rexahn
PHARMACEUTICALS

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October 15, 2010

Ms. Keira Nakada
Division of Corporation Finance
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Rexahn Pharmaceuticals, Inc.
Form 10-K for the year ended December 31, 2009
Schedule 14A filed April 26, 2010
File No. 001-34079

Dear Ms. Nakada:

On behalf of Rexahn Pharmaceuticals, Inc. (the "Company"), this letter responds to comments made by the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission") regarding the above referenced Annual Report on Form 10-K for the year ended December 31, 2009 ("Form 10-K") and Schedule 14A filed on April 26, 2010 ("Schedule 14A"), in the Staff's letter to Dr. Chang Ahn dated September 17, 2010. Set forth below are the Staff's comments in bold type, with each comment followed by the Company's response.

Form l0-K for the fiscal year ended December 31. 2009

Intellectual Property, page 18

1. Please provide proposed disclosure to be included in your Form 10-K for 2010 which includes the following information with regard to your intellectual property:

- **The number of material patents that you own;**
- **The number of material patents that you have licensed;**
- **The jurisdictions in which your material patents have been granted; and**
- **The indication or product candidate to which each of your material patents relate.**

RESPONSE:

The Company proposes to include the following disclosure in its Form 10-K for 2010 with regard to the Company's intellectual property:

Proprietary patent and intellectual property (IP) protection for our drug candidates, processes and know-how is important to our business. We diligently prosecute and defend our patents and proprietary technology. Rexahn has several U.S. and international patents issued for 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 particular, Rexahn owns US patents for its Clinical and Pre-clinical candidates including US Patents related to RX-1792, RX-3117, Archexin and RX-0047. In addition, Rexahn owns patents in South Korea related to RX-1792, RX-3117, and in Switzerland, Germany, Spain, France, Great Britain, Italy, and Poland related to RX-3117. Additional US and/or foreign patent applications related to RX-3117, RX-8243, RX-5902, RX-21101 and RX-21202 are pending. Rexahn also owns pending US and foreign patent applications related to Zoraxel and Serdaxin.

In February 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.

Rexahn is the exclusive licensee of three US Patents, and patents in Australia, Mexico, New Zealand, Belgium, Switzerland, Germany, Denmark, Spain, Finland, France, Great Britain, Ireland, Italy, the Netherlands and Sweden, related to Serdaxin. Rexahn is the exclusive licensee of one US Patent related to Zoraxel. Rexahn is also the exclusive licensee of additional pending US and/or foreign patent applications related to Zoraxel and/or Serdaxin.

Collaboration and License Arrangements, page 18

2. Please provide proposed disclosure to be included in your form 10-K for 2010 which includes the material terms of each of your material collaboration and license arrangements. In particular, for your license agreement with Revaax Pharmaceuticals LLC in relation to the licensing and development of certain compounds including Serdaxin and Zoraxel, please provide proposed disclosure which includes the following information:

- **Initial license fee;**
- **Range of royalties (within a ten-percent range); and**

· **Aggregate potential milestone payments;**

For your collaborative research agreement with Rexgene Biotech Co., Ltd. in relation to the development of Archexin, please provide proposed disclosure which· includes the termination provisions of the agreement.

RESPONSE:

The Company proposes to include the following disclosure in its Form 10-K for 2010 with regard to the Company's collaboration and license arrangements:

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 (Teva). On September 21, 2009, we closed on licensing and stock purchase agreements with Teva for the development of 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 our common stock for $3.5 million. We will be eligible to receive additional development, regulatory and sales milestone payments. In addition, we will be eligible to receive royalties on net sales worldwide. Pursuant to the purchase agreement, Teva has the option to purchase additional shares of Rexahn's common stock. If Teva exercises such option, it will acquire additional shares of common stock having a value of $750,000 plus such additional amount equal to the amount, if any, then anticipated to be required to complete the development of RX-3117. The price for any such common stock purchased by Teva will equal 120% of the closing price of the common stock on the last trading day prior to the date of purchase; provided, that if the number of shares subject to purchase by Teva would exceed 7% of the total outstanding common stock upon the completion of such purchase, then the aggregate purchase price shall remain the same, but the number of shares subject to purchase will be reduced so as not to exceed such amount.

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 us with polymer-drug conjugate products, which are part of our polymer-based nanomedicine portfolio.

