As filed with the Securities and Exchange Commission on June 24, 2010
Registration No. 333-150580

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

POST-EFFECTIVE AMENDMENT NO. 2
TO
FORM S-1
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

MANHATTAN PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**2834**	**36-3898269**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

Manhattan Pharmaceuticals, Inc.
48 Wall Street
New York, NY 10005
Telephone: (212) 582-3950
(Address, including zip code, and telephone number, including area code, of registrant’s principal executive offices)

Mr. Michael G. McGuinness
Chief Operating and Financial Officer
Manhattan Pharmaceuticals, Inc.
48 Wall Street
New York, NY 10005
Telephone: (212) 582-3950
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:
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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities act of 1933, check the following box. ☑

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

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

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

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.

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

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

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Preliminary Prospectus **Subject to completion, dated June 24, 2010**

Manhattan Pharmaceuticals, Inc.

33,928,571 Shares
Common Stock

This prospectus relates to 33,928,571 shares of common stock of Manhattan Pharmaceuticals, Inc. for the sale from time to time by a certain holder of our securities, or by its pledgees, assignees and other successors-in-interest. Of these shares, (i) 26,785,714 shares of common stock (the "Original Put Shares") are issuable upon exercise of the selling securityholder's right to put up to a 50% equity interest in a limited partnership out of the 52.38% equity interest currently held by the selling securityholder of which we and the selling securityholder are partners and (ii) 7,142,857 shares of common stock (the "Original Warrant Shares") are issuable upon exercise of an outstanding warrant held by the selling securityholder. We will not receive any proceeds from the sales of the shares of common stock by the selling securityholder. We will not receive cash proceeds from the exercise of all or any portion of the put right exercisable for shares of common stock being registered in this offering; however, in the event of any such exercise, we will receive up to a 50% equity interest in the limited partnership of the 52.38% equity interest currently held by the selling stockholder. We will receive the proceeds of any cash exercise of the warrant.

The distribution of securities offered hereby may be effected in one or more transactions that may take place on the Over the Counter Bulletin Board, including ordinary brokers' transactions, privately negotiated transactions or through sales to one or more dealers for resale of such securities as principals, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. Usual and customary or specifically negotiated brokerage fees or commissions may be paid by the selling securityholder.

The prices at which the selling securityholder may sell the shares in this offering will be determined by the prevailing market price for the shares or in negotiated transactions. Our common stock is traded on the Over the Counter Bulletin Board under the symbol "MHAN." On June 18, 2010, the last reported sales price for our common stock on the Over the Counter Bulletin Board was $0.055 per share.

These securities involve a high degree of risk. See "Risk Factors" beginning on page 5 of this prospectus for factors you should consider before buying shares of our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is ________, 2010.

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This prospectus contains service marks, trademarks and tradenames of Manhattan Pharmaceuticals, Inc.

PROSPECTUS SUMMARY

This summary highlights selected information appearing elsewhere in this prospectus and may not contain all the information that is important to you. This prospectus includes information about the securities being offered as well as information regarding our business. You should carefully read this prospectus and the registration statement of which this prospectus is a part in their entirety before investing in our common stock, including the section entitled "Risk Factors" beginning on page 5 and our financial statements and related notes. Unless the context otherwise requires, all references to "we," "us," "our company," or "the company" in this prospectus refer collectively to Manhattan Pharmaceuticals, Inc., a Delaware corporation.

Overview

We are a specialty healthcare product company focused on developing and commercializing innovative treatments for underserved patient populations. We aim to acquire rights to these technologies by licensing or otherwise acquiring an ownership interest, funding their research and development and eventually either bringing the technologies to market or out-licensing. In the short term, we are focusing our efforts on the commercialization of the four product candidates we currently have in development: Hedrin™, a novel, non-insecticide treatment for pediculosis (head lice), which we are developing through a joint venture, AST-726, a nasally delivered form of hydroxocobalamin for the treatment of vitamin B_{12} deficiency, AST-915, an oral treatment for essential tremor and a topical product for the treatment of psoriasis. Longer term, we intend to acquire and commercialize low risk, quick to market products, specifically products that could be marketed over-the-counter, or OTC, treat everyday maladies, are simple to manufacture, and/or could be classified as medical devices by the FDA.

We have not received regulatory approval for, or generated commercial revenues from marketing or selling any drugs.

Recent Developments

2010 Private Placement

On April 8, 2010, we completed a private placement of approximately 121 units, which we refer to has the 2010 Private Placement, with each unit consisting of (i) 357,143 shares of our common stock, $0.001 par value per share and (ii) 535,714 common stock purchase warrants, each of which will entitle the holder to purchase one additional share of our common stock for a period of five years at an exercise price of $0.08 per share. The purchase price for each unit was $25,000. We received aggregate gross proceeds of $3,029,386 in connection with the private placement (including the conversion of a 12% original issue discount senior subordinated convertible debenture with a stated value of $400,000 and the interest accrued thereon into units).

The first closing of the private place was completed on March 2, 2010, at which we sold an aggregate of 101.9 units. In connection with the first closing, we issued a warrant to purchase 3,639,289 shares of our common stock at an exercise price of $0.08 per share to the placement agent as partial compensation for its services.

The final closing of the private placement was completed on April 8, 2010, at which we sold an aggregate of 2.4 additional Units. In connection with the final closing, we issued a warrant to purchase 12,857 shares of our common stock at an exercise price of $0.08 per share to the placement agent as partial compensation for its services. In addition, on April 8, 2010, the holder of an outstanding 12% original issue discount senior subordinated convertible debenture, dated October 28, 2009, with a stated value of $400,000 and $21,886 of accrued interest, exercised its option to convert such debenture (including all accrued interest thereon) into 16.88 units. The conversion price was equal to the per unit purchase price paid by the investors in the private placement.

Each of the investors in the private placement and the holder of the debenture represented that they were "accredited investors," as that term is defined in Rule 501(a) of Regulation D under the Securities Act, and the sale of the Units was made in reliance on exemptions provided by Regulation D and Section 4(2) of the Securities Act of 1933, as amended.

In connection with the private placement, we entered into a registration rights agreement pursuant to which we agreed to file a registration statement to register the resale of the shares of our common stock issued in the private placement, within 60 days of the final closing date and to cause the registration statement to be declared effective within 150 days (or 180 days upon review by the SEC).

Acquisition of Ariston

On March 8, 2010, we entered into an Agreement and Plan of Merger (the "Merger Agreement") with Ariston Pharmaceuticals, Inc., a Delaware corporation ("Ariston") and Ariston Merger Corp., a Delaware corporation and our wholly-owned subsidiary (the "Merger Sub"). Pursuant to the terms and conditions set forth in the Merger Agreement, on March 8, 2010, the Merger Sub merged with and into Ariston, with Ariston being the surviving corporation of the merger. As a result of the merger, Ariston became a wholly-owned subsidiary of ours.

We merged with Ariston principally to add new products to our portfolio. Prior to the merger, Ariston was a private, clinical stage specialty biopharmaceutical company based in Shrewsbury, Massachusetts that in-licenses, develops and plans to market novel therapeutics for the treatment of serious disorders of the central and peripheral nervous systems.

Under the terms of the Merger Agreement, the consideration payable by us to the stockholders and note holders of Ariston consists of the issuance of 7,062,423 shares of our common stock at Closing (as defined in the Merger Agreement) plus the right to receive up to an additional 24,718,481 shares of our common stock (the “Ariston Milestone Shares”) upon the achievement of certain product-related milestones described below. In addition, we have reserved 38,630,723 shares of our common stock for possible future issuance in connection with the conversion of $15.45 million of outstanding Ariston convertible promissory notes. The note holders will not have any recourse to us for repayment of the notes (their sole recourse being to Ariston, which is our wholly-owned subsidiary), but the note holders will have the right to convert the notes into shares of our common stock at the rate of $0.40 per share. Further, we have reserved 5,000,000 shares of our common stock for possible future issuance in connection with the conversion of $1.0 million of an outstanding Ariston convertible promissory note issued in satisfaction of a trade payable. The note holder will not have any recourse to us for repayment of the note (their sole recourse being to Ariston, which is our wholly-owned subsidiary), but the note holder will have the right to convert the note into shares of our common stock at the rate of $0.20 per share.

Upon the achievement of the milestones described below, we would be obligated to issue portions of the Ariston Milestone Shares to the former Ariston stockholders and noteholders:

- Upon the affirmative decision of our Board of Directors, provided that such decision is made prior to March 8, 2011, to further develop the AST-914 metabolite product candidate, either internally or through a corporate partnership, we would issue 8,828,029 of the Ariston Milestone Shares.

- Upon the acceptance by the FDA of our filing of the first New Drug Application for the AST-726 product candidate, we would issue 7,062,423 of the Ariston Milestone Shares.

- Upon our receipt of FDA approval to market the AST-726 product candidate in the United States of America, we would issue 8,828,029 of the Ariston Milestone Shares.

Certain members of our board of directors and certain of our principal stockholders owned Ariston securities. Timothy McInerney, one of our directors, owned 16,668 shares of Ariston common stock which represented less than 1% of Ariston’s outstanding common stock as of the closing of the Merger. Neil Herskowitz, one of our directors, indirectly owned convertible promissory notes of Ariston with interest and principal in the amount of $192,739. Michael Weiser, who was serving as one of our directors at the time of the Merger, owned 117,342 shares of Ariston common stock, which represented approximately 2.1% of Ariston’s outstanding common stock as of the closing of the Merger. Lindsay Rosenwald, a more than 5% beneficial owner of our common stock, in his individual capacity and indirectly through trusts and companies he controls owned 497,911 shares of Ariston common stock, which represented approximately 8.9% of Ariston’s outstanding common stock as of the closing of the Merger and indirectly owned convertible promissory notes of Ariston in the amount of $141,438.

Corporate History – Merger Transaction(s)

We were incorporated in Delaware in 1993 under the name "Atlantic Pharmaceuticals, Inc." and, in March 2000, we changed our name to "Atlantic Technology Ventures, Inc." In 2003, we completed a "reverse acquisition" of privately held "Manhattan Research Development, Inc." In connection with this transaction, we also changed our name to "Manhattan Pharmaceuticals, Inc." From an accounting perspective, the accounting acquirer is considered to be Manhattan Research Development, Inc. and accordingly, the historical financial statements are those of Manhattan Research Development, Inc.

During 2005, we merged with Tarpan Therapeutics, Inc., or Tarpan. Tarpan was a privately held New York based biopharmaceutical company developing dermatological therapeutics. This transaction was accounted for as a purchase of Tarpan by us.

During 2010, we completed a merger pursuant to which we acquired Ariston. We merged with Ariston principally to add new products to our portfolio. Prior to the merger, Ariston was a private, clinical stage specialty biopharmaceutical company based in Shrewsbury, Massachusetts that in-licenses, develops and plans to market novel therapeutics for the treatment of serious disorders of the central and peripheral nervous systems. For a more detailed discussion of the Merger, please see "Business - Recent Developments - Acquisition of Ariston".

Principal Executive Offices

Our executive offices are located 48 Wall Street, New York, NY 10005. Our telephone number is (212) 582-3950 and our internet address is www.manhattanpharma.com.

The Offering

Common Stock Offered by Selling Securityholder (1):	33,928,571 shares
Common Stock Issued and Outstanding prior to this Offering (2):	120,965,260 shares
Common Stock Issued and Outstanding after this Offering (3):	154,893,831 shares
Use of Proceeds:	We will not receive cash proceeds from the exercise of all or any portion of the put right exercisable for shares of common stock being registered in this offering; however, in the event of any such exercise, we will receive up to a 50% equity interest in H Pharmaceuticals K/S (formerly Hedrin Pharmaceuticals K/S), a Danish limited partnership, of which we and the selling securityholder are partners, of the 52.38% equity interest which is currently held by the selling securityholder. We also will receive the proceeds of any cash exercise of the warrant.
Over the Counter Bulletin Board Symbol:	MHAN

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(1) Includes (i) 26,785,714 shares of common stock, which we refer to as the Original Put Shares, are issuable upon exercise of the selling securityholder's right to put up to a 50% equity interest in H Pharmaceuticals K/S of the 52.38% equity interest currently held by the selling securityholder and (ii) 7,142,857 shares of common stock, which we refer to as the Original Warrant Shares are issuable upon exercise of an outstanding warrant held by the selling securityholder.

(2) Based on the number of shares outstanding on June 18, 2010. Excludes (i) the Original Put Shares; (ii) an additional 44,642,857 shares issuable, or which may become issuable, upon exercise of the selling securityholder's right to put up to a 50% equity interest in H Pharmaceuticals K/S of the 52.38% equity interest currently held by the selling securityholder, and our right to call up to a 50% equity interest in H Pharmaceuticals K/S of the 52.38% equity interest currently held by the selling securityholder, as adjusted pursuant to the anti-dilution provisions of the selling securityholder's put right, which we refer to as the Additional Put Shares; (iii) up to 14,285,714 shares of our common stock issuable upon the exercise of the warrant held by the selling securityholder; (iv) up to 157,620,003 shares of our common stock issuable upon exercise of outstanding warrants (excluding the warrant held by the securityholder) and options to purchase shares of our common stock; (v) up to 24,718,481 shares of our common stock which may be issuable upon the achievement of certain milestones set forth in the Ariston Merger Agreement and (vi) up to 43,630,723 shares of our common stock which may be issuable upon conversion of the outstanding Ariston convertible promissory notes and trade payable.

(3) Consists (A) 120,965,260 shares outstanding on June 18, 2010, (B) (i) the 26,785,714 Original Put Shares and (ii) the 7,142,857 Original Warrant Shares, in each case, assuming the selling stockholder's election of its right exercise its put right with respect to the Original Put Shares and its exercise of the warrant to purchase the Original Warrant Shares.

Summary Financial Information

The summary financial information for the fiscal years ended December 31, 2009 and 2008 was derived from our financial statements that have been audited by J.H. Cohn LLP for the fiscal years then ended. The summary financial information as of and for the three months ended March 31, 2010 and 2009 and for the cumulative period from August 6, 2001 (inception) to March 31, 2010 was derived from our unaudited financial data but, in the opinion of management, reflects all adjustments necessary for a fair presentation of the results of such periods. The summary financial information presented below should be read in conjunction with our financial statements and related notes appearing in this prospectus beginning on page F-1. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" for a discussion of our financial statements for the fiscal years ended December 31, 2009 and 2008 and for the three months ended March 31, 2010 and 2009.

	Three Months Ended March, 31		**Years Ended December 31,**		**Cumulative period from August 6, 2001 (inception) to**
	2010	**2009**	**2009**	**2010**	**March 31, 2010**
	(unaudited)	(unaudited)			(unaudited)
Statements of Operations Data:					
Revenue	$ -	$ -	$ -	$ -	$ -
Research and development expense	$ 17,767	$ 44,936	$ 40,376	$ 1,802,792	$ 28,349,978
General and administrative expense	$ 511,678	$ 512,400	$ 1,731,182	$ 2,609,910	$ 18,705,133
Net loss attributable to common shares	$ (1,633,169)	$ (761,844)	$ (2,793,285)	$ (4,268,858)	$ (63,566,604)
Net loss per common share	$ (0.02)	$ (0.01)	$ (0.04)	$ (0.06)	N/A
Statements of Cash Flows Data:					
Net cash used in operating activities	$ (604,827)	$ (645,797)	$ (1,049,799)	$ (4,444,009)	$ (40,274,191)
Net cash provided by financing activities	$ 2,084,746	$ 770,270	$ 961,772	$ 3,909,319	$ 41,401,806
Cash dividends declared	$ -	$ -	$ -	$ -	$ -

	At March 31, 2010	**At December 31, 2009**
	(unaudited)	
Balance Sheets Data:		
Total assets	$ 20,081,864	$ 365,662
Total liabilities	$ 27,599,378	$ 7,150,612
Total stockholders' deficiency	$ (7,517,514)	$ (6,784,950)

RISK FACTORS

An investment in our securities is speculative in nature, involves a high degree of risk, and should not be made by an investor who cannot bear the economic risk of its investment for an indefinite period of time and who cannot afford the loss of its entire investment. You should carefully consider the following risk factors and the other information contained elsewhere in this prospectus before making an investment in our securities.

Risks Related to Our Business

We currently have no product revenues and will need to raise substantial additional funds in the future. If we are unable to obtain the funds necessary to continue our operations, we will be required to delay, scale back or eliminate one or more of our remaining drug development programs and may not continue as a going concern.

We have generated no product revenues to date and will not until, and if, we receive approval from the U.S. Food and Drug Administration, or the FDA, and other regulatory authorities for any of our four product candidates. We have already spent substantial funds developing our potential products and business, however, and we expect to continue to have negative cash flow from our operations for at least the next several years. As of December 31, 2009, we had $17,996 of cash and cash equivalents. We received additional funding of approximately $3.0 million from a financing transaction completed in April 2010. We expect that such financing shall be sufficient to fund our operations through the end of 2010. We will still have to raise substantial additional funds to complete the development of our product candidates and to bring them to market. Beyond the capital requirements mentioned above, our future capital requirements will depend on numerous factors, including:

- the results of any clinical trials;
- the scope and results of our research and development programs;
- the time required to obtain regulatory approvals;
- our ability to establish and maintain marketing alliances and collaborative agreements; and
- the cost of our internal marketing activities.

Our history of operating losses and lack of product revenues may make it difficult to raise capital on acceptable terms or at all. If adequate funds are not available, we will be required to delay, scale back or eliminate one or more of our drug development programs or obtain funds through arrangements with collaborative partners or others that may require us to relinquish rights to certain of our technologies or products that we would not otherwise relinquish. Our Independent Registered Public Accounting Firm has concluded that our net losses, negative cash flow, accumulated deficit and negative working capital as of December 31, 2009, raise substantial doubt about our ability to continue as a going concern. The inclusion of a going concern explanatory paragraph in the report of our Independent Registered Public Accounting Firm will make it more difficult for us to secure additional financing or enter into strategic relationships with distributors on terms acceptable to us, if at all, and likely will materially and adversely affect the terms of any financing that we may obtain.

We have incurred substantial losses and negative cash flow from operations and may never become profitable.

We have a history of losses and expect to incur substantial losses and negative operating cash flow for the foreseeable future, and we may never achieve or maintain profitability. We have incurred losses in every period since our inception on August 6, 2001. For the three months ended March 31, 2010 and for the period from August 6, 2001 (inception) through March 31, 2010, we incurred net losses applicable to common shares of $1,633,169, and $63,566,604, respectively. Even if we succeed in developing and commercializing one or more of our product 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 as we:

- continue to undertake nonclinical development and clinical trials for our product candidates;

- seek regulatory approvals for our product candidates;
- implement additional internal systems and infrastructure;
- lease additional or alternative office facilities; and
- hire additional personnel.

We also expect to experience negative cash flow for the foreseeable future as we fund our operating losses and capital expenditures. As a result, we will need to generate significant revenues in order to achieve and maintain profitability. We may not be able to generate these revenues or achieve profitability in the future. Our failure to achieve or maintain profitability could negatively impact the value of our common stock.

As a result of our continued losses, our Independent Registered Public Accounting Firm has included an explanatory paragraph in our financial statements for the fiscal years ended December 31, 2009 and 2008, expressing doubt as to our ability to continue as a going concern. The inclusion of a going concern explanatory paragraph in the report of our Independent Registered Public Accounting Firm will make it more difficult for us to secure additional financing or enter into strategic relationships with distributors on terms acceptable to us, if at all, and likely will materially and adversely affect the terms of any financing that we may obtain. If we fail to generate revenues, or if operating expenses exceed our expectations or cannot be adjusted accordingly, we may not achieve profitability and the value of your investment could decline significantly.

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

We are a development-stage company and have not yet demonstrated any ability to perform the functions necessary for the successful commercialization of any product candidates. The successful commercialization of our product candidates will require us to perform a variety of functions, including:

- continuing to undertake nonclinical development and clinical trials;
- participating in regulatory approval processes;
- formulating and manufacturing products; and
- conducting sales and marketing activities.

Since inception as Manhattan Research Development, Inc., our operations have been limited to organizing and staffing, and acquiring, developing and securing our proprietary technology and undertaking nonclinical and clinical trials of principal product candidates. These operations provide a limited basis for you to assess our ability to commercialize our product candidates and the advisability of investing in our securities.

We did not engage financial advisors to evaluate the fairness of the consideration paid to the stockholders and noteholders of Ariston in connection with our merger with Ariston. We can provide no assurance that the fair value of the securities paid to the stockholders and noteholders of Ariston in the merger did not exceed the fair value of the assets acquired.

Ariston had approximately $16.5 million indebtedness prior to our merger with them. In connection with the merger, the merger subsidiary of the combined company assumed Ariston's indebtedness of approximately $16.5 million. Such indebtedness may negatively impact our ability to raise sufficient additional capital to fund our operations.

Ariston may have liabilities that were unknown at the time of the consummation of the merger that became our liabilities upon consummation of the merger with Ariston.

There may be liabilities of Ariston and/or its affiliates that were unknown at the time of the consummation of our merger with Ariston. As a result of our merger with Ariston, any such unknown liabilities may become our liabilities. In the event any such liabilities become known following such merger, they may lead to claims against Ariston, our wholly-owned subsidiary, including but not limited to lawsuits, administrative proceedings, and other claims. Any such liabilities may subject us to increased expenses for attorneys' fees, fines, litigation expenses, and expenses associated with any subsequent settlements or judgments. There can be no assurances that such unknown liabilities do not exist. To the extent that such liabilities become known following the merger with Ariston, any such liability-related expenses may materially impact our financial condition and results of operations.

We depend greatly on the intellectual capabilities and experience of our key executives and the loss of any of them could affect our ability to develop our remaining products.

We had only two full-time and two part-time employees as of June 18, 2010. The loss of either Michael G. McGuinness, our Chief Operating and Financial Officer, or Malcolm Morville, Chief Executive Officer of Ariston, could harm us. Mr. McGuinness' employment agreement with us expired in July 2009. Mr. Morville's employment agreement with Ariston expired upon consummation of the merger with Ariston. Messrs. McGuinness and Morville have been working for us and Ariston, respectively, on the same terms and conditions that were set forth in the employment agreements that expired. We cannot predict our success in hiring or retaining the personnel we require for continued operations.

