REXAHN PHARMACEUTICALS, INC.
Form 10-K
March 31, 2010

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 10-K

þ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2009

OR

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission file number: 001-34079
Rexahn Pharmaceuticals, Inc.
(Exact name of registrant as specified in its charter)

Delaware	11-3516358
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
15245 Shady Grove Road, Suite 455 Rockville, Maryland	20850
(Address of principal executive offices)	(Zip Code)

(240) 268-5300
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $.0001 par value per share	NYSE AMEX

Securities registered pursuant to Section 12(g) of the Exchange Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No þ

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes o No þ

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes þ No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes o No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

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

Large accelerated filer o Accelerated filer o Non-accelerated filer o Smaller reporting company þ
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No þ

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter: As of June 30, 2009, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was $38,515,679 based on the closing price reported on NYSE Amex.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date:

Class	Outstanding at March 31, 2010
Common Stock, $.0001 par value per share	73,469,497 shares

DOCUMENTS INCORPORATED BY REFERENCE

Document	Parts Into Which Incorporated
Portions of the registrant's Proxy Statement for the Annual Meeting of Stockholders to be held on June 14, 2010	Part III

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Cautionary Statement Regarding Forward-Looking Statements. This Annual Report on Form 10-K contains statements (including certain projections and business trends) accompanied by such phrases as "believe", "estimate", "expect", "anticipate", "will", "intend" and other similar expressions, that are "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those projected as a result of certain risks and uncertainties, including but not limited to the following:

- our lack of profitability and the need for additional capital to operate our business;
- our ability to obtain the necessary U.S. and worldwide regulatory approvals for our drug candidates;
- successful and timely completion of clinical trials for our drug candidates;
- demand for and market acceptance of our drug candidates;
- the availability of qualified third-party researchers and manufacturers for our drug development programs;
- our ability to develop and obtain protection of our intellectual property; and
- other risks and uncertainties, including those set forth herein under the caption "Risk Factors" and those detailed from time to time in our filings with the Securities and Exchange Commission.

These forward-looking statements are made only as of the date hereof, and we undertake no obligation to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise. The safe harbors for forward-looking statements provided by the Private Securities Litigation Reform Act are unavailable to issuers of "penny stock." Our shares may be considered a penny stock and, as a result, the safe harbors may not be available to us.

REXAHN PHARMACEUTICALS, INC.

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PART I

Item 1. Description of Business

Any references to "we", "us", "our," the "Company" or "Rexahn" shall mean Rexahn Pharmaceuticals, Inc.

We are a clinical stage biopharmaceutical company developing and seeking to deliver novel cures for cancer and disorders of the central nervous system (CNS) to patients worldwide. Our mission is to discover and develop new medicines for diseases that plague patients with no effective cures, in particular high mortality cancers and CNS disorders. Our pipeline features three drug candidates in Phase II clinical trials this year and seven or more other drug candidates in pre-clinical development. Our strategy is to continue building a significant product pipeline of innovative medicines that we will commercialize alone or with pharmaceutical partners. For a description of our pipeline drug candidates, see "Our Pipeline Drug Candidates" in this Item 1.

Our principal corporate offices are located at 15245 Shady Grove Road, Suite 455, Rockville, Maryland 20850 in Maryland's I-270 technology corridor. Our telephone number is (240) 268-5300.

Rexahn currently has three clinical stage drug candidates: Archexin®, Serdaxin®, and ZoraxelTM. Our lead anticancer drug candidate, Archexin, is a first-in-class inhibitor of the protein kinase Akt. Akt plays critical roles in cancer cell proliferation, survival, angiogenesis, metastasis, and drug resistance. Archexin received "orphan drug" designation from the U.S. Food and Drug Administration (FDA) for five cancer indications (renal cell carcinoma (RCC), glioblastoma, ovarian cancer, stomach cancer and pancreatic cancer). The FDA orphan drug program enables expedited FDA review or approval process, seven years of marketing exclusivity after approval and tax incentives for clinical research.

Archexin is currently in Phase II clinical trials for the treatment of pancreatic cancer with patient enrollment underway. Archexin’s Phase II clinical trial protocol for the treatment of renal cell carcinoma (RCC) was accepted by the FDA, but issues with enrollment have delayed the trial. Such enrollment issues were primarily due to the fact that there is a small number of patients that have been diagnosed with RCC and such patients are often treated with surgery instead of drug therapies. After further consideration of the trial design and the limited number of patients, there was a reallocation of resources and Rexahn reprioritized Archexin to pursue studies in pancreatic cancer and ovarian cancer.

We are currently developing Serdaxin for the treatment of depression and neurodegenerative disorders. Rexahn has recently concluded a Phase IIa clinical trial for major depressive disorder (MDD) with Serdaxin, and is planning the Phase II clinical trial for Parkinson’s disease (PD). Unlike the current standard treatment that treats symptomatic conditions, Serdaxin is a disease modifying drug that protects neurons from damage that can lead to dysfunction and eventual neuronal death. Considering that over 60% of patients with Parkinson’s, Alzheimer’s, and Multiple Sclerosis also suffer from depression, Serdaxin’s effectiveness in treating depression and as a neuroprotective agent may make it a potential market leader for the treatment of neurological diseases. Serdaxin's Phase IIa clinical trial for depression is complete with positive results. A Phase IIb trial is under development.

We are developing Zoraxel for treatment of erectile dysfunction (ED). Zoraxel is a developmental stage drug for sexual dysfunction that directly modulates the sexual activity control center in the brain. Zoraxel enhances the action of serotonin and dopamine, brain signaling molecules that play a key role in three phases of male sexual activity: arousal, erection and release. Zoraxel is the first ED therapeutic to affect all three of these phases. Preclinical studies demonstrated that Zoraxel improves sexual performance via enhanced motivation and arousal. Due to its centrally acting mechanism of action, Zoraxel may also have potential use in the treatment of female sexual dysfunction. The Phase IIa clinical trial of Zoraxel is now complete with positive results and the Phase IIb trial will continue through

2010-2011.

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We leverage a powerful, multi-faceted discovery engine consisting of small signaling molecule discovery, computational modeling and nanotechnology-based drug targeting and delivery to develop and commercialize targeted cancer drugs with greater clinical benefits for patients. Rexahn leverages its proprietary nanomedicine research and platforms of The Inhibitors of Multi-Expression Signals (TIMES) and 3-D Gateway Of Ligand Discovery (3D-GOLD) technology, to strengthen and expand its innovative pipelines, which offer greater therapeutic benefits and quality of life for patients.

Company Background

Our company resulted from a merger of Corporate Road Show.Com Inc., originally a New York corporation (CPRD) which was formed in November 1999, and Rexahn, Corp, a Maryland corporation immediately after giving effect to a 1-for-100 reverse stock split and the reincorporation of CPRD as a Delaware corporation under the name "Rexahn Pharmaceuticals, Inc." (Rexahn Pharmaceuticals), with Rexahn, Corp surviving as a wholly owned operating subsidiary of ours (the Merger). The Merger was effective as of May 13, 2005. On September 29, 2005, Rexahn, Corp, was merged with and into us, and Rexahn, Corp's separate existence was terminated.

Rexahn, Corp was founded in March 2001 and began as a biopharmaceutical company focusing on oncology drugs. Dr. Chang Ahn, our Chairman, a former U.S. Food and Drug Administration (FDA) reviewer, and National Cancer Institute (NCI) research scientist, helped guide initial research and commercialization efforts in targeted cancer drugs and the company’s expansion into disorders of the central nervous system (CNS). Our mission is to find new cures that improve the health and wellness of patients with life-threatening or life-altering diseases.

Industry and Disease Markets

Overview

Our research and development focuses on several therapeutic areas that affect the lives of many people—cancer, CNS disorders such as Parkinson’s disease, depression and related mood disorders, and sexual dysfunction. These disorders can have a debilitating effect on the quality of life for patients who suffer from them. Our strategy is to develop innovative drugs that alter the signaling pathways implicated in these diseases, and thereby help patients regain an improved quality of life.

According to the Center for Disease Control and Prevention, cancer claims the lives of more than half a million Americans each year and is the second leading cause of death among Americans. In 2008, the National Institute of Cancer estimated that $228 billion was spent in medical costs in the United States. Worldwide, it is predicted that the number of new cancer cases diagnosed will rise to 16 million annually in 2020, with cancer-related deaths reaching 10 million in 20201. Global sales of cancer drugs are predicted to grow to $70 billion by 2018 in the seven major markets, driven mainly by commercialization of molecular targeted therapies2.

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1 Cancer, 2007 (Datamonitor).

2 Cancer Market and Definition Overview, 2009 (Datamonitor).

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Currently, there are 45 million estimated cases of depression in the US and its drug cost alone exceeded $19 billion in 2007. Several classes of drugs are available on the market for depression, including selective serotonin uptake inhibitors (SSRI), serotonin-norepinephrine reuptake inhibitors (SNRI), and tricyclic antidepressants (TCA). However, these drugs are prone to side-effects, such as insomnia, weight gain and sexual dysfunction, and they can take up to 6 weeks to relieve depression symptoms. Efficacy of the currently available drugs is also in doubt as 35 to 55% of patients experience remission and the non-compliance rate ranges between 40 to 65%.

Parkinson's disease is the most common motor disorder. In the United States, 50,000 - 60,000 new cases of PD are diagnosed each year, adding to the one million people who currently have PD. In fact, it is estimated that four to six million people around the world suffer from the condition. Age is the most important risk factor for PD, and the aging world population is expected to push the number of the afflicted to over 10 million by 2030. In addition, its chronic and debilitating nature has a high socio-economic impact. In the US alone, the financial cost of the disease is estimated to exceed $6 billion annually. PD is characterized by the progressive loss of dopaminergic neurons in the brain. The resulting dopamine depletion leads to its cardinal motor symptoms, such as rigidity (muscle stiffness), bradykinesia (slowing of movement), postural instability and resting tremor. These impairments are accompanied by non-motor disabilities, including dementia, depression, and sleep disturbance. The current standard treatment options target the dopaminergic pathway, either by supplementing the molecule or stimulating dopamine receptors (binding partners of dopamine). While these strategies ameliorate symptoms in early stages, they become less effective over the course of the disease. In addition, dopamine therapies fail to tackle the underlying causes of the disease, and therefore, do not slow the progression of PD or extend the life expectancy of patients.

Erectile dysfunction causes the consistent inability to attain and maintain an erection sufficient for satisfactory sexual intercourse. Erectile problems may be due to psychogenic causes (e.g., depression or stress), organic causes, or both. The launch of the first orally available phosphodiesterase (PDE)-5 inhibitor, Viagra®, in 1998 established a new standard of care for ED and pioneered a new market. Cialis® and Levitra® were subsequently launched in 2003 as second-generation PDE-5 inhibitor drugs. However, 30% of patients are refractory or unresponsive to the leading PDE-5 inhibitor drugs. In addition, PDE-5 inhibitors also increase the risk of a variety of cardiovascular diseases, including heart attack. As evidenced by clinical data from the Phase IIa trial, Zoraxel has superior safety compared to PDE-5 inhibitors by demonstrating no serious adverse effects. Contrary to peripherally acting PDE-5 inhibitors, Zoraxel centrally acts in the brain affecting all three functions of sexual activity.

Current Cancer Treatments

The life-threatening nature of cancer, and the various ways of trying to cure cancer to save lives, has led to treatment(s) with surgery, radiation therapy, and chemotherapy. Surgery is widely used to treat, and in many cases cure cancer; however, there may be related or significant complications and surgery may be ineffective if metastasis has occurred. Radiation therapy, or radiotherapy, can be highly effective. Ionizing radiation deposits energy that injures or destroys cells in the area being treated by damaging their genetic material, making it impossible for these cells to continue to grow. Although radiation damages both cancer cells and normal cells, the normal cells are generally able to repair themselves and function properly. Cytotoxic cancer drugs destroy cancer cells by interfering with various stages of the cell division process. However, many current cytotoxic chemotherapy drugs have limited efficacy and debilitating adverse side effects and may result in the development of multi-drug resistance.

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Unmet Needs in Cancer

Despite significant advances in cancer research and treatments, high unmet needs still remain including:

- Long-term management of cancers: Surgery, chemotherapy or radiation therapy may not result in long-term remission, though surgery and radiation therapies are considered cure methods. Therefore, there is a need for more effective drugs and adjuvant therapies to treat relapsed and refractory cancers.
    - Multi-drug resistance: Multi-drug resistance is a major obstacle in successful clinical outcomes.
- Debilitating toxicity by chemotherapy: Chemotherapy as a mainstay of cancer treatment induces severe adverse reactions and toxicities, affecting quality of life or life itself.

Archexin: First-in-class Anticancer Akt Inhibitor

Archexin is a first-in-class, potent inhibitor of the Akt-1 protein kinase (Akt) in cancer cells. Archexin has FDA orphan drug designations for five cancers (RCC, glioblastoma, and cancers of the ovary, stomach and pancreas). Multiple indications for other solid tumors can also be pursued. Archexin is differentiated by its ability to inhibit both activated and inactivated forms of Akt, and to potentially reverse the drug resistance observed with the protein kinase inhibitors. Other targeted drugs may only inhibit inactivated Akt and be vulnerable to development of drug resistance. Akt activation plays a key role in cancer cell proliferation, survival, angiogenesis and drug resistance. Akt is over-activated in many human cancers (e.g., breast, colorectal, gastric, pancreatic, prostate, and melanoma cancers). A method to control the Akt activity involves inhibition of signaling molecules upstream of Akt in cancer cells (e.g., EGFR or VEGFR inhibitors). In this case, only the activity of native Akt is indirectly affected. However, signal transmission for cancer progression and resistance occurs when Akt is activated, thus inhibition of the activated Akt becomes more important. Archexin inhibits both activated and native Akt.

Archexin is an antisense oligonucleotide (ASO) compound that is complementary to Akt mRNA, and highly selective for inhibiting mRNA expression and production of Akt protein. Archexin has demonstrated excellent safety, tolerability and minimal side effects in a Phase I study in patients with advanced cancers, where Grade 3 (G3) fatigue was the only dose-limiting toxicity and no significant hematological abnormalities were observed. The main objectives of the Phase I study were to determine maximum tolerated dose (MTD), dose limiting toxicity, and pharmacokinetic (pk) parameters for Archexin monotherapy. The Archexin Phase I study design was an open label, single arm ascending dose, safety and tolerability study. Archexin's Phase II clinical trial protocol for the treatment of RCC was accepted by the FDA, but issues with enrollment have delayed the trial. Such enrollment issues are primarily due to the fact that there is a small number of patients that have been diagnosed with RCC and such patients are often treated with surgery instead of drug therapies. After further consideration of the trial design and the limited number of patients, there was a reallocation of resources and Rexahn reprioritized Archexin to pursue studies in pancreatic cancer and ovarian cancer. Archexin is currently in Phase II clinical trials for the treatment of pancreatic cancer with patient enrollment underway and the Phase II protocol for the treatment of ovarian cancer is being developed.

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The Company has been issued a U.S. patent for Archexin that covers composition of matter and broad claims for the nucleotide sequences of the antisense compounds that target and inhibit the expression of Akt in human tissues or cells, and the method of using the compounds to induce cytotoxicity in cancer cells.

Current CNS Treatments

The U.S. National Institute of Mental Health (NIMH) estimates that 26 percent of adults, or more than 55 million Americans, suffer from a diagnosable mental disorder in a given year. The depression market is one of the more mature and established markets in CNS therapeutics. Current treatments for depression focus on serotonin-based drugs (e.g., selective serotonin reuptake inhibitors) as a first-line treatment. Many depression patients are refractory to the various classes of antidepressants and suffer from severe side effects.

Unmet Needs in CNS Disorders: Major Depressive Disorder

Unmet needs for treating MDD include3 the following:

- Faster onset of action. Current antidepressants take four to six weeks to relieve depression symptoms. The delay in onset of antidepressant activity is associated with the most common antidepressant drug classes including: selective serotonin reuptake inhibitors (SSRIs), serotonin-norepinephrine reuptake inhibitors (SNRIs), monoamine oxidase inhibitors (MAOIs), and tricyclic antidepressants (TCAs).

- Fewer side effects. The most widely used antidepressants, SSRIs, are linked with side effects of insomnia, weight gain and sexual dysfunction. The safety of SSRIs has also been called into question over concerns about inducing suicidal ideations. Use of benzodiazepines is linked with side effects of cognitive deficit and motor impairment.

- Improved compliance. High rate of serious side effects among patients taking anti-depressant drugs leads many to stop taking the prescribed medicines, resulting in high non-compliance rates of 40% to 65%.

- Need for greater efficacy. Remission is one key objective of depression treatment. The proportion of patients achieving remission after antidepressant treatment ranges from 35% to 55% depending on the severity of depression.4 New drugs with much higher efficacy as well as wider coverage of the depression patients are needed.

- Reduced MDD relapse. High relapse rate of about 35% and lingering symptoms are serious problems in antidepressant treatment.

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3 Depression, June 2007; Stakeholder Insight: Major Depressive Disorder (MDD), March 2006 (Datamonitor).

4 Remission rates tend to vary based on factors such as: treatment algorithm and drugs prescribed, patient geographic population or country, prescribing doctor (primary care, psychiatrist), and time at which remission rates are measured (3, 6, 8, or 10 weeks of treatment). Depression, June 2007; MDD, March 2006 (Datamonitor).

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Serdaxin: CNS Drug to Treat Neurodegenerative Disorders, Depression, and Mood Disorders

Serdaxin is a potential market leading CNS neuroprotective agent and antidepressant. Based on its novel actions as a dual serotonin and dopamine enhancer, it is a potential treatment for multiple CNS disorders where these neurotransmitters are depleted or implicated in CNS-based illnesses such as Parkinson's disease and depression. It has shown neuroprotective effects in the substantia nigra, hippocampus, and nucleus accumbens- areas of the brain involved in neurodegenerative diseases. Serdaxin's Phase IIa clinical trial for depression is complete with positive results and a Phase IIb trial is under development. The Phase IIa trial was a randomized, double blind, placebo controlled and dose ranging study of 77 patients and was conducted at multiple sites in the United States to assess the Serdaxin's safety and preliminary efficacy. The study showed that patients ages 18-65 with MDD exhibited clinically meaningful improvement over baseline in symptoms of depression as measured by the Montgomery-Asberg Depression Rating Scale total score. A marked clinical response was observed within two weeks in patients taking Serdaxin. Additionally, a significantly lower drop-out rate among patients taking Serdaxin compared with those patients taking a placebo was observed (<20% treatment groups vs. >50% placebo group). Multiple indications are also being considered, including possible use in general anxiety and other mood disorders.

Serdaxin has well-established and extensive safety in humans, and appears to have excellent tolerability and few side effects. Its greatest potential may be as a neuroprotective agent that further addresses the morbidity of depression and mood disorders that are linked to CNS illnesses of the neurodegenerative category, such as PD and Alzheimer's disease. In regards to PD, Serdaxin has shown in animal models that it has the potential to address both non-motor and motor events of PD in humans, by treating depleted dopamine levels that lead to loss of control of movements; and further, enhancing serotonin and dopamine levels that are involved in depression and mood disorders. Serdaxin may achieve greater and broader therapeutic coverage, and appears to have no cognition deficit and side effects such as nausea, vomiting, insomnia, weight gain, and sexual dysfunction that are linked to existing drugs. Clinical programs are also being developed for PD. Serdaxin is a new class of CNS disorder therapeutics that has prevented neuronal deaths in PD models. In contrast to other PD drugs, Serdaxin directly targets the disease mechanism by slowing or halting the progression of the disease, fulfilling unmet needs in Parkinson's disease treatment. Currently, Phase II clinical trials for the use of Serdaxin in PD is under development.

Current Sexual Dysfunction Treatment

The launch of the first orally available PDE-5 inhibitor, Viagra, in 1998 established a new standard care for ED and pioneered a new market. Cialis and Levitra were subsequently launched in 2003 as second-generation PDE-5 inhibitor drugs. However, 30% of patients are refractory to the leading PDE-5 inhibitor drugs. In addition, PDE-5 inhibitors also increase the risk of a variety of cardiovascular diseases, including heart attack. The majority of ED drugs in the R&D pipeline work by a 'me-too' PDE-5 inhibitor mechanism of action.5 Dopamine agonists are also in clinical trials for ED.6

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5 Erectile Dysfunction, 2006 (Datamonitor).

6 Gresser U and Gleiter CH. Erectile Dysfunction: Comparison of efficacy and side effects of the PDE-5 inhibitors sildenafil, vardenafil and tadalafil (Review of Literature). Eur J Med Res (2002) 7:435-46.

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Unmet Needs in Sexual Dysfunction

There are potential severe side effects associated with PDE-5 drugs, such as priapism, severe hypotension, myocardial infarction, sudden death, increased intraocular pressure and sudden hearing loss. PDE-5 inhibitors only target end organ erectile function, and work in peripheral blood vessels. Beyond the PDE-5 inhibitors, there is currently no single class of ED drugs that dominates the market.

- Need for Greater Efficacy- An estimated 30% of US men are refractory to the leading PDE-5 inhibitor drugs (Viagra, Cialis, and Levitra), which work peripherally and mechanically. Certain segments of the ED patient population that respond less to PDE-5 inhibitors include diabetics, obese or post-surgical prostatectomy or coronary risk patients.

- Reduced Side Effects- PDE-5 inhibitors have significant drawbacks of cardiovascular risks and other side effects (e.g., priapism, severe hypotension, myocardial infarction, ventricular arrhythmias, sudden death and increased intraocular pressure).