Korea Research Institute of Chemical Technology (KRICT). On July 13, 2009, we 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 IP 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 (the "Licensed Products"). 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 the first approval by any federal, state or local regulatory, department, bureau or other governmental entity necessary prior to the commercial sale of the Licensed Product ("Marketing Approval"). 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.

Under the agreement we agreed to pay Revaax an initial license fee of $375,000, payable in 8 installments of $46,875 each over a period of 2 years from February 10, 2005. In addition, we also agreed to pay Revaax a number of one time payments within 30 days of the first achievement of the following milestones, (a) $500,000 with respect to the dosing of the first patient in the first Phase III clinical trial or other controlled study in humans of the efficacy and safety with regards to any product the manufacture, use or sale of which is covered by a any claim of an issued and unexpired patent (the "Pivotal Trial") within the Licensed Products, and $250,000 with respect to the dosing of the first patient, in the second, third, fourth and fifth Privotal Trial, and $125,000 with respect to the dosing of the first patient in any subsequent Pivotal Trial, (b) $5,000,000 with respect to the receipt of Marketing Approval, and $2,500,000 with respect to the receipt of the second, third, fourth and fifth Marketing Approval for a Licensed Product, and $1,250,000 with respect to any subsequent Marketing Approval. We are not under an obligation to make any payments with respect to milestone events for which we receive any non-creditable upfront fees or milestone payments received by us from any sublicense an in connection with the development and commercialization of a Licensed Product by such sublicense, less any license fees, milestone payments, or royalties payable by us to a third party under any technology acquisition agreement in connection with the development or commercialization of a Licensed Product, but specifically excluding any royalties revenues derived from any sublicense agreements. Also, at our option, we may elect to make up to 50% of any milestone payment in shares of our common stock with the number of shares determined by dividing the amount of the milestone portion by the fair market value of one share of common stock, as reasonably determined by our board of directors.

We also agreed to pay Revaax royalty payments on all sales of the Licensed Product made to third parties. The royalties consist of (a) 4% of the portion of the aggregate net sales of the Licensed Product during a calendar year that is equal to or less than $250,000,000, (b) 5% of the portion of aggregate net sales of the Licensed Product in a calendar year that is greater than $250,000,000 but equal to or less than $500,000,000, (c) 6% of the aggregate sales of the Licensed Product during a calendar year that is greater than $500,000,000 but equal to or less than $750,000,000, and (d) 7% of the aggregate net sales of the Licensed Product during a calendar year exceeds $750,000,000. The royalty payment obligations will expire on the later of (a) expiration of any claim of an issued and unexpired patent within the Licensed Products which has not been held unenforceable or invalid and which has not been disclaimed or admitted to be invalid or unenforceable through reissue or otherwise (the "Valid Claim") that, for the licenses granted under the Agreement, would be infringed by the sale of such Licensed Product, and (b) 10 years after the first commercial sale of the Licensed Product by us, our affiliates or sublicenses anywhere in the world.

Upon expiration of the Valid Claim for a particular Licensed Product in a particular country, each of the royalty fees will be reduced by 50% for the remainder of the term remaining on our royalty payment obligations, resulting in royalty fees of 2%, 2.5%, 3%, and 3.5%, as applicable.

Rexgene Biotech Co., Ltd. (Rexgene). On February 6, 2003 we entered into a Research Collaboration Agreement with Rexgene to collaborate in the development of a cancer treatment therapeutic compound denominated RX-0201(Archexin). We jointly agreed to develop a research and development plan for the purpose of registering RX-0201 for sale and use in the Republic of Korea and other Asian countries. The research and development plan would include clinical and animal trials to be conducted in the United States, clinical trials would be conducted in Korea and other Asian countries. We agreed to provide as its initial contribution to the joint development and research, a license to all technology related to RX-0201. Rexgene agreed to provide, as its initial contribution $1,500,000 to be used by us in further development of RX-0201. Rexgene agreed to pay us a royalty fee of 3% of net sales of all licenses technology related to RX-0201 in all countries in Asia by Rexgene or any sublicensee of Rexgene.

The agreement was scheduled to expire upon the last to expire of all US and foreign patents presently or in the future issued that cover RX-0201, or if no licensed patent is issued within 20 years from the date of execution of the agreement. A breach of the agreement by either party will afford the non-breaching party the right to terminate the agreement upon 90 days written notice of termination specifying the obligations breached, provided that within said 90 days the breaching party does not remedy the breach.