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

We will need FDA approval to commercialize our product candidates in the U.S. and approvals from the FDA equivalent regulatory authorities in foreign jurisdictions to commercialize our product candidates in those jurisdictions. In order to obtain FDA approval of any of our product candidates, we must first submit to the FDA an IND, which will set forth our plans for clinical testing of our product candidates. We are unable to estimate the size and timing of the clinical and non-clinical trials required to bring our product candidates to market and, accordingly, cannot estimate the time when development of our product candidates will be completed.

When the clinical testing for our product candidates is complete, we will submit to the FDA a NDA demonstrating that the product candidate is safe for humans and effective for its intended use. This demonstration requires significant research and animal tests, which are referred to as nonclinical studies, as well as human tests, which are referred to as clinical trials. Satisfaction of the FDA's regulatory requirements typically takes many years, depends upon the type, complexity and novelty of the product 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. The FDA has substantial discretion in the drug approval process and may require us to conduct additional nonclinical and clinical testing or to perform post-marketing studies. The approval process may also be delayed by changes in government regulation, future legislation or administrative action or changes in FDA policy that occur prior to or during our regulatory review. Delays in obtaining regulatory approvals may:

- delay commercialization of, and our ability to derive product revenues from, our product candidates;
- impose costly procedures on us; and
- diminish any competitive advantages that we may otherwise enjoy.

Even if we comply with all FDA requests, the FDA may ultimately reject any or all of our future NDAs. We cannot be sure that we will ever obtain regulatory clearance for any of our product candidates. Failure to obtain FDA approval of any of our product candidates will severely undermine our business by reducing our number of salable products and, therefore, corresponding product revenues.

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 have not yet made any determination as to which foreign jurisdictions we may seek approval and have not undertaken any steps to obtain approvals in any foreign jurisdiction.

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 product candidates will take at least several 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:

- unforeseen safety issues;

- determination of dosing issues;

- lack of effectiveness during clinical trials;

- slower than expected rates of patient recruitment;

- inability to monitor patients adequately during or after treatment; and

- inability or unwillingness of medical investigators to follow our clinical protocols.

In addition, we or the FDA may suspend our 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.

The results of our clinical trials may not support our product candidate claims.

Even if our clinical trials are completed as planned, we cannot be certain that their results will support our product candidate claims. Success in nonclinical 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 nonclinical testing. The clinical trial process may fail to demonstrate that our product candidates are safe for humans or effective for indicated uses. This failure would cause us to abandon a product candidate and may delay development of other product candidates. Any delay in, or termination of, our clinical trials will delay the filing of our NDAs with the FDA and, ultimately, our ability to commercialize our product candidates and generate product revenues. In addition, we anticipate that our clinical trials will involve only a small patient population. Accordingly, the results of such trials may not be indicative of future results over a larger patient population.

Physicians and patients may not accept and use our products.

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

- perceptions by members of the health care community, including physicians, about the safety and effectiveness of our drugs;
- cost-effectiveness of our product relative to competing products;
- availability of reimbursement for our products from government or other healthcare payers; and
- effectiveness of marketing and distribution efforts by us and our licensees and distributors, if any.

Because we expect sales of our current product 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.

Our product-development program depends upon third-party researchers who are outside our control.

We currently are collaborating with several third-party researchers, for the development of our product candidates. Accordingly, the successful development of our product candidates will depend on the performance of these third parties. These collaborators will not be our employees, however, and we cannot control the amount or timing of resources that they will devote to our programs. Our collaborators may not assign as great a priority to our programs or pursue them as diligently as we would if we were undertaking such programs ourselves. 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, will be delayed. These collaborators may also have relationships with other commercial entities, some of whom 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 product candidates.

We have no experience in drug formulation or manufacturing and do not intend to establish our own manufacturing facilities. We lack the resources and expertise to formulate or manufacture our own product candidates. We intend to contract with one or more manufacturers to manufacture, supply, store and distribute drug supplies for our clinical trials. If any of our product candidates receive FDA approval, we will rely on one or more third-party contractors to manufacture our drugs. Our anticipated future reliance on a limited number of third-party manufacturers exposes us to the following 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, production of our products after receipt of FDA approval, if any.
- 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, if any.
- Our future 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, 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.
- 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.

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

We currently have no sales, marketing or distribution capabilities. We do not anticipate having the resources in the foreseeable future to allocate to the sales and marketing of our proposed products. Our future success depends, in part, on our ability to enter into and maintain such collaborative relationships, the collaborator's strategic interest in the products under development and such collaborator's ability to successfully market and sell any such products. We intend to pursue collaborative arrangements regarding the sales and marketing of our products, however, there can be no assurance that we will be able to establish or maintain such collaborative arrangements, or if able to do so, that they will have effective sales forces. 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. There can also be no assurance 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, and there can be no assurance that such efforts will be successful. In addition, there can also be no assurance that we will be able to market and sell our product in the United States or overseas.

If we cannot compete successfully for market share against other drug companies, we may not achieve sufficient product revenues and our business will suffer.

The market for our product candidates is characterized by intense competition and rapid technological advances. If our product candidates receive FDA approval, they will compete with a number of existing and future drugs and therapies developed, manufactured and marketed by others. Existing or future competing products may provide greater therapeutic convenience or clinical or other benefits for a specific indication than our products, or may offer comparable performance at a lower cost. If our products fail to capture and maintain market share, we may not achieve sufficient product revenues and our business will suffer.

We will compete against fully integrated pharmaceutical companies and smaller companies that are collaborating with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Many of these competitors have product candidates that will compete with ours already approved or in development. In addition, many of these competitors, either alone or together with their collaborative partners, operate larger research and development programs and have substantially greater financial resources than we do, as well as significantly greater experience in:

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

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

Many of the organizations competing with us have substantially greater capital resources, larger research and development staffs 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.

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.

See “Business – Intellectual Property and License Agreements”.

However, with regard to the patents covered by our license agreements and any future patents issued to which we will have rights, 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 patents;
- if and when patents will issue;
- whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings which may be costly whether we win or lose.

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 of our employees, consultants, advisors and contractors to enter into agreements which 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, forced to pay damages, and defend against litigation, which could adversely affect our ability to execute our business plan.

Our business is substantially dependent on the intellectual property on which our product candidates are based. To date, we have not received any threats or claims that we may be infringing on another's patents or other intellectual property rights. If our products, methods, processes and other technologies infringe the proprietary rights of other parties, we could incur substantial costs and we 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;
- 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 valuable management resources.

Our ability to generate product revenues will be diminished if our drugs sell for inadequate prices or patients are unable to obtain adequate levels of reimbursement.

Our ability to commercialize our drugs, alone or with collaborators, will depend in part on the extent to which reimbursement will be available from:

- government and health administration authorities;
- private health maintenance organizations and health insurers; and
- other healthcare payers.

Significant uncertainty exists as to the reimbursement status of newly approved healthcare products. Healthcare payers, including Medicare, are challenging the prices charged for medical products and services. Government and other healthcare payers increasingly attempt to contain healthcare costs by limiting both coverage and the level of reimbursement for drugs. Even if our product candidates are approved by the FDA, insurance coverage may not be available, and reimbursement levels may be inadequate, to cover our drugs. If government and other healthcare payers do not provide adequate coverage and reimbursement levels for any of our products, once approved, market acceptance of our products could be reduced.

Health care reform and restrictions on reimbursement may limit our returns on potential products.

Because our strategy ultimately depends on the commercial success of our products, we assume, among other things, that end users of our products will be able to pay for them. In the United States and other countries, in most cases, the volume of sales of products like those we are developing depends on the availability of reimbursement from third-party payors, including national health care agencies, private health insurance plans and health maintenance organizations. Third-party payors increasingly challenge the prices charged for medical products and services. Accordingly, if we succeed in bringing products to market, and reimbursement is not available or is insufficient, we could be prevented from successfully commercializing our potential products.

The health care industry in the United States and in Europe is undergoing fundamental changes as a result of political, economic and regulatory influences. Reforms proposed from time to time include mandated basic health care benefits, controls on health care spending, the establishment of governmental controls over the cost of therapies, creation of large medical services and products purchasing groups and fundamental changes to the health care delivery system. We anticipate ongoing review and assessment of health care delivery systems and methods of payment in the United States and other countries. We cannot predict whether any particular reform initiatives will result or, if adopted, what their impact on us will be. However, we expect that adoption of any reform proposed will impair our ability to market products at acceptable prices.

Changes in laws affecting the health care industry could adversely affect our business.

In the U.S., there have been numerous proposals considered at the federal and state levels for comprehensive reforms of health care and its cost, and it is likely that federal and state legislatures and health agencies will continue to focus on health care reform in the future. Congress has passed legislation to reform the U.S. health care system by expanding health insurance coverage, reducing health care costs and making other changes. While health care reform may increase the number of patients who have insurance coverage for our products, it may also include cost containment measures that adversely affect reimbursement for our products. Congress has also considered legislation to change the Medicare reimbursement system for outpatient drugs, increase the amount of rebates that manufacturers pay for coverage of their drugs by Medicaid programs and facilitate the importation of lower-cost prescription drugs that are marketed outside the U.S. Some states are also considering legislation that would control the prices of drugs, and state Medicaid programs are increasingly requesting manufacturers to pay supplemental rebates and requiring prior authorization by the state program for use of any drug for which supplemental rebates are not being paid. Managed care organizations continue to seek price discounts and, in some cases, to impose restrictions on the coverage of particular drugs. Government efforts to reduce Medicaid expenses may lead to increased use of managed care organizations by Medicaid programs. This may result in managed care organizations influencing prescription decisions for a larger segment of the population and a corresponding constraint on prices and reimbursement for our products.

We operate in a highly regulated industry. As a result, governmental actions may adversely affect our business, operations or financial condition, including:

- new laws, regulations or judicial decisions, or new interpretations of existing laws, regulations or decisions, related to health care availability, method of delivery and payment for health care products and services;
- changes in the FDA and foreign regulatory approval processes that may delay or prevent the approval of new products and result in lost market opportunity;
- changes in FDA and foreign regulations that may require additional safety monitoring, labeling changes, restrictions on product distribution or use, or other measures after the introduction of our products to market, which could increase our costs of doing business, adversely affect the future permitted uses of approved products, or otherwise adversely affect the market for our products;
- new laws, regulations and judicial decisions affecting pricing or marketing practices; and
- changes in the tax laws relating to our operations.

The enactment in the U.S. of health care reform, possible legislation which could ease the entry of competing follow-on biologics in the marketplace, new legislation or implementation of existing statutory provisions on importation of lower-cost competing drugs from other jurisdictions, and legislation on comparative effectiveness research are examples of previously enacted and possible future changes in laws that could adversely affect our business. In addition, the Food and Drug Administration Amendments Act of 2007 included new authorization for the FDA to require post-market safety monitoring, along with an expanded clinical trials registry and clinical trials results database, and expanded authority for the FDA to impose civil monetary penalties on companies that fail to meet certain commitments.

We may not successfully manage our growth.

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

If we are unable to hire additional qualified personnel, our ability to grow our business may be harmed.

We will need to hire additional qualified personnel with expertise in nonclinical testing, clinical research and testing, government regulation, formulation and manufacturing and sales and marketing. We compete for qualified individuals with numerous biopharmaceutical companies, universities and other research institutions. Competition for such individuals is intense, and we cannot be certain that our search for such personnel will be successful. Attracting and retaining qualified personnel will be critical to our success.

If we are not successful in integrating Ariston's product development programs, we may not be able to operate efficiently after our merger with Ariston, which may have a material adverse effect on our results of operations and financial condition.

Achieving the benefits of our merger with Ariston will depend in part on the successful integration of Ariston's drug development programs and personnel in a timely and efficient manner. The integration process requires coordination of different development, regulatory, and manufacturing teams, and involves the integration of systems, applications, policies, procedures, business processes and operations. If we cannot successfully integrate Ariston's programs, we may not realize the expected benefits of the merger.

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. We currently carry clinical trial insurance in an amount up to $5,000,000, which may be inadequate to protect against potential product liability claims or may inhibit the commercialization of pharmaceutical products we develop, alone or with corporate collaborators. Although we intend to maintain clinical trial insurance during any clinical trials, this may be inadequate to protect us against any potential claims. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

We are controlled by current officers, directors and principal stockholders.

As of June 18, 2010, our directors, executive officers and principal stockholders beneficially own approximately 6,877,851 shares of our common stock, which represents approximately 5.38% of our outstanding voting stock, including shares underlying outstanding options and warrants which are currently exercisable or exercisable within 60 days of June 18, 2010. In addition, Nordic Biotech Venture Fund II K/S, which we refer to herein as Nordic or the selling securityholder, as applicable, has the right to acquire up to 85,714,285 shares of our common stock which would result in Nordic beneficially owning approximately 41.47% of our common stock as of June 18, 2010 (although, as described in Note 18 to our financial statements at and for the years ended December 31, 2009 and 2008, and as described in an amendment to Nordic's Schedule 13D filing with respect to ownership of our securities, Nordic disputes the anti-dilution method that we used to calculate the anti-dilution shares issuable to Nordic as a result of our 2010 Private Placement completed on April 8, 2010, which resulted in Nordic beneficially owning 85,714,285 shares as of June 18, 2010, and Nordic claims it acquired the right to purchase an additional 5,555,556 shares of our common stock upon exercise of the Nordic put as a result of Nordic's making an additional investment in the Hedrin JV of $500,000 in January 2010; as a result Nordic claims that it beneficially owns 216,666,666, or 65.5% of our common stock, which we dispute). Through its beneficial ownership of our common stock, its right to acquire additional shares, its substantial control over the management of the Hedrin JV (which includes the ability to terminate our management contract with the Hedrin JV), Nordic has the ability to exert substantial influence over the election of our Board of Directors, the outcome of issues submitted to our stockholders, the development of Hedrin and our ability, as a company, to benefit from the successful development of Hedrin. Accordingly, our directors, officers and principal stockholders, specifically Nordic, taken as a whole, have the ability to exert substantial influence over the election of our Board of Directors and the outcome of issues submitted to our stockholders.

In April 2010, Nordic filed a Schedule 13D/A (the "Nordic Amended 13D"). We are not in agreement with the disclosure set forth in the Nordic Amended 13D and have written a letter to Nordic explaining our disagreements. The Nordic Amended 13D shows an aggregate number of shares of our common stock beneficially owned by Nordic as 216,666,666, or 65.5%. We believe the correct beneficial ownership is 85,714,285 shares, or 41.47%. The Nordic Amended 13D states that Nordic does not believe our determination of the anti-dilution shares accruing to Nordic as a result of the 2010 Private Placement was neither reasonable nor made in good faith. As we have previously stated we believe our determination was both reasonable and made in good faith. The Nordic Amended 13D further states that Nordic acquired the right to purchase an additional 5,555,556 shares of our common stock upon exercise of the Nordic put as a result of Nordic's making an additional investment in the Hedrin JV of $500,000 in January 2010. We are not in agreement with this claim, we do not believe that Nordic is required to any adjustment to Nordic's put as a result of Nordic making additional capital contributions to the Hedrin JV. In the letter to Nordic we note that Nordic's valuation suggestions for the warrants issued in the 2010 Private Placement ignores the concept of relative value inherent in the Hedrin JV Agreement.

Risks Related to Our Common Stock

Our stock price is, and we expect it to remain, volatile, which could limit investors' ability to sell stock at a profit.

During the last two fiscal years, our stock price has traded at a low of $0.007 in the fourth quarter of 2008 to a high of $0.23 in the first quarter of 2008. The volatile price of our stock makes it difficult for investors to predict the value of their investment, to sell shares at a profit at any given time, or to plan purchases and sales in advance. A variety of factors may affect the market price of our common stock. These include, but are not limited to:

- The global economic crisis, which affected stock prices of many companies, and particularly many small pharmaceutical companies like ours;
- publicity regarding actual or potential clinical results relating to products under development by our competitors or us;
- delay or failure in initiating, completing or analyzing nonclinical or clinical trials or the unsatisfactory design or results of these trials;
- achievement or rejection of regulatory approvals by our competitors or us;
- announcements of technological innovations or new commercial products by our competitors or us;
- developments concerning proprietary rights, including patents;
- developments concerning our collaborations;
- regulatory developments in the United States and foreign countries;
- economic or other crises and other external factors;
- period-to-period fluctuations in our revenues and other results of operations;
- changes in financial estimates by securities analysts; and
- sales of our common stock.

We will not be able to control many of these factors, and we believe that period-to-period comparisons of our financial results will not necessarily be indicative of our future performance.

In addition, the stock market in general, and the market for biotechnology companies in particular, has experienced extreme price and volume fluctuations that may have been unrelated or disproportionate to the operating performance of individual companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance.

Our common stock is not listed on a national exchange and there is a limited market for our common stock which may make it more difficult for you to sell your stock.

Our common stock is quoted on the OTC Bulletin Board under the symbol "MHAN.OB." There is a limited trading market for our common stock which negatively impacts the liquidity of our common stock not only in terms of the number of shares that can be bought and sold at a given price, but also through delays in the timing of transactions and reduction in security analysts' and the media's coverage of us. Accordingly, there can be no assurance as to the liquidity of any markets that may develop for our common stock, the ability of holders of our common stock to sell our common stock, or the prices at which holders may be able to sell our common stock.

The fact that our common stock is not listed on a national exchange may negatively impact our ability to attract investors and to use our common stock to raise capital to fund our operations.

In order to maintain liquidity in our common stock, we depend upon the continuing availability of a market on which our securities may be traded. We need to raise substantial additional funds in the future to continue our operations and the fact that our common stock is not listed on a national exchange may impact our ability to attract investors and to use our common stock to raise sufficient capital to continue to fund our operations. See the Risk Factor ***"We have no product revenues and will need to raise substantial additional funds in the future. If we are unable to obtain funds necessary to continue our operations, we will be required to delay, scale back or eliminate one or more of our drug development programs"*** above.

If we fail to file periodic reports with the SEC our common stock may be removed from the OTCBB.

Pursuant to the Over-The-Counter Bulletin Board ("OTCBB") rules relating to the timely filing of periodic reports with the SEC, any OTCBB issuer which fails to file a periodic report (Form 10-Q's or 10-K's) by the due date of such report (as extended by the filing of a Form 12b-25), three (3) times during any twenty-four (24) month period is automatically de-listed from the OTCBB. In the event an issuer is de-listed, such issuer would not be eligible to be re-listed on the OTCBB for a period of one-year, during which time any subsequent late filing would reset the one-year period of de-listing. If we are late in our filings three times in any twenty-four (24) month period and are de-listed from the OTCBB, our common stock would likely be listed for trading only on the "Pink Sheets," which generally provide an even less liquid market than the OTCBB. In such event, investors may find it more difficult to trade our common stock or to obtain accurate, current information concerning market prices for or common stock.

We are at greater risk for market fraud since our common stock is not traded on a national securities exchange.

OTCBB securities are frequent targets of fraud or market manipulation. Not only because of their generally low price, but also because the OTCBB reporting requirements for these securities are less stringent than for listed on a national securities exchange and no exchange requirements are imposed. Dealers may dominate the market and set prices that are not based on competitive forces. Individuals or groups may create fraudulent markets and control the sudden, sharp increase of price and trading volume and the equally sudden collapse of market prices.

Penny stock regulations may impose certain restrictions on marketability of our securities.

The Securities and Exchange Commission has adopted Rule 15g-9 which establishes the definition of a "penny stock," for the purposes relevant to us, as any equity security that has a market price of less than $5.00 per share or with an exercise price of less than $5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, the rules require:

- that a broker or dealer approve a person's account for transactions in penny stocks; and
- the broker or dealer receives from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person's account for transactions in penny stocks, the broker or dealer must:

- obtain financial information and investment experience objectives of the person; and
- make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the Commission relating to the penny stock market, which, in highlight form:

- sets forth the basis on which the broker or dealer made the suitability determination; and
- that the broker or dealer received a signed, written agreement from the investor prior to the transaction.

Generally, brokers may be less willing to execute transactions in securities subject to the "penny stock" rules. This may make it more difficult for investors to dispose of our common stock and cause a decline in the market value of our stock.

Disclosure also must be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker-dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock transactions. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

If we are unable to obtain future capital on acceptable terms, this will negatively affect our business operations and current investors.

We expect that in the future we will seek additional capital through public or private financings. Additional financing may not be available on acceptable terms, or at all. If additional capital is raised through the sale of equity, or securities convertible into equity, further dilution to then existing stockholders will result. In addition, certain warrants held by certain of our investors and the Nordic put contain full-ratchet anti-dilution protection provisions which would result in significant dilution to existing stockholders in the event we are required to raise capital at an effective price per share below $0.07 per common share. If additional capital is raised through the incurrence of debt, our business could be affected by the amount of leverage incurred. For instance, such borrowings could subject us to covenants restricting our business activities, paying interest would divert funds that would otherwise be available to support commercialization and other important activities, and holders of debt instruments would have rights and privileges senior to those of equity investors. If we are unable to obtain adequate financing on a timely basis, we may be required to delay, reduce the scope of or eliminate some of our planned activities, any of which could have a material adverse effect on the business.

We have not paid dividends in the past and do not expect to pay dividends in the future, and any return on investment may be limited to the value of your stock.

We have never paid dividends on our common stock and do not anticipate paying any dividends for the foreseeable future. You should not rely on an investment in our stock if you require dividend income. Further, you will only realize income on an investment in our stock in the event you sell or otherwise dispose of your shares at a price higher than the price you paid for your shares. Such a gain would result only from an increase in the market price of our common stock, which is uncertain and unpredictable.

If you are not an institutional investor, you may purchase our securities in this offering only if you reside within certain states and may engage in resale transactions only in those states and a limited number of other jurisdictions.

If you are not an "institutional investor," you will need to be a resident of certain jurisdictions to purchase our securities in this offering. The definition of an "institutional investor" varies from state to state but generally includes financial institutions, broker-dealers, banks, insurance companies and other qualified entities. In order to prevent resale transactions in violation of states' securities laws, you may engage in resale transactions only in the states and in other jurisdictions in which an applicable exemption is available or a registration application has been filed and accepted. This restriction on resale may limit your ability to resell the securities purchased in this offering and may impact the price of our shares.