Zoraxel: Drug Candidate to Treat Erectile Dysfunction Sexual Dysfunction

Zoraxel is centrally acting in the CNS and may be a more effective ED treatment for patients who are responsive or unresponsive to PDE-5 inhibitors. Zoraxel is being developed as an orally administered, on-demand tablet to treat sexual dysfunction, and has extensive and well-established safety in humans. Zoraxel is a dual enhancer of neurotransmitters in the brain that play a key role in sexual activity phases of motivation and arousal, erection and release, and may be the first ED drug to affect all three of these phases of sexual activity. In preclinical animal studies, Zoraxel significantly improved sexual performance and suggested positive behavioral effects. The Phase IIa clinical trial of Zoraxel is now complete with positive results. The double blind, randomized, placebo-controlled, dose ranging study found that human subjects treated with Zoraxel demonstrated improved erectile function as measured by changes over the International Index of Erectile Function (IIEF) baseline score within the 8-week treatment period. The study, which was designed to assess Zoraxel's safety and preliminary efficacy in male subjects ages 18 to 65 with ED, demonstrated a dose dependent treatment effect achieved by Zoraxel as assessed by the IIEF survey. Zoraxel was found to be safe and well tolerated, with no serious adverse events reported. Furthermore, subjects treated with Zoraxel demonstrated improved erectile function and significant improvement in the quality of life measures. The Phase IIb trial, which will include the Sexual Encounter Profile (SEP) survey, IIEF and quality of life study endpoints will continue through 2010-11.

Market Opportunity

There are several factors favorable for commercializing new cancer, CNS and sexual dysfunction drugs that may be first-in-class or market leaders, including:

- Expedited Regulatory or Commercialization Pathways. Drugs for life-threatening diseases such as cancer are often treated by the FDA as candidates for fast track, priority and accelerated reviews. Expedited regulatory review may lead to clinical studies that require fewer patients, or expedited clinical trials. Our lead products, Serdaxin and Zoraxel, are also expected to have expedited or shortened clinical development timelines because their active pharmaceutical ingredient has extensive and well established safety in humans.

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- Favorable Environment for Formulary Access and Reimbursement. Cancer drugs with proven efficacy or survival benefit, and cost-effective clinical outcomes would be expected to gain rapid market uptake, formulary listing and payer reimbursement. In addition, drugs that have orphan designations are generally reimbursed by insurance companies given that there are few, if any, alternatives. Because mental disorders affect more than 55 million estimated Americans, the burden of illness is significant for insurance companies as well as for employers. Given the significant cost of treating behavioral health problems, there is a favorable environment for formulary access and reimbursement for effective products that treat multiple disorders.

- Focus on Specialty Markets. The marketing of new drugs to specialty physicians can be accomplished with a specialty sales force that requires fewer personnel and lower related costs than a typical sales force that markets to primary care physicians and general practitioners.

Our Strategy

Our strategy has several key components:

Develop innovative therapeutics with the potential to be first-in-class or market leaders

We plan to expand our R&D pipeline and introduce more new drugs into clinical trials over the next five years, and develop an industry-leading oncology therapeutics franchise. Our pipeline spans the major classes of cancer drugs – molecular targeted therapies, signal transduction and multi-kinase inhibitors, nano-medicines, and small molecule cytotoxics (microtubule inhibitors, quinazoline and nucleoside analogues). Differentiated target product profiles and proprietary discovery and research technology platforms further support these strategic efforts. Further, we plan to commercialize neurology and psychiatry drugs for growing CNS markets. Rexahn has exclusive patent and development rights to a portfolio of CNS compounds that are repurposed and adaptable for clinical development in multiple indications, including PD, depression, and neurodegenerative disorders.

Target Signal Transduction Molecules with Multiple Drug Candidates

We plan to expand our oncology drug candidate pipeline and introduce several new signal inhibitor drugs into clinical trials over the next five years. By identifying and characterizing the genes and proteins that control the signaling pathways and gene expression of cancer cells, we seek to develop DNA/RNA-based and small-molecule drugs to treat a broad range of diseases caused by abnormal expression or functions of those genes and proteins.

Establish Partnerships with Large Pharmaceutical Companies

In September 2009, Rexahn closed on licensing and stock purchase agreements with Teva Pharmaceutical Industries (Teva) for the development of our novel anti-cancer compound, RX-3117. The companies reached an agreement with respect to the commercialization and development of RX-3117. We seek to establish strategic alliances and partnerships with large pharmaceutical companies for the development of other drug candidates.

Clinically Develop Drug Candidates as Orphan Drugs to Reduce Time-to-Market

Under the Orphan Drug Act, the FDA may expedite approval of new drugs that treat diseases affecting less than 200,000 patients each year. This category of diseases is called an "orphan indication". Incentives in the Orphan Drug Act include a faster time-to-market of the drug (with FDA approval possible after Phase II trials instead of Phase III trials) and seven years of drug marketing exclusivity for the sponsor. We plan to develop drug candidates initially for orphan category cancers in order to reduce the time-to-market.

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In-License Unique Technology

We continually review opportunities to in-license and advance compounds in oncology and other strategic therapeutic areas that have value creating potential and will strengthen our R&D pipeline. For example, in February 2005, we licensed the intellectual property of Revaax Pharmaceuticals LLC ("Revaax") to develop new drugs for treatment of CNS and mood disorders. As a result of this licensing agreement, we have now advanced Serdaxin and Zoraxel into Phase II clinical trials for depression and sexual dysfunction patients.

Capitalize on Our Management Team's Expertise for Drug Development and Product Commercialization

Our management team possesses clinical development experience in oncology and several other therapeutic areas, that facilitates strategic approaches to, and competitive advantages in, the design, risk assessment, and implementation of drug development programs. We also have prior experience in pharmaceutical alliances, product launches and marketing.

Our Pipeline Drug Candidates

We have three clinical stage drug candidates, and several more pre-clinical drugs, including the following:

Clinical Stage Pipeline:

(1) Archexin: First-in-class anticancer Akt inhibitor

(2) Serdaxin: CNS Disorders drug for depression and neurodegenerative diseases

(3) Zoraxel: ED and sexual dysfunction drug

Pre-clinical Pipeline:

(1) RX-1792: Small molecule targeted anticancer drug candidate

(2) RX-5902: Small molecule microtubule inhibitor anticancer drug candidate

(3) RX-3117: Small molecule anti-metabolite nucleoside anticancer drug candidate

(4) RX-8243: Small molecule aurora kinase inhibitor anticancer drug candidate

(5) RX-0201-Nano: Nanoliposomal anticancer Akt-1 inhibitor

(6) RX-0047-Nano: Nanoliposomal anticancer HIF-1 alpha inhibitor

(7) RX-21101 & RX-21202: Nano-polymer Anticancer

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We have discussed our clinical stage pipeline in detail above.

Pre-clinical Pipeline

Our pre-clinical pipeline includes:

(1) RX-1792: Small molecule targeted anticancer drug candidate

RX-1792 is a quinazoline analogue that suppresses protein kinase Akt and c-Fos, critical components of tumor growth and metastasis. Preclinical studies have shown RX-1792 to inhibit tumor growth in xenograft models.

(2) RX-5902: Small molecule microtubule inhibitor anticancer drug candidate

RX-5902 is a novel piperazine-based small molecule that interferes with microtubule structure and G2/M cell cycle in cancer cells. Studies demonstrated drug-resistant tumors recede in xenografted model by oral administration of RX-5902.

(3) RX-3117: Small molecule anti-metabolite nucleoside anticancer drug candidate

RX-3117 is being co-developed with Teva for the treatment of cancer cells and tumors, in particular gemcitabine-resistant lung cancer. RX-3117 has shown potent anti-tumor effects in xenograft human tumor models. Preclinical studies revealed the high bioavailability and superior toxicity profile compared to gemcitabine, the current first-line therapy for pancreatic and other cancers.

(4) RX-8243: Small molecule aurora kinase inhibitor anticancer drug candidate

RX-8243 is a novel isoquinolinamine analogue that inhibits Ark1 (Aurora A) kinase and other Ser/Thr kinase in caner cells. RX-8243 is a multikinase inhibitor that downregulates signal molecules of RAS as well as PI3K pathways such as activated forms of ERK, p38 and Akt. Preclinical studies showed RX-8243 blocks tumor growth in xenograft models at low nanomolar concentrations.

(5) RX-0201-Nano: Nanoliposomal anticancer Akt-1 inhibitor

RX-0201, the active ingredient of Archexin, is a first-in-class, potent inhibitor of the Akt-1 protein kinase. RX-0201-Nano is a nanoliposomal product of RX-0201 with high incorporation efficiency and good stability. Nanoliposomal delivery of RX-0201 may provide significant clinical benefits including targeted higher cellular uptake, extended circulation time, reduced drug-related toxicity, and improved efficacy.

(6) RX-0047-Nano: Nanoliposomal anticancer HIF-1 inhibitor

RX-0047 is a potent inhibitor of HIF-1 , a key transcription factor involved in cancer cell survival, metastasis, and angiogenesis. HIF-1 is over-expressed in a broad range of human cancers, and associated with increased cancer mortality and resistance. RX-0047 inhibits proliferation of cancer cells of human origin at low nanomolar concentrations by lowering mRNA level of HIF-1 . It is also effective in radiation-resistant cancer cells. Studies in xenografted model have shown RX-0047 to inhibit tumor growth in lung and prostate and blocks metastasis.

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(7) RX-21101 & RX-21202: Nano-polymer Anticancer Drugs

Among the prominent nano-polymer drugs in Rexahn, RX-21101(HPMA-docetaxel) and RX-21202 (HPMA-gemcitabine) are anticancer drugs that can overcome the downside of cytotoxic compounds, such as poor solubility, stability, and severe adverse reactions. Conjugating water-soluble and non-toxic HPMA to conventional anticancer compounds bolster efficacy while lowering toxicity by specific tumor targeting and increased stability in body.

Competition

We are developing new drugs to address unmet medical needs in oncology, CNS disorders, and sexual dysfunction markets. Our drug candidates will be competing with products and therapies that either currently exist or are expected to be developed. Competition among these products will be based on factors such as product efficacy, safety, price, launch timing and execution. Our competitive position will also depend upon our ability to attract and retain qualified personnel, to obtain patent protection or otherwise develop proprietary products or processes, and to secure sufficient capital resources for the often substantial period between technological conception and commercial sales.

There are a number of pharmaceutical and biotechnology companies that are conducting research and development on technologies and products for treatment of cancers, CNS diseases and sexual dysfunction. Our competitors may succeed in developing products based on novel technologies that are more effective than ours, which could render our technology and products noncompetitive prior to recovery by us of expenses incurred with respect to those products.

Our competitors may include major pharmaceutical, specialized biotechnology firms, and academic and other research institutions. Many of our competitors have substantially greater financial, technical and human resources than we do. In addition, many of our competitors have significantly greater experience than we do in undertaking pre-clinical testing and human clinical trials of new pharmaceutical products and obtaining FDA and other regulatory approvals of products for use in health care.

As we expand our drug development programs to include diseases other than cancer, CNS and sexual dysfunction, we will also face competition from pharmaceutical and biotechnology companies conducting research and development on products for treatment of those other diseases, increasing our competition. For many of the same reasons described above, we cannot assure you that we will compete successfully.

Government Regulation

Regulation by governmental authorities in the United States and in other countries constitutes a significant consideration in our product development, manufacturing and marketing strategies. We expect that all of our drug candidates will require regulatory approval by appropriate governmental agencies prior to commercialization and will be subjected to rigorous pre-clinical, clinical, and post-approval testing, as well as to other approval processes by the FDA and by similar health authorities in foreign countries. U.S. federal regulations control the ongoing safety, manufacture, storage, labeling, record keeping, and marketing of all biopharmaceutical products intended for therapeutic purposes. We believe that we are in compliance in all material respects with currently applicable rules and regulations.

Obtaining governmental approvals and maintaining ongoing compliance with federal regulations are expected to require the expenditure of significant financial and human resources not currently at our disposal. We plan to fulfill our short-term needs through consulting agreements and joint ventures with academic or corporate partners while building our own internal infrastructure for long-term corporate growth.

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The process by which biopharmaceutical compounds for therapeutic use are approved for commercialization in the United States is lengthy. Many other countries have instituted equally difficult approval processes. In the United States, regulations published by the FDA require that the person or entity sponsoring and/or conducting a clinical study for the purpose of investigating a potential biological drug product's safety and effectiveness submit an Investigational New Drug (IND) application to the FDA. These investigative studies are required for any drug product for which the product manufacturer intends to pursue licensing for marketing the product in interstate commerce. If the FDA does not object to the IND application, clinical testing of the compound may begin in humans after a 30-day review period. Clinical evaluations typically are performed in three phases.

In Phase I, the drug is administered to a small number of healthy human subjects or patients to confirm its safety and to develop detailed profiles of its pharmacological and pharmacokinetic actions (i.e., absorption, metabolism, excretion, duration of therapeutic concentration and effects, if any).

In Phase II, the drug is administered to groups of patients (up to a total of 500) to determine its preliminary efficacy against the targeted disease and the requisite dose and dose intervals. In a typical development program, additional animal toxicology studies precede this phase. In some cases, the trial can be split into Phase IIa and IIb studies in order to test smaller subject pools. Some Phase I clinical studies may also proceed in parallel with some Phase II studies.

In Phase III, the drug is administered to a larger group of patients (usually 1,000 to 3,000 or more) by physicians (study site investigators) in a network of participating clinics and hospitals. The extensive clinical testing is intended to confirm Phase II results and to document the nature and incidence of adverse reactions. Studies also are performed in patients with concomitant diseases and medications. Larger patient populations are evaluated in Phase III at multiple study sites and many clinical trial programs or registration studies are conducted concurrently for the sake of time and efficiency.

After completing the IND clinical studies, the product developer submits the safety and effectiveness data generated by the studies to the FDA in the form of a New Drug Application (NDA) to market the product. It is the responsibility of the FDA to review the proposed product labeling, the pre-clinical (animal and laboratory) data, the clinical data, the facilities utilized and the methodologies employed in the manufacture of the product to determine whether the product is safe and effective for its intended use.

Even after initial FDA approval has been obtained, further studies may be required to provide additional data on safety or to gain approval for expanded labeling or treatment indications. Also, the FDA may require post-marketing testing and surveillance programs to monitor the drug's effects. Side effects resulting from the use of drug products may prevent or limit the further marketing of the products.

For marketing outside the United States, we will be subject to foreign regulatory requirements governing human clinical trials and marketing approval for drugs. The requirements relating to the conduct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country.

Certain drugs are eligible in the United States for designation by the FDA as "orphan" drugs if their use is intended to treat a disease that affects fewer than 200,000 persons in the U.S. or the disease affects more than 200,000 persons in the United States but there is no reasonable expectation that the cost of developing and marketing a drug will be recovered from the U.S. sales of such drug. In order for a sponsor to obtain orphan designation for a drug product, an application must be submitted for approval to the FDA's Office of Orphan Products Development. The approval of an application for orphan designation is based upon the information submitted by the sponsor. A drug that has obtained orphan designation is said to have "orphan status". The approval of an orphan designation request does not alter the standard regulatory requirements and process for obtaining marketing approval. Safety and efficacy of a compound

must be established through adequate and well-controlled studies.

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Orphan drugs may obtain FDA approval after successful Phase II trials, rather than after completion of Phase III trials, resulting in faster time-to-market for those drugs. If a sponsor obtains orphan drug designation for a particular compound and is the first to obtain FDA regulatory approval of that compound, then that sponsor is granted marketing exclusivity for a period of seven years.

Sales and Marketing

Rexahn plans to commercialize unique and differentiated drugs that are first-in-class or potential market leaders. We may develop cancer drugs for orphan indications initially, and then expand into more highly prevalent cancers. Currently, Archexin has Orphan drug designation for five cancer indications. For drugs that require larger pivotal trials and/or large sales force, Rexahn seeks alliances and corporate partnerships with larger pharmaceutical firms. We also seek acquisition or in-licensing candidates to strengthen our product pipeline.

Research Technologies

Our research technologies are focused on our proprietary multi-target aimed ligands platform and nano-based drug delivery. For a discussion of collaboration arrangements pursuant to which we obtain research and development services from universities, research institutions and other organizations, see "Collaboration and License Agreements" in this item.

The Inhibitors of Multi-Expression Signals (TIMES)

Rexahn has developed a unique ligand discovery platform targeting multi-expression signals. Since cancer is a complex disease caused by multiple factors as well as genetic modifications, cancer treatment involves a combination of drugs with different mechanisms of action, which compound degree and extent of toxicities. Rexahn's approach is to control multiple targets important for cancer proliferation with a single agent. In doing so, Rexahn utilizes a proprietary, genomics-based integrated, gene expression system to identify potentially important targets that control multiple genes or signaling events in cancer cells.

3-D Gateway of Ligand Discovery (3-D GOLD)

3D-GOLD is a drug discovery platform that integrates 3-D natures of molecular modeling, databases of chemicals and proteins, and ligand filtering and generation. The chemical database contains 3D structures of about 5 million compounds. Rexahn’s proprietary quantitative structure-activity relationship tool for innovative discovery and docking tools are parts of the platform. The filtering module is a powerful component to determine similarity in pharmacophore and 3D fingerprinting, while ligand generation helps optimize the leads.

Nano-medicine Drug Delivery

Rexahn has developed unique proprietary drug delivery nano-systems that may increase the availability of a drug at the disease site, minimize adverse reactions, and/or provide longer duration of action. Rexahn is currently testing multiple nanoliposomal- and nanopolymer-based anticancer drugs. Rexahn was awarded grants from Maryland Industrial Partnerships and is collaborating with the Center for Nanomedicine of University of Maryland to accelerate the development of its proprietary nano technologies and nano products.

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Manufacturing and Distribution

We do not currently have the resources required for commercial manufacturing of our drug candidates. We currently outsource the manufacturing of drug substances and drug products for our drug candidates. We believe that there are a limited number of manufacturers that could manufacture our drug candidates. We have no current plans to build internal manufacturing capacity for any product. Manufacturing will be accomplished through outsourcing or through partnerships with large pharmaceutical companies. We do not have any specific distribution plans at this time.

Intellectual Property

Proprietary patent and intellectual property (IP) protection for our drug candidates, processes and know-how is important to our business. We aggressively prosecute and defend our patents and proprietary technology. Rexahn has several U.S. and international patents issued for broad IP coverage of our drug candidates in cancer, CNS, behavioral and mood disorders, neuroprotection and sexual dysfunction, effective until 2020 to 2025. Additional U.S., Europe, and foreign patents are pending. We also rely upon trade secrets, know-how, continuing technological innovation and licensing opportunities to develop and maintain our competitive position.

In March 2005, we licensed-in CNS-related intellectual property from Revaax Pharmaceuticals, LLC. The intellectual property rights acquired cover use of certain compounds for anxiety, depression, aggression, cognition, Attention Deficit Hyperactivity Disorder, neuroprotection and sexual dysfunction. See "Collaboration and License Arrangements" in this Item for additional information.

Collaboration and License Arrangements

We have numerous collaborative research and development relationships with universities, research institutions and other organizations. A description of these material relationships is below.

Teva Pharmaceutical Industries. On September 21, 2009, Rexahn closed on licensing and stock purchase agreements with Teva for the development our novel anti-cancer compound, RX-3117. RX-3117 is a small molecule, new chemical entity (NCE), nucleoside compound that has an anti-metabolite mechanism of action, and has therapeutic potential in a broad range of cancers including colon, lung and pancreatic cancer. The companies reached an agreement with respect to the commercialization and development of RX-3117, under which Teva purchased 3,102,837 shares of Rexahn’s common stock for $3.5 million. Rexahn will be eligible to receive additional development, regulatory and sales milestone payments. In addition, Rexahn will be eligible to receive royalties on net sales worldwide. Under the terms of the deal, Teva may also make an additional equity investment in Rexahn within 12 months of the closing.

TheraTarget, Inc. (TheraTarget). On December 14, 2009, Rexahn and TheraTarget, a developer of innovative polymer therapeutics for the treatment of cancer, formed a joint research collaboration agreement. Under the terms of the agreement, TheraTarget will synthesize and supply Rexahn with polymer-drug conjugate products, which are part of Rexahn’s polymer-based nanomedicine portfolio.

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Korea Research Institute of Chemical Technology (KRICT). On July 13, 2009 Rexahn entered a licensing partnership with the Korea Research Institute of Chemical Technology (KRICT) to develop a synthetic process for Quinoxalines compounds. These compounds provide selective toxicity towards hypoxic cells – cells found in solid tumors and that are resistant to anticancer drugs and radiation therapy, making them a potential treatment for solid tumors.

The University of Maryland Baltimore (UMB). On February 1, 2007, we entered into a Maryland Industrial Partnership agreement with the UMB to collaborate with and sponsor the joint development of polymer-drug conjugates for cancer therapy, for the targeted delivery of cancer drugs. Intellectual property made or developed under this agreement is jointly owned by us and UMB. This project is currently on-going.

Revaax Pharmaceuticals LLC (Revaax). On February 10, 2005, we licensed on an exclusive basis, with the right to sublicense, all of the intellectual property of Revaax, which includes four patents and multiple patent applications, with respect to certain chemical structures that have demonstrated in pre-clinical research the potential to treat certain behavioral disorders, such as anxiety, depression and cognitive disorders. This agreement expires upon the expiration of the royalty term for all licensed products in all countries, which is no earlier than August 2020 and could extend to August 2024. This agreement provides for an initial license fee and milestone payments based on the initiation of pivotal trials for disease treatment indication for licensed products. Furthermore, we will pay Revaax a specified fee for each licensed product under the agreement upon receipt of marketing approval for the licensed product. Notwithstanding the milestone payment arrangement described above, we are not obligated to make any milestone payment with respect to milestone events for which we receive sublicense revenues and are obligated to pay Revaax a percentage of such sublicense revenues, as well as royalties for sales of licensed products based on net sales of the licensed products.