Research and Development Projects, page 37

3. Please provide us proposed disclosure to be included in future filings of the research and development expenses incurred during each period presented by product.

RESPONSE:

The Company proposes to include the following disclosure in its future filings:

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.

Archexin®

Archexin, a 20 nucleotide single stranded DNA anti-sense molecule, 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, or FDA, for five cancer indications (renal cell carcinoma, or RCC, glioblastoma, ovarian cancer, stomach cancer and pancreatic cancer). The FDA orphan drug program provides seven years of marketing exclusivity after approval and tax incentives for clinical research. In October 2006, we announced the conclusion of the Phase I clinical trial of Archexin, our leading drug candidate. The Phase I clinical trial of Archexin, which took place at Georgetown University and the University of Alabama, was an open-label, dose-escalation study with 14 day continuous infusion in 17 patients with solid tumors. The Phase I trial was intended primarily to assess the safety and tolerability of Archexin in patients with advanced cancer. The trial results showed that the dose limiting toxicity of Archexin occurring at 315 mg/m2 dose in the form of fatigue. No other serious adverse events such as hematological toxicities were observed in this Phase I study. In the Phase I study, stable disease was observed in two out of the 17 Patients. Archexin is currently being studied in a Phase II clinical trials for the treatment of pancreatic cancer with patient enrollment underway. The Archexin Phase IIa trial is a single-arm, open-label study with 35 subjects conducted at global sites in the United States and India. Archexin will be administered in combination with gemcitabine in patients with advanced pancreatic cancer to assess safety and preliminary efficacy, maximum tolerated dose, and overall survival. 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. The enrollment issues were primarily due to the small number of patients that have been diagnosed with RCC and the fact that 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.

In October 2006, we announced the conclusion of the Phase I clinical trial of Archexin. The costs incurred for the Phase I clinical trial was approximately $1,500,000. As of September 30, 2010, we have spent an additional $1,700,000 for Phase II clinical trials of Archexin and we estimate that the Phase IIa trials for pancreatic cancer patients will be completed in first half of 2011 and will require approximately $400,000.

Serdaxin® (RX-10100)

Serdaxin is an extended release formulation of clavulanic acid, which is an ingredient present in antibiotics approved by FDA. We are currently developing Serdaxin for the treatment of depression and neurodegenerative disorders. We have recently concluded a Phase IIa proof of concept clinical trial for major depressive disorder, or MDD, with Serdaxin. The proof-of-concept, randomized, double blind, placebo controlled and dose ranging (5 mg, 10 mg, 15 mg administered twice daily) Phase IIa clinical trial enrolled 77 MDD patients at multiple sites in the United States. No statistical difference was seen between the three doses and placebo on the MADRS. A high dropout rate of non-responders in the placebo group contributed to a higher-than-expected response for the placebo-treated subjects that completed the study. We believe this high drop out rate may have contributed to the absence of statistical significance. In our ad hoc analysis, results from the Phase IIa clinical trial showed that patients suffering from MDD responded most positively to the 5 mg dose of the drug, and supported proceeding to a Phase IIb clinical trial. In the subgroup analysis, the study showed that patients with severe MDD taking 5 mg of Serdaxin had significant improvement in Montgomery-Asberg Depression Rating Scale, or MADRS, scores after 8 weeks of treatment, compared to the placebo group. Among the 77 patients, 53 patients were classified as having severe MDD. Of the 14 patients treated with 5 mg of Serdaxin, MADRS scores improved by 55.6%, compared to only 34.0% in the placebo group ($n = 14$), which was statistically significant ($p=0.041$) on an intent to treat basis. In addition, 64.3% of patients with severe MDD treated with the 5 mg of Serdaxin were considered “Responders” compared to 28.6% in the placebo group ($p=0.0581$). A “Responder” is a patient with a change from baseline in MADRS score of greater than or equal to 50% after treatment. Additionally, 42.9% of patients in the treatment group at 5 mg of Serdaxin were in remission with a MADRS score of less than or equal to 12 after treatment, at 8 weeks versus 14.3% in the placebo group ($p=0.209$). During the trial there were no reports of serious side effects that are commonly linked to currently marketed antidepressant drugs, such as selective serotonin uptake inhibitors, or SSRI, serotonin-norepinephrine reuptake inhibitors, or SNRI, and tricyclic antidepressants, or TCA. The 5 mg Serdaxin-treated group (20 adverse events) reported 40% fewer adverse events such as headache than the placebo group (36 adverse events). In addition, the 5 mg Serdaxin-treated group reported a lower dropout rate in week 2 of 4.8% compared to 9.1% in the placebo group, and by week 8 the drop-out rate for the Serdaxin group was only 14.3% compared to 59.1% in the placebo group. Pre-clinical studies suggest that Serdaxin may have an inverted, U-shape dose-response curve. This inverted, dose-response relationship may explain the observation in the Phase IIa trial of a more positive response in patients taking the lowest dose. Due to this phenomenon, higher doses of Serdaxin may not be effective, suggesting an additional potential benefit with respect to the risk of overdose problems prevalent in other psychogenic medications. A Phase IIb trial for MDD with lower doses is under development and we expect the trial to commence in the second half of 2010, subject to the Company first submitting the protocol for the Serdaxin Phase IIb study to the FDA without receiving any objection. We are also currently planning the Phase II clinical trial for Parkinson’s disease, or PD, with Serdaxin and have submitted the protocol for this study to the FDA.