If you are not an institutional investor, you generally will not be permitted to purchase shares in this offering unless there is an available exemption or we register the shares covered by this prospectus in such states.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Business," and elsewhere in this prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1993 (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934 that are based on management's assumptions, expectations and projections about us, and the industry within which we operate, that have been made pursuant to the Private Securities Litigation Reform Act of 1995 and which reflect our expectations regarding our future growth, results of operations, performance and business prospects and opportunities. These statements also involve known and unknown risks, uncertainties and other factors that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among other things, those listed under "Risk Factors" and elsewhere in this prospectus. In some cases, you can identify forward-looking statements by terminology such as "indicates," "may," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," or "continue" or the negative of such terms or other comparable terminology. These statements are only predictions. Actual events or results may differ materially.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We caution you not to place undue reliance on these statements, which speak only as of the date of this prospectus. We are under no duty to update any of the forward-looking statements after the date of this prospectus to conform such statements to actual results.

USE OF PROCEEDS

We are registering shares of our common stock pursuant to registration rights granted to the selling securityholder. We will not receive any of the proceeds from the sale of the common stock by the selling securityholder named in this prospectus. All proceeds from the sale of the common stock will be paid directly to the selling securityholder.

We will not receive cash proceeds from the exercise of all or any portion of the put right exercisable for shares of common stock being registered in this offering; however, in the event of any such exercise, we would receive up to a 50% equity interest in H Pharmaceuticals K/S of the 52.38% equity interest currently held by the selling securityholder. If all of the warrant exercisable for shares of common stock being registered in this offering is exercised for cash, we could receive net proceeds of up to approximately $1,000,000. We intend to use the estimated net proceeds received upon exercise of the warrant, if any, for working capital and general corporate purposes. The warrant may not be exercised and we cannot assure you that the warrant will be exercised.

We have agreed to pay all costs, expenses and fees relating to registering the shares of our common stock referenced in this prospectus. The selling securityholder will pay any brokerage commissions and/or similar charges incurred for the sale of such shares of our common stock.

PRICE RANGE FOR OUR COMMON STOCK

Prior to March 26, 2008 our common stock traded on the American Stock Exchange “AMEX” under the symbol “MHA”. On March 26, 2008, our common stock was voluntarily delisted from the AMEX and began trading on the Over the Counter Bulletin Board under the symbol “MHAN”. The following table lists the high and low price for our common stock as quoted, in U.S. dollars, on the American Stock Exchange or the Over the Counter Bulletin Board for the periods indicated:

	High	Low
2008		
First Quarter	$ 0.230	$ 0.110
Second Quarter	$ 0.180	$ 0.100
Third Quarter	$ 0.200	$ 0.100
Fourth Quarter	$ 0.090	$ 0.007
2009		
First Quarter	$ 0.060	$ 0.090
Second Quarter	$ 0.120	$ 0.021
Third Quarter	$ 0.100	$ 0.070
Fourth Quarter	$ 0.090	$ 0.060
2010		
First Quarter	$ 0.084	$ 0.060
Second Quarter (through June 18, 2010)	$ 0.085	$ 0.050

The number of holders of record of our common stock as of June 18, 2010 was 559.

DIVIDEND POLICY

To date, we have not paid any dividends on our common stock and we do not intend to pay dividends for the foreseeable future, but intend instead to retain earnings, if any, for use in our business operations. The payment of dividends in the future, if any, will be at the sole discretion of our board of directors and will depend upon our debt and equity structure, earnings and financial condition, need for capital in connection with possible future acquisitions and other factors, including economic conditions, regulatory restrictions and tax considerations. We cannot guarantee that we will pay dividends or, if we pay dividends, the amount or frequency of these dividends.

SELECTED FINANCIAL INFORMATION

The selected financial information for the fiscal years ended December 31, 2009 and 2008 was derived from our financial statements that have been audited by J.H. Cohn LLP for the fiscal years then ended. The selected financial information at and for the three months ended March 31, 2010 and 2009 and for the cumulative period from August 6, 2001 (inception) to March 31, 2010 was derived from our unaudited financial data but, in the opinion of management, reflects all adjustments necessary for a fair presentation of the results of such periods. The selected financial information presented below should be read in conjunction with our financial statements and related notes appearing in this prospectus beginning on page F-1. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" for a discussion of our financial statements for the fiscal years ended December 31, 2009 and 2008 and for the three months ended March 31, 2010 and 2009.

	Three Months Ended March, 31		Years Ended December 31,		Cumulative period from August 6, 2001 (inception) to
	2010	2009	2009	2010	March 31, 2010
	(unaudited)	(unaudited)			(unaudited)
Statements of Operations Data:					
Revenue	$ -	$ -	$ -	$ -	$ -
Research and development expense	$ 17,767	$ 44,936	$ 40,376	$ 1,802,792	$ 28,349,978
General and administrative expense	$ 511,678	$ 512,400	$ 1,731,182	$ 2,609,910	$ 18,705,133
Net loss attributable to common shares	$ (1,633,169)	$ (761,844)	$ (2,793,285)	$ (4,268,858)	$ (63,566,604)
Net loss per common share	$ (0.02)	$ (0.01)	$ (0.04)	$ (0.06)	N/A
Statements of Cash Flows Data:					
Net cash used in operating activities	$ (604,827)	$ (645,797)	$ (1,049,799)	$ (4,444,009)	$ (40,274,191)
Net cash provided by financing activities	$ 2,084,746	$ 770,270	$ 961,772	$ 3,909,319	$ 41,401,806
Cash dividends declared	$ -	$ -	$ -	$ -	$ -

	At March 31, 2010	At December 31, 2009
	(unaudited)	
Balance Sheets Data:		
Total assets	$ 20,081,864	$ 365,662
Total liabilities	$ 27,599,378	$ 7,150,612
Total stockholders' deficiency	$ (7,517,514)	$ (6,784,950)

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion contains forward-looking statements and involves numerous risks and uncertainties, including, but not limited to, those described in the "Risk Factors" section of this prospectus. Actual results may differ materially from those contained in any forward-looking statements. The following discussion should be read in conjunction with "Selected Financial Information" and our financial statements and notes thereto included elsewhere in this prospectus.

Overview

We were incorporated in Delaware in 1993 under the name "Atlantic Pharmaceuticals, Inc." and, in March 2000, we changed our name to "Atlantic Technology Ventures, Inc." In 2003, we completed a "reverse acquisition" of privately held "Manhattan Research Development, Inc". In connection with this transaction, we also changed our name to "Manhattan Pharmaceuticals, Inc." From an accounting perspective, the accounting acquirer is considered to be Manhattan Research Development, Inc. and accordingly, the historical financial statements are those of Manhattan Research Development, Inc.

During 2005 we merged with Tarpan Therapeutics, Inc. ("Tarpan"). Tarpan was a privately held New York based biopharmaceutical company developing dermatological therapeutics. This transaction was accounted for as a purchase of Tarpan by the Company.

On March 8, 2010, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement") by and among the Company, Ariston Pharmaceuticals, Inc., a Delaware corporation ("Ariston") and Ariston Merger Corp., a Delaware corporation and wholly-owned subsidiary of the Company (the "Merger Sub"). Pursuant to the terms and conditions set forth in the Merger Agreement, on March 8, 2010, the Merger Sub merged with and into Ariston (the "Merger"), with Ariston being the surviving corporation of the Merger. As a result of the Merger, Ariston became a wholly-owned subsidiary of the Company.

We are a specialty healthcare product company focused on developing and commercializing pharmaceutical treatments for underserved patient populations. We aim to acquire rights to these technologies by licensing or otherwise acquiring an ownership interest, funding their research and development and eventually either bringing the technologies to market or out-licensing.

You should read the following discussion of our results of operations and financial condition in conjunction with the financial statements and notes thereto appearing elsewhere in this prospectus. This discussion includes "forward-looking" statements that reflect our current views with respect to future events and financial performance. We use words such as we "expect," "anticipate," "believe," and "intend" and similar expressions to identify forward-looking statements. You should be aware that actual results may differ materially from our expressed expectations because of risks and uncertainties inherent in future events, particularly those risks identified under the heading "Risk Factors", and should not unduly rely on these forward looking statements. All share and per share information in this discussion has been adjusted for the 1-for-5 combination of our common stock effected on September 25, 2003.

Results of Operations

Three-month Period ended March 31, 2010 versus 2009

	Quarters ended March 31,		Increase	% Increase
	2010	**2009**	**(decrease)**	**(decrease)**
Costs and expenses:				
Research and development:				
Share-based compensation	$ -	$ -	$ -	0.00%
Other research and development expenses	18,000	45,000	(27,000)	-60.00%
Total research and development expenses	**18,000**	**45,000**	**(27,000)**	**-60.00%**
General and administrative:				
Share-based compensation	$ 191,000	104,000	87,000	83.65%
Other general and administrative expenses	320,000	408,000	(88,000)	-21.57%
Total general and administrative expenses	**511,000**	**512,000**	**(1,000)**	**-0.20%**
Other income/(expense)	(1,104,000)	(205,000)	(899,000)	438.54%
Net loss	**$ 1,633,000**	**$ 762,000**	**$ 871,000**	**114.30%**

During each of the three month periods ended March 31, 2010 and 2009, we did not recognize any revenues. We are considered a development stage company and do not expect to have revenues relating to our products candidates prior to March 31, 2011, if at all.

For the quarter ended March 31, 2010 research and development expense was $18,000 as compared to $45,000 for the quarter ended March 31, 2009. This decrease of $27,000, or 60%, is primarily due to there being no active product development projects during the 2010 period and limited product development activity during the 2009 period.

For the quarter ended March 31, 2010 general and administrative expense was $511,000 as compared to $512,000 for the quarter ended March 31, 2009. This decrease of $1,000 is less than 1%.

For the quarter ended March 31, 2010 other income/(expense) was $(1,104,000) as compared to $(205,000) for the quarter ended March 31, 2009. This change of $(899,000), or 439%, is primarily due to a change in fair value of a derivative of $872,000, an increase in interest expense of $111,000, a decrease in other income of $52,000 offset by a decrease in equity in losses of Hedrin JV of $136,000.

Net loss for the quarter ended March 31, 2010 was $1,633,000 as compared to $762,000 for the quarter ended March 31, 2009. This increase of $871,000, or 114%, is primarily due to an increase in other expense of $899,000 and a decrease in research and development expenses of $27,000.

Fiscal Year Ended December 31, 2009 versus Fiscal Year Ended December 31, 2008

During each of the years ended December 31, 2009 and 2008, we had no revenues, and are considered a development stage company. We do not expect to have revenues relating to our products prior to December 31, 2010.

	Years ended December 31,		Increase	% Increase
	2009	2008	(decrease)	(decrease)
Costs and expenses:				
Research and development:				
Share-based compensation	$ 2,000	$ 122,000	$ (120,000)	-98.36%
Other research and development expenses	38,000	1,681,000	(1,643,000)	-97.74%
Total research and development expenses	**40,000**	**1,803,000**	**(1,763,000)**	**-97.78%**
General and administrative:				
Share-based compensation	351,000	342,000	9,000	2.63%
Other general and administrative expenses	1,380,000	2,268,000	(888,000)	-39.15%
Total general and administrative expenses	**1,731,000**	**2,610,000**	**(879,000)**	**-33.68%**
Other income/(expense):				
Equity in loss of Hedrin JV	(500,000)	(250,000)	(250,000)	100.00%
Change in fair value of derivative	(560,000)	-	(560,000)	N/A
Swiss Pharma settlement	251,000	-	251,000	N/A
Interest and amortization on Notes Payable	(545,000)	(39,000)	(506,000)	1297.44%
Other interest expense	(3,000)	(26,000)	23,000	-88.46%
Interest and other income	335,000	459,000	(124,000)	-27.02%
Total other income/(expense)	**(1,022,000)**	**144,000**	**(1,166,000)**	**-809.72%**
Net loss	**$ 2,793,000**	**$ 4,269,000**	**$ (1,476,000)**	**-34.57%**

For the year ended December 31, 2009 research and development expense was $40,000 as compared to $1,803,000 for the year ended December 31, 2008. This decrease of $1,763,000, or 98%, is primarily due to there being no active product development projects during 2009, as the Hedrin product is being developed by the Hedrin JV and as we have ceased development of all other products due to the lack of funds and other factors.

For the year ended December 31, 2009 general and administrative expense was $1,731,000 as compared to $2,610,000 for the year ended December 31, 2008. This decrease of $879,000, or 34%, is primarily comprised of $493,000 of costs recognized during 2008 related to the Swiss Pharma arbitration award with no costs recognized during 2009, decreases in public company costs of $107,000, in travel and related expenses of $63,000, in consulting and temporary help of $58,000, in rent and related expenses of $51,000, in depreciation expense and loss on abandonment of fixed assets of $38,000, in business development costs of $28,000 and in dues and subscriptions of $18,000, partially offset by an increase in share-based compensation of $9,000.

For the year ended December 31, 2009 other income/(expense), net, was $(1,022,000) as compared to $144,000 for the year ended December 31, 2008. This change of $(1,166,000) , or 810%, is due to the recognition of $(560,000) of change in the fair value of a derivative liability and $251,000 relating to the settlement of the Swiss Pharma matter during 2009 with no corresponding amounts recognized during 2008, of increases in equity in losses of Hedrin JV of $(250,000), in interest and amortization expense related to Notes Payable of $(506,000) and a decrease of $(124,000), in management fee revenue from the Hedrin JV.

Net loss for the year ended December 31, 2009 was $2,793,000 as compared to $4,269,000 for the year ended December 31, 2008. This decrease of $1,476,000, or 35%, is primarily due to a decrease in research and development expenses of $1,763,000, a decrease in general and administrative expense of $879,000 offset by a change in other income/(expense) of $(1,166,000).

Liquidity and Capital Resources

From inception to March 31, 2010, we incurred a deficit during the development stage of $63,566,604 primarily as a result of our net losses, and we expect to continue to incur additional losses through at least March 31, 2011 and for the foreseeable future. These losses have been incurred through a combination of research and development activities related to the various technologies under our control and expenses supporting those activities.

We have financed our operations since inception primarily through equity and debt financings and a joint venture transaction. During the quarter ended March 31, 2010, we had a net increase in cash and cash equivalents of $2.0 million. This increase resulted largely from net cash provided by financing activities of $2.1 million and $0.5 million of cash acquired in the Ariston merger partially offset by net cash used in operating activities of $0.6 million. Total liquid resources as of March 31, 2010 were $2.0 million compared to $18,000 at December 31, 2009.

Our current liabilities as of March 31, 2010 were $7,203,000 compared to $2,532,000 at December 31, 2009, an increase of $4,671,000. As of March 31, 2010, we had working capital deficit of $4,917,000 compared to working capital deficit of $2,268,000 at December 31, 2009.

We received net proceeds of approximately $2,100,000 in March 2010 from the 2010 Private Placement. We also acquired $519,000 of cash in the merger with Ariston.

Our available working capital and capital requirements will depend upon numerous factors, including progress of our research and development programs, our progress in and the cost of ongoing and planned nonclinical and clinical testing, the timing and cost of obtaining regulatory approvals, the cost of filing, prosecuting, defending, and enforcing patent claims and other intellectual property rights, in-licensing activities, competing technological and market developments, changes in our existing collaborative and licensing relationships, the resources that we devote to developing manufacturing and commercializing capabilities, the status of our competitors, our ability to establish collaborative arrangements with other organizations and our need to purchase additional capital equipment.

Our continued operations will depend on whether we are able to raise additional funds through various potential sources, such as equity and debt financing, other collaborative agreements, strategic alliances, and our ability to realize the full potential of our technology in development. Such additional funds may not become available on acceptable terms and there can be no assurance that any additional funding that we do obtain will be sufficient to meet our needs in the long term. Through March 31, 2010, a significant portion of our financing has been through equity and debt financings and a joint venture transaction. Unless our operations generate significant revenues and cash flows from operating activities, we will continue to fund operations from cash on hand and through the similar sources of capital previously described. We can give no assurances that any additional capital that we are able to obtain will be sufficient to meet our needs. We believe that we will continue to incur net losses and negative cash flows from operating activities for the foreseeable future.

Based on the resources available to us at March 31, 2010, our management believes that we have sufficient capital to fund our operations through 2010. Our management believes that we will need additional equity or debt financing or will need to generate positive cash flow from the Hedrin JV, or generate revenues through licensing of its products or entering into strategic alliances to be able to sustain our operations into 2011. Furthermore, we will need additional financing thereafter to complete development and commercialization of our products. There can be no assurances that we can successfully complete development and commercialization of our products.

These matters raise substantial doubt about our ability to continue as a going concern. The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We have reported net losses of $1,633,000 and $762,000 for the three month periods ended March 31, 2010 and 2009, respectively. The net loss attributable to common shares from date of inception, including preferred stock dividends, August 6, 2001 to March 31, 2010, amounts to $63,567,000. Management believes that we will continue to incur net losses through at least March 31, 2011 and for the foreseeable future.

Joint Venture Agreement

We and Nordic Biotech Venture Fund II K/S, or Nordic, entered into a joint venture agreement on January 31, 2008, which was amended on February 18, 2008 and on June 9, 2008. Pursuant to the joint venture agreement, in February 2008, (i) Nordic contributed cash in the amount of $2.5 million to H Pharmaceuticals K/S, a newly formed Danish limited partnership, or the Hedrin JV, in exchange for a 50% of the equity interests in the Hedrin JV, and (ii) we contributed certain assets to North American rights (under license) to our Hedrin product to the Hedrin JV in exchange for $2.0 million in cash and 50% of the equity interests in the Hedrin JV. On or around June 30, 2008, in accordance with the terms of the joint venture agreement, Nordic contributed an additional $1.25 million in cash to the Hedrin JV, $1.0 million of which was distributed to us and equity in the Hedrin JV was distributed to each of us and Nordic sufficient to maintain our respective ownership interests.

Pursuant to the joint venture agreement, upon the classification by the U.S. Food and Drug Administration, or the FDA, of Hedrin as a Class II or Class III medical device, Nordic was required to contribute to the Hedrin JV an additional $1.25 million in cash, $0.5 million of which was to be distributed to us and equity in the Hedrin JV was to be distributed to each of us and Nordic sufficient to maintain our respective ownership interests. The FDA notified the Hedrin JV that Hedrin has been classified as a Class III medical device and in February 2009, Nordic made the $1.25 million investment in the Hedrin JV, the Hedrin JV made the $0.5 million milestone payment to us and equity in the Hedrin JV was distributed to us and Nordic sufficient to maintain our respective ownership interests.

The Hedrin JV is responsible for the development and commercialization of Hedrin for the North American market and all associated costs including clinical trials, if required, regulatory costs, patent costs, and future milestone payments owed to Thornton & Ross Ltd., or T&R, the licensor of Hedrin. The Hedrin JV has engaged us to provide management services to the Hedrin JV in exchange for an annualized management fee, which for the three month periods ended March 31, 2010 and 2009 was approximately $75,000 and $109,000, respectively.

The profits of the Hedrin JV will be shared by us and Nordic in accordance with our respective equity interests in the Hedrin JV, of which we each currently hold 47.62%, except that Nordic is entitled to receive a minimum return each year from the Hedrin JV equal to 6% on Hedrin sales, as adjusted for any change in Nordic's equity interest in the Hedrin JV, before any distribution is made to us. If the Hedrin JV realizes a profit in excess of the Nordic minimum return in any year, then such excess shall first be distributed to us until our distribution and the Nordic minimum return are in the same ratio as our respective equity interests in the Hedrin JV and then the remainder, if any, is distributed to Nordic and us in the same ratio as our respective equity interests. However, in the event of a liquidation of the Hedrin JV, Nordic's distribution in liquidation must equal the amount Nordic invested in the Hedrin JV ($5.5 million) plus 10% per year, less the cumulative distributions received by Nordic from the Hedrin JV before any distribution is made to us. If the Hedrin JV's assets in liquidation exceed the Nordic liquidation preference amount, then any excess shall first be distributed to us until our distribution and the Nordic liquidation preference amount are in the same ratio as our respective equity interests in the Hedrin JV and then the remainder, if any, is distributed to Nordic and us in the same ratio as our respective equity interests. Further, in no event shall Nordic's distribution in liquidation be greater than assets available for distribution in liquidation.

Pursuant to the terms of the joint venture agreement, Nordic has the right to nominate one person for election or appointment to our board of directors. The Hedrin JV's board of directors consists of four members, two members appointed by us and two members appointed by Nordic. Nordic has the right to appoint one of the directors as chairman of the board. The chairman has certain tie breaking powers.

Pursuant to the joint venture agreement, Nordic has the right to put up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by it in exchange for such number of shares of our common stock in an amount not to exceed $5,000,000 of Nordic’s investment in the Hedrin JV divided by $0.07, as adjusted for the 2010 Private Placement, and as further adjusted from time to time for stock splits and other specified events, multiplied by a conversion factor, which is (i) 1.00 for so long as Nordic's distributions from the Hedrin JV are less than the amount of its investment, (ii) 1.25 for so long as Nordic's distributions from the Hedrin JV are less than two times the amount of its investment but greater than or equal to the amount of its investment amount, (iii) 1.50 for so long as Nordic's distributions from the Hedrin JV are less than three times the amount of its investment but greater than or equal to two times the amount of its investment amount, (iv) 2.00 for so long as Nordic's distributions from the Hedrin JV are less than four times the amount of its investment but greater than or equal to three times the amount of its investment amount and (v) 3.00 for so long as Nordic’s distributions from Hedrin JV are greater than or equal to four times the amount of its investment. The put right expires upon the earlier to occur of (i) February 25, 2018 and (ii) 30 days after the date when Nordic's distributions from the Hedrin JV exceed five times the amount Nordic has invested in the Hedrin JV (or 10 days after such date if we have provided Nordic notice thereof).

Pursuant to the joint venture agreement, we have the right to call up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic in exchange for such number of shares of our common stock equal to the portion of Nordic's investment in the Hedrin JV (not to exceed $5 million) that we call by the dollar amount of Nordic's investment in the Hedrin JV up to $5 million, divided by $0.07, as adjusted for the 2010 Private Placement, and as further adjusted from time to time for stock splits and other specified events. The call right is only exercisable by us if the price of our common stock has closed at or above $1.40 per share for 30 consecutive trading days. During the first 30 consecutive trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 25% of the call right. During the second 30 consecutive trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 50% of the call right on a cumulative basis. During the third consecutive 30 trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 75% of the call right on a cumulative basis. During the fourth consecutive 30 days in which our common stock closes at or above $1.40 per share, we may exercise up to 100% of the call right on a cumulative basis. Nordic may refuse the call, either by paying $1.5 million multiplied by the percentage of Nordic's investment being called or forfeiting an equivalent portion of the put right, calculated on a pro rata basis for the percentage of the Nordic equity interest called by us. The call right expires on February 25, 2013. For purposes of Nordic’s right to put, and our right to call, up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic, the amount of Nordic’s investment is $5,000,000.