Employees

We currently have 15 full-time and 2 part-time employees, all of whom are based at our Rockville, Maryland office. Our employees are not covered by any collective bargaining agreement and we have never experienced a work stoppage. We believe our relationships with our employees are satisfactory.

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Item 1A. Risk Factors.

You should carefully consider the risks described below together with the other information included in this Annual Report on Form 10-K. Our business, financial condition or results of operations could be adversely affected by any of these risks. If any of these risks occur, the value of our common stock could decline.

We currently have no product revenues, have incurred negative cash flows from operations since inception, and will need to raise additional capital to operate our business.

To date, we have generated no product revenues and have incurred negative cash flow from operations. Until we receive approval from the FDA and other regulatory authorities for our drug candidates, we cannot sell our drugs and will not have product revenues. Therefore, for the foreseeable future, we will have to fund all of our operations and capital expenditures from the net proceeds of equity or debt offerings we may make, cash on hand, licensing fees and grants. Through the end of 2010, we expect to spend approximately $2.5 million on clinical development for Phase II clinical trials of Archexin, Serdaxin and Zoraxel™, and the development of preclinical compounds, $4 million on general corporate expenses and approximately $108,418 on facilities rent. We will need to raise additional money through debt and/or equity offerings in order to continue to develop our drug candidates. If we are not able to raise sufficient additional money, we will have to reduce our research and development activities. We will first reduce research and development activities associated with our preclinical compounds. To the extent necessary, we will then reduce our research and development activities related to some or all of our clinical drugs.

Additionally, changes may occur that would consume our existing capital at a faster rate than projected, including but not limited to, the progress of our research and development efforts, the cost and timing of regulatory approvals and the costs of protecting our intellectual property rights. We may seek additional financing to implement and fund other drug candidate development, clinical trial and research and development efforts, including Phase I clinical trials for other new drug candidates, as well as other research and development projects.

We will need additional financing to continue to develop our drug candidates, which may not be available on favorable terms, if at all. If we are unable to secure additional financing in the future on acceptable terms, or at all, we may be unable to complete our planned pre-clinical and clinical trials or obtain approval of our drug candidates from the FDA and other regulatory authorities. In addition, we may be forced to reduce or discontinue product development or product licensing, reduce or forego sales and marketing efforts and forego attractive business opportunities in order to improve our liquidity to enable us to continue operations. Any additional sources of financing will likely involve the sale of our equity securities or securities convertible into our equity securities, which may have a dilutive effect on our stockholders.

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We are not currently profitable and may never become profitable.

We have generated no revenues to date from product sales. Our accumulated deficit as of December 31, 2009 and 2008 was $36,293,907 and $29,906,479, respectively. For the years ended December 31, 2009 and 2008, we had net losses of $6,387,428 and $4,912,148, respectively, primarily as a result of expenses incurred through a combination of research and development activities related to the various technologies under our control and expenses supporting those activities. Even if we succeed in developing and commercializing one or more of our drug candidates, we expect to incur substantial losses for the foreseeable future and may never become profitable. We also expect to continue to incur significant operating and capital expenditures and anticipate that our expenses will increase substantially in the foreseeable future, based on the following considerations:

- continued pre-clinical development and clinical trials for our current and new drug candidates;
- efforts to seek regulatory approvals for our drug candidates;
- implementing additional internal systems and infrastructure;
- licensing in additional technologies to develop; and
- hiring additional personnel.

We also expect to continue to experience negative cash flow for the foreseeable future as we fund our operating losses and capital expenditures. Until we have the capacity to generate revenues, we are relying upon outside funding resources to fund our cash flow requirements.

We have a limited operating history.

We are a development-stage company with a limited number of drug candidates. To date, we have not demonstrated an ability to perform the functions necessary for the successful commercialization of any of our drug candidates. The successful commercialization of our drug candidates will require us to perform a variety of functions, including, but not limited to:

- conducting pre-clinical and clinical trials;
- participating in regulatory approval processes;
- formulating and manufacturing products; and
- conducting sales and marketing activities.

To date, our operations have been limited to organizing and staffing our company, acquiring, developing and securing our proprietary technology, drug candidate research and development and undertaking, through third parties, pre-clinical trials and clinical trials of our principal drug candidates. These operations provide a limited basis for assessment of our ability to commercialize drug candidates.

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We may not obtain the necessary U.S. or worldwide regulatory approvals to commercialize our drug candidates.

We will need FDA approval to commercialize our drug candidates in the U.S. and approvals from the FDA-equivalent regulatory authorities in foreign jurisdictions to commercialize our drug candidates in those jurisdictions. In order to obtain FDA approval of our drug candidates, we must submit to the FDA an NDA demonstrating that the drug candidate is safe for humans and effective for its intended use. This demonstration requires significant research and animal tests, which are referred to as pre-clinical studies, as well as human tests, which are referred to as clinical trials. Satisfaction of the FDA's regulatory requirements typically takes many years, and depends upon the type, complexity and novelty of the drug candidate and requires substantial resources for research, development and testing. We cannot predict whether our research and clinical approaches will result in drugs that the FDA considers safe for humans and effective for indicated uses. Two of our drug candidates, Archexin and RX-0047, are antisense oligonucleotide (ASO) compounds. To date, although applications have been made, the FDA has not approved any NDAs for any ASO compounds for cancer treatment. In addition, each of Archexin, RX-0201-nano and RX-0047-nano is of a drug class (Akt inhibitor, in the case of Archexin and RX-0201-nano, and HIF inhibitor, in the case of RX-0047) that has not been approved by the FDA to date, nor have we submitted such NDA. After the clinical trials are completed, the FDA has substantial discretion in the drug approval process and may require us to conduct additional pre-clinical and clinical testing or to perform post-marketing studies.

In foreign jurisdictions, we must receive approval from the appropriate regulatory authorities before we can commercialize our drugs. Foreign regulatory approval processes generally include all of the risks associated with the FDA approval procedures described above. We cannot assure you that we will receive the approvals necessary to commercialize our drug candidates for sale outside the United States.

Our drug candidates are in early stages of clinical trials.

Our drug candidates are in an early stage of development and require extensive clinical testing, which are very expensive, time-consuming and difficult to design. In 2007, Archexin, an oncology drug candidate, entered Phase II clinical trials. In 2008, we initiated Phase II clinical trials of Zoraxel, a sexual dysfunction drug candidate. In 2009, we initiated Phase II clinical trial of Serdaxin, drug candidate for depression and other CNS disorders.

Clinical trials are very expensive, time-consuming and difficult to design and implement.

Human clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. The clinical trial process is also time-consuming. We estimate that clinical trials of our current drug candidates will take up to three years to complete. Furthermore, failure can occur at any stage of the trials, and we could encounter problems that cause us to abandon or repeat clinical trials. The commencement and completion of clinical trials may be delayed by several factors, including, but not limited to:

- unforeseen safety issues;
- determination of dosing issues;
- lack of effectiveness during clinical trials;
- reliance on third party suppliers for the supply of drug candidate samples;

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- slower than expected rates of patient recruitment;
- inability to monitor patients adequately during or after treatment;
- inability or unwillingness of medical investigators and institutional review boards to follow our clinical protocols; and
- lack of sufficient funding to finance the clinical trials.

We or the FDA may suspend clinical trials at any time if it appears that we are exposing participants to unacceptable health risks or if the FDA finds deficiencies in our IND submissions or the conduct of these trials.

Additionally, we may have difficulty enrolling patients in our clinical trials. If we experience such difficulties, we may not be able to complete the clinical trial or we may experience significant delays in completing the clinical trial.

If the results of our clinical trials fail to support our drug candidate claims, the completion of development of such drug candidate may be significantly delayed or we may be forced to abandon development altogether, which will significantly impair our ability to generate product revenues.

Even if our clinical trials are completed as planned, we cannot be certain that our results will support our drug candidate claims. Success in pre-clinical testing and early clinical trials does not ensure that later clinical trials will be successful, and we cannot be sure that the results of later clinical trials will replicate the results of prior clinical trials and pre-clinical testing. The clinical trial process may fail to demonstrate that our drug candidates are safe for humans and effective for indicated uses. This failure would cause us to abandon a drug candidate and may delay development of other drug candidates. Any delay in, or termination of, our clinical trials will delay the filing of our NDAs with the FDA and, ultimately, delay our ability to commercialize our drug candidates and generate product revenues. In addition, our trial designs may involve a small patient population. Because of the small sample size, the results of early clinical trials may not be indicative of future results.

If physicians and patients do not accept and use our drugs, our ability to generate revenue from sales of our products will be materially impaired.

Even if the FDA approves our drug candidates, physicians and patients may not accept and use them. Future acceptance and use of our products will depend upon a number of factors including:

- awareness of the drug's availability and benefits;
- perceptions by members of the health care community, including physicians, about the safety and effectiveness of our drugs;
- pharmacological benefit and cost-effectiveness of our product relative to competing products;
- availability of reimbursement for our products from government or other healthcare payers;

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- effectiveness of marketing and distribution efforts by us and our licensees and distributors, if any; and
- the price at which we sell our products.

Because we expect sales of our current drug candidates, if approved, to generate substantially all of our product revenues for the foreseeable future, the failure of any of these drugs to find market acceptance would harm our business and could require us to seek additional financing.

Much of our drug development program depends upon third-party researchers, and the results of our clinical trials and such research activities are, to a limited extent, beyond our control.

We depend upon independent investigators and collaborators, such as universities and medical institutions, to conduct our pre-clinical and clinical trials and toxicology studies. This business practice is typical for the pharmaceutical industry and companies like us. For example, the Phase I clinical trials of Archexin were conducted at the Lombardi Comprehensive Cancer Center of Georgetown Medical Center and the University of Alabama at Birmingham, with the assistance of Amarex, LLC, a pharmaceutical clinical research service provider who is responsible for creating the reports that will be submitted to the FDA. We also relied on TherImmune Research Corporation (now named Bridge Global Pharmaceutical Services, Inc.), a discovery and pre-clinical service provider, to summarize Archexin 's pre-clinical data. While we make every effort internally to oversee their work, these collaborators are not our employees and we cannot control the amount or timing of resources that they devote to our programs. These investigators may not assign priority to our programs or pursue them as diligently as we would if we were undertaking such programs ourselves. For example, we have a billing dispute on the work performance and expenses with Amarex, LLC for clinical trials. The dispute might cause a delay of the program or increase our costs associated with the program. If outside collaborators fail to devote sufficient time and resources to our drug-development programs, or if their performance is substandard, the approval of our FDA applications, if any, and our introduction of new drugs, if any, may be delayed. The risk of completion or delay of these studies is not within our direct control and a program delay may occur due to circumstances outside our control. A delay in any of these programs may not necessarily have a direct impact on our daily operations. However, to the extent that a delay results in additional cost to us, a higher than expected expense may result. These collaborators may also have relationships with other commercial entities, some of which may compete with us. If our collaborators assist our competitors at our expense, our competitive position would be harmed.

We rely exclusively on third parties to formulate and manufacture our drug candidates, which expose us to a number of risks that may delay development, regulatory approval and commercialization of our products or result in higher product costs.

We have no experience in drug formulation or manufacturing. Internally, we lack the resources and expertise to formulate or manufacture our own drug candidates. Therefore, we rely on third party expertise to support us in this area. For example, we have entered into contracts with third-party manufacturers such as Raylo Chemicals Inc., Formatech, Inc., Avecia Biotechnology Inc. and UPM Pharmaceuticals, Inc. to manufacture, supply, store and distribute supplies of our drug candidates for our clinical trials. If any of our drug candidates receive FDA approval, we will rely on these or other third-party contractors to manufacture our drugs. Our reliance on third-party manufacturers exposes us to the following potential risks:

- We may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA must approve any replacement contractor. This approval would require new testing and compliance inspections. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, the production of our products after receipt of FDA approval, if any.

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- Our third-party manufacturers might be unable to formulate and manufacture our drugs in the volume and of the quality required to meet our clinical needs and commercial needs.

- Our contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products.

- Drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Agency (DEA), and corresponding state agencies to ensure strict compliance with good manufacturing practice and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards, but we may be ultimately responsible for any of their failures.

- If any third-party manufacturer makes improvements in the manufacturing process for our products, we may not own, or may have to share, the intellectual property rights to the innovation.

Each of these risks could delay our clinical trials, drug approval and commercialization and potentially result in higher costs and/or reduced revenues.

We have no experience selling, marketing or distributing products and currently no internal capability to do so.

We currently have no sales, marketing or distribution capabilities. While we intend to have a role in the commercialization of our products, we do not anticipate having the resources in the foreseeable future to develop global sales and marketing capabilities for all of our proposed products. Our future success depends, in part, on our ability to enter into and maintain collaborative relationships with other companies having sales, marketing and distribution capabilities, the collaborator's strategic interest in the products under development and such collaborator's ability to successfully market and sell any such products. To the extent that we decide not to, or are unable to, enter into collaborative arrangements with respect to the sales and marketing of our proposed products, significant capital expenditures, management resources and time will be required to establish and develop an in-house marketing and sales force with technical expertise. We cannot assure you that we will be able to establish or maintain relationships with third party collaborators or develop in-house sales and distribution capabilities. To the extent that we depend on third parties for marketing and distribution, any revenues we receive will depend upon the efforts of such third parties, as well as the terms of our agreements with such third parties, which cannot be predicted at this early stage of our development. We cannot assure you that such efforts will be successful. In addition, we cannot assure you that we will be able to market and sell our products in the United States or overseas.

Developments by competitors may render our products or technologies obsolete or non-competitive.

We will compete against fully integrated pharmaceutical companies and smaller companies that are collaborating with larger pharmaceutical companies, such as Keryx Biopharmaceuticals, Genta Incorporated and Imclone Systems Incorporated, as well as academic institutions, government agencies and other public and private research organizations. In addition, many of these competitors, either alone or together with their collaborative partners, operate larger research and development programs or have substantially greater financial resources than we do, as well as more experience in:

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- developing drugs;
- undertaking pre-clinical testing and human clinical trials;
- obtaining FDA and other regulatory approvals of drugs;
- formulating and manufacturing drugs; and
- launching, marketing and selling drugs.

Large pharmaceutical companies such as Bristol-Myers Squibb, Eli-Lilly, Novartis, Pfizer and Glaxo-SmithKline currently sell both generic and proprietary compounds for the treatment of cancer, depression and erectile dysfunction. In addition, companies pursuing different but related fields represent substantial competition. Many of these organizations have substantially greater capital resources, larger research and development staff and facilities, longer drug development history in obtaining regulatory approvals and greater manufacturing and marketing capabilities than we do. These organizations also compete with us to attract qualified personnel, parties for acquisitions, joint ventures or other collaborations.

If we fail to adequately protect or enforce our intellectual property rights or secure rights to patents of others, the value of our intellectual property rights would diminish and our business and competitive position would suffer.

Our success, competitive position and future revenues will depend in part on our ability and the abilities of our licensors to obtain and maintain patent protection for our products, methods, processes and other technologies, to preserve our trade secrets, to prevent third parties from infringing on our proprietary rights and to operate without infringing the proprietary rights of third parties. We have filed U.S. and worldwide patent applications for anti-Akt compounds, including Archexin and anti-HIF compounds, including RX-0047. In November 2006, we were granted a U.S. patent for our anti-Akt compounds, including Archexin. The patent covers the nucleotide sequences of the antisense compounds that target and inhibit the expression of Akt in human tissues or cells. The patent also covers the method of using the compounds to induce cytotoxicity in cancer cells. We have also filed three U.S. provisional patent applications for new anticancer quinazoline compounds, new anticancer nucleoside products and a drug target, cenexin, a polo-box binding protein. In December 2004, we also filed two Korean patent applications for new anticancer piperazine compounds. Through our licensing agreement with Revaax, we hold exclusive rights to five patents and multiple patent applications, with respect to certain chemical structures related to antibiotics, but without antibiotic efficacy. However, we cannot predict:

- the degree and range of protection any patents will afford us against competitors, including whether third parties will find ways to invalidate or otherwise circumvent our licensed patents;
- if and when patents will issue;
- whether or not others will obtain patents claiming aspects similar to those covered by our licensed patents and patent applications;

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- whether we will need to initiate litigation or administrative proceedings which may be costly whether we win or lose;

- whether our patents will be challenged by competitors alleging that a patent is invalid or unenforceable and, if litigated, the outcome of any court action as to patent validity, enforceability or scope;

- whether a competitor will develop a similar compound that is outside the scope of protection afforded by a patent or whether the patent scope is inherent in the claims or modified due to interpretation of claim scope by a court;

- whether there were activities previously undertaken by a licensor that could limit the scope, validity or enforceability of licensed patents and intellectual property;

- whether there will be challenges or litigation brought by a licensor alleging breach of a license agreement and its effect on our ability to practice particular technologies and the outcome of any such challenge or litigation; or

- whether a competitor will assert infringement of its patents or intellectual property, whether or not meritorious, and what the outcome of any related litigation or challenge may be.

Our success also depends upon the skills, knowledge and experience of our scientific and technical personnel, our consultants and advisors as well as our licensors and contractors. To help protect our proprietary know-how and our inventions for which patents may be unobtainable or difficult to obtain, we rely on trade secret protection and confidentiality agreements. To this end, we require all employees to enter into agreements that prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business. These agreements may not provide adequate protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information. If any of our trade secrets, know-how or other proprietary information is disclosed, the value of our trade secrets, know-how and other proprietary rights would be significantly impaired and our business and competitive position would suffer.

If we infringe the rights of third parties we could be prevented from selling products and be forced to pay damages and defend against litigation.

If our products, methods, processes and other technologies infringe the proprietary rights of other parties, we could incur substantial costs and may have to:

- obtain licenses, which may not be available on commercially reasonable terms, if at all;

- redesign our products or processes to avoid infringement;

- stop using the subject matter claimed in the patents held by others, which could cause us to lose the use of one or more of our drug candidates;

- pay damages; or

- defend litigation or administrative proceedings which may be costly whether we win or lose, and which could result in a substantial diversion of our management resources.

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Although to date, we have not received any claims of infringement by any third parties, as our drug candidates move into clinical trials and commercialization, our public profile and that of our drug candidates may be raised and generate such claims.

Our license agreement with Revaax may be terminated in the event we commit a material breach, the result of which would significantly harm our business prospects.

Our license agreement with Revaax is subject to termination by Revaax if we materially breach our obligations under the agreement, including breaches with respect to certain installment payments and royalty payments, if such breaches are not cured within a 60-day period. The agreement also provides that it may be terminated if we become involved in a bankruptcy, insolvency or similar proceeding. If this license agreement is terminated, we will lose all of our rights to develop and commercialize the licensed compounds, including Serdaxin and Zoraxel, which would significantly harm our business and future prospects.

If we are unable to successfully manage our growth, our business may be harmed.

In addition to our own internally developed drug candidates, we proactively seek opportunities to license-in the compounds in oncology and other therapeutic areas that are strategic and have value creating potential to take advantage of our development know-how. We are actively pursuing additional drug candidates to acquire for development. Such additional drug candidates 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 drug candidates. Alternatively, we may be required to hire more employees, further increasing the size of our organization and related expenses. If we are unable to manage our growth effectively, we may not efficiently use our resources, which may delay the development of our drug candidates and negatively impact our business, results of operations and financial condition.

We may not be able to attract and retain qualified personnel necessary for the development and commercialization of our drug candidates. Our success may be negatively impacted if key personnel leave.

Attracting and retaining qualified personnel will be critical to our future success. We compete for qualified individuals with numerous biopharmaceutical companies, universities and other research institutions. Competition for such individuals is intense, and we cannot assure you that we will be successful.

The loss of the technical knowledge and management and industry expertise of any of our key personnel, especially Dr. Chang H. Ahn, our Chairman and Chief Executive Officer and regulatory expert, could result in delays in product development and diversion of management resources, which could adversely affect our operating results. We do not have "key person" life insurance policies for any of our officers.

We may incur substantial liabilities and may be required to limit commercialization of our products in response to product liability lawsuits.

The testing and marketing of medical products entail an inherent risk of product liability. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our products. Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of pharmaceutical products we develop, alone or with collaborators. Although we currently carry clinical trial insurance and product liability insurance we, or any collaborators, may not be able to maintain such insurance at a reasonable cost. Even if our agreements with any future collaborators entitles us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

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An investment in shares of our common stock is very speculative and involves a very high degree of risk.

To date, we have generated no revenues from product sales and only minimal revenues from a research agreement with a minority shareholder, and interest on bank account balances and short-term investments. Our accumulated deficit as of December 31, 2009 and 2008 was $36,293,907 and $29,906,479, respectively. For the years ended December 31, 2009 and 2008, we had net losses of $6,387,428 and $4,912,148, respectively, primarily as a result of expenses incurred through a combination of research and development activities related to the various technologies under our control and expenses supporting those activities. Until we receive approval from the FDA and other regulatory authorities for our drug candidates, we cannot sell our drugs and will not have product revenues.

The market price of our common stock may fluctuate significantly.

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

- the announcement of new products or product enhancements by us or our competitors;
- developments concerning intellectual property rights and regulatory approvals;
- variations in our and our competitors' results of operations;
- changes in earnings estimates or recommendations by securities analysts; and
- developments in the biotechnology industry.