Through September 30, 2010, the costs incurred for development of Serdaxin to date have been approximately $1,300,000. We currently estimate that the Phase IIb MDD studies will require $8,000,000 through the end of 2011. Phase II clinical trials for the use of Serdaxin in Parkinson's disease are being developed. We currently estimate PD studies will require $1,000,000 through the end of 2011.

***Zoraxel*™ (RX-10100)**

We are developing Zoraxel for treatment of erectile dysfunction. Zoraxel is an immediate release formulation of clavulanic acid, the same active ingredient found in our product candidate Serdaxin. The Phase IIa proof of concept clinical trial of Zoraxel is complete with positive results and the Phase IIb trial will continue through 2010-2011. Rexahn's decision to move forward with the Phase IIb trial is supported by data from the Phase IIa proof of concept, randomized, double blind, placebo controlled and dose ranging (5 mg, 10 mg, 15 mg) study of 39 erectile dysfunction patients (ages of 18 to 65) treated with Zoraxel. The Phase IIa study was completed in May 2009 and demonstrated that Zoraxel consistently improved International Index of Erectile Function, or IIEF, scores of treated subjects. The Phase IIa study results showed treatment with 15mg of Zoraxel at week 8 improving subjects' IIEF-EF scores by 6.5, a value obtained from the changes from baseline between scores of 15 mg of Zoraxel (5.3) and the placebo group (-1.2). Furthermore, the study showed among treated subjects a dose dependent treatment effect with improved erectile function and quality of life measures. The study also showed Zoraxel to be well tolerated in the patients in the study, with no serious adverse events reported. To examine the clinical relevance of Zoraxel as an erectile dysfunction drug, "effect size" analysis has been conducted. "Effect size" (ES) is a data analysis index developed by Dr. Jacob Cohen of New York University and is derived from the improvement in IIEF mean score for the treatment group minus the improvement in IIEF mean score of the placebo group over the treatment period, divided by the standard deviation of the entire sample at baseline. An ES value greater than 0.80 is deemed "a considerable change" under the ES criteria. The ES for IIEF-EF and IIEF-intercourse satisfaction indices of Zoraxel (2.59 and 0.88, respectively) were larger than 0.80, suggesting a considerable change in sexual experiences in Zoraxel-treated patients based on the ES criteria. The Phase IIb study is designed to assess Zoraxel's efficacy in approximately 225 male subjects, ages 18 to 65, with ED. The double blind, randomized, placebo-controlled, 12-week study will include IIEF, Sexual Encounter Profile, or SEP, 2 (Penetration) & 3 (Sexual Intercourse) survey, as primary endpoints with 25 and 50 mg doses. The Phase IIb study is expected to begin in the first half of 2011 and the preliminary data is expected to be available in 2011, subject to the absence of any objection of the FDA to the Phase IIb trial we developed for Zoraxel. The study will be conducted at multiple sites in the United States.

Through September 30, 2010, the costs incurred for development of Zoraxel to date have been approximately $1,200,000. We currently estimate that these Phase IIb studies will require approximately $3,000,000 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. Pursuant to the purchase agreement, Teva has the option to purchase additional shares of Rexahn's Common Stock. If Teva exercises such option, it will acquire additional shares of Common Stock having a value of $750,000 plus such additional amount equal to the amount, if any, then anticipated to be required to complete the development of RX-3117.