In connection with our joint venture agreement, on February 25, 2008, Nordic paid us a non-refundable fee of $150,000 in exchange for the right to receive a warrant to purchase up to 14,285,714 shares of our common stock at $0.07 per share, as adjusted for the 2010 Private Placement, and as further adjusted from time to time for stock splits and other specified events.

In connection with the joint venture agreement, we entered into a registration rights agreement with Nordic on February 25, 2008, as modified pursuant to a letter agreement, dated September 17, 2008, pursuant to which we agreed to file with the Securities and Exchange Commission, or the SEC, an initial registration statement registering the resale by Nordic of any shares of our common stock issuable to Nordic through the exercise of the warrant or the put right, within10 calendar days following the date on which our annual report on Form 10-K for the year ended December 31, 2007 was required to be filed with the SEC, which was subsequently extended until May 1, 2008. We filed an initial registration statement on May 1, 2008, which was declared effective on October 15, 2008. On June 2, 2009, we filed an additional Registration Statement registering the additional 28,769,841 shares of our common stock that may be issued to Nordic upon exercise of a put right, which we refer to as the Put Shares, held by Nordic as a result of Nordic’s additional investment of $1,250,000 in the Hedrin JV, as adjusted pursuant to the anti-dilution provisions of the put right and the additional 3,968,254 shares issuable upon exercise of an outstanding warrant held by Nordic. The SEC has informed us that we may not register the Put Shares for resale until Nordic exercises its put right and such shares of common stock are outstanding. Further, although we diligently pursued registration with the SEC, such registration statement was not declared effective within 105 days of the required filing date. We have withdrawn such registration statement in light of the SEC staff's position that the shares of common stock underlying Nordic's put right cannot be registered because such shares are not outstanding and do not underlie a currently outstanding convertible security.

We also have agreed to file with the SEC any additional registration statements which may be required no later than 45 days after the date we first know such additional registration statement is required; provided, however, that (i) in the case of the classification by the FDA of Hedrin as a Class II or Class III medical device described above and the payment in full by Nordic of the related final milestone payment of $1.25 million, the registration statement with respect to the additional shares of our common stock relating to such additional investment must be filed within 45 days after achievement of such classification; and (ii) in the event we provide Nordic with notice of exercise of our right to call up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic, a registration statement with respect to the shares of our common stock payable to Nordic in connection with such call right (after giving effect to any reduction in the number of such shares resulting from Nordic's refusal of all or a portion of such call in accordance with the terms of our joint venture agreement) must be filed within 16 days after delivery of such notice to Nordic. If we fail to file a registration statement on time or if a registration statement is not declared effective by the SEC within 105 days of the required filing date, or otherwise fail to diligently pursue registration with the SEC in accordance with the terms of the registration rights agreement, we will be required to pay as partial liquidated damages and not as a penalty, to Nordic or its assigns, an amount equal to 0.5% of the amount invested in the Hedrin JV by Nordic pursuant to the joint venture agreement per month until the registration statement is declared effective by the SEC; provided, however, that in no event shall the aggregate amount payable by us exceed 9% of the amount invested in the Hedrin JV by Nordic under the joint venture agreement.

As per the limited partnership agreement between us and Nordic, in the event that a limited partner in the Hedrin JV determines, in its reasonable goods faith discretion, that the Hedrin JV requires additional capital for the proper conduct of its business that limited partner shall provide each limited partner with a written request for contribution of such limited partner’s proportionate share, in accordance to the then respective equity ownership in the Hedrin JV, of such requested additional capital amount.

As per the terms of the limited partnership agreement, if a limited partner declines to so contribute, elects to contribute but thereafter fails to do so timely, or elects to contribute and timely does contribute some, but not all of, its proportionate share of the requested additional capital amount, the other limited partner shall have the option to contribute the remaining balance of such requested additional capital amount.

As per the terms of the limited partnership agreement, the general partner shall determine the fair market value of the shares for purposes of determining how to allocate the number of shares of the Hedrin JV to be issued in consideration for the contribution of capital. If the general partner is unable to determine the fair market value of the shares, the fair market value for the shares shall be determined in good faith by the contributing limited partner if such amount is equal to or greater than the most recent valuation of such Hedrin JV shares.

On December 31, 2009, Nordic delivered a written notice to us for a $1,000,000 capital increase to the Hedrin JV. In January 2010, Nordic made its capital contribution to the Hedrin JV of $500,000. We did not have sufficient funds to make such a capital contribution within the required time prescribed in the limited partnership agreement.

The general partner was unable to determine the fair market value of the shares. The contributing limited partner, Nordic, determined in good faith that the fair market value of the shares is equal to the most recent valuation. The most recent valuation was the February 2009 investment of $1,500,000 into the Hedrin JV by Nordic at $5,000 per share. As a result of Nordic’s investing an additional $500,000 in the Hedrin JV, the ownership percentages of the Hedrin JV have changed from 50% to Nordic and 50% for us to 52.38% to Nordic and 47.62% for us. In the event that Nordic exercises its option to invest the remaining $500,000 of the $1,000,000 capital increase then the ownership percentage shall change to 54.55% for Nordic and 45.45% for us.

Disagreement with Nordic

In April 2010, Nordic filed a Schedule 13D/A (the “Nordic Amended 13D”). We are not in agreement with the disclosure set forth in the Nordic Amended 13D and have written a letter to Nordic explaining our disagreements. The Nordic Amended 13D shows an aggregate number of shares of our common stock beneficially owned by Nordic as 216,666,666, or 65.5%. We believe the correct beneficial ownership is 85,714,285 shares, or 41.47%. The Nordic Amended 13D states that Nordic does not believe our determination of the anti-dilution shares accruing to Nordic as a result of the 2010 Private Placement was neither reasonable nor made in good faith. As we have previously stated we believe our determination was both reasonable and made in good faith. The Nordic Amended 13D further states that Nordic acquired the right to purchase an additional 5,555,556 shares of our common stock upon exercise of the Nordic Put as a result of Nordic’s making an additional investment in the Hedrin JV of $500,000 in January 2010. We are not in agreement with this claim, we do not believe that Nordic is required to any adjustment to Nordic’s Put as a result of Nordic making additional capital contributions to the Hedrin JV. In the letter to Nordic we note that Nordic’s valuation suggestions for the warrants issued in the 2010 Private Placement ignores the concept of relative value inherent in the Hedrin JV Agreement.

2010 Private Placement

On March and April 2010, we raised aggregate gross proceeds of approximately $2.6 million in connection with our 2010 Private Placement. We sold an aggregate of 104.3 units for a purchase price of $25,000 per unit. We issued to each investor units consisting of 357,143 shares of our common stock and 535,714 warrants, each of which entitle the holder to purchase one additional share of our common stock for a period of five years at an exercise price of $0.08 per share. In addition in April 2010, a12% original discount senior secured subordinated convertible debenture, which we refer to as the Convertible 12% Debenture, with a stated value of $400,000 and $21,886 of accrued interest, was converted by its holder into 16.88 units (including all accrued interest thereon). The conversion price was equal to the per unit purchase price paid by the investors in the 2010 Private Placement.

Convertible 12% Note Payable

On October 27, 2009, we entered into a Settlement Agreement and Mutual Release with Swiss Pharma Contract LTD (“Swiss Pharma”) pursuant to which we agreed to pay Swiss Pharma $200,000 and issue Swiss Pharma an interest free promissory note in the principal amount of $250,000 in full satisfaction of the September 5, 2008 arbitration award. The amount of the Arbitration award was $683,027 at September 30, 2009 and is included as a component of accrued expenses in the balance sheet as of September 30, 2009.

In conjunction with the Settlement Agreement and Mutual Release with Swiss Pharma described above, on October 28, 2009, we entered into a subscription agreement pursuant to which we sold the 12% Convertible Debenture and a warrant to purchase 2,222,222 shares of our common stock, par value $.001 per share for a purchase price of $200,000. The warrant is exercisable at an exercise price of $0.11 per share, subject to adjustment, prior to October 28, 2014. The Convertible 12% Debenture is convertible into shares of our common stock at an initial conversion price of $0.09 per share, subject to adjustment or, in the event that we issues new securities in connection with a financing, the Convertible 12% Debenture may be converted into such new securities at a conversion price equal to the purchase price paid by the purchasers of such new securities. The Convertible 12% Debenture was subordinated to our outstanding Secured 12% Notes in the aggregate principal amount of $1,725,000. On April 8, 2010, the holder of the Convertible 12% Debenture converted the 12% Convertible Debenture (including all interest accrued thereon) into approximately 17 units, with each unit consisting of (i) 357,143 shares of our common stock and (ii) warrants to purchase 535,714 shares of our common stock at a per share purchase price of $0.08. In connection with the issuance of the Convertible 12% Debenture and the warrants, we issued warrants to purchase an aggregate of 222,222 shares of common stock at an exercise price of $0.11 per share to the placement agent and certain of its designees.

Secured 10% Notes Payable

On September 11, 2008, we issued secured 10% promissory notes to certain of our directors and officers and an employee for aggregate principal amount of $70,000. Principal and interest on the notes was payable in cash on March 10, 2009 unless paid earlier by us. The secured 10% notes were repaid in February 2009 along with interest thereon. In connection with the issuance of the notes, we issued to the noteholders 5-year warrants to purchase an aggregate of 140,000 shares of our common stock at an exercise price of $0.20 per share.

Secured 12% Notes Payable

On February 3, 2009, we completed a private placement of 345 units, with each unit consisting of secured 12% notes in the principal amount of $5,000 and a warrant to purchase up to 166,667 shares of our common stock at an exercise price of $.09 per share which expires on December 31, 2013, for aggregate gross proceeds of $1,725,000. The private placement was completed in three closings which occurred on November 19, 2008 with respect to 207 units, December 23, 2008 with respect to 56 units and February 3, 2009 with respect to 82 units.

To secure our obligations under the notes, we entered into a security agreement and a default agreement with the investors. The security agreement provides that the notes will be secured by a pledge of our assets other than (i) our interest in the Hedrin joint venture, including, without limitation, our interest in H Pharmaceuticals K/S and H Pharmaceuticals General Partner ApS, (ii) our rent deposit for our former office space, (iii) our refund of a prepayment and (iv) our tax refund for the 2007 fiscal year from the State of New York and City of New York. In addition, to provide additional security for our obligations under the notes, we entered into a default agreement, which provides that upon an event of default under the notes, we shall, at the request of the holders of the notes, use our reasonable commercial efforts to either (i) sell a part or all of our interests in the Hedrin JV or (ii) transfer all or part of our interest in the Hedrin JV to the holders of the notes, as necessary, in order to fulfill our obligations under the notes, to the extent required and to the extent permitted by the applicable Hedrin JV agreements.

In connection with the private placement, we, the placement agent and the investors entered into a registration rights agreement. Pursuant to the registration rights agreement, we agreed to file a registration statement to register the resale of the shares of our common stock issuable upon exercise of the warrants issued to the investors in the private placement, within 20 days of the final closing date and to cause the registration statement to be declared effective within 90 days (or 120 days upon full review by the SEC). During the three month period ended March 31, 2009, we filed the registration statement, received a comment letter from the SEC, responded to the SEC comment letter and re-filed the registration statement. The registration statement was declared effective by the SEC on April 17, 2009.

Acquisition of Ariston Pharmaceuticals, Inc.

On March 8, 2010, we entered into the Merger Agreement by and among Ariston, the Merger Sub and us. Pursuant to the terms and conditions set forth in the Merger Agreement, on March 8, 2010, the Merger Sub merged with and into Ariston (the "Merger"), with Ariston being the surviving corporation of the Merger. As a result of the Merger, Ariston became our wholly-owned subsidiary.

Under the terms of the Merger Agreement, the consideration payable by us to the stockholders and note holders of Ariston consists of the issuance of 7,062,423 shares of our common stock at closing (as defined in the Merger Agreement) plus the right to receive up to an additional 24,718,481 shares of our common stock (the “Ariston Milestone Shares”) upon the achievement of certain product-related milestones described below. In addition, we have reserved 38,630,723 shares of our Common Stock for possible future issuance in connection with the conversion of $15.45 million of outstanding Ariston convertible promissory notes. The note holders will not have any recourse to us for repayment of the notes (their sole recourse being to Ariston), but the note holders will have the right to convert the notes into shares of our common stock at the rate of $0.40 per share. Further, we have reserved 5,000,000 shares of our common stock for possible future issuance in connection with the conversion of $1.0 million of outstanding Ariston convertible promissory note issued in satisfaction of a trade payable. The note holder will not have any recourse to us for repayment of the note (their sole recourse being to Ariston), but the note holder will have the right to convert the note into shares of our common stock at the rate of $0.20 per share.

Upon the achievement of the milestones described below, we would be obligated to issue portions of the Ariston Milestone Shares to the former Ariston stockholders and noteholders:

- Upon the affirmative decision of our Board of Directors, provided that such decision is made prior to March 8, 2011, to further develop the AST-914 metabolite product candidate, either internally or through a corporate partnership, we would issue 8,828,029 of the Ariston Milestone Shares.

- Upon the acceptance by the FDA of our filing of the first New Drug Application for the AST-726 product candidate, we would issue 7,062,423 of the Ariston Milestone Shares.
- Upon our receipt of FDA approval to market the AST-726 product candidate in the United States of America, we would issue 8,828,029 of the Ariston Milestone Shares.

Certain members of our Board of Directors and certain of our principal stockholders owned Ariston securities. Timothy McInerney, one of our directors, owned 16,668 shares of Ariston common stock which represented less than 1% of Ariston's outstanding common stock as of the closing of the Merger. Neil Herskowitz, one of our directors, indirectly owned convertible promissory notes of Ariston with interest and principal in the amount of $192,739. Michael Weiser, who served as one of our directors at the time of the Merger, owned 117,342 shares of Ariston common stock, which represented approximately 2.1% of Ariston's outstanding common stock as of the closing of the Merger. Lindsay Rosenwald, a more than 5% beneficial owner of our common stock, in his individual capacity and indirectly through trusts and companies he controls owned 497,911 shares of Ariston common stock, which represented approximately 8.9% of Ariston's outstanding common stock as of the closing of the Merger and indirectly owned convertible promissory notes of Ariston in the amount of $141,438.

We merged with Ariston principally to add new products to our portfolio. Ariston, prior to the Merger, was a private, clinical stage specialty biopharmaceutical company based in Shrewsbury, Massachusetts that in-licenses, develops and plans to market novel therapeutics for the treatment of serious disorders of the central and peripheral nervous systems.

AST-726

Ariston is developing a nasally-delivered Vitamin B_{12} remediation treatment which it calls AST-726. AST-726 has demonstrated pharmacokinetic equivalence to a marketed intramuscular injection product for Vitamin B_{12} remediation. Ariston believes that AST-726 may enable both a single, once-monthly treatment for maintenance of normal Vitamin B_{12} levels in deficient patients, and more frequent administration to restore normal levels in newly diagnosed B_{12} deficiency. Further, Ariston believes that AST-726 could offer a convenient, painless, safe and cost-effective treatment for Vitamin B_{12} deficiency, without the need for intramuscular injections.

Ariston has positioned AST-726 to currently require only a single, relatively small Phase III clinical trial prior to submission of a 505(b)(2) new drug application ("NDA") to the FDA.

Ariston has developed a CMC/manufacturing process for AST-726 that Ariston believes provides a commercially viable stability profile. Ariston has two issued patents in the United States with respect to AST-726, one of which relates to its application in Vitamin B_{12} remediation.

More than 9 million people in the US are deficient in Vitamin B_{12}, indicating substantial market potential for a facile, convenient, safe and effective treatment that can replace the need for painful and frequent intramuscular injections or other less than fully effective delivery forms. Ariston believes that substantial market opportunity also exists internationally.

Vitamin B_{12} Deficiency-Background of the Disease

Untreated Vitamin B_{12} deficiency can result in serious clinical problems including hematological disorders, such as life-threatening anemias, and a range of central and peripheral neurological abnormalities such as fatigue, confusion, cognition impairment, dementia, depression, peripheral neuropathies and gait disturbances. Neuronal damage may involve peripheral nerves, the spinal cord and the brain and if the condition is left untreated may become permanent. Furthermore, clinically asymptomatic patients with low normal or below normal Vitamin B_{12} levels may have changes in blood chemistries, including elevated levels of methylmalonic acid or homocysteine, known risk factors for other medical conditions associated with an increased risk of circulatory problems, blood clots and cardiovascular disease.

The primary diagnosis of Vitamin B_{12} deficiency is made when measurement of its blood concentration falls below the expected normal range of 200 to 900 picograms/ml. Vitamin B_{12} deficiency is most often caused by pathological conditions that limit the body's ability to absorb the vitamin. Such disorders include pernicious anemia, atrophic gastritis, problems caused by gastric surgical procedures to treat stomach cancer and obesity, Crohn's disease and simple age-related changes. Some studies show the inability to properly absorb Vitamin B_{12} as a side effect from chronic use of certain widely prescribed antacid medications such as Prilosec ® and diabetes treatments such as Glucophage ®.

Approximately 15% of the elderly and up to 40% of nursing home residents in the U.S. have Vitamin B_{12} deficiency. A study of over 11,000 U.S. civilians ages four and older found a 3% prevalence of Vitamin B_{12} deficiency in the general population using the 200 picograms/ml deficiency standard, indicating that approximately 9 million people in the U.S. are in need of B_{12} replacement therapy. Some experts advocate a higher deficiency standard of 300-350 picograms/ml on the basis that levels below this coincide with elevated methylmalonic acid and homocysteine, risk factors for cardiovascular disease as found in the Framingham Heart Study. On this basis the prevalence of Vitamin B_{12} deficiency increases substantially.

Current Treatments for Vitamin B_{12} Deficiency

Once Vitamin B_{12} deficiency is diagnosed by a simple blood test, the goal of treatment is generally to:

- restore circulating blood levels to normal as rapidly as possible;
- replenish and normalize the substantial stores of the vitamin in the body; and
- institute a lifelong therapeutic regimen that will maintain normal levels of the vitamin.

Ariston believes that parenteral (intramuscular injection) treatment is often considered the treatment of choice for Vitamin B_{12} deficiency. Cyanocobalamin is predominantly used for this purpose in the United States, but hydroxocobalamin, the active ingredient in AST-726, is also available for pediatrics and for adults for whom injection of cyanocobalamin is poorly tolerated. Hydroxocobalamin injection is the predominant treatment for Vitamin B_{12} deficiency in Europe.

In the United States, intramuscular injections are generally given by a physician or nurse, necessitating an office/medical center visit by the patient or a visiting nurse home call for each treatment. Following a diagnosis of B_{12} deficiency, injections are required quite frequently in order to restore normal vitamin levels. Once normalization is achieved, the frequency can be reduced to once or twice per month. While the treatment is usually highly effective, the inconvenience and cost of frequent office visits and the pain and side-effects associated with intramuscular injections are problematic for many patients.

Intranasal treatment with Vitamin B_{12} deficiency seeks to alleviate these problems, but the two intranasal products currently available in the United States have to be administered on a daily or weekly basis and are not usually recommended for the treatment of newly diagnosed patients. Both products are based on cyanocobalamin.

Oral or sublingual administration of high doses of Vitamin B_{12} can restore deficient patients to normal in certain cases. Such high dose supplements are generally available in pharmacies and nutrition/health food stores. Adequate results can almost certainly be obtained when nutritional insufficiency (e.g., strict vegan diet) is the primary cause of the problem. However, the normal gastrointestinal tract has a very limited capability to absorb Vitamin B_{12} and if this is compromised, as is the case in many deficient patients, oral or sublingual supplementation may not be ideal for rapidly restoring circulating levels and storage depots of the vitamin to normal. In such cases of pathological Vitamin B_{12} deficiency, intramuscular injection still often remains the current treatment of choice.

An unapproved Vitamin B_{12} patch is available in the United States, but Ariston believes that its effectiveness in moderate to severe Vitamin B_{12} deficient patients is substantially untested.

Potential Advantages of Ariston's AST-726 Treatment

Ariston believes that Ariston's AST-726 treatment has the potential to directly substitute for and replace the need for injection treatment by applying the current injection frequency paradigms for both newly diagnosed and normalized Vitamin B_{12} deficient patients. AST-726 is proposed to be self-administered at home by the patient, without costly, time-consuming and inconvenient visits to a doctor's office or medical facility needed for each of the many intramuscular injections required for life. Because it is delivered through a nasal spray, additional advantages include freedom from injection pain and reduced anxiety in individuals, including children and the elderly, who may have fear of injections. Ariston believes that the delivery profile of AST-726 is comparable to that of the marketed intramuscular injection, and that therefore newly diagnosed patients will be able to self-administer the nasal spray on a daily basis or several times a week to restore their Vitamin B_{12} status to normal and will then be self-maintained on a single monthly nasal spray treatment.

Additional Clinical Trial Is Needed

AST-726, a commercial nasal spray formulation of hydroxocobalamin, has satisfactorily completed preclinical toxicology, and an Investigational New Drug ("IND") Application has been filed with the FDA. This product candidate is being developed utilizing the 505(b)(2) regulatory pathway. AST-726 has also successfully completed a safety and pharmacokinetic study in healthy volunteers and an end of Phase II meeting with FDA has been completed. We are planning a Phase III Vitamin B_{12} replacement study in the United States. The study is designed to enroll approximately 40 Vitamin B_{12} deficient patients currently treated with injection therapy. Patients will first be evaluated on injection therapy and then will receive AST-726 by nasal spray on a monthly basis for 12 weeks. The primary purpose of this study is to determine that levels of Vitamin B_{12} in the patients' bloodstream remain within the normal range following monthly administration of AST-726. We anticipate that the data from this study and additional manufacturing information will support the planned 505(b)(2) new drug application ("NDA") filing for AST-726.

AST-915

AST-915 is an orally delivered treatment for essential tremor. We acquired global rights to AST-915 as part of the Ariston acquisition. This product candidate is being studied under a Cooperative Research and Development Agreement (CRADA) with the National Institutes of Health (NIH) and a Phase 1 clinical study is currently underway in essential tremor patients. AST-915 was formerly referred to as "AST-914 metabolite".