Further, the stock market, in general, and the market for biotechnology companies, in particular, have experienced extreme price and volume fluctuations. Continued market fluctuations could result in extreme volatility in the price of our common stock, which could cause a decline in the value of our common stock. You should also be aware that price volatility might be worse if the trading volume of our common stock is low. We have not paid, and do not expect to pay, any cash dividends because we anticipate that any earnings generated from future operations will be used to finance our operations and as a result, you will not realize any income from an investment in our common stock until and unless you sell your shares at a profit.

Some or all of the "restricted" shares of our common stock issued in the merger of CPRD and Rexahn, Corp or held by other stockholders may be offered from time to time in the open market pursuant to Rule 144, and these sales may have a depressive effect on the market for our common stock. In general, an affiliated person who has held restricted shares for a period of six months may, upon filing with the SEC a notification on Form 144, sell into the market common stock in an amount equal to 1 percent of the outstanding shares (approximately 700,000 shares) during a three-month period. Non-affiliates may sell restricted securities after six months without any limits on volume.

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Our common stock is currently listed on the NYSE AMEX. However, because our common stock may be a "penny stock," it may be more difficult for you to sell shares of our common stock, and the market price of our common stock may be adversely affected.

Our common stock may be a "penny stock" if, among other things, the stock price is below $5.00 per share, we are not listed on a national securities exchange or approved for quotation on the Nasdaq Stock Market, or we have not met certain net tangible asset or average revenue requirements. Broker-dealers who sell penny stocks must provide purchasers of these stocks with a standardized risk-disclosure document prepared by the SEC. This document provides information about penny stocks and the nature and level of risks involved in investing in the penny-stock market. A broker must also give a purchaser, orally or in writing, bid and offer quotations and information regarding broker and salesperson compensation, make a written determination that transactions in penny stock are suitable for the purchaser, and obtain the purchaser's written agreement to the purchase. Broker-dealers must also provide customers that hold penny stock in their accounts with such broker-dealer a periodic statement containing price and market information relating to the penny stock. If a penny stock is sold in violation of the penny stock rules, purchasers may be able to cancel their purchase and get their money back. If applicable, the penny stock rules may make it difficult for investors to sell their shares of our stock. Because of the rules and restrictions applicable to a penny stock, there is less trading in penny stocks and the market price of our common stock may be adversely affected. Also, many brokers choose not to participate in penny stock transactions. Accordingly, purchasers may not always be able to resell shares of our common stock publicly at times and prices that they feel are appropriate.

Our business could be adversely impacted if we have deficiencies in our disclosure controls and procedures or internal control over financial reporting.

Effective internal control over financial reporting and disclosure controls and procedures are necessary in order for us to provide reliable financial and other reports and effectively prevent fraud. These types of controls are designed to provide reasonable assurance regarding the reliability of financial reporting and the proper preparation of our financial statements, as well as regarding the timely reporting of material information. If we cannot maintain effective internal control or disclosure controls and procedures, or provide reliable financial or SEC reports or prevent fraud, investors may lose confidence in our reported financial information, our common stock could be subject to delisting on the stock exchange where it is traded, our operating results and the trading price of our common stock could suffer, and we might become subject to litigation.

While our management will continue to review the effectiveness of our internal control over financial reporting and disclosure controls and procedures, there is no assurance that our disclosure controls and procedures or our internal control over financial reporting will be effective in accomplishing all control objectives, including the prevention and detection of fraud, all of the time.

Item 1B. Unresolved Staff Comments.

A smaller reporting company is not required to provide the information required by this Item.

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Item 2. Description of Property.

We lease approximately 5,466 square feet of office space at 15245 Shady Grove Road, Rockville, Maryland 20850. We also lease approximately 1,100 square feet of laboratory space at 20271 Goldenrod Lane #2086, #2088, Germantown, MD 20876. The facility is equipped with the requisite laboratory services required to conduct our business and we believe that our existing facilities are adequate to meet our needs for the foreseeable future. The office lease, which commenced on June 29, 2009, is for a five year term. The laboratory lease, which commenced on July 1, 2009, is for one year term. We do not own any real property.

Item 3. Legal Proceedings.

As previously reported in Item 1 of our Quarterly Report on Form 10-Q for the period ending September 30, 2009, on April 20, 2009, Amarex, LLC filed suit against the Company in the Circuit Court of Montgomery County, Maryland, seeking damages for an alleged breach of a contract between the Company and Amarex, LLC entered into on January 6, 2006. Amarex, LLC claims damages of $93,156 plus interest. On May 22, 2009, the Company filed an answer and an affirmative defense to the complaint denying the claims of damages made by Amarex, LLC. On June 16, 2009, the Company filed a counterclaim against Amarex, LLC for breach of the same contract in the amount of $354,824 plus interest. The court ordered that the Company and Amarex, LLC proceed with a non-binding mediation. The mediation has taken place, but the parties were not able to reach a settlement as of December 31, 2009 and will proceed with litigation. The trial is scheduled to commence on June 14, 2010.

Item 4. [Removed and Reserved].

None.

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PART II

Item 5. Market for Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

As of March 31, 2010, we are authorized to issue two classes of capital stock, which are common stock and preferred stock. Our total authorized shares of common stock and preferred stock are 500,000,000 shares, par value $0.0001 per share, and 100,000,000 shares, par value $0.0001, respectively. As of March 31, 2010, we have 72,755,830 shares of common stock outstanding and approximately 2000 stockholders of record of common stock. As of March 31, 2010, no shares of preferred stock are outstanding.

Our common stock is traded on the NYSE AMEX, formerly known as the American Stock Exchange, under the ticker symbol “RNN”. From May 16, 2005 to May 23, 2008 our common stock was traded on the Over the Counter Bulletin Board (the OTC-BB) under the ticker symbol "RXHN." From November 2004 until May 13, 2005, our common stock was traded on the OTC-BB under the ticker symbol "CPRD."

The following table sets forth the high and low sales prices of our common shares as reported during the periods indicated.

Period	High	Low
2008		
First Quarter	2.50	1.35
Second Quarter	9.99	1.85
Third Quarter	3.50	0.51
Fourth Quarter	1.35	0.66
2009		
First Quarter	1.06	0.45
Second Quarter	2.00	0.58
Third Quarter	1.14	0.40
Fourth Quarter	1.06	0.61

Dividends

We have not paid any cash dividends on common stock and do not expect to do so in the foreseeable future. We anticipate that any earnings generated from future operations will be used to finance our operations. No restrictions exist upon our ability to pay dividends.

Purchase of Equity Securities by the Issuer and Affiliated Purchasers

There were no repurchases of equity securities in 2009.

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Sale of Unregistered Equity Securities

On September 21, 2009, the Company completed a sale of 3,102,837 shares of our common stock, par value $0.0001 per share, to Teva, for an aggregate purchase price of $3,500,000. The securities were issued pursuant to the exemption from registration afforded by Section 4(2) of the Securities Act of 1933. The purchaser is an accredited investor and represented that it was acquiring the securities for investment only and not with a view for the sale or distribution of the securities.

Equity Compensation Plan Information

The following table provides information, as of December 31, 2009, about shares of our common stock that may be issued upon the exercise of options, warrants and rights granted to employees, consultants or directors under all of our existing equity compensation plans.

	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by stockholders	7,715,795	$0.98	8,942,500
Equity compensation plans not approved by stockholders	–	–	–
Total	7,715,795	$0.98	8,942,500

Item 6. Selected Financial Data.

A smaller reporting company is not required to provide the information required by this Item.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operation.

You should read the following discussion and analysis of our results of operations, financial condition and liquidity in conjunction with our financial statements and the related notes, which are included in this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report on Form 10-K, including information with respect to our plans and strategies for our business, statements regarding the industry outlook, our expectations regarding the future performance of our business, and the other non-historical statements contained herein are forward-looking statements. See "Cautionary Statement Regarding Forward-Looking Statements". You should also review the "Risk Factors" section under this Item 1A of this Annual Report for a discussion of important factors that could cause actual results to differ materially from the results described herein or implied by such forward-looking statements.

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Overview

Our company resulted from the merger of Corporate Road Show.Com Inc., a New York corporation incorporated in November 1999, and Rexahn, Corp, a Maryland corporation, immediately after giving effect to our reincorporation as a Delaware corporation under the name "Rexahn Pharmaceuticals, Inc." In connection with that transaction, a wholly owned subsidiary of ours merged with and into Rexahn, Corp, with Rexahn, Corp remaining as the surviving corporation and a wholly owned subsidiary of ours. In exchange for their shares of capital stock in Rexahn, Corp, the former stockholders of Rexahn, Corp received shares of common stock representing approximately 91.8% of the Company's outstanding equity after giving effect to the transaction. Further, upon the effective time of the Merger, our historic business was abandoned and the business plan of Rexahn, Corp was adopted. The transaction was therefore accounted for as a reverse acquisition with Rexahn, Corp as the accounting acquiring party and CPRD as the acquired party. In September 2005, Rexahn, Corp was merged with and into the Company.

Our efforts and resources have been focused primarily on acquiring and developing our pharmaceutical technologies, raising capital and recruiting personnel. We are a development stage company and have no product sales to date and we will not receive any product sales until we receive approval from the FDA or equivalent foreign regulatory bodies to begin selling our pharmaceutical candidates. Our major sources of working capital have been proceeds from various private financings, primarily private sales of common stock and debt securities, and collaboration agreements with our strategic investors.

Critical Accounting Policies

A "critical accounting policy" is one which is both important to the portrayal of our financial condition and results and requires our management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Our accounting policies are in accordance with United States generally accepted accounting principles, or GAAP, and their basis of application is consistent with that of the previous year. Our significant estimates include assumptions made in estimating the fair values of stock-based compensation and our assessment relating to the impairment of intangible assets and deferred revenues.

Research and Development

Research and development costs are expensed as incurred. Research and development expenses consist primarily of third party service costs under research and development agreements, salaries and related personnel costs, as well as stock compensation related to these costs, costs to acquire pharmaceutical products and product rights for development and amounts paid to contract research organizations, hospitals and laboratories for the provision of services and materials for drug development and clinical trials.

Costs incurred in obtaining the license rights to technology in the research and development stage, that have no alternative future uses and are for unapproved product compounds are expensed as incurred.

Fair Value of Financial Instruments

The carrying amounts reported in the accompanying financial statements for cash and cash equivalents, prepaid expenses and other current assets and accounts payable and accrued expenses approximate fair value because of the short-term maturity of these financial instruments.

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Income Taxes

The Company accounts for income taxes in accordance with Statement ASC 740, "Income Taxes". Deferred tax assets and liabilities are recorded for differences between the financial statement and tax basis of the assets and liabilities that will result in taxable or deductible amounts in the future based on enacted tax laws and rates. ASC 740 requires that a valuation allowance be established when it is more likely than not that all portions of a deferred tax asset will not be realized. A review of all positive and negative evidence needs to be considered, including a company's current and past performance, the market environment in which the company operates, length of carryback and carryforward periods and existing contracts that will result in future profits. Income tax expense is recorded for the amount of income tax payable or refundable for the period, increased or decreased by the change in deferred tax assets and liabilities during the period.

As a result of the Company's significant cumulative losses, we determined that it was appropriate to establish a valuation allowance for the full amount of our deferred tax assets.

The calculation of our tax liabilities involves the inherent uncertainty associated with the application of complex tax laws. We are subject to examination by various taxing authorities. We believe that as a result of our losses sustained to date, any examination would result in a reduction of our net operating losses rather than a tax liability. As such, we have not provided for additional taxes estimated under ASC 740.

Stock-Based Compensation

In accordance with ASC 718 “Stock Compensation” compensation costs related to share-based payment transactions, including employee stock options, are to be recognized in the financial statements. In addition, the Company adheres to the guidance set forth within Securities and Exchange Commission (SEC) Staff Accounting Bulletin No. 107 (SAB 107), which provides the Staff's views regarding the interaction between ASC 718 and certain SEC rules and regulations, and provides interpretations with respect to the valuation of share-based payments for public companies.

Impairment of Long-Lived Assets

In accordance with ASC 360, "Property, Plant and Equipment", long-lived assets to be held and used are analyzed for impairment whenever events or changes in circumstances indicate that the related carrying amounts may not be recoverable. The Company evaluates at each balance sheet date whether events and circumstances have occurred that indicate possible impairment. If there are indications of impairment, the Company uses future undiscounted cash flows of the related asset or asset grouping over the remaining life in measuring whether the assets are recoverable. In the event such cash flows are not expected to be sufficient to recover the recorded asset values, the assets are written down to their estimated fair value. Management determined that an impairment of intangible assets occurred in 2009 and wrote-off the assets remaining carrying value of $286,132.

Concentration of Credit Risk

SFAS No. 105, "Disclosure of Information About Financial Instruments with Off-Balance Sheet Risk and Financial Instruments with Concentration of Credit Risk", requires disclosure of any significant off-balance sheet risk and credit risk concentration. The Company does not have significant off-balance sheet risk or credit concentration. The Company maintains cash and short-term investments with major financial institutions. From time to time the Company has funds on deposit with commercial banks that exceed federally insured limits. The balances are insured by the Federal Deposit Insurance Corporation up to $250,000. At December 31, 2009, the Company uninsured cash balances or $8,788,659. Management does not consider this to be a significant credit risk as these banks and financial institutions are well-known.

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Recent Accounting Pronouncements Affecting the Company

In May 2009, the FASB issued guidance that is intended to establish general standards of accounting for and disclosure of events that occur after the balance sheet date but before the financial statements are issued or are available to be issued. This guidance is contained in ASC Topic 855 "Subsequent Events." It requires the disclosure of the date through which an entity has evaluated subsequent events and the basis for that date. This guidance is effective for interim and annual periods ending after June 15, 2009. The Company adopted the provisions of this guidance as of June 30, 2009.

In January 2010, the FASB issued ASU 2010-06, “Improving Disclosures about Fair Value Measurements” (ASU 2010-6). The standard amends ASC Topic 820, “Fair Value Measurements and Disclosures” to require additional disclosures related to transfers between levels in the hierarchy of fair value measurements. ASU 2010-6 is effective for interim and annual fiscal years beginning after December 15, 2009. The standard does not change how fair values are measured, accordingly the standard will not have a financial impact on the Company.

The FASB issues ASUs to amend the authoritative literature in ASC. There have been a number of ASUs to date that amend the original text of ASC. Except for the ASUs listed above, those issued to date either (i) provide supplemental guidance, (ii) are technical corrections, (iii) are not applicable to the Company or (iv) are not expected to have a significant impact on the Company.

Results of Operations

Total Revenues

During 2003, we entered into a collaborative research agreement with Rexgene Biotech Co., Ltd. (Rexgene), a minority shareholder. Rexgene is engaged in the development of pharmaceutical products in Asia and has agreed to assist us with the research, development and clinical trials necessary for registration of our Archexin drug candidate in Asia. This agreement provides Rexgene with exclusive rights to license, sublicense, make, have made, use, sell and import Archexin in Asia. A one-time contribution to the joint development and research of Archexin of $1,500,000 was paid to us in 2003 in accordance with the agreement. The amount of revenue from this contribution is being recognized as income over the term of this agreement which terminates at the later of 20 years or the term of the patent on the licensed product. We use 20 years as the basis for revenue recognition and accordingly $75,000 was included in revenues in each fiscal year beginning with 2003 and the remaining $975,000 is reflected as deferred revenue on the balance sheet as of December 31, 2009. We adopted SAB No. 104, "Revenue Recognition - Nonrefundable Upfront Fees" with respect to the accounting for this transaction. These fees are to be used in the cooperative funding of the costs of development of Archexin.

Comparison of the Year Ended December 31, 2009 and the Year Ended December 31, 2008

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related expenses for executive, finance and other administrative personnel, recruitment expenses, professional fees and other corporate expenses, including business development and general legal activities.

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General and administrative expenses increased $418,398, or 16.6%, from $2,525,705 in fiscal 2008 to $2,944,103 in fiscal 2009. The increase was due primarily to professional investment bank fees for financing activities, accounting fees, and stock options compensation expense.

Research and Development Expenses

Research and development expenses consist primarily of salaries and related personnel costs, fees paid to consultants and outside service providers for laboratory development and other expenses relating to the design, development, testing, and enhancement of our drug candidates. We expense our research and development costs as they are incurred.

Research and development expenses increased $822,464 or 33.9%, from $2,429,507 in fiscal 2008 to $3,251,971 in fiscal 2009. The increase was due primarily to expenses incurred in relation to Phase II clinical trials of Archexin, Serdaxin and Zoraxel.

Patent Fees

Our patent fees increased $86,860, or 40.1%, from $216,360 in fiscal 2008 to $303,220 in fiscal 2009. This was primarily due to increased activity and legal costs incurred to respond to existing patent applications in 2009 as compared to 2008.

Depreciation and Amortization

Depreciation expense decreased $14,139, or 25.4%, from $55,743 in fiscal 2008 to $41,604, in fiscal 2009. The decrease was due primarily to lab equipment being depreciated based on a declining balance.

Interest Expense

Our interest expense was $0 for fiscal 2008 and 2009.

Interest Income

In fiscal 2009, we recorded $67,445 of interest income from the investment of our cash and cash equivalents and other short-term investments, compared to $260,533 recorded in fiscal 2008. The decrease of $193,088, or 74.1%, was primarily due to a lower average cash and cash equivalents balance.

Research and Development Projects

Research and development expenses are expensed as incurred. Research and development expenses consist primarily of salaries and related personnel costs, costs to acquire pharmaceutical products and product rights for development and amounts paid to contract research organizations, hospitals and laboratories for the provision of services and materials for drug development and clinical trials. Costs incurred in obtaining the license rights to technology in the research and development stage and that have no alternative future uses are expensed as incurred. Our research and development programs are related to our three clinical stage lead drug candidates, Archexin, Serdaxin and Zoraxel and pre-clinical stage nano drug candidates, RX-0201-Nano, RX-0047-Nano and Nano-polymer Anticancer Drugs. Each of our lead drug candidates is in various stages of completion as described below. As we expand our clinical studies, we will enter into additional development agreements. Significant additional expenditures will be required if we complete our clinical trials, start new trials, apply for regulatory approvals, continue development of our technologies, expand our operations and bring our products to market. The eventual total cost of each clinical trial is dependent on

a number of uncertainties such as trial design, the length of the trial, the number of clinical sites and the number of patients. The process of obtaining and maintaining regulatory approvals for new therapeutic products is lengthy, expensive and uncertain. Because the successful development of our most advanced drug candidates, Archexin, Serdaxin and Zoraxel, is uncertain, and because RX-0201-Nano, RX-0047-Nano and Nano-polymer Anticancer Drugs are in early-stage development, we are unable to estimate the costs of completing our research and development programs, the timing of bringing such programs to market and, therefore, when material cash inflows could commence from the sale of these drug candidates. If these projects are not completed as planned, our results of operations and financial condition could be negatively affected and if we are unable to obtain additional financing to fund these projects, we may not be able to continue as a going concern.

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Archexin

In October 2006, we announced the conclusion of the Phase I clinical trial of Archexin, our leading drug candidate. The costs incurred for the Phase I clinical trial was approximately $1,500,000. As of December 31, 2009, we have spent an additional $1,500,000 for Phase II clinical trials of Archexin and we estimate that the Phase IIa trials for pancreatic cancer patients will be completed by the end of 2010 and will require approximately $500,000.

Serdaxin

Through December 31, 2009, the costs incurred for development of these compounds to date have been approximately $1,000,000. We currently estimate that these studies will require $6 million through the end of 2011. Also, Phase II clinical trials for the use of Serdaxin in PD is under development. We currently estimate that these studies will require $8 million through the end of 2012.

Zoraxel

Through December 31, 2009, the costs incurred for development of these compounds to date have been approximately $1,000,000. We currently estimate that these studies will require approximately $4 million through the end of 2011.

Pre-clinical Pipeline

On June 26, 2009, the Company entered into a securities purchase agreement with Teva. Contemporaneous with the execution and delivery of this agreement, the parties executed a research and exclusive license option agreement (RELO) pursuant to which the Company is required to use $2,000,000 of the gross proceeds of the issuance and sale of shares to Teva to fund a research and development program for the pre-clinical development of RX-3117 and has included this amount in restricted cash equivalents. The Company will be eligible to receive royalties on net sales of RX-3117 worldwide. During the fourth quarter of 2009, research and development work began on the RX-3117 research and development program. These compounds may be entered into Phase I clinical trials in 2010.

RX-0201-Nano, RX-0047-Nano and Nano-polymer Anticancer Drugs are in a pre-clinical stage of development and the next scheduled program for each compound is a pre-clinical toxicology study required prior to submission of an IND application to the FDA. Through December 31, 2009, the costs incurred for development of these compounds to date have been approximately $1,250,000. The estimated cost to complete pre-clinical toxicology and Phase I clinical trials is estimated to be approximately $1,500,000 per each compound for a total of $4,500,000.

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The conduct of the clinical trial and toxicology studies described above are being accomplished in conjunction with third-party clinical research organizations at external locations. This business practice is typical for the pharmaceutical industry and companies like us. As a result, the risk of completion or delay of these studies is not within our direct control and a program delay may occur due to circumstances outside our control. A delay in any of these programs may not necessarily have a direct impact on our daily operations. However, to the extent that a delay results in additional cost to us, a higher than expected expense may result.

We will need to raise additional money through debt and/or equity offerings in order to continue to develop our drug candidates. If we are not able to raise sufficient additional money, we will have to reduce our research and development activities. We will first reduce research and development activities associated with our preclinical compounds. To the extent necessary, we will then reduce our research and development activities related to some or all of our clinical drugs.