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 September 30, 2010, the costs incurred for development of these compounds to date have been approximately $2,300,000. The estimated cost to complete pre-clinical toxicology and Phase I clinical trials is estimated to be approximately $1,500,000 per each compound.

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.

Signatures. page 52

4. We note that your Form 10-K does not appear to have been signed by an individual identified as your controller or principal accounting officer. If an individual who has already signed your Form l0-K serves in this capacity, please advise us of this fact and confirm that your next Form l0-K will include this additional capacity in the signature block for this individual If your principal accounting officer or controller has not signed your form 10-K, your filing wil1 need to be amended to include the signature of this individual as required under General Instruction D to Form l0-K.

RESPONSE:

Tae Heum Jeong is the Chief Financial Officer of the Company and signed the Form 10-K as the Company's principal financial and accounting officer. The Company's future filings will indicate that Mr. Jeong serves in both capacities.

Financial Statements

Notes to the Financial Statements 9. Common Stock. page F-15

5. It appears, based on your filed exhibits, that the Securities Purchase Agreements and warrant agreements for your December 18, 2007 and March 20, 2008 unit offerings provide for anti-dilution protection whereby additional shares and warrants, at a reduced exercise price, are issued if you issue equity instruments at prices lower than the individual unit offering prices. Please address the following comments:

- **Please explain to us why these anti-dilution make-whole provisions associated with the common stock portion of these unit offerings are not liabilities under ASC Topic 480.**

- **Please explain to us why these anti-dilution provisions associated with the common stock warrants were not reclassified to liabilities on January 1, 2009 with the adoption of the new guidance starting at ASC 815-40-15-5. In this regard, it appears that the Subsequent Equity Sales provision in Sections 9d of these warrant agreements is similar to Example 9 at ASC 815AO-55-33 and 55-34.**

RESPONSE:

On December 18, 2007 and March 20, 2008, we issued shares of common stock and warrants as a unit. The accounting for the warrants is separately addressed below. As outlined in the Securities Purchase Agreements, we extended anti-dilution protections to the investors in the event we sell or issue shares or share-indexed contracts below an effective purchase price paid by the investors. The investor would thereupon receive additional shares equal to a ratio of the original purchase price, divided by the diluted purchase price per share less the original number of common shares issued.

We have concluded that the anti-dilution make whole provision is a written put and requires classification in liabilities under paragraph 480, at fair value both on inception and subsequently.

ASC Topic 480-10-25-14 provides that a financial instrument, other than an outstanding share, that embodies a conditional obligation that the issuer may settle by issuing a variable number of its equity shares should be classified as a liability if at inception, the monetary value of the obligation is based solely or predominantly on one of three criteria. Applicable criteria we considered were (i) a fixed monetary amount is known at inception (for example, a payable settleable with a variable number of equity shares) and (ii) variations inversely related to changes in the fair value of the issuers equity shares (for example, a written put option that could be net share settled). The anti-dilution provision is a financial instrument other than a share. It is a written put (a put on our enterprise value) that is embodied separately in the Securities Purchase Agreement. As an enterprise value put, its value moves inversely with the value of the underlying common stock which, under ASC 480, is not consistent with the general concepts or criterion for equity classified financial instruments. Accordingly, the written put is within the scope of ASC 480.

In drawing our conclusion that the written put was within the scope of ASC 480, we also have concluded that it is freestanding, apart from the common stock, and represents the value of the only ongoing obligation that we have to the investors. ASC 480 specifically provides that financial instruments that can be legally detachable and separately exercisable, although entered into in conjunction with other contracts, are freestanding. We believe that the written put meets this definition.

The written put is embodied in an agreement that is physically separate from the common stock. We believe that whether an instrument is documented in a contract separate and apart from any other contract is not necessarily determinative; rather, all facts and circumstances be considered. The written put, if triggered, would, in fact, be settled apart from the common stock by the issuance of additional common shares with no effects on the previously issued shares. Those previously issued shares operate under the Company’s articles of incorporation possessing all the rights, risks and rewards that other common stockholders possess. When one instrument can be exercised while the other instrument continues to be outstanding (for example, a forward that can be satisfied with outstanding shares of the issuer or can be net settled) we believe the instruments would be considered freestanding under ASC 480. This is similar to how the common stock and the written put operate.

Additionally, as mentioned above, we believe that the written put represents the value of the only ongoing obligation that we have to the investors. We have no further obligation related to the common stock that the investors purchased other than the obligations that we have to all of our common stockholders. Our only ongoing obligation to those investors under the terms of the financing arrangement is to settle the put should we sell or issue shares below the effective price. Accordingly, we believe that the only liability (using the continuing Concept Statement 6 definition) subject to recognition is that underlying the value of the written put.

