contract research and development activities may involve the controlled use of hazardous materials and chemicals. Although we believe that our safety procedures for using, storing, handling and disposing of these materials comply with federal, state and local laws and regulations, we cannot completely eliminate the risk of accidental injury or contamination from these materials. In the event of such an accident, we could be held liable for any resulting damages and any liability could have a materially adverse effect on our business, financial condition and results of operations. In addition, the federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous or radioactive materials and waste products may require our contractors to incur substantial compliance costs that could materially adversely affect our business, financial condition and resu