Liquidity and Capital Resources

Comparison of 2009 and 2008

Cash used in operating activities was $5,146,845 in fiscal 2009 as compared to $4,323,853 in fiscal 2008. Fiscal 2009 operating cash flows reflect our net loss from operations of $6,387,428, offset by net non-cash charges of $767,743 and an increase in working capital of $472,840. Non-cash charges consist of depreciation and amortization of $41,604, stock option compensation of $497,531, amortization of deferred revenue of $75,000, realized gains on securities of $11,025, amortization of deferred lease incentives of $10,000, deferred lease expenses of $38,501 and a loss on disposal of intangible assets of $286,132. The increase in working capital consists of prepaid expenses and other current assets of $45,830 and an increase in accounts payable and accrued expenses of $427,010. Fiscal 2008 operating cash flows reflect our loss from continuing operations of $4,912,148, offset by net non-cash charges of $485,793 and a net increase in cash components of working capital of $102,502. Non-cash charges consist of depreciation and amortization of $55,743, stock option compensation expense of $484,684, amortization of deferred revenue of $75,000 and realized losses on securities available for sale of $20,366. The increase in working capital primarily consists of prepaid expenses and other of $350,440 offset by reduction in accounts payable and accrued expenses of $247,938.

Cash provided by investing activities was $1,341,825 in fiscal 2009, which consisted of $2,026,060 for restricted cash equivalents, $18,370 for the purchase of equipment, $1,371,824 for the purchase of securities and $4,758,079 of proceeds from the sales of securities. Cash used in investing activities was $47,789 in fiscal 2008, which consisted of $27,193 for the purchase of equipment, $5,848,176 for the purchase of available-for-sale securities and $5,827,580 of proceeds from sales of securities.

Cash provided by financing activities of $10,733,922 in fiscal 2009 consists of $10,730,320 from the issuance of common stock and units and $3,602 of proceeds from the exercise of stock options. Cash provided by financing activities of $931,201 in fiscal 2008 consists of proceeds from the issuance of common stock for cash.

For the years ended December 31, 2009 and 2008, we experienced net losses of $6,387,428 and $4,912,148, respectively. Our accumulated deficit as of December 31, 2009 and 2008 was $36,293,907 and $29,906,479, respectively.

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Financings

We have financed our operations since inception primarily through equity and convertible debt financings and interest income from investments of cash and cash equivalents. During fiscal year 2009, we had a net increase in cash and cash equivalents of $ 6,928,902. The increase resulted primarily from cash provided by investing activities of $1,341,825 and cash provided by financing activities of $10,733,922, off set by cash used in operating activities of $5,146,845.

On March 20, 2008, we received approximately $900,001 in proceeds upon closing of the sales of our securities. Such sales consisted of the following: (1) sale to Jungwoo Family Co., Ltd. of 285,715 shares of our common stock and a warrant to acquire up to 57,143 shares of our common stock for aggregate cash consideration of $400,000; (2) sale to Super Bio Co. Ltd. of 357,143 shares of our common stock and a warrant to acquire up to 71,429 shares of our common stock for aggregate cash consideration of $500,000.

On May 19, 2009 the Company entered into a purchase agreement to issue 2,857,143 shares of common stock at a price of $1.05 per share to an institutional investor for gross proceeds of $2,710,910 and incurred $289,090 of stock issuance costs. The investor was also issued:

1) Series I warrants to purchase 2,222,222 shares of common stock at a purchase price of $1.05 per share at any time before September 3, 2009;

2) Series II warrants to purchase 1,866,666 shares of common stock at a purchase price of $1.25 per share at any time from December 3, 2009 to June 5, 2012; and

3) Series III warrants to purchase 1,555,555 shares of common stock at a purchase price of $1.50 per share at any time from December 3, 2009 to June 5, 2014.

These warrants have been valued at $1,142,925 and recorded in additional paid-in-capital. The closing costs included 142,857 warrants valued at $35,398 and were recorded as a reduction of the gross proceeds. Series I warrants to purchase 2,222,222 shares of common stock at a purchase price of $1.05 per share have been expired.

On September 21, 2009, the Company issued 3,102,837 shares of common stock at a purchase price of $1.13 per share to Teva for total net proceeds of $3,371,340, which include $128,659 of stock issuance costs.

On October 19, 2009, the Company entered into a purchase agreement to issue 6,072,383 shares of common stock at a price of $0.82 per share to five institutional investors for net proceeds of $4,648,070, which include $351,928 of stock issuance costs. The investors were also issued warrants to purchase 2,125,334 shares of common stock at a purchase price of $1.00 per share, exercisable on or after the date of delivery until the five-year anniversary. These warrants have been valued at $909,399 and recorded in additional paid-in-capital. The closing costs included 245,932 warrants valued at $104,722 and were recorded as a reduction of the total gross proceeds.

For the foreseeable future, we will have to fund all of our operations and capital expenditures from the net proceeds of equity and debt offerings we may make, cash on hand, licensing fees and grants. Although we expect to have to pursue additional financing, there can be no assurance that we will be able to secure financing when needed or obtain such financing on terms satisfactory to us, if at all, or that any additional funding we do obtain will be sufficient to meet our needs in the long term. If we are not able to raise sufficient additional money, we will have to reduce our research and development activities. We will first reduce research and development activities associated with our preclinical compounds. To the extent necessary, we will then reduce our research and development activities related to some or all of our clinical drugs.

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Contractual Obligations

The Company has contracted with various vendors to provide research and development services. The terms of these agreements usually require an initiation fee and monthly or periodic payments over the term of the agreement, ranging from 2 months to 36 months. The costs to be incurred are estimated and are subject to revision. As of December 31, 2009, the total contract value of these agreements was approximately $8,433,195 and the Company had made payments totaling $3,323,201 under the terms of the agreements as of December 31, 2009. All of these agreements may be terminated by either party upon appropriate notice as stipulated in the respective agreements.

The Company and three of its key executives entered into employment agreements. Each of these agreements was renewed on August 10, 2009 and expires on August 10, 2012. The agreements result in annual commitments of $200,000, $350,000 and $250,000.

On April 6, 2009, the Company entered into an agreement with Rodman & Renshaw, LLC (Rodman) for Rodman to serve as placement agent for the Company. Under this agreement, the Company agreed to pay a cash fee to Rodman immediately upon the closing of the placement equal to 6% of the aggregate gross proceeds raised in the placement plus a cash fee payable immediately on each exercise of the warrants issued to the purchasers in the placement that are solicited by Rodman equal to 6% of the aggregate proceeds received by the Company in connection with such exercise; and such number of warrants (the Rodman Warrants) issuable to Rodman or its designees at the closing to purchase shares of common stock equal to 5% of the aggregate number of shares sold in the placement. In accordance with the agreement, the contract ended on July 31, 2009. The Company paid $180,000 and issued the placement agent warrants to purchase up to an aggregate of 142,857 shares of our common stock at an exercise price of $1.3125 per share.

On April 20, 2009, Amarex, LLC filed suit against the Company in the Circuit Court of Montgomery County, Maryland, seeking damages for an alleged breach of a contract between the Company and Amarex, LLC entered into on January 6, 2006. Amarex, LLC claims damages of $93,156 plus interest. On May 22, 2009, the Company filed an answer and an affirmative defense to the complaint denying the claims of damages made by Amarex, LLC. On June 16, 2009, the Company filed a counterclaim against Amarex, LLC for breach of the same contract in the amount of $354,824 plus interest. The court ordered the Company and Amarex, LLC to proceed with a non-binding mediation. The mediation has place but the parties were not able to reach an amicable resolution as at December 31, 2009. The trial is scheduled to commence on June 14, 2010. On October 21, 2009, the Company entered in to an agreement with Ethridge Quinn McAuliffe Rowan & Hartinger to provide legal services for the Company.

On May 21, 2009, the Company entered into a 1 year agreement to use lab space commencing on July 1, 2009. The Company agreed to pay monthly payments of $4,594 from October 1, 2009 to June 30, 2010. The agreement shall terminate on June 30, 2010 and may be renewed for two additional terms of one year upon 60 days prior to the expiration of the agreement.

On June 22, 2009, the Company entered into a License Agreement with Korea Research Institute of Chemical Technology (KRICT) to acquire the rights to all intellectual properties related to Quinoxaline-Piperazine derivatives that were synthesized under a Joint Research Agreement. The initial license fee was $100,000, all of which was paid as of December 31, 2009. The agreement with KRICT calls for a one-time milestone payment of $1,000,000 within 30 days after the first achievement of marketing approval of the first commercial product arising out of or in connection with the use of KRICT's intellectual properties.

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On June 26, 2009, the Company entered into a securities purchase agreement with Teva. Contemporaneous with the execution and delivery of this agreement, the parties executed a research and exclusive license option agreement (RELO) pursuant to which the Company shall use $2,000,000 of the gross proceeds of the issuance and sale of shares to Teva to fund a research and development program for the pre-clinical development of RX-3117 and has included this amount in restricted cash equivalents. The Company will be eligible to receive royalties on net sales of RX-3117 worldwide. During the fourth quarter of 2009, research and development work began on the RX-3117 research and development program.

On June 29, 2009, the Company signed a five year lease for 5,466 square feet of office space in Rockville, Maryland commencing on June 29, 2009. The lease requires annual base rents of $76,524 with increases over the next five years. Under the leasing agreement, the Company pays its allocable portion of real estate taxes and common area operating charges. Rent paid under the Company's former lease during the year ended December 31, 2009 was $112,973 (2008 - $132,104).

Future rental payments over the next five years and thereafter are as follows:

2010	$108,418
2011	148,593
2012	158,835
2013	162,806
2014	82,408
	$661,060

In connection with the lease agreement, the Company issued a letter of credit of $100,000 in favor of the lessor. The Company has restricted cash equivalents of the same amount for the letter of credit.

On November 4, 2009, the Company entered into a Synthesis and Supply Agreement with TheraTarget, Inc. to provide synthesis and supply of Rexahn's products. The total cost of these services is $100,000, of which $30,000 was paid as of December 31, 2009.

The Company has a 401(k) plan established for its employees. The Company elected to match 100% of the first 3% of the employee's compensation plus 50% of the employee's deferral that exceeds 3% of the employee's compensation (limited to 5% total employee compensation). Expense related to this matching contribution aggregated $49,519 and nil for the years ended December 31, 2009 and 2008, respectively.

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Current and Future Financing Needs

We have incurred negative cash flow from operations since we started our business. We have spent, and expect to continue to spend, substantial amounts in connection with implementing our business strategy, including our planned product development efforts, our clinical trials, and our research and development efforts. Based on our current plans and our capital resources, we believe that our cash and cash equivalents will be sufficient to enable us to meet our minimum planned operating needs through the end of 2010, which would entail focusing our resources on Phase II clinical trials of Archexin, Serdaxin and Zoraxel. Through the end of 2010, we expect to spend a minimum of approximately $2.5 million on clinical development for Phase II clinical trials of Archexin, Serdaxin and Zoraxel (including our commitments described under "Contractual Commitments" of this Item 6), $4 million on general corporate expenses, and approximately $108,418 on facilities rent. Additionally, as required by the exclusive license option agreement executed on June 26, 2009, we plan to spend $2 million on the preclinical development of RX-3117. We will need to seek additional financing to implement and fund other drug candidate development, clinical trial and research and development efforts to the maximum extent of our operating plan, including in-vivo animal and pre-clinical studies, Phase II clinical trials for new product candidates, as well as other research and development projects. If we are not able to secure additional financing, we will not be able to implement and fund the research and development.

However, the actual amount of funds we will need to operate is subject to many factors, some of which are beyond our control. These factors include the following:

- the progress of our product development activities;
- the number and scope of our product development programs;
- the progress of our pre-clinical and clinical trial activities;
- the progress of the development efforts of parties with whom we have entered into collaboration agreements;
- our ability to maintain current collaboration programs and to establish new collaboration arrangements;
- the costs involved in prosecuting and enforcing patent claims and other intellectual property rights; and
- the costs and timing of regulatory approvals.

Impact of Inflation

To date inflationary factors have not had a significant effect on our operations.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

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Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

A smaller reporting company is not required to provide the information required by this Item.

Item 8. Financial Statements and Supplementary Data.

Our financial statements and financial statement schedule and the Report of Independent Registered Public Accounting Firm thereon are filed pursuant to this Item 8 and are included in this Annual Report on Form 10-K beginning on page F-1.

Item 9. Changes In and Disagreements With Accountants on Accounting and Financial Disclosure.

None.

Item 9A(T). Controls and Procedures.

Evaluation of Disclosure Controls and Procedures. Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) as of the end of the period covered by this report. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this report were effective such that the information required to be disclosed by us in reports filed under the Securities Exchange Act of 1934 is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding disclosure. A controls system cannot provide absolute assurance, however, that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

Changes in Internal Control Over Financial Reporting. During the most recent quarter ended December 31, 2009, there has been no change in our internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act)) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and the dispositions of the assets of the Company;

- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorization of management and the board of directors of the Company; and

- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluations of effectiveness to future periods are subject to risk that controls may become inadequate because of changes in conditions or because of declines in the degree of compliance with the policies or procedures.

Our management, with the participation of the Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2009. In making this assessment, the Company's management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework.

Based on this evaluation, our management, with the participation of the Chief Executive Officer and Chief Financial Officer, concluded that, as of December 31, 2009, our internal control over financial reporting was effective.

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal controls over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to temporary rules of the SEC that permit the Company to provide only management's report in this annual report.

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Item 9B. Other Information.

None.

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PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information to be provided under the caption “Election of Directors,” to be contained in the Definitive Proxy Statement and required to be disclosed in this Item 10, is hereby incorporated by reference in this Item 10; and the information to be provided under the caption “Section 16(a) Beneficial Ownership Reporting Compliance,” to be contained in the Definitive Proxy Statement and required to be disclosed pursuant to Section 16(a) of the Exchange Act, is also hereby incorporated by reference in this Item 9.

Code of Ethics

We have adopted a code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Rexahn’s Code of Ethics is posted on its website, which is located at www.rexahn.com.

We intend to satisfy any disclosure requirement regarding an amendment to, or waiver from, a provision of this code of ethics by posting such information on our website, at the address specified above.

Item 11. Executive Compensation.

The information to be provided under the caption “Executive Compensation and Other Matters”, to be contained in the Definitive Proxy Statement and required to be disclosed in this Item 11, is hereby incorporated by reference in this Item 11.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information to be provided under the captions “Equity Compensation Plan Information” and “Security Ownership of Management and Certain Security Holders”, each to be contained in the Definitive Proxy Statement and required to be disclosed in this Item 12, is hereby incorporated by reference in this Item 12.

Item 13. Certain Relationships and Related Transactions; and Director Independence.

Related Transactions

The information to be provided under the caption “Certain Relationships and Related Transactions,” to be contained in the Definitive Proxy Statement and required to be disclosed in this Item 13, is hereby incorporated by reference in this Item 13.

Item 14. Principal Accounting Fees and Services.

The information to be provided under the caption "Proposal 2 Ratification of the Appointment of the Independent Registered Public Accounting Firm, Fees," to be contained in the Definitive Proxy Statement and required to be disclosed in this Item 14, is hereby incorporated by reference in this Item 14.

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Item 15. Exhibits, Financial Statement Schedules.

(a) The following documents are filed as a part of this Annual Report on Form 10-K:

(b)

(1) Financial Statements:

(2)

All schedules for which provision is made in the applicable accounting regulations of the SEC are omitted because the required information is either presented in the financial statements or notes thereto, or is not applicable, required or material.

(3) Exhibits:

The documents listed below are filed with this Annual Report on Form 10-K as exhibits or incorporated into this Annual Report on Form 10-K by reference as noted:

Exhibit Number	Exhibit Description
3.1.	Amended and Restated Certificate of Incorporation, filed as Appendix G to the Company's Definitive Proxy Statement on Schedule 14A (File No. 000-50590) dated April 29, 2005, is incorporated herein by reference.
3.2.	Amended and Restated Bylaws, filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on March 26, 2010, is incorporated herein by reference.
4.1.	Specimen Certificate for the Company's Common Stock, par value $.0001 per share, filed as Exhibit 4.3 to the Company's Registration Statement on Form S-8 (File No. 333-129294) dated October 28, 2005, is incorporated herein by reference.
4.2	Form of Senior Debt Securities Indenture, filed as Exhibit 4.2 to the Company's Registration Statement on Form S-3 dated July 30, 2008, is incorporated herein by reference.
4.3	Form of Subordinated Debt Securities Indenture, filed as Exhibit 4.3 to the Company's Registration Statement on Form S-3 dated July 30, 2008 is incorporated herein by reference.
*10.1.1.	Rexahn Pharmaceuticals, Inc. Stock Option Plan, as amended, filed as Exhibit 4.4 to the Company's Registration Statement on Form S-8 (File No. 333-129294) dated October 28, 2005, is incorporated herein by reference.
*10.1.2.	

Form of Stock Option Grant Agreement for Employees, filed as Exhibit 4.5.1 to the Company's Registration Statement on Form S-8 (File No. 333-129294) dated October 28, 2005, is incorporated herein by reference.

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*10.1.3.	Form of Stock Option Grant Agreement for Non-Employee Directors and Consultants, filed as Exhibit 4.5.2 to the Company's Registration Statement on Form S-8 (File No. 333-129294) dated October 28, 2005, is incorporated herein by reference.
*10.2.	Employment Agreement, dated as of August 10, 2009, by and between Rexahn Pharmaceuticals, Inc. and C. H. Ahn, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 10, 2009, is incorporated herein by reference.
*10.3.	Employment Agreement, dated as of August 10, 2009, by and between Rexahn Pharmaceuticals, Inc. and T. H. Jeong, filed as Exhibit 10.3 to the Company's Current Report on Form 8-K filed on August 10, 2009, is incorporated herein by reference.
10.4.	Research Collaboration Agreement dated February 6, 2003 by and between Rexahn Pharmaceuticals, Inc. and Rexgene Biotech Co., Ltd., filed as Exhibit 10.5 to the Company's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2005, is incorporated herein by reference.
10.5.	Revaax License Agreement, dated February 8, 2005, by and between Rexahn Pharmaceuticals, Inc. and Revaax Pharmaceuticals LLC, filed as Exhibit 10.6 to the Company's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2005, is incorporated herein by reference.
10.6	Lease Agreement, dated June 5, 2009, by and between Rexahn Pharmaceuticals, Inc. and The Realty Associates Fund V, L.P., filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, is incorporated herein by reference.
10.7	Securities Purchase Agreement, dated as of November 19, 2007, by and between Rexahn Pharmaceuticals, Inc. and KT&G Corporation, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 21, 2007, is incorporated herein by reference.
10.8	Securities Purchase Agreement, dated as of November 20, 2007, by and between Rexahn Pharmaceuticals, Inc. and Rexgene Biotech Co., Ltd, filed as Exhibit 10.4 to the Company's Current Report on Form 8-K filed on November 21, 2007, is incorporated herein by reference.
10.9	Securities Purchase Agreement, dated as of December 17, 2007, by and between Rexahn Pharmaceuticals, Inc. and Jungwoo Family Co., Ltd, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 18, 2007, is incorporated herein by reference.
10.10	Securities Purchase Agreement, dated as of December 17, 2007, by and between Rexahn Pharmaceuticals, Inc. and Kumho Investment Bank, filed as Exhibit 10.2 to the Company's Current Report on Form 8-K filed on December 18, 2007, is incorporated herein by reference.
10.11	Securities Purchase Agreement, dated as of December 17, 2007, by and between Rexahn Pharmaceuticals, Inc. and the several parties thereto, filed as Exhibit 10.3 to the Company's Current Report on Form 8-K filed on December 18, 2007, is incorporated herein by reference.
10.12	Warrant, dated December 24, 2007, issued to KT&G Corporation, filed as Exhibit 10.6 to the Company's Current Report on Form 8-K filed on December 26, 2007, is incorporated herein by reference.
10.13	Warrant, dated December 24, 2007, issued to Rexgene Biotech Co., Ltd., filed as Exhibit 10.7 to the Company's Current Report on Form 8-K filed on December 26 ,2007, is incorporated herein by reference.
10.14	Form of Warrant, dated December 24, 2007, issued to the purchasers pursuant to the Jungwoo Securities Purchase Agreement, the Kumho Securities Purchase Agreement, the Individual Investor Securities Purchase Agreement and to a consultant, filed as Exhibit 10.4 to the Company's Current Report on Form 8-K filed on December 18, 2007, is incorporated herein by reference.