We are currently in the process of reviewing different valuation models, including Black-Scholes-Merton, Lattice and Monte-Carlo, to determine the model we will use for valuing the written put. Once we determine the valuation model to be used, we will calculate the fair value of the written put at inception and each reporting period until its expiration and consider whether the effect of recording the written put as a liability will be material to our financial statements and require restatement of prior period financial statements.

We have reassessed the conclusion as to whether the anti-dilution provisions associated with the common stock warrants should have been reclassified to a liability on January 1, 2009 upon the adoption of the new guidance starting at ASC 815-40-15-5.

We are currently in the process of calculating the fair value of the common stock warrants as of January 1, 2009 and each reporting period until its expiration. Once we determine the fair value of the common stock warrants, we will consider whether the effect of recording the common stock warrants as a liability will be material to our financial statements and require restatement of prior period financial statements.

6. It appears that the warrants issued in conjunction with your May 19, 2009 and October 19, 2009 unit offerings were made pursuant to shelf registration statements. It also appears that the June 30, 2010 unit offering identified in your June 30, 2010 Form 10-Q was also issued pursuant to a shelf registration statement. Please provide us proposed disclosure to include in your future filings to clarify the operation of the anti-dilution protection provisions associated with the warrants in these units. In this regard, please address the following, as applicable, in your proposed disclosure:

- **Clarify how the provisions are structured to protect a holder's position from being diluted based on a mathematical calculation;**

- **Describe the inputs and how these inputs are used in the mathematical calculation of the provision;**

- **Clarify whether the protection also applies to the common stock issued in the units; and**

- **Confirm separately for us that these unit offerings do not have the same provisions as your December 18, 2007 and March 20, 2008 unit whereby additional shares and warrants are issued if you issue equity instruments at prices lower than the individual unit offering prices.**

RESPONSE:

The warrants issued in conjunction with the May 19, 2009, October 19, 2009 and June 30, 2010 unit offerings contain substantially the same anti-dilution protection provisions, which include customary terms providing for adjustment of the exercise price and the number of shares in the event of stock splits, stock dividends, *pro rata* distributions, fundamental transactions and the like (as specifically described below) to offset the dilution caused by such events. These protections do not apply to the common stock issued in the units. These warrants do not include the "full ratchet" anti-dilution protection that was provided in the warrants issued in conjunction with the December 18, 2007 and March 20, 2008 offerings.

The anti-dilution protection provisions in the warrants issued in conjunction with the May 19, 2009, October 19, 2009 and June 30, 2010 unit offerings are as follows:

Fundamental Transactions

If, at any time while the warrants are outstanding, the Company (1) consolidates or merges with or into another corporation, (2) sells all or substantially all of its assets or (3) are subject to or complete a tender or exchange offer pursuant to which holders of the Company's common stock are permitted to tender or exchange their shares for other securities, cash or property, (4) effect any reclassification of the Company's common stock or any compulsory share exchange pursuant to which the Company's common stock is converted into or exchanged for other securities, cash or property, or (5) engage in one or more transactions with another party that results in that party acquiring more than 50% of the Company's outstanding shares of common stock (each, a "Fundamental Transaction"), then the holder shall have the right thereafter to receive, upon exercise of the warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of warrant shares then issuable upon exercise of the warrant, and any additional consideration payable as part of the Fundamental Transaction. Any successor to the Company or surviving entity shall assume the obligations under the warrant.

In the event of certain Fundamental Transactions, the holders of the warrants will be entitled to receive, in lieu of the Company's common stock and at the holders' option, cash in an amount equal to the value of the remaining unexercised portion of the warrant on the date of the transaction determined using Black-Scholes option pricing model with an expected volatility equal to the greater of 100% and the 100-day historical price volatility obtained by Bloomberg L.P. as of the trading day immediately prior to the public announcement of the transaction.

Subsequent Rights Offerings

If, at any time while the warrants are outstanding, the Company issues rights, options or warrants to all holders of the Company's common stock entitling them to purchase the Company's common stock at a price per share less than the volume weighted average price on the date of the issuance of such rights, options or warrants, then the exercise price of the warrants will adjust pursuant to a volume weighted average price based ratio.