Essential Tremor

Essential tremor is a neurological disorder that is characterized by involuntary shaking of the hands, arms, head, voice, and upper body. The most disabling tremors occur during voluntary movement, affecting common skills such as writing, eating and drinking. Essential tremor is often misdiagnosed as Parkinson's disease, yet according to the National Institutes of Neurological Disorders and Stroke, approximately 8 times as many people have essential tremor as have Parkinson's. Essential tremor is not confined to the elderly. Children, newborns, and middle-aged people can also have the condition.

Market opportunity

Essential tremor is the most common involuntary movement disorder, with increasing incidence as people age. According to the National Institute of Health (NIH), essential tremor affects 14% of people 65 years and older, which equates to approximately 5.4 million Americans. There is no cure for essential tremor and the currently available drug therapies do not work in certain patients, produce at best a 50% response in others and have significant side effects. We believe AST-915 may provide a new treatment option for this serious and prevalent disorder**.** We believe that substantial market opportunity also exists internationally.

Commitments

General

We often contract with third parties to facilitate, coordinate and perform agreed upon research and development of our product candidates. To ensure that research and development costs are expensed as incurred, we record monthly accruals for clinical trials and nonclinical testing costs based on the work performed under the contracts.

These contracts typically call for the payment of fees for services at the initiation of the contract and/or upon the achievement of certain milestones. This method of payment often does not match the related expense recognition resulting in either a prepayment, when the amounts paid are greater than the related research and development costs recognized, or an accrued liability, when the amounts paid are less than the related research and development costs recognized.

Development Commitments

At present we have no development commitments.

Hedrin

In collaboration with Nordic and through the Hedrin JV we are developing Hedrin for the treatment of pediculosis (head lice). To date, Hedrin has been clinically studied in 326 subjects and is currently marketed as a device in Western Europe and as a pharmaceutical in the United Kingdom (U.K.).

In a randomized, controlled, equivalence clinical study conducted in Europe by T&R, Hedrin was administered to 253 adult and child subjects with head louse infestation. The study results, published in the British Medical Journal in June 2005, demonstrated Hedrin's equivalence when compared to the insecticide treatment, phenothrin, the most widely used pediculicide in the U.K. In addition, according to the same study, the Hedrin-treated subjects experienced significantly less irritation (2%) than those treated with phenothrin (9%).

An additional clinical study published in the November 2007 issue of PLoS One, an international, peer-reviewed journal published by the Public Library of Science (PLoS), demonstrated Hedrin's superior efficacy compared to a U.K. formulation of malathion, a widely used insecticide treatment in both Europe and North America. In this randomized, controlled, assessor blinded, parallel group clinical trial, 73 adult and child subjects with head lice infestations were treated with Hedrin or malathion liquid. Using intent-to-treat analysis, Hedrin achieved a statistically significant cure rate of 70% compared to 33% with malathion liquid. Using the per-protocol analysis Hedrin achieved a highly statistically significant cure rate of 77% compared to 35% with malathion. In Europe it has been widely documented that head lice had become resistant to European formulations of malathion, and we believe this resistance had influenced these study results. To date, there have been no reports of resistance to U.S. formulations of malathion. Additionally, Hedrin treated subjects experienced no irritant reactions, and Hedrin showed clinical equivalence to malathion in its ability to inhibit egg hatching. Overall, investigators and study subjects rated Hedrin as less odorous, easier to apply, and easier to wash out, and 97% of Hedrin treated subjects stated they were significantly more inclined to use the product again versus 31% of those using malathion.

Two new, unpublished Hedrin studies were completed by T&R in 2008. In the first, Hedrin achieved a 100% kill rate in vitro, including in malathion resistant head lice. In the other, a clinical field study conducted in Manisa province, a rural area of Western Turkey, Hedrin was administered to 36 adult and child subjects with confirmed head lice infestations. Using per protocol analysis, Hedrin achieved a 97% cure rate. Using intent-to-treat analysis, Hedrin achieved a 92% cure rate since 2 subjects were eliminated due to protocol violations. No subjects reported any adverse events.

In the U.S., we, through the Hedrin JV, are pursuing the development of Hedrin as a medical device. In January 2009, the U.S. Food and Drug Administration ("FDA") Center for Devices and Radiological Health ("CDRH") notified H Pharmaceuticals that Hedrin had been classified as a Class III medical device. A Class III designation means that a Premarket Approval ("PMA") Application will need to be obtained before Hedrin can be marketed in the U.S. We expect to be required to complete at least one clinical trial as part of that PMA Application. At a July 2009 meeting with the FDA, the FDA requested of the Hedrin JV that the confirmatory clinical trials consist of two parallel studies. The Hedrin JV estimates that each of the parallel studies will consist of 60 patients. In April 2010, the Hedrin JV received correspondence from the FDA in which the FDA raised certain questions about the non-clinical aspects of Hedrin. The Hedrin JV is in the process of responding to those questions and will not be able to commence the confirmatory clinical trials until such questions are responded to, to the satisfaction of the FDA.

To date, we have incurred $1,084,000 of project costs for the development of Hedrin. None of these costs were incurred during the three month period ended March 31, 2010. We do not expect to incur any future costs as the Hedrin JV is now responsible for all costs associated with Hedrin.

Topical GEL for Psoriasis

As a result of our merger with Tarpan Therapeutics in 2005, we held an exclusive, worldwide license to develop and commercialize Topical PTH (1-34) for the treatment of psoriasis. Tarpan acquired the exclusive, worldwide rights pursuant to a 2004 license agreement with IGI, Inc ("IGI").

In April 2006, we encountered a stability issue with the original topical PTH (1-34) product which utilized IGI's Novosome® formulation technology. In order to resolve that stability issue we created a new topical gel version of PTH (1-34).

In September 2007, the U.S. FDA accepted our Investigational New Drug ("IND") application for this new gel formulation of Topical PTH (1-34), and in October 2007, we initiated and began dosing subjects in a Phase 2a clinical study of Topical PTH (1-34) for the treatment of psoriasis. This U.S., multi-center, randomized, double-blind, vehicle-controlled, parallel group study was designed to evaluate safety and preliminary efficacy of Topical PTH (1-34) in patients with mild to moderate psoriasis. Approximately 54 subjects were enrolled and randomized to receive one of two dose levels of Topical PTH (1-34), or the gel vehicle (placebo), for an 8 week treatment period. In this study the vehicle was the topical gel ("GEL") without the active ingredient, PTH (1-34).

In July 2008, we announced the results of a Phase 2a clinical study where PTH (1-34) failed to show statistically or clinically meaningful improvements in psoriasis as compared to the vehicle (placebo). We have conducted no further clinical activities with PTH (1-34), terminated the agreement with IGI in May 2009 and have no further financial liability or commitment to IGI under the license agreement.

The gel vehicle (placebo) used in the above-mentioned study is our proprietary topical GEL which unexpectedly showed evidence of psoriasis improving properties. At the end of week 2, 15% of study subjects treated with the GEL achieved a clear or almost clear state. At the end of week 4, 20% of subjects treated with the GEL had achieved a clear or almost clear state, and at the end of week 8, 25% of subjects had achieved a clear or almost clear state. We own worldwide rights to this topical GEL and is exploring the possibility of developing it as an OTC product for mild psoriasis.

To date, we have incurred $6,504,000 of project costs related to our development of Topical PTH (1-34). These project costs have been incurred since April 1, 2005, the date of the Tarpan Therapeutics acquisition. None of these costs were incurred during the three month period ended March 31, 2010.

Summary of Contractual Commitments

Leases

Rent expense for the years ended December 31, 2009 and 2008 was $88,363 and $139,636, respectively. Future minimum rental payments subsequent to December 31, 2009 under an operating lease for our office facility, which expires on September 30, 2010, are $36,000.

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements.

Critical Accounting Policies

In December 2001, the SEC requested that all registrants discuss their most “critical accounting policies” in management’s discussion and analysis of financial condition and results of operations. The SEC indicated that a “critical accounting policy” is one which is both important to the portrayal of the company’s financial condition and results and requires 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.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

Research and Development Expenses

All research and development costs are expensed as incurred and include costs of consultants who conduct research and development on behalf of our company and our subsidiaries. Costs related to the acquisition of technology rights and patents for which development work is still in process are expensed as incurred and considered a component of research and development costs.

We often contract with third parties to facilitate, coordinate and perform agreed upon research and development of a new drug. To ensure that research and development costs are expensed as incurred, we record monthly accruals for clinical trials and preclinical testing costs based on the work performed under the contracts.

These contracts typically call for the payment of fees for services at the initiation of the contract and/or upon the achievement of certain milestones. This method of payment often does not match the related expense recognition resulting in either a prepayment, when the amounts paid are greater than the related research and development costs expensed, or an accrued liability, when the amounts paid are less than the related research and development costs expensed.

Share-Based Compensation

We have stockholder-approved stock incentive plans for employees, directors, officers and consultants. Prior to January 1, 2006, we accounted for the employee, director and officer plans using the intrinsic value method. Effective January 1, 2006, we adopted the share-based payment method for employee options using the modified prospective transition method. This new method of accounting for stock options eliminated the option to use the intrinsic value method and required us to expense the fair value of all employee options over the vesting period. Under the modified prospective transition method, we recognized compensation cost which includes a) period compensation cost related to share-based payments granted prior to, but not yet vested, as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions; and b) period compensation cost related to share-based payments granted on or after January 1, 2006, based on the grant date fair value estimated in accordance with the new accounting methodology. In accordance with the modified prospective method, we have not restated prior period results.

New Accounting Pronouncements

In May 2009, the Financial Accounting Standards Board (“FASB”) issued a statement which sets forth the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. This statement was effective for interim or annual periods ending after June 15, 2009, and we adopted the provisions of this statement for the quarter ended June 30, 2009. The adoption of this statement did not have a material impact on our financial statements. We have evaluated all events or transactions that occurred after March 31, 2010 up through the date we issued these financial statements, and we have disclosed all events or transactions that have a material impact on our financial statements.

In August 2009, the FASB issued a new pronouncement to provide clarification on measuring liabilities at fair value when a quoted price in an active market is not available. In particular, this pronouncement specifies that a valuation technique should be applied that uses either the quote of the liability when traded as an asset, the quoted prices for similar liabilities when traded as assets, or another valuation technique consistent with existing fair value measurement guidance. This statement is prospectively effective for financial statements issued for interim or annual periods ending after October 1, 2009. The adoption of this statement at December 31, 2009 did not impact our results of operations or financial condition.

In January 2010, the FASB issued a new pronouncement, Improving Disclosures about Fair Value Measurements (ASU 2010-06). This provision amends previous provisions that require reporting entities to make new disclosures about recurring and nonrecurring fair value measurements including the amounts of and reasons for significant transfers into and out of Level 1and Level 2 fair value measurements and separate disclosure of purchases, sales, issuances, and settlements in the reconciliation of Level 3 fair value measurements. This pronouncement was effective for interim and annual reporting periods beginning after December 15, 2009, except for Level 3 reconciliation disclosures which are effective for interim and annual periods beginning after December 15, 2010. The adoption of this pronouncement did not have a material impact on our results of operations or financial condition.

In February 2010, the FASB issued new accounting guidance that amends the previous guidance to (1) eliminate the requirement for an SEC filer to disclose the date through which it has evaluated subsequent events, (2) clarify the period through which conduit bond obligors must evaluate subsequent events and (3) refine the scope of the disclosure requirements for reissued financial statements. We adopted this new accounting guidance for the quarterly period ended March 31, 2010. The adoption of this guidance did not have a material impact on our financial statements.

BUSINESS

Overview

We are a specialty healthcare product company focused on developing and commercializing innovative treatments for underserved patient populations. We aim to acquire rights to these technologies by licensing or otherwise acquiring an ownership interest, funding their research and development and eventually either bringing the technologies to market or out-licensing. Our current portfolio of product candidates includes:

- Hedrin™, a novel, non-insecticide treatment for pediculosis (head lice)
- AST-726, a nasally delivered form of hydroxocobalamin for the treatment of vitamin B_{12} deficiency
- AST-915, an oral treatment for essential tremor
- A topical GEL for the treatment of mild psoriasis

In the short term, we are focusing our efforts on the commercialization of Hedrin and AST-726. We have not received regulatory approval for, or generated commercial revenue from, marketing or selling any products.

Our executive offices are located at 48 Wall Street, 11th floor, New York, NY 10005 USA. Our telephone number is (212) 582-3950 and our internet website address is www.manhattanpharma.com.

Recent Developments

On April 8, 2010, we completed a private placement of approximately 121 units, which we refer to has the 2010 Private Placement, with each unit consisting of (i) 357,143 shares of our common stock, $0.001 par value per share and (ii) 535,714 common stock purchase warrants, each of which will entitle the holder to purchase one additional share of our common stock for a period of five years at an exercise price of $0.08 per share. The purchase price for each unit was $25,000. We received aggregate gross proceeds of $3,029,386 in connection with the private placement (including the conversion of a 12% original issue discount senior subordinated convertible debenture with a stated value of $400,000 and the interest accrued thereon into units).

The first closing of the private place was completed on March 2, 2010, at which we sold an aggregate of 101.9 units. In connection with the first closing, we issued a warrant to purchase 3,639,289 shares of our common stock at an exercise price of $0.08 per share to the placement agent as partial compensation for its services.

The final closing of the private placement was completed on April 8, 2010, at which we sold an aggregate of 2.4 additional Units. In connection with the final closing, we issued a warrant to purchase 12,857 shares of our common stock at an exercise price of $0.08 per share to the placement agent as partial compensation for its services. In addition, on April 8, 2010, the holder of an outstanding 12% original issue discount senior subordinated convertible debenture, dated October 28, 2009, with a stated value of $400,000 and $21,886 of accrued interest, exercised its option to convert such debenture (including all accrued interest thereon) into 16.88 units. The conversion price was equal to the per unit purchase price paid by the investors in the private placement.

Each of the investors in the private placement and the holder of the debenture represented that they were “accredited investors,” as that term is defined in Rule 501(a) of Regulation D under the Securities Act, and the sale of the Units was made in reliance on exemptions provided by Regulation D and Section 4(2) of the Securities Act of 1933, as amended.

In connection with the private placement, we entered into a registration rights agreement pursuant to which we agreed to file a registration statement to register the resale of the shares of our common stock issued in the private placement, within 60 days of the final closing date and to cause the registration statement to be declared effective within 150 days (or 180 days upon review by the SEC).

Acquisition of Ariston

On March 8, 2010, we entered into an Agreement and Plan of Merger (the "Merger Agreement") with Ariston Pharmaceuticals, Inc., a Delaware corporation ("Ariston") and Ariston Merger Corp., a Delaware corporation and our wholly-owned subsidiary (the "Merger Sub"). Pursuant to the terms and conditions set forth in the Merger Agreement, on March 8, 2010, the Merger Sub merged with and into Ariston, with Ariston being the surviving corporation of the merger. As a result of the merger, Ariston became a wholly-owned subsidiary of ours.

We merged with Ariston principally to add new products to our portfolio. Prior to the merger, Ariston was a private, clinical stage specialty biopharmaceutical company based in Shrewsbury, Massachusetts that in-licenses, develops and plans to market novel therapeutics for the treatment of serious disorders of the central and peripheral nervous systems.

Under the terms of the Merger Agreement, the consideration payable by us to the stockholders and note holders of Ariston consists of the issuance of 7,062,423 shares of our common stock at Closing (as defined in the Merger Agreement) plus the right to receive up to an additional 24,718,481 shares of our common stock (the "Ariston Milestone Shares") upon the achievement of certain product-related milestones described below. In addition, we have reserved 38,630,723 shares of our common stock for possible future issuance in connection with the conversion of $15.45 million of outstanding Ariston convertible promissory notes. The note holders will not have any recourse to us for repayment of the notes (their sole recourse being to Ariston, which is our wholly-owned subsidiary), but the note holders will have the right to convert the notes into shares of our common stock at the rate of $0.40 per share. Further, we have reserved 5,000,000 shares of our common stock for possible future issuance in connection with the conversion of $1.0 million of an outstanding Ariston convertible promissory note issued in satisfaction of a trade payable. The note holder will not have any recourse to us for repayment of the note (their sole recourse being to Ariston, which is our wholly-owned subsidiary), but the note holder will have the right to convert the note into shares of our common stock at the rate of $0.20 per share.

Upon the achievement of the milestones described below, we would be obligated to issue portions of the Ariston Milestone Shares to the former Ariston stockholders and noteholders:

- Upon the affirmative decision of our Board of Directors, provided that such decision is made prior to March 8, 2011, to further develop the AST-914 metabolite product candidate, either internally or through a corporate partnership, we would issue 8,828,029 of the Ariston Milestone Shares.

- Upon the acceptance by the FDA of our filing of the first New Drug Application for the AST-726 product candidate, we would issue 7,062,423 of the Ariston Milestone Shares.

- Upon our receipt of FDA approval to market the AST-726 product candidate in the United States of America, we would issue 8,828,029 of the Ariston Milestone Shares.

Certain members of our board of directors and certain of our principal stockholders owned Ariston securities. Timothy McInerney, one of our directors, owned 16,668 shares of Ariston common stock which represented less than 1% of Ariston's outstanding common stock as of the closing of the Merger. Neil Herskowitz, one of our directors, indirectly owned convertible promissory notes of Ariston with interest and principal in the amount of $192,739. Michael Weiser, who was serving as one of our directors at the time of the Merger, owned 117,342 shares of Ariston common stock, which represented approximately 2.1% of Ariston's outstanding common stock as of the closing of the Merger. Lindsay Rosenwald, a more than 5% beneficial owner of our common stock, in his individual capacity and indirectly through trusts and companies he controls owned 497,911 shares of Ariston common stock, which represented approximately 8.9% of Ariston's outstanding common stock as of the closing of the Merger and indirectly owned convertible promissory notes of Ariston in the amount of $141,438.

Business Strategy

Our goal is to locate, develop, and commercialize specialty healthcare products. In order to achieve this, we look for innovative, or next generation, products with one or more of the following characteristics:

- Low clinical, regulatory, and/or marketing risk
- Quick to market (such as medical devices, 505(b)(2), or over-the-counter)
- Low cost to develop
- Low cost and/or simple to manufacture
- Serves a niche or underserved patient population

All of our current products meet some or all of these criteria.

Products

Hedrin

Hedrin is a novel, non-insecticide, one hour treatment for pediculosis (head lice) and is currently being developed in the United States as a prescription medical device. Hedrin is the top selling head lice product in Europe. It is currently marketed in over 27 countries and, according to Thornton & Ross Ltd. ("T&R"), achieved 2008 annual sales through its licensees of approximately $48 million (USD) at in-market public prices, garnering approximately 23% market share across Europe.

In June 2007, we entered into an exclusive license agreement with T&R and Kerris, S.A. ("Kerris") for Hedrin (the "Hedrin License Agreement"). We acquired an exclusive North American license to certain patent rights and other intellectual property relating to the product. In addition, and at the same time, we also entered into a Supply Agreement with T&R pursuant to which T&R will be our exclusive supplier of Hedrin product (the "Hedrin Supply Agreement").

In February 2008, we entered into a joint venture agreement with Nordic Biotech Advisors ApS ("Nordic") to develop and commercialize Hedrin for the North American market. The joint venture entity, H Pharmaceuticals ("H Pharmaceuticals" or the "Hedrin JV"), now owns, is developing, and is working to secure commercialization partners for Hedrin in both the U.S. and Canada. We manage the day-to-day operations of the Hedrin JV under a management contract with the Hedrin JV. H Pharmaceuticals is independently funded and is responsible for all costs associated with the Hedrin project, including any necessary U.S. clinical trials, patent costs, and future milestones owed to the original licensor, T&R.

We, through the Hedrin JV, are currently working to secure commercialization and marketing partners for the U.S. and Canada.

Pediculosis (Head lice)

Head lice (*Pediculus humanus capitis*) are small parasitic insects that live mainly on the human scalp and neck hair. Head lice are not known to transmit disease, but they are highly contagious and are acquired by direct head-to-head contact with an infested person's hair, and may also be transferred with shared combs, hats, and other hair accessories. They can also live on bedding or upholstered furniture for a brief period. Head lice are seen across the socioeconomic spectrum and are unrelated to personal cleanliness or hygiene. Children are more frequently infested than are adults, and Caucasians more frequently than other ethnic groups. Lice are most commonly found on the scalp, behind the ears, and near the neckline at the back of the neck. Common symptoms include a tickling feeling of something moving in the hair, itching, irritability caused by poor sleep, and sores on the head caused by scratching.

Mechanism of Action

Hedrin is a novel, non-insecticide combination of silicones (dimethicone and cyclomethicone) that acts as a pediculicidal (lice killing) agent by disrupting the insect's mechanism for managing fluid and breathing. In contrast with most currently available lice treatments, Hedrin contains no chemical insecticides. Because Hedrin kills lice by preventing the louse from excreting waste fluid, rather than by acting on the central nervous system, the insects cannot build up resistance to the treatment. Recent studies have indicated that resistance to chemical insecticides may be increasing and therefore contributing to insecticide treatment failure. We believe there is significant market potential for a convenient, non-insecticide treatment alternative. Both silicones in this proprietary formulation of Hedrin are used extensively in cosmetics and toiletries.

Product Development

To date, Hedrin has been clinically studied in over 400 subjects. In a randomized, controlled, equivalence, clinical study (conducted in Europe by T&R), Hedrin was administered to 253 adult and child subjects with head lice infestation. The study results, published in the British Medical Journal in June 2005, demonstrated Hedrin's equivalence when compared to the insecticide treatment, phenothrin, the most widely used pediculicide in the U.K. In addition, according to the same study, the Hedrin treated subjects experienced significantly less irritation (2%) than those treated with phenothrin (9%).

A clinical study published in the November 2007 issue of PLoS One, an international, peer-reviewed journal published by the Public Library of Science (PLoS), demonstrated Hedrin's superior efficacy compared to a U.K. formulation of malathion, a widely used insecticide treatment in both Europe and North America. In this randomized, controlled, assessor blinded, parallel group clinical trial, 73 adult and child subjects with head lice infestations were treated with Hedrin or malathion liquid. Using intent-to-treat analysis, Hedrin achieved a statistically significant cure rate of 70% compared to 33% with malathion liquid. Using the per-protocol analysis Hedrin achieved a highly statistically significant cure rate of 77% compared to 35% with malathion. In Europe, it has been widely documented that head lice has become resistant to malathion, and we believe this resistance may have influenced the study results. To date, there have been no reports of malathion resistance in the U.S. Additionally, Hedrin treated subjects experienced no irritant reactions, and Hedrin showed clinical equivalence to malathion in its ability to inhibit egg hatching. Overall, investigators and study subjects rated Hedrin as less odorous, easier to apply, and easier to wash out. In addition, 97% of Hedrin treated subjects stated they were significantly more inclined to use the product again versus 31% of those using malathion.