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10.15	Registration Rights Agreement, dated as of December 24, 2007, by and among Rexahn Pharmaceuticals, Inc. and the purchasers pursuant to the KT&G Securities Purchase Agreement, the Rexgene Securities Purchase Agreement, the Jungwoo Securities Purchase Agreement, the Kumho Securities Purchase Agreement, the Individual Investor Securities Purchase Agreement and a consulting Services Agreement, filed as Exhibit 10.9 to the Company Current Report on Form 8-K filed on December 26, 2007, is incorporated herein by reference.
10.16	Securities Purchase Agreement, dated as of March 20, 2008, by and between Rexahn Pharmaceuticals, Inc. and Jungwoo Family Co., Ltd. (the "Jungwoo Securities Purchase Agreement"), filed as Exhibit 10.1 to the Company's current report on Form 8-K filed on March 26, 2008, is incorporated herein by reference.
10.17	Securities Purchase Agreement, dated as of March 20, 2008, by and between Rexahn Pharmaceuticals, Inc. and Super Bio Co. Ltd., (the "Super Bio Securities Purchase Agreement"), filed as Exhibit 10.2 to the Company's current report on Form 8-K filed on March 26, 2008, is incorporated herein by reference.
10.18	Form of Warrant for issuance pursuant to the Jungwoo Securities Purchase Agreement and the Super Bio Securities Purchase Agreement, filed as Exhibit 10.3 to the Company's Current Report on Form 8-K filed on March 26, 2008, is incorporated herein by reference.
*10.19	Employment Agreement, dated as of August 10, 2009, by and between Rexahn Pharmaceuticals, Inc. and Rakesh Soni, filed as Exhibit 10.2 to the Company's Current Report on Form 8-K filed on August 10, 2009, is incorporated herein by reference.
*10.20	Consulting Agreement, dated August 12, 2008, by and between Rexahn Pharmaceuticals, Inc. and Y. Michelle Kang, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 27, 2008, is incorporated herein by reference.
10.21	Securities Purchase Agreement, dated as of May 19, 2009 by and between Rexhan Pharmaceuticals, Inc. and the purchaser signatory thereto, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 20, 2009, is incorporated herein by reference.
10.22	Form of Warrant for the Company's Series I, II, and III Common Stock Purchase Warrants, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on May 20, 2009, is incorporated herein by reference.
10.23	Research and Exclusive License Option Agreement, dated as of June 26, 2009, by and between Rexahn Pharmaceuticals, Inc. and Teva Pharmaceutical Industries Limited, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on September 21, 2009, is incorporated herein by reference.
10.24	Securities Purchase Agreement, dated as of June 26, 2009, by and between Rexahn Pharmaceuticals, Inc. and Teva Pharmaceutical Industries Limited (the "Teva Securities Purchase Agreement"), filed as Exhibit 10.2 to the Company's Current Report on Form 8-K filed on September 21, 2009, and Amendment No. 1 to the Teva Securities Purchase Agreement, filed as Exhibit 10.3 to the Company's Current Report on Form 8-K filed on September 21, 2009, are incorporated herein by reference.
10.25	Securities Purchase Agreement, dated as of October 19, 2009, by and between Rexahn Pharmaceuticals, Inc. and the purchasers signatory thereto, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on October 20, 2009, is incorporated herein by reference.
10.26	Form of Warrant for the Company's Common Stock Purchase Warrants, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on October 20, 2009, is incorporated herein by reference.
14	Code of Ethics and Business Conduct, filed as Exhibit 14 to the Company's Annual Report on 10-K for the fiscal year ended December 31, 2008, filed on March 16, 2009, is incorporated herein by reference.

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16	Letter of Lazar Levine & Felix LLP dated February 27, 2009, filed as Exhibit 16.1 to the Company's Amended Current Report on Form 8-K filed on March 2, 2009, is incorporated herein by reference.
23	Consent of ParenteBeard LLC, independent registered public accounting firm.
24.	Power of Attorney.
31.1.	Certification of Chief Executive Officer of Periodic Report Pursuant to Pursuant to Rule 13a-15(e) or Rule 15d-15(e).
31.2.	Certification of Chief Financial Officer of Periodic Report Pursuant to Pursuant to Rule 13a-15(e) or Rule 15d-15(e).
32.1	Certification of Chief Executive Officer of Periodic Report Pursuant to 18 U.S.C. Section 1350.
32.2	Certification of Chief Financial Officer of Periodic Report Pursuant to 18 U.S.C. Section 1350.

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* Management contract or compensation plan or arrangement.

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SIGNATURES

In accordance with the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the issuer has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on this 31st day of March, 2010.

REXAHN PHARMACEUTICALS, INC.

By: /s/ Chang H. Ahn
Chang H. Ahn
Chairman and Chief Executive Officer

In accordance with the requirement of the Securities Exchange Act of 1934, this report has been signed on the 31st day of March, 2010 by the following persons on behalf of the issuer and in the capacities indicated:

Name	Title
/s/ Chang H. Ahn* Chang H. Ahn	Chairman and Chief Executive Officer
/s/ Tae Heum Jeong* Tae Heum Jeong	Chief Financial Officer, Secretary and Director
/s/ Freddie Ann Hoffman* Freddie Ann Hoffman	Director
/s/ David McIntosh* David McIntosh	Director
/s/ Charles Beever* Charles Beever	Director
/s/ Kwang Soo Cheong* Kwang Soo Cheong	Director
/s/ Y. Michele Kang* Y. Michele Kang	Director

* By: /s/ Tae Heum Jeong, Attorney-in Fact
Tae Heum Jeong, Attorney-in-Fact**

** By authority of the power of attorney filed as Exhibit 24 hereto.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors
Rexahn Pharmaceuticals, Inc.
Rockville, Maryland

We have audited the accompanying balance sheets of Rexahn Pharmaceuticals, Inc. (the "Company") (a development stage company) as of December 31, 2009 and 2008, and the related statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the two years in the period ended December 31, 2009 and the amounts in the cumulative from March 19, 2001 (inception) to December 31, 2009 column in the statements of operations and cash flows. The Company's management is responsible for these financial statements. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Rexahn Pharmaceuticals, Inc. as of December 31, 2009 and 2008, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2009 and the cumulative period from March 19, 2001 (inception) to December 31, 2009, in conformity with accounting principles generally accepted in the United States of America.

PARENTEBEARD LLC

/s/ PARENTEBEARD LLC

New York, New York
March 31, 2010

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Balance Sheets

	December 31, 2009	December 31, 2008
ASSETS		
Current Assets:		
Cash and cash equivalents	$7,298,032	$369,130
Marketable securities	175,000	2,999,750
Prepaid expenses and other current assets (note 3)	320,935	366,765
Total Current Assets	7,793,967	3,735,645
Restricted Cash Equivalents (note 13)	2,026,060	-
Equipment, Net (note 4)	168,978	92,212
Intangible Assets, Net	-	286,132
Total Assets	$9,989,005	$4,113,989
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable and accrued expenses (note 5)	$785,904	$358,894
Deferred Revenue (note 6)	975,000	1,050,000
Other Liabilities (note 7)	128,501	-
Total Liabilities	1,889,405	1,408,894
Commitment and Contingencies (note 13)		
Stockholders' Equity (note 9):		
Preferred stock, par value $0.0001, 100,000,000 authorized shares, none issued and outstanding	-	-
Common stock, par value $0.0001, 500,000,000 authorized shares, 71,938,701 (2008 – 56,039,854) issued and 71,924,496 (2008 – 56,025,649) outstanding	7,194	5,604
Additional paid-in capital	44,414,723	33,184,860
Accumulated deficit during the development stage	(36,293,907)	(29,906,479)
Treasury stock, 14,205 shares, at cost	(28,410)	(28,410)
Accumulated other comprehensive (loss)	-	(550,480)
Total Stockholders' Equity	8,099,600	2,705,095
Total Liabilities and Stockholders' Equity	9,989,005	$4,113,989

(See accompanying notes to financial statements.)

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Statement of Operations

	Years Ended December 31,		Cumulative from March 19, 2001 (Inception) to December 31,
	2009	2008	2009
Revenue:			
Research	$75,000	$75,000	$525,000
Expenses:			
General and administrative	2,944,103	2,525,705	17,808,542
Research and development	3,251,971	2,429,507	16,483,815
Patent fees	303,220	216,360	1,225,053
Depreciation and amortization	41,604	55,743	544,808
Total Expenses	6,540,898	5,227,315	36,062,218
Loss from Operations	(6,465,898)	(5,152,315)	(35,537,218)
Other (Income) Expense			
Realized (gain) loss on securities available-for-sale	(11,025)	20,366	9,341
Interest income	(67,445)	(260,533)	(1,178,799)
Interest expense	-	-	301,147
Beneficial conversion feature	-	-	1,625,000
	(78,470)	(240,167)	756,689
Loss Before Provision for Income Taxes	(6,387,428)	(4,912,148)	(36,293,907)
Provision for Income Taxes	-	-	-
Net Loss	$(6,387,428)	$(4,912,148)	$(36,293,907)
Net Loss per share , basic and diluted	$(0.10)	$(0.09)	
Weighted average number of shares, basic and diluted	61,411,442	55,856,991	

(See accompanying notes to financial statements.)

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Statements of Stockholders' Equity and Comprehensive Loss
Period from March 19, 2001 (Inception) to December 31, 2009

	Common Stock		Additional	Accumulated Deficit During the	Treasury Stock		Accumulated Other	Total Stockholders'
	Number of shares	Amount	Paid in Capital	Development Stage	Number of shares	Amount	Comprehensive Loss	Equity (Deficit)
Opening balance, March 19, 2001	-	$-	$-	$-	-	$-	$ -	$-
Common shares issued`	7,126,666	71,266	4,448,702	-	-	-	-	4,519,968
Net loss	-	-	-	(625,109)	-	-	-	(625,109)
Balances at, December 31, 2001	7,126,666	71,266	4,448,702	(625,109)	-	-	-	3,894,859
Net loss	-	-	-	(1,181,157)	-	-	-	(1,181,157)
Balances at, December 31, 2002	7,126,666	71,266	4,448,702	(1,806,266)	-	-	-	2,713,702
Common shares issued	500,000	5,000	1,995,000	-	-	-	-	2,000,000
Stock option compensation	-	-	538,074	-	-	-	-	538,074
Net loss	-	-	-	(2,775,075)	-	-	-	(2,775,075)
Balances at, December 31, 2003	7,626,666	76,266	6,981,776	(4,581,341)	-	-	-	2,476,701
Common shares issued	1,500	15	1,785	-	-	-	-	1,800
Stock option compensation	-	-	230,770	-	-	-	-	230,770
Net loss	-	-	-	(3,273,442)	-	-	-	(3,273,442)
Balances at, December 31, 2004	7,628,166	76,281	7,214,331	(7,854,783)	-	-	-	(564,171)
Stock split (5 for 1)	30,512,664	(72,467)	72,467	-	-	-	-	-
Common shares issued in connection with merger	3,397,802	340	(340)	-	-	-	-	-
Common stock issued for cash	4,175,000	417	8,349,565	-	-	-	-	8,349,982

Common shares issued on conversion of convertible debt	650,000	65	1,299,935	-	-	-	-	1,300,000
Exercise of stock options	40,000	4	9,596	-	-	-	-	9,600
Common shares issued in exchange for services	7,000	1	21,876	-	-	-	-	21,877
Beneficial conversion feature	-	-	1,625,000	-	-	-	-	1,625,000
Stock option compensation	-	-	436,748	-	-	-	-	436,748
Net loss	-	-	-	(6,349,540)	-	-	-	(6,349,540)
Balances at, December 31, 2005	46,410,632	4,641	19,029,178	(14,204,323)	-	-	-	4,829,496
Exercise of stock options	61,705	6	14,802	-	-	-	-	14,808
Common shares issued on conversion of convertible debt	3,850,000	385	3,849,615	-	-	-	-	3,850,000
Purchase of treasury stock	-	-	-	-	14,205	(28,410)	-	(28,410)
Stock option compensation	-	-	1,033,956	-	-	-	-	1,033,956
Net loss	-	-	-	(6,486,003)	-	-	-	(6,486,003)
Balances at, December 31, 2006	50,322,337	$5,032	$23,927,551	$(20,690,326)	14,205	$(28,410)	$ -	$3,213,847

(See accompanying notes to financial statements.)

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Statements of Stockholders' Equity and Comprehensive Loss (Continued)
Period from March 19, 2001 (Inception) to December 31, 2009

	Common Stock		Additional	Accumulated Deficit During the	Treasury Stock		Accumulated Other	Total Stockholders'
	Number of shares	Amount	Paid in Capital	Development Stage	Number of shares	Amount	Comprehensive Loss	Equity (Deficit)
Balances at, December 31, 2006	50,322,337	$5,032	$23,927,551	$(20,690,326)	14,205	$(28,410)	-	$3,213,847
Common stock issued for cash	4,857,159	486	6,799,538	-	-	-	-	6,800,024
Exercise of stock options	127,500	12	59,988	-	-	-	-	60,000
Stock option compensation	-	-	1,121,646	-	-	-	-	1,121,646
Share issuance costs	-	-	(139,674)	-	-	-	-	(139,674)
Net loss	-	-	-	(4,304,005)	-	-	-	(4,304,005)
Balances at, December 31, 2007	55,306,996	5,530	31,769,049	(24,994,331)	14,205	(28,410)	-	6,751,838
Common stock issued	642,858	65	899,936	-	-	-	-	900,001
Exercise of stock options	90,000	9	31,191	-	-	-	-	31,200
Stock option compensation	-	-	484,684	-	-	-	-	484,684
Share issuance costs	-	-	-	-	-	-	-	-
Net (loss)	-	-	-	(4,912,148)	-	-	-	(4,912,148)
Unrealized loss on securities available for sale				-			(550,480)	(550,480)
Balances at, December 31, 2008	56,039,854	5,604	33,184,860	(29,906,479)	14,205	(28,410)	(550,480)	2,705,095
Issuance of common stock and units, net of issuance	15,883,847	1,588	10,728,732	-	-	-	-	10,730,320

costs								
Stock options exercised	15,000	2	3,600	-	-	-	-	3,602
Stock option compensation	-	-	497,531	-	-	-	-	497,531
Net (loss)	-	-	-	(6,387,428)	-	-	-	(6,387,428)
Unrealized gain on securities available for sale	-	-	-	-	-	-	550,480	550,480
Balances at, December 31, 2009	71,938,701	$7,194	$44,414,723	$(36,293,907)	14,205	$(28,410)	$ -	$8,099,600

(See accompanying notes to financial statements.)

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Statement of Cash Flows

	Years Ended December 31,		Cumulative From March 19, 2001 (Inception) to December 31,
	2009	2008	2009
Cash Flows from Operating Activities:			
Net loss	$(6,387,428)	$(4,912,148)	$(36,293,907)
Adjustments to reconcile net (loss) to net cash used in operating activities:			
Beneficial conversion feature	-	-	1,625,000
Compensatory stock	-	-	21,877
Depreciation and amortization	41,604	55,743	544,808
Stock option compensation	497,531	484,684	4,354,365
Amortization of deferred revenue	(75,000)	(75,000)	(525,000)
Realized (gains) losses on marketable securities	(11,025)	20,366	9,341
Amortization of deferred lease incentive	(10,000)	-	(10,000)
Deferred lease expenses	38,501	-	38,501
Loss on impairment of intangible assets	286,132	-	286,132
Changes in assets and liabilities:			
Prepaid expenses and other current assets	45,830	350,440	(320,935)
Accounts payable and accrued expenses	427,010	(247,938)	785,904
Net Cash Used in Operating Activities	(5,146,845)	(4,323,853)	(29,483,914)
Cash Flows from Investing Activities:`			
Restricted cash equivalents	(2,026,060)	-	(2,026,060)
Purchase of equipment	(18,370)	(27,193)	(543,702)
Purchase of marketable securities	(1,371,824)	(5,848,176)	(10,770,000)
Proceeds from sales of marketable securities	4,758,079	5,827,580	10,585,659
Payment of licensing fees	-	-	(356,216)
Net Cash Provided (Used in) by Investing Activities	1,341,825	(47,789)	(3,110,319)
Cash Flows from Financing Activities:			
Issuance of common stock and units, net of issuance costs	10,730,320	931,201	33,267,073
Proceeds from exercise of stock options	3,602		3,602
Proceeds from long-term debt	-	-	5,150,000
Proceeds from research contribution	-	-	1,500,000
Principal payments on long-term debt	-	-	(28,410)
Net Cash Provided by Financing Activities	10,733,922	931,201	39,892,265
Net Increase (Decrease) in Cash and Cash Equivalents	6,928,902	(3,440,441)	7,298,032
Cash and Cash Equivalents - beginning of period	369,130	3,809,571	-
Cash and Cash Equivalents - end of period	7,298,032	$369,130	$7,298,032

Supplemental Cash Flow Information			
Interest paid	$-	$-	$301,147
Non-cash financing and investing activities:			
Warrants issued	$2,270,908	$220,004	$3,877,752
Leasehold improvement incentive	$100,000	-	$100,000

(See accompanying notes to financial statements.)

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Notes to the Financial Statements
December 31, 2009 and 2008

1. Operations and Organization

Operations and Organization

Rexahn Pharmaceuticals, Inc. (the "Company" or "Rexahn Pharmaceuticals"), a Delaware corporation, is a development stage biopharmaceutical company dedicated to the discovery, development and commercialization of innovative treatments for cancer, central nervous system (“CNS”) disorders, sexual dysfunction and other medical needs. The Company has not yet generated commercial sales revenue and has been able to fund it operating losses to date through the sale of its common stock, issuance of long-term debt, and proceeds from reimbursed research and development costs. The Company believes that its existing cash and cash equivalents and marketable securities will be sufficient to cover its cash flow requirements for 2010. Management has the capability of managing the Company’s operations within existing cash and marketable securities available by reducing its research and development activities. This may result in slowing down clinical studies, but will conserve the Company’s cash to allow it to operate for the next twelve months.

Reverse Merger Acquisition

Pursuant to an Agreement and Plan of Merger by and among Rexahn, Corp ("Rexahn"), Corporate Road Show.Com Inc. ("CRS"), a New York corporation and predecessor corporation of the Company, CRS Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of CRS ("Merger Sub"), CRS Delaware, Inc., a Delaware corporation and wholly owned subsidiary of CRS, immediately after giving effect to a 1-for-100 reverse stock split and the reincorporation of CRS as a Delaware corporation under the name Rexahn Pharmaceuticals, Inc. ("Rexahn Pharmaceuticals"), on May 13, 2005, Merger Sub merged with and into Rexahn, with Rexahn surviving as a wholly owned subsidiary of Rexahn Pharmaceuticals (the "Acquisition Merger"). In the Acquisition Merger, (i) each share of the issued and outstanding common stock of Rexahn (other than dissenting shares) was converted into the right to receive five shares of Rexahn Pharmaceuticals common stock; and (ii) each issued, outstanding and unexercised option to purchase a share of Rexahn common stock was converted into an option to purchase five shares of Rexahn Pharmaceuticals common stock.

Shares of Rexahn Pharmaceuticals common stock issued in the Acquisition Merger were exempt from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"), pursuant to Regulation D under the Securities Act and/or Regulation S under the Securities Act. These shares of Rexahn Pharmaceuticals common stock are deemed "restricted securities" and bear an appropriate restrictive legend indicating that the resale of such shares may be made only pursuant to registration under the Securities Act or pursuant to an available exemption from such registration.

For accounting purposes, the Acquisition Merger was accounted for as a reverse acquisition of CRS (legal acquirer) by Rexahn (accounting acquirer). As a result, following the Acquisition Merger, the historical financial statements of Rexahn became the historical financial statements of the Company.

Merger of Subsidiary

On September 29, 2005, the Company's wholly owned subsidiary, Rexahn, was merged with and into the Company and Rexahn's separate existence was terminated.

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Notes to the Financial Statements
December 31, 2009 and 2008

2. Summary of Significant Accounting Policies

a) Cash and Cash Equivalents

Cash and cash equivalents include cash on hand and short-term investments purchased with remaining maturities of three months or less at acquisition.

b) Marketable Securities

Marketable securities are considered “available-for-sale” in accordance with Financial Statement Accounting Board Accounting Standard Codification 320 (“ASC 320”), “Debt and Equity Securities”, and thus are reported at fair value in our accompanying Balance Sheets, with unrealized gains and (losses) excluded from earnings and reported as a separate component of stockholders’ equity. Realized gains and (losses) are accounted on the basis of specific identification and are included in other income (expense) in our income statements. We classify such investments as current on our balance sheets as the investments are readily marketable and available for use in our current operations. Accumulated other comprehensive loss for the years ended December 31, 2009 and 2008 was $0 and $550,480, respectively.

c) Equipment

Equipment is stated at cost less accumulated depreciation. Depreciation, based on the lesser of the term of the lease or the estimated useful life of the assets, is provided as follows:

	Life	Depreciation Method
Furniture and fixtures	7 years	double declining balance
Office equipment	5 years	double declining balance
Lab equipment	5-7 years	double declining balance
Computer equipment	5 years	straight line
Leasehold improvements	3-5 years	straight line

d) Research and Development

Research and development costs are expensed as incurred. Research and development expenses consist primarily of third party service costs under research and development agreements, salaries and related personnel costs, as well as stock compensation related to these costs, costs to acquire pharmaceutical products and product rights for development and amounts paid to contract research organizations, hospitals and laboratories for the provision of services and materials for drug development and clinical trials.

Costs incurred in obtaining the license rights to technology in the research and development stage, that have no alternative future uses and are for unapproved product compounds are expensed as incurred.

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Notes to the Financial Statements
December 31, 2009 and 2008

2. Summary of Significant Accounting Policies (cont'd)

e) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates are based on management's best knowledge of current events and actions the Company may undertake in the future. Actual results may ultimately differ from those estimates. These estimates are reviewed periodically and as adjustments become necessary, they are reported in earnings in the period in which they become available.

f) Fair Value of Financial Instruments

The carrying amounts reported in the accompanying financial statements for cash and cash equivalents, prepaid expenses and other current assets and accounts payable and accrued expenses approximate fair value because of the short-term maturity of these financial instruments.

g) Income Taxes

The Company accounts for income taxes in accordance with Statement ASC 740, "Income Taxes". Deferred tax assets and liabilities are recorded for differences between the financial statement and tax basis of the assets and liabilities that will result in taxable or deductible amounts in the future based on enacted tax laws and rates. ASC 740 requires that a valuation allowance be established when it is more likely than not that all portions of a deferred tax asset will not be realized. A review of all positive and negative evidence needs to be considered, including a company's current and past performance, the market environment in which the company operates, length of carryback and carryforward periods and existing contracts that will result in future profits. Income tax expense is recorded for the amount of income tax payable or refundable for the period, increased or decreased by the change in deferred tax assets and liabilities during the period.