Pro Rata Distributions

If, at any time while the warrants are outstanding, the Company distributes evidences of the Company's indebtedness, assets, or rights or warrants to purchase any security other than the Company's common stock to all holders of the Company's common stock, then the exercise price of the warrant will adjust pursuant to a volume weighted average price based ratio.

Certain Adjustments

The exercise price and the number of shares of common stock purchasable upon the exercise of the warrants are subject to adjustment upon the occurrence of specific events, including stock dividends, stock splits, combinations and reclassifications of the Company's common stock. In addition, if the Company enters into any variable rate transactions (other than either one as part of an acquisition or strategic transaction), the exercise price shall be reduced to the lowest possible conversion or exercise price at which such securities in the variable rate transaction may be converted or exercised.

Each of aforementioned anti-dilution protection provisions is included in the form of warrants issued in conjunction with the May 19, 2009, October 19, 2009 and June 30, 2010 unit offerings, which were filed as exhibits to Current Reports on form 8-K filed with the Commission on May 20, 2009, October 20, 2009 and June 29, 2010, respectively. To address the Staff's comment, the Company will provide a summary of these provisions in the Company's Management's Discussion and Analysis of Financial Condition and Results of Operation in the Form 10-K for 2010. The Company will also revise the Notes to the Condensed Financial Statements, which currently state under the common stock note pertaining to the warrants issued in conjunction with the May 19, 2009, October 19, 2009 and June 30, 2010 unit offerings, "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." This section will be revised to reflect an abbreviated summary of the aforementioned anti-dilution protection provisions.

Exhibits 31. Certifications Pursuant to Rule 13a-15(e) or Rule 15d-15(e)

7. Please provide us proposed disclosure to include in your future filings to revise your certifications to be presented exactly as stipulated in Item 601 (b)(31) of Regulation S-K. In this regard, please remove the titles of your certifying officers and the name of your company from the introductory sentence. In addition, please change the rule reference for these exhibits in the Exhibit Index. You reference Rules 13a-15(e) and 15d-15(e) when the appropriate Rules are 13a-14(a) and 15d-14(a). The former rules define disclosure controls and procedures, the latter rules set the requirements for filing the certifications.

RESPONSE:

See the revised form of certification attached hereto as Exhibit A. The Exhibit Index will be revised to reflect the following disclosure for the certifications:

31.1. Certification of Chief Executive Officer of Periodic Report Pursuant to Pursuant to Rule 13a-14(a) or Rule 15d-14(a).
31.2. Certification of Chief Financial Officer of Periodic Report Pursuant to Pursuant to Rule 13a-14(a) or Rule 15d-14(a).

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Summary Compensation Table, page 20

8. We note that the value of the option award granted to Mr. Soni in 2008 as reflected in the 2009 Summary Compensation Table is the same as the value for the option award as reflected in your 2008 Summary Compensation Table. As such, it appears that the 2009 Summary Compensation Table has not been revised to properly value the option awards granted to named executive officers in accordance with FASB ASC Topic 718. Please advise. If the option awards have not been valued in accordance with F ASB ASC Topic 718, your Form 10-K will need to be amended to revise your 2009 Summary Compensation Table accordingly.

RESPONSE:

According to Regulation 229.402 (Item 402) Executive Compensation, for awards of options, the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with FASB ASC Topic 718 should be reported in the Executive Compensation and Other Matters table. The amounts recorded in the Executive Compensation and Other Matters table are the same compensation expense amounts recorded in the December 31, 2008 and 2009 financial statements.

Rakesh Soni, President and Chief Operating Officer, was granted two option awards in 2008 of which are being expensed over the vesting period in accordance with FASB ASC Topic 718. Compensation expense in the financial statements for the years ended December 31, 2008 and December 31, 2009 was $23,550 and $140,454, respectively.

In connection with responding to the foregoing comments, the Company hereby acknowledges that:

(1) the Company is responsible for the adequacy and accuracy of the disclosure in the filing;

(2) Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing; and

(3) the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If you have any questions with respect to the foregoing, please contact the undersigned at (240) 268-5305.

Thank you for your attention to this filing. We look forward to hearing from you shortly.

Very truly yours,

/s/ Tae Heum Jeong
Tae Heum Jeong
Chief Financial Officer

EXHIBIT A

Form of Certification Pursuant to Rules 13a-14(a) and 15d-14(a)

I, [Name of Certifying Individual], certify that:

1. I have reviewed this [specify report] of Rexahn Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.