Two unpublished Hedrin studies were completed by T&R in 2008. In the first, Hedrin achieved a 100% kill rate in vitro, including malathion resistant head lice. In the other, a clinical field study conducted in Manisa province, a rural area of Western Turkey, Hedrin was administered to 36 adult and child subjects with confirmed head lice infestations. Using per protocol analysis, Hedrin achieved a 97% cure rate. Using intent-to-treat analysis, Hedrin achieved a 92% cure rate since 2 subjects were eliminated due to protocol violations. No subjects reported any adverse events.

In April 2009, T&R published a new clinical field study where 40 adult and child subjects with head lice infestations were treated with Hedrin using a 1 hour application time. Treatment was given twice with 7 days between applications. In this study, Hedrin achieved a cure rate of 90%.

In the U.S., we, through the Hedrin JV, are pursuing the development of Hedrin as a prescription medical device. In January 2009, the U.S. Food and Drug Administration ("FDA") Center for Devices and Radiological Health ("CDRH") notified H Pharmaceuticals that Hedrin had been classified as a Class III medical device. A Class III designation means that a Premarket Approval ("PMA") Application will need to be obtained before Hedrin can be marketed in the U.S. In July 2009, the CDRH division of the FDA confirmed that two pivotal studies, which can occur simultaneously, using the same protocol consisting of approximately 60 subjects each, or 120 patients in total, are required for the completion of the PMA Application. In April, 2010, the Hedrin JV received correspondence from the FDA in which the FDA raised certain questions about the non-clinical aspects of Hedrin (including certain deficiencies in safety documentation that will require further study). The Hedrin JV is in the process of responding to those questions and will not be able to commence the confirmatory clinical trials, and the Hedrin JV's application to conduct those trials will not be accepted by the FDA, unless and until such questions are responded to, to the satisfaction of the FDA.

Market and Competition

According to the American Academy of Pediatrics an estimated 6-12 million Americans are infested with head lice each year, with pre-school and elementary children and their families affected most often. The total U.S. head lice market is estimated to be over $200 million with prescription and over-the-counter (OTC) therapies comprising approximately 50% of that market. The remaining 50% of the market is comprised of alternative therapies such as tea tree oils, mineral oils, and "nit picking", or physical combing to remove lice. In addition, the head lice market is experiencing an increasing trend toward healthier, more environmentally friendly consumer products and a growing activism against pesticide products. We believe there is significant market potential for a convenient, non-insecticide treatment for head lice.

The prescription and OTC segment of the market is dominated by 4-5 name brand products and numerous, low cost generics and store brand equivalents. The active ingredients in these pharmacological therapies are chemical insecticides. The most frequently prescribed insecticide treatments are Ovide (malathion) and Kwell (lindane), and the most frequently purchased OTC brands are Rid (piperonyl butoxide), Nix (permethrin), and Pronto (piperonyl butoxide). Lindane has been banned in 52 countries worldwide and has now been banned in the state of California due to its toxicity. In addition, New York, Michigan, and Minnesota have initiated legislation to ban the use of lindane. European formulations of malathion have experienced widespread resistance. Resistance to U.S. formulations of malathion has not been widely reported to date, but experts believe it is likely to develop with continued use. Head lice resistance to piperonyl butoxide and permethrin has been reported in the U.S. and treatment failures are common.

See also "Management's Discussion and Analysis of Financial Condition and Results of Operations- Liquidity and Capital Resources- Research and Development Projects-Hedrin."

AST-726

AST-726 is a nasally delivered form of hydroxocobalamin for the treatment of Vitamin B_{12} deficiency. We acquired global rights to AST-726 as part of the Ariston merger. AST-726 has demonstrated pharmacokinetic equivalence to a marketed intramuscular injection product for Vitamin B_{12} remediation. We believe that AST-726 may enable both a single, once-monthly treatment for maintenance of normal Vitamin B_{12} levels in deficient patients, and more frequent administration to restore normal levels in newly diagnosed B_{12} deficiency. Further, we believe that AST-726 could offer a convenient, painless, safe and cost-effective treatment for Vitamin B_{12} deficiency, without the need for intramuscular injections.

Vitamin B_{12} Deficiency - Background of the Disease

Untreated Vitamin B_{12} deficiency can result in serious clinical problems including hematological disorders, such as life-threatening anemias, and a range of central and peripheral neurological abnormalities such as fatigue, confusion, cognition impairment, dementia, depression, peripheral neuropathies and gait disturbances. Neuronal damage may involve peripheral nerves, the spinal cord and the brain and if the condition is left untreated may become permanent. Furthermore, clinically asymptomatic patients with low normal or below normal Vitamin B_{12} levels may have changes in blood chemistries, including elevated levels of methylmalonic acid or homocysteine, known risk factors for other medical conditions associated with an increased risk of circulatory problems, blood clots and cardiovascular disease.

The primary diagnosis of Vitamin B_{12} deficiency is made when measurement of its blood concentration falls below the expected normal range of 200 to 900 picograms/ml. Vitamin B_{12} deficiency is most often caused by pathological conditions that limit the body's ability to absorb the vitamin. Such disorders include pernicious anemia, atrophic gastritis, problems caused by gastric surgical procedures to treat stomach cancer and obesity, Crohn's disease and simple age-related changes. Some studies show the inability to properly absorb Vitamin B_{12} as a side effect from chronic use of certain widely prescribed antacid medications such as Prilosec® and diabetes treatments such as Glucophage®.

Product Development

AST-726, a commercial nasal spray formulation of hydroxocobalamin, has satisfactorily completed preclinical toxicology, and an Investigational New Drug ("IND") Application has been filed with the FDA. This product candidate is being developed utilizing the 505(b)(2) regulatory pathway. AST-726 has also successfully completed a safety and pharmacokinetic study in healthy volunteers and an end of Phase II meeting with FDA has been completed. We are planning a Phase III Vitamin B_{12} replacement study in the United States. The study is designed to enroll approximately 40 Vitamin B_{12} deficient patients currently treated with injection therapy. Patients will first be evaluated on injection therapy and then will receive AST-726 by nasal spray on a monthly basis for 12 weeks. The primary purpose of this study is to determine that levels of Vitamin B_{12} in the patients' bloodstream remain within the normal range following monthly administration of AST-726. We anticipate that the data from this study and additional manufacturing information will support the planned 505(b)(2) new drug application ("NDA") filing for AST-726.

A CMC/manufacturing process has been developed for AST-726 that we believe provides a commercially viable stability profile. We have two issued patents in the United States with respect to AST-726, one of which relates to its application in Vitamin B_{12} remediation.

Market and Competition

More than 9 million people in the U.S. are deficient in Vitamin B_{12} , indicating substantial market potential for a facile, convenient, safe and effective treatment that can replace the need for painful and frequent intramuscular injections or other less than fully effective delivery forms.

Approximately 15% of the elderly and up to 40% of nursing home residents in the U.S. have Vitamin B_{12} deficiency. A study of over 11,000 U.S. civilians ages four and older found a 3% prevalence of Vitamin B_{12} deficiency in the general population using the 200 picograms/ml deficiency standard, indicating that approximately 9 million people in the U.S. are in need of B_{12} replacement therapy. Some experts advocate a higher deficiency standard of 300-350 picograms/ml on the basis that levels below this coincide with elevated methylmalonic acid and homocysteine, risk factors for cardiovascular disease as found in the Framingham Heart Study. On this basis the prevalence of Vitamin B_{12} deficiency increases substantially.

We believe that substantial market opportunity also exists internationally.

Current Treatments for Vitamin B_{12} Deficiency

Once Vitamin B_{12} deficiency is diagnosed by a simple blood test, the goal of treatment is generally to:

- Restore circulating blood levels to normal as rapidly as possible;
- Replenish and normalize the substantial stores of the vitamin in the body; and
- Institute a lifelong therapeutic regimen that will maintain normal levels of the vitamin.

We believe that parenteral (intramuscular injection) treatment is often considered the treatment of choice for Vitamin B_{12} deficiency. Cyanocobalamin is predominantly used for this purpose in the United States, but hydroxocobalamin, the active ingredient in AST-726, is also available for pediatrics and for adults for whom injection of cyanocobalamin is poorly tolerated. Hydroxocobalamin injection is the predominant treatment for Vitamin B_{12} deficiency in Europe.

In the United States, intramuscular injections are generally given by a physician or nurse, necessitating an office/medical center visit by the patient or a visiting nurse home call for each treatment. Following a diagnosis of B_{12} deficiency, injections are required quite frequently in order to restore normal vitamin levels. Once normalization is achieved, the frequency can be reduced to once or twice per month. While the treatment is usually highly effective, the inconvenience and cost of frequent office visits and the pain and side effects associated with intramuscular injections are problematic for many patients.

Intranasal treatment for Vitamin B_{12} deficiency seeks to alleviate these problems, but the two intranasal products currently available in the United States, Nascobal® and Calomist®, have to be administered on a daily or weekly basis and are not usually recommended for the treatment of newly diagnosed patients. Both products are based on cyanocobalamin.

Oral or sublingual administration of high doses of Vitamin B_{12} can restore deficient patients to normal in certain cases. Such high dose supplements are generally available in pharmacies and nutrition/health food stores. Adequate results can almost certainly be obtained when nutritional insufficiency (e.g., strict vegan diet) is the primary cause of the problem. However, the normal gastrointestinal tract has a very limited capability to absorb Vitamin B_{12} and if this is compromised, as is the case in many deficient patients, oral or sublingual supplementation may not be ideal for rapidly restoring circulating levels and storage depots of the vitamin to normal. In such cases of pathological Vitamin B_{12} deficiency, intramuscular injection still often remains the current treatment of choice.

An unapproved Vitamin B_{12} patch is available in the United States, but we believe that its effectiveness in moderate to severe Vitamin B_{12} deficient patients is substantially untested.

Potential Advantages of AST-726 Treatment

We believe that AST-726 treatment has the potential to directly substitute for and replace the need for injection treatment by applying the current injection frequency paradigms for both newly diagnosed and normalized Vitamin B_{12} deficient patients. AST-726 is proposed to be self-administered at home by the patient, without costly, time consuming, and inconvenient visits to a doctor's office or medical facility needed for each of the many intramuscular injections required for life. Because it is delivered through a nasal spray, additional advantages include freedom from injection pain and reduced anxiety in individuals, including children and the elderly, who may have fear of injections. We believe that the delivery profile of AST-726 is comparable to that of the marketed intramuscular injection, and that therefore newly diagnosed patients will be able to self-administer the nasal spray on a daily basis or several times a week to restore their Vitamin B_{12} status to normal and will then be self-maintained on a single monthly nasal spray treatment.

AST-915

AST-915 is an orally delivered treatment for essential tremor. We acquired global rights to AST-915 as part of the Ariston merger. This product candidate is being studied under a Cooperative Research and Development Agreement (CRADA) with the National Institutes of Health (NIH) and a Phase 1 clinical study is currently underway in essential tremor patients. AST-915 was formerly referred to as "AST-914 metabolite".

Essential Tremor

Essential tremor is a neurological disorder that is characterized by involuntary shaking of the hands, arms, head, voice, and upper body. The most disabling tremors occur during voluntary movement, affecting common skills such as writing, eating and drinking. Essential tremor is often misdiagnosed as Parkinson's disease, yet according to the National Institutes of Neurological Disorders and Stroke, approximately 8 times as many people have essential tremor as have Parkinson's. Essential tremor is not confined to the elderly. Children, newborns, and middle-aged people can also have the condition.

Market opportunity

Essential tremor is the most common involuntary movement disorder, with increasing incidence as people age. According to the National Institute of Health (NIH), essential tremor affects 14% of people 65 years and older, which equates to approximately 5.4 million Americans. There is no cure for essential tremor and the currently available drug therapies do not work in certain patients, produce at best a 50% response in others and have significant side effects. We believe AST-915 may provide a new treatment option for this serious and prevalent disorder**.** We believe that substantial market opportunity also exists internationally.

Topical GEL for Psoriasis

This topical GEL was used as the vehicle (placebo) in a prior clinical study versus a discontinued product candidate, topical PTH (1-34), and showed evidence of psoriasis improving properties. In that Phase 2a study 15% of study subjects achieved a clear or almost clear state at the end of week 2. At the end of week 4, 20% of subjects treated with the GEL had achieved a clear or almost clear state, and at the end of week 8, 25% of subjects treated with the GEL had achieved a clear or almost clear state. We own global rights to this topical GEL and is exploring the possibility of developing it as an OTC product for mild psoriasis.

Psoriasis

Psoriasis is a common, chronic, immune-mediated disease that results in the over-production of skin cells. In healthy skin, immature skin cells migrate from the lowest layer of the epidermis to the skin's surface over a period of 28-30 days. In psoriasis, these cells reproduce at an extremely accelerated rate and advance to the surface in only 7 days.   This results in a build up of excess, poorly differentiated skin cells that accumulate in dry, thick patches known as plaques. These plaques can appear anywhere on the body resulting in itching, skin irritation, and disability.

Market and Competition

According to the National Psoriasis Foundation approximately 125 million people worldwide, including approximately 6 million Americans, suffers from psoriasis. Of these, approximately 65% (4.4 million) have mild psoriasis and are the most likely of psoriasis sufferers to be treated with an OTC product. According to Datamonitor, only an estimated 55% of psoriasis sufferers have been formally diagnosed by a physician, so the OTC market could potentially be much larger.

There are a number of treatments available today for psoriasis, including numerous OTC creams and ointments that help to reduce inflammation, stop itching, and soothe skin. Products such as Psoriasin, CortAid, Dermarest, and Cortizone 10 are the most common, but none are viewed as particularly effective for psoriasis.

See also "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources - Research and Development Projects – Topical Psoriasis Product."

Discontinued Research and Development Programs

Altoderm™

In April 2007 we entered into a license agreement with T&R, pursuant to which we acquired exclusive rights to develop and commercialize Altoderm in North America. Altoderm is a novel, proprietary formulation of topical cromolyn sodium and is designed to enhance the absorption of cromolyn sodium into the skin in order to treat pruritus (itch) associated with dermatologic conditions including atopic dermatitis (eczema).

In a Phase 3, randomized, double-blind, vehicle-controlled clinical study (conducted in Europe by T&R) Altoderm was safe and well tolerated, and showed a trend toward improvement in pruritus, but the efficacy results were inconclusive. Altoderm treated subjects and vehicle only treated subjects experienced a similar improvement (each greater than 30%), and therefore, the study did not achieve statistical significance.

As a result of the inconclusive European study data and a lack of sufficient funds to develop Altoderm, in March 2009 we discontinued development and returned the project to T&R under the terms of the license agreement.

Altolyn™

In April 2007 we entered into a license agreement with T&R, pursuant to which we acquired exclusive rights to develop and commercialize Altolyn in North America. Altolyn is a novel, proprietary oral tablet formulation of cromolyn sodium designed to treat mastocytosis and possibly other gastrointestinal disorders such as food allergy and symptoms of irritable bowel syndrome.

Due to small market opportunity and lack of sufficient funds to develop Altolyn, in March 2009 we discontinued development and returned the project to T&R under the terms of the license agreement.

Commercialization, Marketing, and Sales

In order to maximize the commercial value of our product candidates, it is likely that we will partner with, and/or out-license the marketing rights to, a marketing organization with expertise in the therapeutic areas we operate in. We are currently working to secure a marketing partner for Hedrin in both the United States and Canada. Longer term, we may explore the possibility of securing commercialization partners for AST-726, AST-915, and the topical GEL in the United States and global territories.

Intellectual Property and License Agreements

Our goal is to obtain, maintain and enforce patent protection for our products, formulations, processes, methods and other proprietary technologies, preserve our trade secrets, and operate without infringing on the proprietary rights of other parties, both in the United States and in other countries. Our policy is to actively seek to obtain, where appropriate, the broadest intellectual property protection possible for our product candidates, proprietary information and proprietary technology through a combination of contractual arrangements and patents, both in the U.S. and elsewhere in the world.

We also depend upon the skills, knowledge and experience of our scientific and technical personnel, as well as that of our advisors, consultants and other contractors. This knowledge and experience we call "know-how". To help protect our proprietary know-how which is not patentable, and for inventions for which patents may be difficult to enforce, we rely on trade secret protection and confidentiality agreements to protect our interests. To this end, we require all employees, consultants, advisors and other contractors to enter into confidentiality agreements which 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.

Hedrin

On June 26, 2007, we entered into an exclusive license agreement for Hedrin ("the Hedrin Agreement') with T&R and Kerris. Pursuant to the Hedrin Agreement, we have acquired an exclusive North American license to certain patent rights and other intellectual property relating to Hedrin^{TM}, a non-insecticide product candidate for the treatment of pediculosis ("head lice"):

U.S. Patent Application No. 2007/0142330, entitled, "Method and composition for the control of arthropods." Jayne Ansell, Inventor. Application filed February 12, 2007. This application is a divisional of U.S. application Ser. No. 10/097,615, filed Mar. 15, 2002, which is a continuation of International Application No. PCT/GB00/03540, which designated the United States and was filed on September 14, 2000. This application has not yet issued as a patent. Any patent that issues will expire on September 14, 2020.

This patent application has numerous, detailed and specific claims related to the use of Hedrin (novel formulation of silicon derivatives) in controlling and repelling arthropods such as insects and arachnids, and in particular control and eradication of head lice and their ova.

On February 25, 2008, we assigned and transferred our rights in Hedrin to the Hedrin JV. The Hedrin JV is now responsible for all of our obligations under the Hedrin License Agreement and the Hedrin Supply Agreement.

AST-726

Pursuant to the Merger Agreement with Ariston, we acquired patent rights and other intellectual property relating to AST-726:

1. U.S. Patent No. 5,801,161 entitled, “Pharmaceutical composition for the intranasal administration of hydroxocobalamin.” Franciscus W.H.M. Merkus, Inventor. Application filed June 17, 1996. Patent issued September 1, 1998. This patent is scheduled to expire on May, 13, 2014.

2. U.S. Patent No. 5,925,625 entitled, “Pharmaceutical composition for the intranasal administration of hydroxocobalamin.” Franciscus W.H.M. Merkus, Inventor. Application filed December 30, 1997. Patent issued July 20, 1999. This patent is scheduled to expire on May, 13, 2014.

3. European Patent No. EP0735859B1 (granted July 30, 1997, national phase of PCT Publication No. WO9517164) entitled, “Pharmaceutical composition for the intranasal administration of hydroxocobalamin.” Franciscus W.H.M. Merkus, Inventor. Application filed May 13, 1994. Patents validated in Great Britain, Austria, Belgium, Denmark, France, Ireland, Italy, the Netherlands, Switzerland, Germany, Spain, and Sweden are scheduled to expire on May, 13, 2014.

AST-915

Pursuant to the Merger Agreement with Ariston, we have acquired patent rights and other intellectual property relating to AST-915:

U.S. Patent Application No. PCT/US2009/000876 entitled “Octanoic acid formulations and methods of treatment using the same.” McLane, Nahab, and Hallet, Inventors. Application filed February 12, 2009. This application has not yet issued as a patent.

Manufacturing

We do not have any manufacturing capabilities. T&R will supply any Hedrin product required to conduct human clinical studies, and we are in contact with several contract cGMP manufacturers for the supply of AST-726, AST-915, and the topical GEL for psoriasis.

Government Regulations

The research, development, testing, manufacture, labeling, promotion, advertising, distribution, and marketing, among other things, of our products are extensively regulated by governmental authorities in the United States and other countries. In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or the FDCA, and its implementing regulations. Failure to comply with the applicable U.S. requirements may subject us to administrative or judicial sanctions, such as FDA refusal to approve pending NDAs, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, and/or criminal prosecution.

Drug Approval Process. None of our drugs may be marketed in the U.S. until the drug has received FDA approval. The steps required before a drug may be marketed in the U.S. include:

- nonclinical laboratory tests, animal studies, and formulation studies,
- submission to the FDA of an Investigational New Drug application (IND) or, in the case of medical devices, an Investigational Device Exemption (IDE), for human clinical testing, which must become effective before human clinical trials may begin,
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug for each indication,
- submission to the FDA of a New Drug Application (NDA) or, in the case of medical devices a Premarket Approval (PMA),

- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current good manufacturing practices, or cGMPs, and
- FDA review and approval of the NDA or PMA.

Nonclinical tests include laboratory evaluation of product chemistry, toxicity, and formulation, as well as animal studies. The conduct of the nonclinical tests and formulation of the compounds for testing must comply with federal regulations and requirements. The results of the nonclinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND or IDE, which must become effective before human clinical trials may begin. An IND/IDE will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions about issues such as the conduct of the trials as outlined in the IND/IDE. In such a case, the IND/IDE sponsor and the FDA must resolve any outstanding FDA concerns or questions before clinical trials can proceed. We cannot be sure that submission of an IND/IDE will result in the FDA allowing clinical trials to begin.

Clinical trials involve the administration of the investigational drug or medical device to human subjects under the supervision of qualified investigators. Clinical trials are conducted under protocols detailing the objectives of the study, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND/IDE.

Clinical trials typically are conducted in three sequential phases, but the phases may overlap. The study protocol and informed consent information for study subjects in clinical trials must also be approved by an Institutional Review Board for each institution where the trials will be conducted. Study subjects must sign an informed consent form before participating in a clinical trial. Phase 1 usually involves the initial introduction of the investigational drug into people to evaluate its short-term safety, dosage tolerance, metabolism, pharmacokinetics and pharmacologic actions, and, if possible, to gain an early indication of its effectiveness. Phase 2 usually involves trials in a limited patient population to (i) evaluate dosage tolerance and appropriate dosage; (ii) identify possible adverse effects and safety risks; and (iii) preliminarily evaluate the efficacy of the drug for specific indications. Phase 3 trials usually further evaluate clinical efficacy and test further for safety by using the drug in its final form in an expanded patient population. There can be no assurance that Phase 1, Phase 2, or Phase 3 testing will be completed successfully within any specified period of time, if at all. Furthermore, we or the FDA may suspend clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk.