As a result of the Company's significant cumulative losses, we determined that it was appropriate to establish a valuation allowance for the full amount of our deferred tax assets.

The calculation of our tax liabilities involves the inherent uncertainty associated with the application of complex tax laws. We are subject to examination by various taxing authorities. We believe that as a result of our losses sustained to date, any examination would result in a reduction of our net operating losses rather than a tax liability. As such, we have not provided for additional taxes estimated under ASC 740.

h) Loss Per Share

The Company accounts for loss per share pursuant to ASC 260, "Earnings per Share", which requires disclosure on the financial statements of "basic" and "diluted" loss per share. Basic loss per share is computed by dividing net loss by the weighted average number of common shares outstanding for the year. Diluted loss per share is computed by

dividing net loss by the weighted average number of common shares outstanding plus potentially dilutive securities outstanding for each year. Potentially dilutive securities include stock options and warrants.

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
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December 31, 2009 and 2008

Diluted loss per share for the years ended December 31, 2009 and 2008 is the same as basic loss per share due to the fact that the Company incurred losses for all periods presented and the inclusion of common share equivalents would be antidilutive. The following securities, presented on a common share equivalent basis, have been excluded from the per share computations:

	For the years ended	
	December 31, 2009	December 31 2008
Stock Options	7,715,795	7,790,798
Warrants	8,575,243	1,207,151

i) Stock-Based Compensation

In accordance with ASC 718 “Stock Compensation” compensation costs related to share-based payment transactions, including employee stock options, are to be recognized in the financial statements. In addition, the Company adheres to the guidance set forth within Securities and Exchange Commission ("SEC") Staff Accounting Bulletin No. 107 ("SAB 107"), which provides the Staff's views regarding the interaction between ASC 718 and certain SEC rules and regulations, and provides interpretations with respect to the valuation of share-based payments for public companies.

j) Impairment of Long-Lived Assets

In accordance with ASC 360, "Property, Plant and Equipment", long-lived assets to be held and used are analyzed for impairment whenever events or changes in circumstances indicate that the related carrying amounts may not be recoverable. The Company evaluates at each balance sheet date whether events and circumstances have occurred that indicate possible impairment. If there are indications of impairment, the Company uses future undiscounted cash flows of the related asset or asset grouping over the remaining life in measuring whether the assets are recoverable. In the event such cash flows are not expected to be sufficient to recover the recorded asset values, the assets are written down to their estimated fair value. Management determined that an impairment of intangible assets occurred in 2009 and wrote-off the assets remaining carrying value of $286,132.

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Notes to the Financial Statements
December 31, 2009 and 2008

2. Summary of Significant Accounting Policies (cont'd)

k) Concentration of Credit Risk

SFAS No. 105, "Disclosure of Information About Financial Instruments with Off-Balance Sheet Risk and Financial Instruments with Concentration of Credit Risk", requires disclosure of any significant off-balance sheet risk and credit risk concentration. The Company does not have significant off-balance sheet risk or credit concentration. The Company maintains cash and short-term investments with major financial institutions. From time to time the Company has funds on deposit with commercial banks that exceed federally insured limits. The balances are insured by the Federal Deposit Insurance Corporation up to $250,000. At December 31, 2009, the Company uninsured cash balances of $8,788,659. Management does not consider this to be a significant credit risk as these banks and financial institutions are well-known.

l) Recent Accounting Pronouncements Affecting the Company

In May 2009, the FASB issued guidance that is intended to establish general standards of accounting for and disclosure of events that occur after the balance sheet date but before the financial statements are issued or are available to be issued. This guidance is contained in ASC Topic 855 "Subsequent Events." It requires the disclosure of the date through which an entity has evaluated subsequent events and the basis for that date. This guidance is effective for interim and annual periods ending after June 15, 2009. The Company adopted the provisions of this guidance as of June 30, 2009.

In January 2010, the FASB issued ASU 2010-06, “Improving Disclosures about Fair Value Measurements” (“ASU 2010-6”). The standard amends ASC Topic 820, “Fair Value Measurements and Disclosures” to require additional disclosures related to transfers between levels in the hierarchy of fair value measurements. ASU 2010-6 is effective for interim and annual fiscal years beginning after December 15, 2009. The standard does not change how fair values are measured, accordingly the standard will not have a financial impact on the Company.

The FASB issues ASUs to amend the authoritative literature in ASC. There have been a number of ASUs to date that amend the original text of ASC. Except for the ASUs listed above, those issued to date either (i) provide supplemental guidance, (ii) are technical corrections, (iii) are not applicable to the Company or (iv) are not expected to have a significant impact on the Company.

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Notes to the Financial Statements
December 31, 2009 and 2008

3. Prepaid Expenses and Other Current Assets

	December 31, 2009	December 31, 2008
Deposits on contracts	$ 245,476	$ 294,337
Other assets	75,459	72,428
	$ 320,935	$ 366,765

4. Equipment, Net

	December 31, 2009	December 31, 2008
Furniture and fixtures	$ 32,169	$ 31,713
Office equipment	72,385	70,276
Lab and computer equipment	428,816	421,724
Leasehold improvements	110,713	2,000
	644,083	525,713
Less Accumulated depreciation	(475,105)	(433,501)
Net carrying amount	$ 168,978	$ 92,212

Depreciation expense was $41,604 and $37,932 for the years ended December 31, 2009 and 2008, respectively.

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Notes to the Financial Statements
December 31, 2009 and 2008

5. Accounts Payable and Accrued Expenses

	December 31, 2009	December 31, 2008
Trade payables	$ 132,212	$ 136,906
Accrued expenses	512,659	98,486
Payroll liabilities	141,033	123,502
	$ 785,904	$ 358,894

6. Deferred Revenue

In 2003, the Company entered into a collaborative research agreement with Rexgene Biotech Co., Ltd. ("Rexgene"), a shareholder. Rexgene is engaged in the development of pharmaceutical products in Asia and has agreed to assist the Company with the research, development and clinical trials necessary for registration of the Company's drug candidate, RX-0201, in Asia. This agreement provides Rexgene with exclusive rights to license, sublicense, make, have made, use, sell and import RX-0201 in Asia. A one-time contribution to the joint development and research of RX-0201 of $1,500,000 was paid to the Company in 2003 in accordance with the agreement. The amount of revenue from this contribution is being recognized as income over the term of the agreement which terminates at the later of 20 years or the term of the patent on the licensed product.

The Company is using 20 years as its basis for recognition and accordingly $75,000 was included in revenues for the years ended December 31, 2009 and 2008. The remaining $975,000 at December 31, 2009 (2008 - $1,050,000) is reflected as deferred revenue on the balance sheet. The contribution is being used in the cooperative funding of the costs of development of RX-0201. Royalties of 3% of net sales of licensed products will become payable to the Company on a quarterly basis once commercial sales of RX-0201 begin. The product is still under development and commercial sales are not expected to begin until at least 2012.

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Notes to the Financial Statements
December 31, 2009 and 2008

7. Other Liabilities

Deferred Lease Incentive

On June 29, 2009, the Company entered into a five year office lease agreement as discussed in note 13. The lessor agreed to grant a leasehold improvement allowance of $100,000 to the Company to be used for construction cost of the improvements, architectural and engineering fees, government agency plan check, permit and other fees, sales and use taxes, testing and inspection costs, construction fees and telephone and data cabling and wiring in the premises. As at December 31, 2009, the full amount of leasehold improvement allowance has been used up by the Company. The Company accounts for the benefit of the leasehold improvement allowance as a reduction of rental expense over the term of the lease which is 5 years.

The following table sets forth the deferred lease incentive:

	December 31, 2009
Deferred lease incentive	$ 100,000
Less accumulated amortization	(10,000)
Balance	$ 90,000

Deferred Office Lease Expense

The office lease agreement, discussed above, requires an initial annual base rent of $76,524 with annual increases over the next five years. The Company recognizes rental expense on a straight-line basis over the term of the lease, which resulted in a deferred rent liability of $31,670 as of December 31, 2009.

Deferred Lab Lease Expense

On May 21, 2009, the Company entered into a 1 year agreement to use lab space commencing on July 1, 2009. The lessor granted free rent to the Company for the period from July 1, 2009 to September 30, 2009. The Company recognizes rental expense on a straight-line basis over the term of the lease, which results in a deferred rent liability of $6,831 as of December 31, 2009.

8. Net Loss per Common Share

We compute basic loss per share by dividing net loss by the weighted average number of common shares outstanding and excluding any potential dilution. Net loss per common share assuming dilution was computed by reflecting potential dilution from the exercise of stock options and warrants. As of December 31, 2009 and 2008, there were stock options and warrants to acquire 16,291,035 and 8,967,943 shares of our common stock, respectively. These shares were excluded from the computations of diluted loss per share because their effect would be anti-dilutive.

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
Notes to the Financial Statements
December 31, 2009 and 2008

9. Common Stock

The following transactions occurred from March 19, 2001 (inception) to December 31, 2009:

a) On May 10, 2001 the Company issued 3,600,000 shares of common stock to the Company's founders for $1.

b) On August 10, 2001 the Company issued:

i) 1,208,332 shares of common stock to the directors of the Company for cash of $1,450,000.

ii) 958,334 shares of common stock to Rexgene for cash of $550,000.

iii) 360,000 shares of common stock in a private placement to individual investors for cash of $1,080,000.

These share purchases were negotiated by the parties at various dates prior to the August 10, 2001 share issuance date.

c) On October 10, 2001 the Company issued 400,000 shares of common stock to Chong Kun Dang Pharmaceutical Corp. ("CKD") for cash of $479,991 and 400,000 shares of common stock to an individual investor for cash of $479,991.

d) On October 10, 2001 the Company issued 200,000 shares of common stock to CKD for cash of $479,985.

e) Since inception, the Company's founders have transferred 800,000 shares of the common stock described in a) to officers and directors of the Company.

f) In July 2003, the shareholders described in b)(iii) and e) transferred an aggregate of 1,268,332 shares of common stock to a voting trust. The trust allows for the unified voting of the stock by the trustees. The appointed trustees are senior management of the Company who, together with their existing shares, control a majority of the voting power of the Company.

g) On August 20, 2003 the Company issued 500,000 shares of common stock to KT&G Corporation for cash of $2,000,000.

h) On October 29, 2004, an option holder exercised options to purchase shares of the Company’s common stock for cash of $1,800 and the Company issued an aggregate of 1,500 shares.

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REXAHN PHARMACEUTICALS, INC.
(A Development Stage Company)
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9. Common Stock (cont'd)

i) Pursuant to the agreement and plan of merger which occurred on May 13, 2005, (i) each share of the issued and outstanding common stock of Rexahn, Corp ("Rexahn") (other than dissenting shares) was converted into the right to receive five shares of Rexahn Pharmaceuticals common stock; (ii) each issued, outstanding and unexercised option to purchase a share of Rexahn common stock was converted into an option to purchase five shares of Rexahn Pharmaceuticals common stock and (iii) the par value of Rexahn's common stock was adjusted to reflect the par value of Corporate Road Show Com Inc. ("CRS") common stock. In the acquisition merger, 289,780,000 CRS pre-reverse stock split shares were converted into 2,897,802 post-reverse stock split Rexahn Pharmaceuticals shares, and an additional 500,000 post-reverse stock split Rexahn Pharmaceuticals shares were issued to a former executive of CRS. All shares and earnings per share information have been retroactively restated in these financial statements.

j) On August 8, 2005, the Company issued, in a transaction exempt from registration under the Securities Act, 4,175,000 shares of common stock at a purchase price of $2.00 per share.

k) On October 3, 2005, the Company issued 7,000 shares of common stock for $21,877 and $7,500 cash in exchange for services.

l) On December 2, 2005, the holders of a convertible note, representing $1,300,000 aggregate principal amount, exercised their option to convert the entire principal amount of the note into the Company's common stock. Based on a $2.00 per share conversion price, the holders received an aggregate of 650,000 shares.

m) On December 27, 2005, option holders exercised options to purchase shares of the Company's common stock for cash of $9,600 and the Company issued an aggregate of 40,000 shares.

n) On February 22, 2006, an option holder exercised options to purchase shares of the Company's common stock for cash of $1,200 and the Company issued an aggregate of 5,000 shares.

o) On April 12, 2006, an option holder exercised options to purchase shares of the Company's common stock for cash of $3,409 and the Company issued an aggregate of 14,205 shares. On the same date, the Company agreed to repurchase common stock from the option holder based on the then market price for treasury in exchange for the aggregate purchase price of $28,410 in cash.

p) On May 13, 2006, holders of the $3,850,000 convertible notes issued on February 28, 2005, exercised their rights to convert the entire principal amount of the notes into shares of the Company's common stock. Based on a $1.00 per share conversion price, the Company issued 3,850,000 shares of common stock in connection with the conversion.

q) On October 9, 2006, an option holder exercised options to purchase shares of the Company's common stock for cash of $2,400 and the Company issued an aggregate of 10,000 shares.

r)

On November 19, 2006, an option holder exercised options to purchase shares of the Company's common stock for cash of $1,800 and the Company issued an aggregate of 7,500 shares.

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9. Common Stock (cont'd)

s) On December 19, 2006, an option holder exercised options to purchase shares of the Company's common stock for cash of $6,000 and the Company issued an aggregate of 25,000 shares.

t) On April 18, 2007, an option holder exercised options to purchase shares of the Company's common stock for cash of $14,400 and the Company issued an aggregate of 18,000 shares.

u) On July 23, 2007, an option holder exercised options to purchase shares of the Company's common stock for cash of $12,000 and the Company issued an aggregate of 15,000 shares.

v) On September 27, 2007, an option holder exercised options to purchase shares of the Company's common stock for cash of $15,600 and the Company issued an aggregate of 19,500 shares.

w) On December 18, 2007, the Company issued 4,857,159 units at a price $1.40 per share for total gross proceeds of $6,800,023. Investors also were issued one warrant for every five shares purchased. One warrant will entitle the holder to purchase an additional share of common stock at a purchase price of $1.80 at any time over a period of three years from the date of the closing of the private placement valued at $1,103,164 on closing and were charged to additional paid in capital. Private placement closing costs of $139,674, including 107,144 warrants issued, valued at $91,119, were recorded as a reduction of the issuance proceeds. The anti-dilutive protection provision is indexed to the Company's own stock and has other equity characteristics. The provision is structured in a way that is designed to protect a holder's position from being diluted and contains a price protection based on a mathematical calculation.

x) On December 27, 2007, an option holder exercised options to purchase shares of the Company's common stock for cash of $18,000 and the Company issued an aggregate of 75,000 shares.

y) On March 20, 2008, the Company issued 642,858 units consisting of one share of the Company's common stock and one warrant for every five common shares purchased in a private placement at a price of $1.40 per unit for total gross proceeds of $900,001. One warrant will entitle the holder to purchase an additional share of common stock at a price of $1.80 at any time over a period of three years from the date of the private placement. The warrants were valued at $220,005 and were charged to additional paid-in-capital. The anti-dilutive protection provision is indexed to the Company's own stock and has other equity characteristics. The provision is structured in a way that is designed to protect a holder's position from being diluted and contains a price protection based on a mathematical calculation.

z) On May 30, 2008, an option holder exercised options to purchase shares of the Company's common stock for cash of $7,200 and the Company issued an aggregate of 30,000 shares.

aa) On June 2, 2008, an option holder exercised options to purchase shares of the Company's common stock for cash of $12,000 and the Company issued an aggregate of 50,000 shares.

ab)

On June 30, 2008, an option holder exercised options to purchase shares of the Company's common stock for cash of $12,000 and the Company issued an aggregate of 10,000 shares.

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9. Common Stock (cont'd)

ac) On May 19, 2009 the Company entered into a purchase agreement to issue 2,857,143 shares of common stock at a price of $1.05 per share to an institutional investor for total gross proceeds of $2,710,910 and incurred $289,090 of stock issuance costs. The investor was also issued:

1) Series I warrants to purchase 2,222,222 shares of common stock at a purchase price of $1.05 per share at any time before September 3, 2009;

2) Series II warrants to purchase 1,866,666 shares of common stock at a purchase price of $1.25 per share at any time from December 3, 2009 to June 5, 2012; and

3) Series III warrants to purchase 1,555,555 shares of common stock at a purchase price of $1.50 per share at any time from December 3, 2009 to June 5, 2014.

These warrants have been valued at $1,142,925 and recorded in additional paid-in-capital. The closing costs included 142,857 warrants valued at $35,398 and were recorded as a reduction of the gross proceeds. Series I warrants to purchase 2,222,222 shares of common stock, valued at $213,013, at a purchase price of $1.05 per share have been expired. The anti-dilutive protection provision is indexed to the Company's own stock and has other equity characteristics. The provision is structured in a way that is designed to protect a holder's position from being diluted based on a mathematical calculation.

ad) On June 9, 2009, the Company issued 1,833,341 shares of common stock and 862,246 warrants to purchase common stock at a purchase price of $1.05 per share to existing stockholders pursuant to the anti-dilution protection provisions of the private placements transacted on December 24, 2007 and March 20, 2008.

ae) On September 4, 2009, an option holder exercised options to purchase shares of the Company's common stock for cash of $3,600 and the Company issued an aggregate of 15,000 shares.

af) On September 21, 2009, the Company issued 3,102,837 shares of common stock at a purchase price of $1.13 per share to an institutional investor for net proceeds of $3,371,340, which includes $128,659 of stock issuance costs.

ag) On October 19, 2009, the Company entered into a purchase agreement to issue 6,072,383 shares of common stock at a price of $0.82 per share to five institutional investors for net proceeds of $4,648,070, which includes $351,928 of stock issuance costs. The investors were also issued warrants to purchase 2,125,334 shares of common stock at a purchase price of $1.00 per share, exercisable on or after the date of delivery until the five-year anniversary. These warrants have been valued at $909,399 and recorded in additional paid-in-capital. The closing costs included 245,932 warrants valued at $104,722 and were recorded as a reduction of the total gross proceeds. The anti-dilutive protection provision is indexed to the Company's own stock and has other equity characteristics. The provision is structured in a way that is designed to protect a holder's position from being diluted based on a mathematical calculation.

ah)

On October 19, 2009, the Company issued 2,018,143 shares of common stock and 569,502 warrants to purchase common stock at a purchase price of $0.82 per share to existing stockholders pursuant to anti-dilution protection provisions of the private placements transacted on December 24, 2007 and March 20, 2008. The warrants were valued at $121,491 and are recorded as a reduction in issuance proceeds of the October 19, 2009 transaction as described above.

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10. Stock-Based Compensation

On August 5, 2003, the Company established a stock option plan (the “Plan”). Under the Plan, the Company grants stock options to key employees, directors and consultants of the Company. For all grants prior to September 12, 2005 and grants to employees of the Company after September 12, 2005, the vesting period is 30% on the first anniversary of the grant date, an additional 30% on the second anniversary and the remaining 40% on the third anniversary. Options expire between five and ten years from the date of grant.

For grants to non-employee consultants of the Company after September 12, 2005, the vesting period is between one to three years, subject to the fulfillment of certain conditions in the individual stock option grant agreements, or 100% upon the occurrence of certain events specified in the individual stock option grant agreements. Options authorized for issuance under the Plan total 17,000,000 after giving effect to an amendment to the Plan approved at the Annual Meeting of the Stockholders of the Company on June 2, 2006. At December 31, 2009, 8,942,500 shares of common stock were available for issuance.

Prior to adoption of the plan, the Company made restricted stock grants. During 2003 all existing restricted stock grants were converted to stock options. The converted options maintained the same full vesting period as the original restricted stock grants.

Accounting for Employee Awards

The Company's results of operations for the year ended December 31, 2009 and 2008 include share-based employee compensation expense totaling $565,150 and $253,197, respectively. Such amounts have been included in the Statements of Operations in general and administrative and research and development expenses. No income tax benefit has been recognized in the Statements of Operations for share-based compensation arrangements as the Company has provided for a 100% valuation allowance on its deferred tax assets.

Employee stock option compensation expense is the estimated fair value of options granted amortized on a straight-line basis over the requisite vesting service period for the entire portion of the award.

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10. Stock-Based Compensation (cont'd)

Accounting for Non-Employee Awards

Stock compensation expenses related to non-employee options were $(67,619) and $231,487 for the year ended December 31, 2009 and 2008, respectively. Such amounts have been included in the Statements of Operations in general and administrative and research and development expenses.

Summary of Stock Compensation Expense Recognized

Total stock-based compensation recognized by the Company in the years ended December 31, 2009 and 2008, and the period from inception (March 19, 2001) to December 31, 2009, all of which relates to stock options and warrants, is as follows:

	Years ended		Inception (March 19,2001) to
	December 31, 2009	December 31, 2008	December 31, 2009
Income statement line item:			
General and administrative			
Payroll	$ 443,013	$ 60,350	$ 1,600,091
Consulting and other professional fees	(67,644)	136,918	666,376
Research and development:			
Payroll	122,137	192,848	799,355
Consulting and other professional fees	25	94,568	1,288,543
Total	$ 497,531	$ 484,684	$ 4,354,365

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10. Stock-Based Compensation (cont'd)

Summary of Stock Option Transactions

There were 50,000 stock options granted at an exercise price of $0.73 with a fair value of $28,364, 30,000 stock options granted at an exercise price of $1.05 with a fair value of $5,887 and 100,000 stock options granted at an exercise price of $1.28 with a fair value of $100,666 during the year ended December 31, 2009. A total of 2,005,000 stock options were granted with exercise prices ranging from $0.78 - $3.24 during the year ended December 31, 2008. The fair value of options at the date of grant was estimated using the Black-Scholes option pricing model. The expected volatility is based upon historical volatility of the Company's stock. The expected term is based upon the simplified method.