The FDCA permits FDA and the IND/IDE sponsor to agree in writing on the design and size of clinical studies intended to form the primary basis of an effectiveness claim in an NDA or PMA application. This process is known as Special Protocol Assessment, or SPA. These agreements may not be changed after the clinical studies begin, except in limited circumstances.

Assuming successful completion of the required clinical testing, the results of the nonclinical and clinical studies, together with other detailed information, including information on the manufacture and composition of the drug, are submitted to the FDA in the form of a NDA or PMA requesting approval to market the product for one or more indications. The testing and approval process requires substantial time, effort, and financial resources. The agencies review the application and may deem it to be inadequate to support the registration and we cannot be sure that any approval will be granted on a timely basis, if at all. The FDA may also refer the application to the appropriate advisory committee, typically a panel of clinicians, for review, evaluation and a recommendation as to whether the application should be approved. The FDA is not bound by the recommendations of the advisory committee.

The FDA has various programs, including fast track, priority review, and accelerated approval, that are intended to expedite or simplify the process for reviewing drugs, and/or provide for approval on the basis surrogate endpoints. Generally, drugs that may be eligible for one or more of these programs are those for serious or life-threatening conditions, those with the potential to address unmet medical needs, and those that provide meaningful benefit over existing treatments. We cannot be sure that any of our drugs will qualify for any of these programs, or that, if a drug does qualify, that the review time will be reduced.

Section 505(b)(2) of the FDCA allows the FDA to approve a follow-on drug on the basis of data in the scientific literature or data used by FDA in the approval of other drugs. This procedure potentially makes it easier for generic drug manufacturers to obtain rapid approval of new forms of drugs based on proprietary data of the original drug manufacturer. We intend to rely on Section 505(b)(2) to obtain approval for AST-726.

Before approving an NDA or a PMA, the FDA usually will inspect the facility or the facilities at which the drug is manufactured, and will not approve the product unless cGMP compliance is satisfactory. If the FDA evaluates the NDA/PMA and the manufacturing facilities as acceptable, the FDA may issue an approval letter, or in some cases, an approvable letter followed by an approval letter. Both letters usually contain a number of conditions that must be met in order to secure final approval of the NDA/PMA. When and if those conditions have been met to the FDA's satisfaction, the FDA will issue an approval letter. The approval letter authorizes commercial marketing of the drug for specific indications. As a condition of NDA/PMA approval, the FDA may require post marketing testing and surveillance to monitor the drug's safety or efficacy, or impose other conditions.

After approval, certain changes to the approved product, such as adding new indications, making certain manufacturing changes, or making certain additional labeling claims, are subject to further FDA review and approval. Before we can market our product candidates for additional indications, we must obtain additional approvals from FDA. Obtaining approval for a new indication generally requires that additional clinical studies be conducted. We cannot be sure that any additional approval for new indications for any product candidate will be approved on a timely basis, or at all.

Post-Approval Requirements. Often times, even after a drug has been approved by the FDA for sale, the FDA may require that certain post-approval requirements be satisfied, including the conduct of additional clinical studies. If such post-approval conditions are not satisfied, the FDA may withdraw its approval of the drug. In addition, holders of an approved NDA or PMA are required to: (i) report certain adverse reactions to the FDA, (ii) comply with certain requirements concerning advertising and promotional labeling for their products, and (iii) continue to have quality control and manufacturing procedures conform to cGMP after approval. The FDA periodically inspects the sponsor's records related to safety reporting and/or manufacturing facilities; this latter effort includes assessment of compliance with cGMP. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. We intend to use third party manufacturers to produce our products in clinical and commercial quantities, and future FDA inspections may identify compliance issues at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct. In addition, discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved NDA/PMA, including withdrawal of the product from the market.

Non-United States Regulation. Before our products can be marketed outside of the United States, they are subject to regulatory approval similar to that required in the United States, although the requirements governing the conduct of clinical trials, including additional clinical trials that may be required, product licensing, pricing and reimbursement vary widely from country to country. No action can be taken to market any product in a country until an appropriate application has been approved by the regulatory authorities in that country. The current approval process varies from country to country, and the time spent in gaining approval varies from that required for FDA approval. In certain countries, the sales price of a product must also be approved. The pricing review period often begins after market approval is granted. Even if a product is approved by a regulatory authority, satisfactory prices may not be approved for such product.

In Europe, marketing authorizations may be submitted at a centralized, a decentralized or national level. The centralized procedure is mandatory for the approval of biotechnology products and provides for the grant of a single marketing authorization that is valid in all European Union ("EU") member states. As of January 1995, a mutual recognition procedure is available at the request of the applicant for all medicinal products that are not subject to the centralized procedure. There can be no assurance that the chosen regulatory strategy will secure regulatory approvals on a timely basis or at all.

History

We were incorporated in Delaware in 1993 under the name “Atlantic Pharmaceuticals, Inc.” and, in March 2000, we changed our name to “Atlantic Technology Ventures, Inc.” In 2003, we completed a “reverse acquisition” of privately held “Manhattan Research Development, Inc.” In connection with this transaction, we also changed our name to “Manhattan Pharmaceuticals, Inc.” From an accounting perspective, the accounting acquirer is considered to be Manhattan Research Development, Inc. and accordingly, the historical financial statements are those of Manhattan Research Development, Inc.

During 2005, we merged with Tarpan Therapeutics, Inc., or Tarpan. Tarpan was a privately held New York based biopharmaceutical company developing dermatological therapeutics. This transaction was accounted for as a purchase of Tarpan by us.

During 2010, we completed a merger pursuant to which we acquired Ariston. We merged with Ariston principally to add new products to our portfolio. Prior to the merger, Ariston was a private, clinical stage specialty biopharmaceutical company based in Shrewsbury, Massachusetts that in-licenses, develops and plans to market novel therapeutics for the treatment of serious disorders of the central and peripheral nervous systems. For a more detailed discussion of the Merger, please see "Business - Recent Developments - Acquisition of Ariston".

Employees

We currently have two full time and two part time employees, including: our Chief Operating and Financial Officer, the Chief Executive Officer of Ariston and two persons in business development, clinical management, administration and finance. None of our employees is covered by a collective bargaining unit. We believe our relations with our employees are satisfactory.

Properties

Our executive offices are located at 48 Wall Street, New York, New York 10005. We currently occupy this space pursuant to a written lease that expires on September 30, 2010 under which we pay rent of approximately $4,000 per month.

We believe that our existing facilities are adequate to meet our current requirements. We do not own any real property.

Legal Proceedings

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business. We are not aware of any pending or threatened legal proceeding that, if determined in a manner adverse to us, could have a material adverse effect on our business and operations.

MANAGEMENT

Directors

The name and age of each of our directors as of June 18, 2010, his position with us, his principal occupation, and the period during which such person has served as a director of our company are set forth below. All directors hold office until the next annual meeting of shareholders or until their respective successors are elected and qualified. We believe that each of our directors has professional experience in areas relevant to our strategy and operations. Each of our directors holds or has held senior-level positions in complex business, government, or academic settings. We also believe each of our directors has other attributes necessary to create an effective board: high personal and professional ethics, integrity and values; practical wisdom and judgment; an inquisitive and objective perspective; the willingness to engage management and each other in a constructive and collaborative fashion; the ability to devote significant time to serve on our board and its committees; and a commitment to representing the long-term interests of all our shareholders.

Name	Age	Position(s) Held	Director Since
Douglas Abel	48	Director, Chairman of the Board	2005
Neil Herskowitz	53	Director	2004
Michael McGuinness	56	Principal Operating and Financial Officer and Director	2010
Timothy McInerney	49	Director	2004
Malcolm Morville	64	Director	2010
David Shimko	50	Director	2010
Richard I. Steinhart	53	Director	2004

Douglas Abel served as our President and Chief Executive Officer from April 2005 until June 2009. Mr. Abel continues to serve as our Chairman of the Board. Mr. Abel has been a director of our company since 2005. Mr. Abel currently serves as General Manager for Onset Therapeutics LLC. Mr. Abel was President and CEO of Tarpan Therapeutics, Inc., a privately-held biopharmaceutical company, from November 2004 until April 2005, when Tarpan was acquired by us. Prior to becoming President and CEO of Tarpan, Mr. Abel served as Vice President of the Dermatology Business Unit at Biogen Idec where he worked from August 2000 to November 2004. While at Biogen, he led more than 100 employees to support the launch of AMEVIVE®. Before that, Mr. Abel was at Allergan Pharmaceuticals from December 1987 to August of 2000, with his most recent position being Director of BOTOX® Marketing. Mr. Abel received his A.B. in chemistry from Lafayette College and an M.B.A. from Temple University. Mr. Abel's qualifications to serve as a director include his 4 years of experience as our Chief Executive Officer, his experience as the CEO of Tarpan, his experience as a vice president at Biogen Idec, his A.B. degree in chemistry and his MBA degree. Serving as the CEO of Manhattan and Tarpan provided him with relevant perspective on the dynamics and challenges of small, specialty pharmaceutical companies. In addition, while at Biogen Idec he oversaw the successful growth and evolution of a business unit.

Neil Herskowitz has been a director of our company since July 2004. He has served as the Managing Member of ReGen Partners LLC, an investment fund located in New York, and as the President of its affiliate, Riverside Contracting LLC since June 1998. Mr. Herskowitz currently serves as a director of Innovive Pharmaceuticals (OTCBB: IVPH) a publicly traded pharmaceutical development company. He also serves on the board of directors of Starting Point Services for Children, a not-for-profit corporation, and of Vacation Village, a 220-unit development in Sullivan County, New York. Mr. Herskowitz received a B.B.A. in Finance from Bernard M. Baruch College in 1978. Mr. Herskowitz's qualifications to serve as a director include his executive positions with ReGen Partners and Riverside Contracting and his service as a director of another publicly traded company, Innovive Pharmaceuticals. Serving as an executive of two small companies, ReGen Partners and Riverside Contracting has provided him with relevant perspective on the dynamics and challenges of small companies. His service as a director for Innovive Pharmaceuticals has provided him with relevant perspective on the dynamics and challenges of small, publicly traded life science companies.

Michael G. McGuinness has been our Chief Financial Officer and Secretary since July 2006. Mr. McGuinness was appointed Chief Operating Officer on April 1, 2008. Mr. McGuiness has been a director of our company since March 2010. Prior to joining our company, Mr. McGuinness served as chief financial officer of Vyteris Holdings (Nevada), Inc. (OTCBB: VYHN), a product-based drug delivery company, from September 2001 to April 2006, and from 1998 to 2001 he was chief financial officer of EpiGenesis Pharmaceuticals, a privately-held biotechnology company. Mr. McGuinness received a BBA in public accounting from Hofstra University. Mr. McGuinness' qualifications to serve as a director include his three plus years of service as our Chief Financial Officer and his service as the chief financial officer of Vyteris and his BBA degree in public accounting. Serving as a chief financial officer of publicly traded companies for over eight years has provided him with relevant perspective on the dynamics and challenges of small, publicly traded life science companies.

Timothy McInerney has been a director of our company since July 2004. Mr. McInerney serves as a partner at Riverbank Capital Securities, Inc., a position he has held since June 2007. Mr. McInerney currently serves on the board of directors of ZIOPHARM Oncology Inc. (NASDAQ: ZIOP). From 1992 to March 2007, Mr. McInerney was a Managing Director of Paramount BioCapital, Inc. where he oversaw the overall distribution of Paramount's private equity product. Prior to 1992, Mr. McInerney was a research analyst focusing on the biotechnology industry at Ladenburg, Thalman & Co. Prior to that, Mr. McInerney held equity sales positions at Bear, Stearns & Co. and Shearson Lehman Brothers, Inc. Mr. McInerney also worked in sales and marketing for Bristol-Myers Squibb. He received his B.S. in pharmacy from St. John's University at New York. He also completed a post-graduate residency at the New York University Medical Center in drug information systems. Mr. McInerney's qualifications to serve as a director include his executive positions with Riverbank Capital and Paramount, his service as a director of another publicly traded company, ZIOPHARM, his service as a research analyst at Ladenburg Thalman and his B.S. degree in pharmacy. Serving as an executive of two financial firms that specialize in small cap companies, Riverbank Capital and Paramount, and serving on the board of directors for ZIOPHARM has provided him with relevant perspective on the dynamics and challenges of small, publicly traded companies.

Malcolm Morville, Ph.D., has been a director of our company since March 2010. Dr. Morville serves as President and CEO of Ariston, which as a result of the merger is a wholly-owned subsidiary of our company. Dr. Morville was appointed President and CEO of Ariston in December 2003 and served as a director of Ariston until the consummation of our merger with Ariston. From 1970 to 1988, Dr. Morville was employed by Pfizer, both in the U.K. and U.S., in the discovery, development and marketing of many drugs and potential drugs for the treatment of neurology and central nervous system disorders, infectious, immunological, respiratory, cardiovascular and gastrointestinal diseases as well as diabetes and obesity. From 1988 to 1993, he held senior executive management positions at Immulogic Pharmaceuticals Corporation, a public biotechnology company. From 1993 to 2003, Dr. Morville was President and CEO and a director of Phytera, Inc., a private biotechnology corporation. He remains a director of Phytera. From 1993 to 2009, Dr. Morville was a director of Indevus Pharmaceuticals, Inc. (formerly Interneuron Pharmaceuticals, Inc.) a public biopharmaceutical company which was acquired by Endo Pharmaceuticals Holdings, Inc. in March, 2009. Dr. Morville received his B.Sc. and Ph.D. in biochemistry from the University of Manchester Institute of Science and Technology in the U.K. Dr. Morville's qualifications to serve as a director include his service as the CEO of Ariston, his service as the CEO of Phytera, his service as an executive with Immulogic Pharmaceuticals, his service in the discovery, development and marketing functions for Pfizer and his Ph. D. in biochemistry. Serving as an executive for Ariston, Phytera and Immulogic Pharmaceuticals has provided Dr. Morville with relevant perspective on the dynamics and challenges of life science companies. His service at Pfizer has provided Dr. Morville with relevant perspective on the dynamics and challenges of the development and marketing of pharmaceutical products

David Shimko, Ph.D., was appointed a director of our company in March 2010. Mr. Shimko served as a director of Ariston until the consummation of our merger with Ariston. Mr. Shimko co-founded Risk Capital Management Partners LLC, an independent risk management consulting firm with a specialization in financial risk, and served as its President until it was acquired by Towers Perrin in June 2006. Mr. Shimko provided transition services to Towers Perrin in connection with its acquisition of Risk Capital Management through December 2007. Since the acquisition, Mr. Shimko has continued to act as an independent risk management consultant and has served as President of Winhall LLC. Mr. Shimko received his Ph.D. in finance from Northwestern University. Mr. Shimko's qualifications to serve as a director include his service on the board of directors of Ariston, his service as an executive at Risk Capital and Winhall and his Ph.D. in economics. Serving as on the board of directors of Ariston and serving as an executive for Risk Capital and Winhall has provided Mr. Shimko with relevant perspective on the dynamics and challenges of small companies. His Ph.D. in economics and his service as an executive with two companies provided Mr. Shimko with the relevant perspective on the dynamics and challenges of the audit committee of small, publicly traded companies.

Richard I. Steinhart has been a director of our company since July 2004. Since April 2006, Mr. Steinhart has served as Chief Financial Officer of Electro-Optical Sciences, Inc., a publicly-held medical device company. From May 1992 to April 2006, Mr. Steinhart was principal of Forest Street Capital, a boutique investment banking, venture capital, and management consulting firm. Prior to Forest Street Capital, from May 1991 to May 1992, he was the Vice President and Chief Financial Officer of Emisphere Technologies, Inc., a publicly held biopharmaceutical company that is working to develop and commercialize a proprietary oral drug delivery system. Prior to joining Emisphere Technologies, Mr. Steinhart spent seven years at CW Group, Inc., a venture capital firm focused on medical and healthcare investments, where he was a General Partner and Chief Financial Officer. Mr. Steinhart has previously served as a director of a number of privately-held companies, including ARRIS Pharmaceuticals, Inc., a biotechnology company involved with rational drug design; Membrex, Inc., a laboratory equipment manufacturing company; and Photest, Inc., a diagnostics company. He began his career working as a certified public accountant and continues to be a New York State Certified Public Accountant. Mr. Steinhart holds a Bachelors of Business Administration and Masters of Business Administration from Pace University. Mr. Steinhart's qualifications to serve as a director include his service as Chief Financial Officer of Electro-Optical Sciences, as a director include his service principal of Forest Street Capital, as Chief Financial Officer of Emisphere Technologies, Inc., and his Certified Public Accounting license. Serving as a chief financial officer of two life science publicly traded companies, Electro-Optical and Emisphere, and serving as executive of a financial firm that specialize in small cap companies has provided Mr. Steinhart with relevant perspective on the dynamics and challenges of small, life science, publicly traded companies. His service as a chief financial officer of two public companies and his Certified Public Accounting license provided Mr. Steinhart with the relevant perspective on the dynamics and challenges of the audit committee of small, publicly traded companies.

There are no family relationships among any of our executive officers, directors and key employees.

Independence of the Board of Directors

Our common stock has not been listed on a national securities exchange since we voluntarily de-listed our shares from the American Stock Exchange, or AMEX, effective March 26, 2008 and therefore, we are not subject to any corporate governance requirements regarding independence of board or committee members. However, we have chosen the definition of independence contained in the AMEX rules as a benchmark to evaluate the independence of its directors. Under the AMEX listing standards, an "independent director" of a company means a person who is not an officer or employee of the company or its subsidiaries and who the board of directors has affirmatively determined does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. After review of all relevant transactions or relationships between each director, or any of his family members, and our company, our senior management and our independent registered public accounting firm, the Board has determined that all of our directors are independent directors within the meaning of the applicable AMEX listing standard, except for Mr. Abel, our former President and Chief Executive Officer, Mr. McGuinness, our Chief Operating and Financial Officer and Dr. Morville, President and CEO of our wholly owned subsidiary Ariston.

Board Committees

The Board of Directors has three standing committees: an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. The following table provides membership for each of the Board committees:

Name of Committee	**Membership**
Audit	Messrs. Herskowitz, Shimko and Steinhart (Chair)
Compensation	Messrs. Shimko, Steinhart and McInerney (Chair)
Nominating and Governance	Messrs. Herskowitz, McInerney and Abel (Chair)

Audit Committee

The Audit Committee oversees our accounting and financial reporting process. For these purposes, the Audit Committee performs several functions. For example, the Committee evaluates and assesses the qualifications of the independent registered public accounting firm; determines the engagement of the independent registered public accounting firm; determines whether to retain or terminate the existing independent registered public accounting firm; reviews and approves the retention of the independent registered public accounting firm to perform any non-audit services; reviews the financial statements to be included in our Annual Report on Form 10-K; and discusses with management and the independent registered public accounting firm the results of the annual audit and the results of our quarterly financial statements. The Board of Directors adopted a written Audit Committee Charter, a copy of which can be found on our company website at www.manhattanpharma.com.

Our Board of Directors has reviewed the definition of independence for Audit Committee members and has determined that each member of our Audit Committee is independent (as independence for audit committee members is currently defined under applicable SEC rules and the relevant AMEX listing standards. The Board has further determined that Mr. Steinhart qualifies as an “audit committee financial expert,” as defined by applicable rules of the SEC.

Compensation Committee

The Compensation Committee of the Board of Directors oversees our compensation policies, plans and programs. The Compensation Committee reviews and approves corporate performance goals and objectives relevant to the compensation of our executive officers and other senior management; reviews and recommends to the Board the compensation and other terms of employment of our Chief Executive Officer and our other executive officers; administers our equity incentive and stock option plans; and makes recommendations to the Board concerning the issuance of awards pursuant to those plans. All current members of the Compensation Committee are independent (as independence is currently defined under applicable AMEX listing standards). The Board of Directors has adopted a written charter of the Compensation Committee, a copy of which can be found on our company website at www.manhattanpharma.com.

Nominating and Governance Committee

The Nominating and Governance Committee considers and recommends to the Board persons to be nominated for election by the stockholders as directors. In addition to nominees recommended by directors, the Nominating and Governance Committee will consider nominees recommended by stockholders if submitted in writing to our Secretary at the address of Company’s principal offices. The Board believes that any candidate for director, whether recommended by stockholders or by the Board, should be considered on the basis of all factors relevant to the needs of our company and the credentials of the candidate at the time the candidate is proposed. Such factors include relevant business and industry experience and demonstrated character and judgment. All current members of the Nominating and Governance Committee, except for Mr. Abel who serves as Chair of the Nominating and Corporate Governance Committee are independent (as independence is currently defined under applicable AMEX listing standards). The Board of Directors adopted a written charter of the Nominating and Governance Committee, a copy of which can be found on our company website at www.manhattanpharma.com.

Communication with the Board of Directors

Although we have not adopted a formal process for stockholder communications with our Board of Directors, we believe stockholders should have the ability to communicate directly with the Board so that their views can be heard by the Board or individual directors, as applicable, and that appropriate and timely responses are provided to stockholders. All communications regarding general matters should be directed to our Secretary at the address below and should prominently indicate on the outside of the envelope that it is intended for the complete Board of Directors or for any particular director(s). If no designation is made, the communication will be forwarded to the entire board. Stockholder communications to the Board should be sent to: Corporate Secretary, Attention: Board of Directors (or name(s) of particular directors), Manhattan Pharmaceuticals, Inc., 48 Wall Street, New York, NY 10005.

Code of Ethics

We have adopted a Code of Business Conduct and Ethics that applies to all officers, directors and employees of our company. A copy of our Code of Business Conduct and Ethics is available on our company's website at www.manhattanpharma.com. If we make any substantive amendments to the Code of Business Conduct and Ethics or grant any waiver from a provision of the code to an executive officer or director, we will promptly disclose the nature of the amendment or waiver by filing with the SEC a current report on Form 8-K.

Executive Officers

Set forth below are the names, ages and titles of all of our executive officers as of March 23, 2010. All directors hold office until the next annual meeting of stockholders or until their respective successors are elected and qualified.

Name	Age	Position
Michael G. McGuinness	56	Chief Operating and Financial Officer & Secretary

The biographies of our executive officers are set forth below.

Michael G. McGuinness has been our Chief Financial Officer and Secretary since July 2006. His complete biography is set forth above under the caption "Management - Directors."

None of our executive officers is related to any other executive officer or to any of our directors.