During the year ended December 31, 2009 and 2008, a total of 180,000 and 2,005,000 stock options were granted with an aggregate fair value of $134,917 and $1,485,885 respectively. The fair value of options at the date of grant was estimated using the Black-Scholes option pricing model. The Company took into consideration guidance under ASC 718 and SAB 107 when reviewing and updating assumptions. The expected volatility is based upon historical volatility of the Company's stock. The expected term is based upon the simplified method as allowed under SAB 107.

The assumptions made in calculating the fair values of options are as follows:

	Year Ended December 31,	
	2009	2008
Black-Scholes weighted average assumptions		
Expected dividend yield	$ 0	$ 0
Expected volatility	100 - 108 %	104 - 114 %
Risk free interest rate	0.51 – 2.55%	1.55 - 2.98 %
Expected term (in years)	1 – 5 years	0.25 - 5 years

The following table summarizes the employee and non-employee share-based transactions:

	2009			2008		
	Subject to Options	Shares Weighted Avg. Exercise Prices	Weighted Ave. Fair Value on Date of Grant	Subject to Options	Shares Weighted Avg. Exercise Prices	Weighted Avg. Fair Value on Date of Grant
Outstanding at January 1	7,760,795	$1.01		6,045,795	$0.97	
Granted	180,000	$1.09	$0.79	2,005,000	$1.13	$0.79
Exercised	(15,000)	$0.24	$0.58	(90,000)	$0.35	$0.62
Cancelled	(210,000)	$1.71	$1.29	(200,000)	$1.33	$1.03

Outstanding at December 31	7,715,795	$0.98	7,760,795	$1.01

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10. Stock-Based Compensation (cont'd)

The following table summarizes information about stock options outstanding as of December 31, 2009 and 2008.

	Shares Subject to Options	Weighted Avg. Exercise Prices	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2009	7,715,795	$ 0.98	6.1 years	$ 352,350
Exercisable at December 31, 2009	6,289,295	$ 0.99	5.3 years	$ 352,350

	Shares Subject to Options	Weighted Avg. Exercise Prices	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2008	7,760,795	$ 1.01	6.9 years	$ 987,817
Exercisable at December 31, 2008	5,366,795	$ 0.92	6.7 years	$ 849,767

As of December 31, 2009 and 2008, there was $2,038,569 and $2,411,468 of total unrecognized compensation cost, respectively, related to all unvested stock options, which is expected to be recognized over a weighted average vesting period of 1.7 years and 1.2 years, respectively. As of December 31, 2009 and 2008, the weighted fair value of the unvested stock options on the date of grant was $0.71 and $0.82, respectively.

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11. Warrants

As at December 31, 2009, warrants to purchase 8,575,240 shares were outstanding, having exercise prices ranging from $0.82 to $1.80 and expiration dates ranging from October 19, 2010 to October 14, 2014.

	2009		2008	
	Number of warrants	Weighted average exercise price	Number of warrants	Weighted average exercise price
Balance, January 1	1,207,151	$ 1.80	1,078,576	$ 1.80
Issued during the period	9,590,314	$ 1.48	128,572	$ 1.80
Exercised during the period	-	$ -	-	$ -
Expired during the period	(2,222,222)	$ 1.05	-	$ -
Balance, December 31, 2009	8,575,243	$ 1.40	1,207,148	$ 1.80

As at December 31, 2009 the range of exercise prices of the outstanding warrants and options were as follows:

Range of exercise prices	Number of warrants	Average remaining contractual life	Weighted average exercise price
$0.82 - 1.50	8,575,243	2.7 years	$ 1.40

Warrants were valued using the Black-Scholes option pricing model. The risk-free interest rate used in the Black-Scholes option pricing model is based on the implied yield currently available on U.S. Treasury Securities with an equivalent term. Expected volatility is based on the weighted average historical volatility of the Company's common stock for the most recent five year period. The expected term of warrants represents the contractual term of the warrant.

The assumptions made in calculating the fair values of warrants are as follows:

	Year Ended December 31, 2009	2008
Black-Scholes weighted average assumptions		
Expected dividend yield	$ 0	$ 0
Expected volatility	105.9 - 108 %	100 %
Risk free interest rate	0.20 – 2.85 %	1.80 %
Expected term (in years)	0.25 – 5 years	3 years

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12. Income Taxes

No provision for Federal and State income taxes was required for the years ended December 31, 2009 and 2008, due to the Company's operating losses and increased deferred tax asset valuation allowance. At December 31, 2009 and 2008, the Company has unused net operating loss carry-forwards of approximately $34,073,000 and $27,690,000 which expire at various dates through 2029. Some of this amount may be subject to annual limitations under certain provisions of the Internal Revenue Code related to "changes in ownership".

As of December 31, 2009 and 2008, the deferred tax assets related to the aforementioned carry-forwards have been fully offset by valuation allowances, since significant utilization of such amounts is not presently expected in the foreseeable future.

Deferred tax assets and valuation allowances consist of:

	2009	2008
Net operating loss carry-forwards	$ 12,947,700	$ 10,522,325
Valuation allowance	(12,947,700)	(10,522,325)
Net deferred tax assets	$ -	$ -

The Company files income tax returns in the U.S. federal and New York state jurisdictions. Tax years for fiscal 2006 through 2008 are open and potentially subject to examination by the federal and New York state taxing authorities.

13. Commitments and Contingencies

a) The Company has contracted with various vendors to provide research and development services. The terms of these agreements usually require an initiation fee and monthly or periodic payments over the term of the agreement, ranging from 2 months to 36 months. The costs to be incurred are estimated and are subject to revision. As of December 31, 2009, the total estimated cost to be incurred under these agreements was approximately $8,433,195 and the Company had made payments totaling $3,323,201 under the terms of the agreements as of December 31, 2009. All of these agreements may be terminated by either party upon appropriate notice as stipulated in the respective agreements.

b) The Company and three of its key executives entered into employment agreements. Each of these agreements was renewed on August 10, 2009 and expires on August 10, 2012. The agreements result in annual commitments of $200,000, $350,000 and $250,000.

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c) On April 6, 2009, the Company entered into an agreement with Rodman & Renshaw, LLC (“Rodman”) for Rodman to serve as placement agent for the Company. Under this agreement, the Company agreed to pay a cash fee to Rodman immediately upon the closing of the placement equal to 6% of the aggregate gross proceeds raised in the placement plus a cash fee payable immediately on each exercise of the warrants issued to the purchasers in the placement that are solicited by Rodman equal to 6% of the aggregate proceeds received by the Company in connection with such exercise; and such number of warrants (the “Rodman Warrants”) issuable to Rodman or its designees at the closing to purchase shares of common stock equal to 5% of the aggregate number of shares sold in the placement. In accordance with the agreement, the contract ended on July 31, 2009. The Company paid $180,000 and issued the placement agent warrants to purchase up to an aggregate of 142,857 shares of our common stock at an exercise price of $1.3125 per share.

d) On April 20, 2009, Amarex, LLC filed suit against the Company in the Circuit Court of Montgomery County, Maryland, seeking damages for an alleged breach of a contract between the Company and Amarex, LLC entered into on January 6, 2006. Amarex, LLC claims damages of $93,156 plus interest. On May 22, 2009, the Company filed an answer and an affirmative defense to the complaint denying the claims of damages made by Amarex, LLC. On June 16, 2009, the Company filed a counterclaim against Amarex, LLC for breach of the same contract in the amount of $354,824 plus interest. The court ordered the Company and Amarex, LLC to proceed with a non-binding mediation. The mediation has taken place, but the parties were not able to reach an amicable resolution as of December 31, 2009. The trial is scheduled to commence on June 14, 2010.

e) On May 21, 2009, the Company entered into a 1 year agreement to use lab space commencing on July 1, 2009. The Company agreed to pay monthly payments of $4,594 from October 1, 2009 to June 30, 2010. The agreement shall terminate on June 30, 2010 and may be renewed for two additional terms of one year upon 60 days prior to the expiration of the agreement.

f) On June 22, 2009, the Company entered into a License Agreement with Korea Research Institute of Chemical Technology ("KRICT") to acquire the rights to all intellectual properties related to Quinoxaline-Piperazine derivatives that were synthesized under a Joint Research Agreement. The initial license fee was $100,000, all of which was paid as of December 31, 2009. The agreement with KRICT calls for a one-time milestone payment of $1,000,000 within 30 days after the first achievement of marketing approval of the first commercial product arising out of or in connection with the use of KRICT’s intellectual properties.

g) On June 26, 2009, the Company entered into a securities purchase agreement with Teva Pharmaceutical Industries Limited (“Teva”). Contemporaneous with the execution and delivery of this agreement, the parties executed a research and exclusive license option agreement (“RELO”) pursuant to which the Company shall use $2,000,000 from the gross proceeds of the issuance and sale of shares to Teva to fund a research and development program for the pre-clinical development of RX-3117 and has included this amount in restricted cash equivalents. The Company will be eligible to receive royalties on net sales of RX-3117 worldwide. During the fourth quarter of 2009, research and development work began on the RX-3117 research and development program.

h) On June 29, 2009, the Company signed a five year lease for 5,466 square feet of office space in Rockville, Maryland commencing on June 29, 2009. The lease requires annual base rents of $76,524 with increases over the next five years. Under the leasing agreement, the Company pays its allocable portion of real estate taxes and

common area operating charges. Rent paid under the Company's former lease during the year ended December 31, 2009 was $112,973 (2008 - $132,104).

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Future rental payments over the next five years and thereafter are as follows:

2010	$108,418
2011	148,593
2012	158,835
2013	162,806
2014	82,408
	$661,060

In connection with the lease agreement, the Company issued a letter of credit of $100,000 in favor of the lessor. The Company has restricted cash equivalents of the same amount for the letter of credit.

i) On November 4, 2009, the Company entered into a Synthesis and Supply Agreement with TheraTarget, Inc. to provide synthesis and supply of Rexahn's products. The total cost of these services is $100,000, of which $30,000 was paid as of December 31, 2009.

j) The Company has a 401(k) plan established for its employees. The Company elected to match 100% of the first 3% of the employee's compensation plus 50% of the employee's deferral that exceeds 3% of the employee's compensation (limited to 5% total employee compensation). Expense related to this matching contribution aggregated $49,519 and nil for the years ended December 31, 2009 and 2008, respectively.

14. Fair Value Measurements

The Company adopted ASC 820, "Fair Value Measurements and Disclosure" as of January 1, 2008. ASC 820 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, not adjusted for transaction costs. ASC 820 also establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels giving the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

The three levels are described below:

Level 1 Inputs	Unadjusted quoted prices in active markets for identical assets or liabilities that is accessible by the Company;
Level 2 Inputs	Quoted prices in markets that are not active or financial instruments for which all significant inputs are observable, either directly or indirectly;
Level 3 Inputs	Unobservable inputs for the asset or liability including significant assumptions of the Company and other market participants.

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14. Fair Value Measurements (cont'd)

The Company determines fair values for its financial assets as follows:

The following tables present our assets and liabilities that are measured at fair value on a recurring basis and are categorized using the fair value hierarchy. The fair value hierarchy has three levels based on the reliability of the inputs used to determine fair value.

	Fair Value Measurements as of December 31, 2009			
	Total	Level 1	Level 2	Level 3
Assets:				
Restricted cash equivalents	$ 2,026,060	$ 1,925,012	$ 101,048	-
Marketable securities	$ 175,000	$ 175,000	-	-
Total Assets	$ 2,201,060	$ 2,100,012	$ 101,048	$ -

As of December 31, 2009, the Company's restricted cash equivalents is comprised of the following:

a) Money market funds valued at the net asset value of shares held be the Company and is classified within level 1 of the fair value hierarchy;

b) Certificate of deposit valued based upon the underlying terms of a letter of credit, as discussed in note 13, and classified within level 2 of the fair value hierarchy

Marketable securities consist of state authority and municipal security fund bonds which are valued at fair value and classified within level 1 of the fair value hierarchy.

	Fair Value Measurements as of December 31, 2008			
	Total	Level 1	Level 2	Level 3
Assets:				
State Authority Auction Rate Bonds	$ 2,999,750	-	$ 2,999,750	-
Total Assets	$ 2,999,750	$ -	$ 2,999,750	$ -

As of December 31, 2008, the investments, at fair value, consists of state authority auction rate bonds which are valued is based upon closing prices reported on the secondary market in which the security is traded and is classified within level 2 of the fair value hierarchy.

EXHIBIT INDEX

3.1.	Amended and Restated Certificate of Incorporation, filed as Appendix G to the Company's Definitive Proxy Statement on Schedule 14A (File No. 000-50590) dated April 29, 2005, is incorporated herein by reference.
3.2.	Amended and Restated Bylaws, filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed on March 26, 2010, is incorporated herein by reference.
4.1.	Specimen Certificate for the Company's Common Stock, par value $.0001 per share, filed as Exhibit 4.3 to the Company's Registration Statement on Form S-8 (File No. 333-129294) dated October 28, 2005, is incorporated herein by reference.
4.2	Form of Senior Debt Securities Indenture, filed as Exhibit 4.2 to the Company's Registration Statement on Form S-3 dated July 30, 2008, is incorporated herein by reference.
4.3	Form of Subordinated Debt Securities Indenture, filed as Exhibit 4.3 to the Company's Registration Statement on Form S-3 dated July 30, 2008 is incorporated herein by reference.
*10.1.1.	Rexahn Pharmaceuticals, Inc. Stock Option Plan, as amended, filed as Exhibit 4.4 to the Company's Registration Statement on Form S-8 (File No. 333-129294) dated October 28, 2005, is incorporated herein by reference.
*10.1.2.	Form of Stock Option Grant Agreement for Employees, filed as Exhibit 4.5.1 to the Company's Registration Statement on Form S-8 (File No. 333-129294) dated October 28, 2005, is incorporated herein by reference.
*10.1.3.	Form of Stock Option Grant Agreement for Non-Employee Directors and Consultants, filed as Exhibit 4.5.2 to the Company's Registration Statement on Form S-8 (File No. 333-129294) dated October 28, 2005, is incorporated herein by reference.
*10.2.	Employment Agreement, dated as of August 10, 2009, by and between Rexahn Pharmaceuticals, Inc. and C. H. Ahn, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 10, 2009, is incorporated herein by reference.
*10.3.	Employment Agreement, dated as of August 10, 2009, by and between Rexahn Pharmaceuticals, Inc. and T. H. Jeong, filed as Exhibit 10.3 to the Company's Current Report on Form 8-K filed on August 10, 2009, is incorporated herein by reference.
10.4.	Research Collaboration Agreement dated February 6, 2003 by and between Rexahn Pharmaceuticals, Inc. and Rexgene Biotech Co., Ltd., filed as Exhibit 10.5 to the Company's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2005, is incorporated herein by reference.
10.5.	Revaax License Agreement, dated February 8, 2005, by and between Rexahn Pharmaceuticals, Inc. and Revaax Pharmaceuticals LLC, filed as Exhibit 10.6 to the Company's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2005, is incorporated herein by reference.
10.6	Lease Agreement, dated June 5, 2009, by and between Rexahn Pharmaceuticals, Inc. and The Realty Associates Fund V, L.P., filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, is incorporated herein by reference.
10.7	Securities Purchase Agreement, dated as of November 19, 2007, by and between Rexahn Pharmaceuticals, Inc. and KT&G Corporation, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 21, 2007, is incorporated herein by reference.
10.8	Securities Purchase Agreement, dated as of November 20, 2007, by and between Rexahn Pharmaceuticals, Inc. and Rexgene Biotech Co., Ltd, filed as Exhibit 10.4 to the Company's Current Report on Form 8-K filed on November 21, 2007, is incorporated herein by reference.
10.9	Securities Purchase Agreement, dated as of December 17, 2007, by and between Rexahn Pharmaceuticals, Inc. and Jungwoo Family Co., Ltd, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 18, 2007, is incorporated herein by reference.

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10.10	Securities Purchase Agreement, dated as of December 17, 2007, by and between Rexahn Pharmaceuticals, Inc. and Kumho Investment Bank, filed as Exhibit 10.2 to the Company's Current Report on Form 8-K filed on December 18, 2007, is incorporated herein by reference.
10.11	Securities Purchase Agreement, dated as of December 17, 2007, by and between Rexahn Pharmaceuticals, Inc. and the several parties thereto, filed as Exhibit 10.3 to the Company's Current Report on Form 8-K filed on December 18, 2007, is incorporated herein by reference.
10.12	Warrant, dated December 24, 2007, issued to KT&G Corporation, filed as Exhibit 10.6 to the Company's Current Report on Form 8-K filed on December 26, 2007, is incorporated herein by reference.
10.13	Warrant, dated December 24, 2007, issued to Rexgene Biotech Co., Ltd., filed as Exhibit 10.7 to the Company's Current Report on Form 8-K filed on December 26 ,2007, is incorporated herein by reference.
10.14	Form of Warrant, dated December 24, 2007, issued to the purchasers pursuant to the Jungwoo Securities Purchase Agreement, the Kumho Securities Purchase Agreement, the Individual Investor Securities Purchase Agreement and to a consultant, filed as Exhibit 10.4 to the Company's Current Report on Form 8-K filed on December 18, 2007, is incorporated herein by reference.
10.15	Registration Rights Agreement, dated as of December 24, 2007, by and among Rexahn Pharmaceuticals, Inc. and the purchasers pursuant to the KT&G Securities Purchase Agreement, the Rexgene Securities Purchase Agreement, the Jungwoo Securities Purchase Agreement, the Kumho Securities Purchase Agreement, the Individual Investor Securities Purchase Agreement and a consulting Services Agreement, filed as Exhibit 10.9 to the Company Current Report on Form 8-K filed on December 26, 2007, is incorporated herein by reference.
10.16	Securities Purchase Agreement, dated as of March 20, 2008, by and between Rexahn Pharmaceuticals, Inc. and Jungwoo Family Co., Ltd. (the "Jungwoo Securities Purchase Agreement"), filed as Exhibit 10.1 to the Company's current report on Form 8-K filed on March 26, 2008, is incorporated herein by reference.
10.17	Securities Purchase Agreement, dated as of March 20, 2008, by and between Rexahn Pharmaceuticals, Inc. and Super Bio Co. Ltd., (the "Super Bio Securities Purchase Agreement"), filed as Exhibit 10.2 to the Company's current report on Form 8-K filed on March 26, 2008, is incorporated herein by reference.
10.18	Form of Warrant for issuance pursuant to the Jungwoo Securities Purchase Agreement and the Super Bio Securities Purchase Agreement, filed as Exhibit 10.3 to the Company's Current Report on Form 8-K filed on March 26, 2008, is incorporated herein by reference.
*10.19	Employment Agreement, dated as of August 10, 2009, by and between Rexahn Pharmaceuticals, Inc. and Rakesh Soni, filed as Exhibit 10.2 to the Company's Current Report on Form 8-K filed on August 10, 2009, is incorporated herein by reference.
*10.20	Consulting Agreement, dated August 12, 2008, by and between Rexahn Pharmaceuticals, Inc. and Y. Michelle Kang, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 27, 2008, is incorporated herein by reference.
10.21	Securities Purchase Agreement, dated as of May 19, 2009 by and between Rexhan Pharmaceuticals, Inc. and the purchaser signatory thereto, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 20, 2009, is incorporated herein by reference.
10.22	Form of Warrant for the Company's Series I, II, and III Common Stock Purchase Warrants, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on May 20, 2009, is incorporated herein by reference.

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10.23	Research and Exclusive License Option Agreement, dated as of June 26, 2009, by and between Rexahn Pharmaceuticals, Inc. and Teva Pharmaceutical Industries Limited, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on September 21, 2009, is incorporated herein by reference.
10.24	Securities Purchase Agreement, dated as of June 26, 2009, by and between Rexahn Pharmaceuticals, Inc. and Teva Pharmaceutical Industries Limited (the "Teva Securities Purchase Agreement"), filed as Exhibit 10.2 to the Company's Current Report on Form 8-K filed on September 21, 2009, and Amendment No. 1 to the Teva Securities Purchase Agreement, filed as Exhibit 10.3 to the Company's Current Report on Form 8-K filed on September 21, 2009, are incorporated herein by reference.
10.25	Securities Purchase Agreement, dated as of October 19, 2009, by and between Rexahn Pharmaceuticals, Inc. and the purchasers signatory thereto, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on October 20, 2009, is incorporated herein by reference.
10.26	Form of Warrant for the Company's Common Stock Purchase Warrants, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on October 20, 2009, is incorporated herein by reference.
14	Code of Ethics and Business Conduct, filed as Exhibit 14 to the Company's Annual Report on 10-K for the fiscal year ended December 31, 2008, filed on March 16, 2009, is incorporated herein by reference.
16	Letter of Lazar Levine & Felix LLP dated February 27, 2009, filed as Exhibit 16.1 to the Company's Amended Current Report on Form 8-K filed on March 2, 2009, is incorporated herein by reference.
23	Consent of ParenteBeard LLC, independent registered public accounting firm.
24.	Power of Attorney.
31.1.	Certification of Chief Executive Officer of Periodic Report Pursuant to Pursuant to Rule 13a-15(e) or Rule 15d-15(e).
31.2.	Certification of Chief Financial Officer of Periodic Report Pursuant to Pursuant to Rule 13a-15(e) or Rule 15d-15(e).
32.1	Certification of Chief Executive Officer of Periodic Report Pursuant to 18 U.S.C. Section 1350.
32.2	Certification of Chief Financial Officer of Periodic Report Pursuant to 18 U.S.C. Section 1350.

* Management contract or compensation plan or arrangement.