Summary Compensation of Executive Officers

The following table sets forth all of the compensation awarded to, earned by or paid to (i) each individual serving as our principal executive officer during our last completed fiscal year and (ii) the two most highly compensated executive officers, other than the principal executive officer, that served as an executive officer at the conclusion of the fiscal year ended December 31, 2009 and who received total compensation in excess of $100,000 during such fiscal year (collectively, the "named executives").

Name and Principal Position	Year	Salary	Bonus	Option Awards	Non-equity Incentive Plan Compensation	Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
Douglas Abel (1)	2009	$ 164,053	—	$ 129,571(3)	—	—	$ 30,896(2)	$ 324,520
Chief Executive Officer and President	2008	$ 338,750	—	$ 153,244(3)	—	—	$ 34,000(2)	$ 525,994
Michael McGuinness	2009	$ 277,500	—	$ 145,576(3)	—	—	$ 9,800(4)	$ 432,876
Chief Operating and Financial Officer, Secretary	2008	$ 263,750	—	$ 199,274(3)	—	—	$ 9,000(4)	$ 472,024

(1) Mr. Abel's employment with us ended effective June 15, 2009. Mr. Abel continues to serve as our Chairman of the Board.

(2) For 2009 represents consulting fees of $25,000 and a matching contributions by us pursuant to our company's 401(k) retirement plan of $5,896. For 2008 represents a payment in the amount of $25,000, which amount represents the approximate amount of additional expense incurred by Mr. Abel relating to his commuting between Boston and New York, without a tax "gross up", and a matching contributions by us pursuant to our company's 401(k) retirement plan of $9,000.

(3) Represents the amount of share-based costs recognized by us during 2009 and 2008 under FASB ASC 718. See Notes to our Financial Statements included in our annual reports for 2009 and 2008 on Form 10-K for the assumptions made in the valuation.

(4) Represents matching contributions by us pursuant to our company's 401(k) retirement plan.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information regarding the unexercised options held by each of our named executive officers as of December 31, 2009.

	Option Awards			
Name	**Number of Securities Underlying Unexercised Options (#) Exercisable**	**Number of Securities Underlying Unexercised Options (#) Unexercisable**	**Option Exercise Price ($)**	**Option Expiration Date**
Douglas Abel	1,300,000	0	$ 0.17	03/25/2018
Michael McGuinness	220,000	0	$ 0.70	07/10/2016
	60,000	0	$ 1.35	07/10/2016
	213,334	106,666	$ 0.95	04/25/2017
	733,334	366,666	$ 0.17	03/25/2018

Employment Agreements

Douglas Abel. Mr. Abel's employment with us was governed by an employment agreement from April 1, 2005 to June 15, 2009. Mr. Abel's employment with us ended on June 15, 2009. The agreement provided for Mr. Abel to serve as our President and Chief Executive Officer for (i) an annual base salary of $300,000, subject to a retroactive increase in the amount of $25,000 upon our completing a financing transaction of at least $5,000,000, (ii) a signing bonus in the amount of $200,000, which was payable in two installments during the first year of the agreement, (iii) a discretionary performance-based bonus in an amount equal to up to 50% of Mr. Abel's base salary, and (iv) an option to purchase 2,923,900 shares of our common stock at $1.50 per share with three-year annual vesting, purchasable for a 10-year term. In accordance with the terms of his employment agreement and as a result of our private placement financing that we completed in August 2005, Mr. Abel's salary was increased to $325,000 retroactive to April 1, 2005. On November 19, 2008, at the first closing of our Secured 12% Notes private placement, we entered an amendment to the employment agreement, which provide for a reduction of up to one-third of the salary payable to Mr. Abel until we shall have received at least $2,500,000 of gross proceeds from the sale of the units or other sales of securities or from other revenue received by us in the operation of our business or any combination of the foregoing.

The employment agreement contained customary provisions relating to confidentiality, work-product assignment, non-competition and non-solicitation. In the event Mr. Abel's employment is terminated by us (other than for cause) during the term of the agreement, including a termination upon a change of control (as defined in the agreement), we are required to pay a severance payment ranging from between 6 and 12 month of base salary, depending upon the circumstances of such termination. No severance was paid or payable upon Mr. Abel's termination.

Michael G. McGuinness. Mr. McGuinness' employment with us was governed by an employment agreement from July 7, 2006 to July 6, 2009. Mr. McGuinness continued working for us without an employment agreement since July 7, 2009 on the same terms and conditions that were set forth in the employment agreement that expired. The agreement provided for an initial three-year term of employment ending July 2009, subject to additional one-year renewal periods upon the mutual agreement of the parties. Pursuant to the agreement, Mr. McGuinness was entitled to an annual base salary of $205,000 and an annual bonus, payable in the discretion of our Board, of up to 30 percent of his annual base salary. Mr. McGuinness was also entitled to certain other fringe benefits that are made available to our senior executives from time to time, including medical and dental insurance and participation in our 401(k) plan. On November 19, 2008, at the first closing of our Secured 12% Notes private placement, we entered an amendment to the employment agreement, which provide for a reduction of up to one-third of the salary payable to Mr. McGuinness until we shall have received at least $2,500,000 of gross proceeds from the sale of the units or other sales of securities or from other revenue received by us in the operation of our business or any combination of the foregoing.

In addition, in accordance with the terms of the employment agreement, we issued to Mr. McGuinness two 10-year stock options pursuant to our 2003 Stock Option Plan. The first option relates to 220,000 shares of common stock and is exercisable at a price of $0.70, the closing price of our common stock on the date of his employment agreement. The second option relates to 60,000 shares and is exercisable at a price of $1.35 per share. Both options vest in three annual installments commencing July 10, 2007. To the extent Mr. McGuinness' employment with us is terminated prior to the end of such 10-year term, the options shall remain exercisable for a period of 90 days.

Mr. McGuinness' employment agreement further provided that in the event we terminate his employment with us other than as a result of death, for "cause," "disability" or upon a "change of control" (as those terms are defined in the agreement), then (1) Mr. McGuinness would continue receiving his base salary and fringe benefits for a period of six months following such termination, provided, that our obligation to pay such compensation shall be offset by any amounts received by Mr. McGuinness from subsequent employment during such 6-month period, and (2) the vesting of the stock options issued to Mr. McGuinness in accordance with the employment agreement will accelerate and be deemed vested as of the date of termination and will remain exercisable for a period of 90 days following such termination. In the event we terminate Mr. McGuinness' employment during the term of the agreement upon a "change of control" and, if at the time of such termination, the aggregate value of our outstanding common stock is less than $80 million, then (i) Mr. McGuinness will continue receiving his base salary and fringe benefits for a period of six months following such termination and (ii) the portions of the stock options issued in accordance with the employment agreement that have vested as of the date of such termination or that are scheduled to vest in the calendar year of such termination will be deemed vested and will remain exercisable for a period of 90 days following such termination.

Compensation of Directors

Non-employee directors are eligible to participate in our Non-employee Director Compensation Arrangement, which was adopted on January 30, 2007. Under the arrangement, non-employee directors are granted an option to purchase 50,000 shares of common stock upon their initial election or appointment to the board. Thereafter on an annual basis, non-employee directors are entitled to an option to purchase 50,000 shares of common stock. Each non-employee director is entitled to a retainer of $20,000 per year, payable on a quarterly basis. In addition, each such director shall be entitled to a fee of $1,000 for each meeting of the Board attended in person, or $500 for attending a meeting by telephone or other electronic means. Each non-employee director serving on a committee of the Board is entitled to a fee of $1,000 for each meeting of such committee attended by such director in person, or $500 for attending a committee meeting by telephone or other electronic means. Each non-employee director is also entitled to reimbursement for reasonable out-of-pocket expenses incurred in connection with the performance of his service as a director, including without limitation, travel related expenses incurred in connection with attendance at Board or Board committee meetings.

Due to our need to retain funds for our operations payment of cash fees to our directors were suspended for all periods subsequent to March 31, 2008.

The following table shows the compensation earned by each of our non-employee directors for the year ended December 31, 2009:

Name	Fees Earned or Paid in Cash	Option Awards (1)	All Other Compensation	Total
Neil Herskowitz (3)	$ -	$ 10,809	$ -	$ 10,809
Malcolm Hoenlein (2),(4)	$ -	$ 10,809	$ -	$ 10,809
Timothy McInerney (5)	$ -	$ 10,809	$ -	$ 10,809
Richard Steinhart (6)	$ -	$ 10,809	$ -	$ 10,809
Michael Weiser (2), (7)	$ -	$ 10,809	$ -	$ 10,809

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(1) Represents the amount of share-based costs recognized by us during 2009 under FASB ASC 718. See Notes to our Financial Statements included in our annual report for 2009 on Form 10-K for the assumptions made in the valuation**.**

(2) Messrs. Hoenlein and Weiser resigned from the Board of Directors upon the consummation of the merger with Ariston Pharmaceuticals, Inc. on March 8, 2010.

(3) As of March 27, 2010, Mr. Herskowitz had options to purchase an aggregate of 516,010 shares of our common stock.

(4) As of March 27, 2010, Mr. Hoenlein had options to purchase an aggregate of 466,010 shares of our common stock.

(5) As of March 27, 2010, Mr. McInerney had options to purchase an aggregate of 550,000 shares of our common stock.

(6) As of March 27, 2009, Mr. Steinhart had options to purchase an aggregate of 516,010 shares of our common stock.

(7) As of March 27, 2009, Mr. Weiser had options to purchase an aggregate of 480,000 shares of our common stock.

Compensation Committee Interlocks and Insider Participation

There were no interlocks or other relationships with other entities among our executive officers and directors that are required to be disclosed under applicable SEC regulations relating to compensation committee interlocks and insider participation.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding ownership of shares of our common stock, as of June 18, 2010:

- by each person known by us to be the beneficial owner of 5% or more
- of our common stock;
- by each of our directors and executive officers; and
- by all of our directors and executive officers as a group.

Except as otherwise indicated, each person and each group shown in the table has sole voting and investment power with respect to the shares of common stock indicated. For purposes of the table below, in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended, a person is deemed to be the beneficial owner, of any shares of our common stock over which he or she has or shares, directly or indirectly, voting or investment power or of which he or she has the right to acquire beneficial ownership at any time within 60 days. As used in this prospectus, "voting power" is the power to vote or direct the voting of shares and "investment power" includes the power to dispose or direct the disposition of shares. Common stock beneficially owned and percentage ownership as of June 18, 2010 was based on 120,965,260 shares outstanding. Unless otherwise indicated, the address of each beneficial owner is c/o Manhattan Pharmaceuticals, Inc., 48 Wall Street, New York, NY 10005.

Name of Beneficial Owners, Officers and Directors	Number of Shares Beneficially Owned (#)	Percentage Beneficially Owned (%)
Douglas Abel (1)	1,379,000	1.13%
Neil Herskowitz (2)	725,457	0.60%
Michael McGuinness (3)	2,734,000	2.21%
Timothy McInerney (4)	1,313,870	1.07%
Malcolm Morville	211,568	0.17%
David Shimko	42,313	0.03%
Richard Steinhart (5)	471,643	0.39%
All directors and officers as a group (6) (7 persons)	6,877,851	5.38%
Lester Lipschutz (7) 1650 Arch Street, Philadelphia, PA 19103	8,943,362	6.88%
Lindsay Rosenwald (8) 787 Seventh Avenue, New York, NY 10019	13,286,043	9.90%
Nordic Biotech Venture Fund II K/S (9)* Ostergrade 5, DK-1100, Copenhagen K, Denmark	85,714,285	41.47%

***** In April 2010, Nordic filed a Schedule 13D/A (the “Nordic Amended 13D”). We are not in agreement with the disclosure set forth in the Nordic Amended 13D and have written a letter to Nordic explaining our disagreements. The Nordic Amended 13D shows an aggregate number of shares of our common stock beneficially owned by Nordic as 216,666,666, or 65.5%. We believe the correct beneficial ownership is 85,714,285 shares, or 41.47%. The Nordic Amended 13D states that Nordic does not believe our determination of the anti-dilution shares accruing to Nordic as a result of the 2010 Private Placement was neither reasonable nor made in good faith. As we have previously stated we believe our determination was both reasonable and made in good faith. The Nordic Amended 13D further states that Nordic acquired the right to purchase an additional 5,555,556 shares of our common stock upon exercise of the Nordic Put as a result of Nordic’s making an additional investment in the Hedrin JV of $500,000 in January 2010. We are not in agreement with this claim, we do not believe that Nordic is required to any adjustment to Nordic’s Put as a result of Nordic making additional capital contributions to the Hedrin JV. In the letter to Nordic we note that Nordic’s valuation suggestions for the warrants issued in the 2010 Private Placement ignores the concept of relative value inherent in the Hedrin JV Agreement.

(1) Includes 1,300,000 shares issuable upon exercise of vested portions of options and 24,000 shares issuable upon exercise of warrants.

(2) Includes 466,010 shares issuable upon exercise of vested portions of options, and 43,444 shares issuance upon exercise of warrants; 138,951 shares held by Riverside Contracting, LLC, a limited liability company of which Mr. Herskowitz is a member holding 50% ownership and 44,168 shares held by ReGen Capital II, LLC, a limited liability company of which Mr. Herskowitz is a member holding 50% ownership.

(3) Includes 2,700,000 shares issuable upon the exercise of vested portions of options and 24,000 shares issuable upon exercise of warrants.

(4) Includes 500,000 shares issuable upon exercise of vested portions of options; and 139,863 shares issuable upon exercise of warrants.

(5) Includes 466,010 shares issuable upon exercise of vested portions of options.

(6) Includes 5,432,020 shares issuable upon exercise of vested portions of options; 231,307 shares issuable upon the exercise of warrants; 138,951 shares held by Riverside Contracting, LLC, a limited liability company of which Mr. Herskowitz is a member holding 50% ownership and 44,168 shares held by ReGen Capital II, LLC, a limited liability company of which Mr. Herskowitz is a member holding 50% ownership.

(7) Includes 8,943,362 shares of Common Stock held by separate trusts for the benefit of Dr. Rosenwald or his family with respect to which Mr. Lipschutz is either trustee or investment manager and in either case has investment and voting power. Mr. Lipschutz disclaims beneficial ownership of these shares, except to the extent of his pecuniary interest therein, if any. The foregoing information is derived from a Schedule 13G filed on behalf of the reporting person on August 1, 2007

(8) Includes 6,920,516 shares held directly by Dr. Rosenwald, 6,320,163 shares issuable upon the exercise of warrants, 80 shares held by the Dr. Rosenwald's wife, over which Dr. Rosenwald may be deemed to have sole voting and dispositive power, although he disclaims beneficial ownership of such shares except with regard to his pecuniary interest therein, if any, 33 shares held by Dr. Rosenwald’s children, over which Dr. Rosenwald may be deemed to have sole voting and dispositive power, although he disclaims beneficial ownership of such shares except with regard to his pecuniary interest therein, if any, and 45,251 shares held by Paramount Biosciences LLC, of which Dr. Rosenwald is the sole member. The foregoing information is derived from a Schedule 13G/A filed on behalf of the reporting person on March 8, 2010.

(9) Includes 71,428,571 shares issuable upon exercise of Nordic's right to put up to 50% of the equity interest in H Pharmaceuticals K/S (formerly Hedrin Pharmaceuticals K/S), a Danish limited partnership, of which we and Nordic Biotech Venture Fund II K/S are partners, held by Nordic and 14,285,714 shares issuable upon exercise of an outstanding warrant held by Nordic. Florian Schonharting and Christian Hansen have voting and investment control over such securities.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Hedrin JV

We and Nordic Biotech Venture Fund II K/S, or Nordic, entered into a joint venture agreement on January 31, 2008, which was amended on February 18, 2008 and on June 9, 2008. Pursuant to the joint venture agreement, in February 2008, (i) Nordic contributed cash in the amount of $2.5 million to H Pharmaceuticals K/S, a newly formed Danish limited partnership, or the Hedrin JV, in exchange for 50% of the equity interests in the Hedrin JV, and (ii) we contributed certain assets to North American rights (under license) to our Hedrin product to the Hedrin JV in exchange for $2.0 million in cash and 50% of the equity interests in the Hedrin JV. On or around June 30, 2008, in accordance with the terms of the joint venture agreement, Nordic contributed an additional $1.25 million in cash to the Hedrin JV, $1.0 million of which was distributed to us and equity in the Hedrin JV was distributed to each of us and Nordic sufficient to maintain our respective ownership interests.

Pursuant to the joint venture agreement, upon the classification by the U.S. Food and Drug Administration, or the FDA, of Hedrin as a Class II or Class III medical device, Nordic was required to contribute to the Hedrin JV an additional $1.25 million in cash, $0.5 million of which was to be distributed to us and equity in the Hedrin JV was to be distributed to each of us and Nordic sufficient to maintain our respective ownership interests. The FDA notified the Hedrin JV that Hedrin has been classified as a Class III medical device and in February 2009, Nordic made the $1.25 million investment in the Hedrin JV, the Hedrin JV made the $0.5 million milestone payment to us and equity in the Hedrin JV was distributed to us and Nordic sufficient to maintain our respective ownership interests. In accordance with the terms of the joint venture agreement, the Hedrin JV has received a total of $1.5 million cash to be applied toward the development and commercialization of Hedrin in North America.

The Hedrin JV is responsible for the development and commercialization of Hedrin for the North American market and all associated costs including clinical trials, if required, regulatory costs, patent costs, and future milestone payments owed to Thornton & Ross Ltd., or T&R, the licensor of Hedrin. The Hedrin JV engaged us to provide management services to the Hedrin JV in exchange for a management fee, which for 2010, on an annualized basis, is $300,000. The profits of the Hedrin JV will be shared by us and Nordic in accordance with our respective equity interests in the Hedrin JV, of which Nordic currently holds 52.38% and we currently hold 47.62%, except that Nordic is entitled to receive a minimum return each year from the Hedrin JV equal to 6% on Hedrin sales, as adjusted for any change in Nordic’s equity interest in the Hedrin JV, before any distribution is made to us. If the Hedrin JV realizes a profit in excess of the Nordic minimum return in any year, then such excess shall first be distributed to us until our distribution and the Nordic minimum return are in the same ratio as our respective equity interests in the Hedrin JV and then the remainder, if any, is distributed to Nordic and us in the same ratio as our respective equity interests. However, in the event of a liquidation of the Hedrin JV, Nordic’s distribution in liquidation must equal the amount Nordic invested in the Hedrin JV ($5.5 million) plus 10% per year, less the cumulative distributions received by Nordic from the Hedrin JV before any distribution is made to us. If the Hedrin JV’s assets in liquidation exceed the Nordic liquidation preference amount, then any excess shall first be distributed to us until our distribution and the Nordic liquidation preference amount are in the same ratio as our respective equity interests in the Hedrin JV and then the remainder, if any, is distributed to Nordic and us in the same ratio as our respective equity interests. Further, in no event shall Nordic’s distribution in liquidation be greater than assets available for distribution in liquidation.

Pursuant to the terms of the joint venture agreement, Nordic has the right to nominate one person for election or appointment to our board of directors. The Hedrin JV's board of directors consists of four members, two members appointed by us and two members appointed by Nordic. Nordic has the right to appoint one of the directors as chairman of the board. The chairman has certain tie breaking powers.

Pursuant to the joint venture agreement, Nordic has the right to put up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic in exchange for such number of shares of our common stock equal to the amount of Nordic’s investment in the Hedrin JV divided by $0.14, as adjusted from time to time for stock splits and other specified events, multiplied by a conversion factor, which is (i) 1.00 for so long as Nordic's distributions from the Hedrin JV are less than the amount of its investment, (ii) 1.25 for so long as Nordic's distributions from the Hedrin JV are less than two times the amount of its investment but greater than or equal to the amount of its investment amount, (iii) 1.50 for so long as Nordic's distributions from the Hedrin JV are less than three times the amount of its investment but greater than or equal to two times the amount of its investment amount, (iv) 2.00 for so long as Nordic's distributions from the Hedrin JV are less than four times the amount of its investment but greater than or equal to three times the amount of its investment amount and (v) 3.00 for so long as Nordic’s distributions from Hedrin JV are greater than or equal to four times the amount of its investment. The put right expires upon the earlier to occur of (i) February 25, 2018 and (ii) 30 days after the date when Nordic's distributions from the Hedrin JV exceed five times the amount Nordic has invested in the Hedrin JV (or 10 days after such date if we have provided Nordic notice thereof).

Pursuant to the joint venture agreement, we have the right to call up to a 50% of the equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic in exchange for such number of shares of our common stock equal to the portion of Nordic's investment in the Hedrin JV (not to exceed $5 million) that we call by the dollar amount of Nordic's investment in the Hedrin JV up to $5 million, divided by $0.07, as adjusted for the 2010 Private Placement, and as further adjusted from time to time for stock splits and other specified events. The call right is only exercisable by us if the price of our common stock has closed at or above $1.40 per share for 30 consecutive trading days. During the first 30 consecutive trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 25% of the call right. During the second 30 consecutive trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 50% of the call right on a cumulative basis. During the third consecutive 30 trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 75% of the call right on a cumulative basis. During the fourth consecutive 30 days in which our common stock closes at or above $1.40 per share, we may exercise up to 100% of the call right on a cumulative basis. Nordic may refuse the call, either by paying $1.5 million multiplied by the percentage of Nordic's investment being called or forfeiting an equivalent portion of the put right, calculated on a pro rata basis for the percentage of the Nordic equity interest called by us. The call right expires on February 25, 2013. For purposes of Nordic’s right to put, and our right to call, up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic, the amount of Nordic’s investment is $5,000,000.

As per the limited partnership agreement between us and Nordic, in the event that a limited partner in the Hedrin JV determines, in its reasonable goods faith discretion, that the Hedrin JV requires additional capital for the proper conduct of its business that limited partner shall provide each limited partner with a written request for contribution of such limited partner’s proportionate share, in accordance to the then respective equity ownership in the Hedrin JV, of such requested additional capital amount.

As per the terms of the limited partnership agreement, if a limited partner declines to so contribute, elects to contribute but thereafter fails to do so timely, or elects to contribute and timely does contribute some, but not all of, its proportionate share of the requested additional capital amount, the other limited partner shall have the option to contribute the remaining balance of such requested additional capital amount.

As per the terms of the limited partnership agreement the general partner shall determine the fair market value of the shares for purposes of determining how to allocate the number of shares of the Hedrin JV to be issued in consideration for the contribution of capital. If the general partner is unable to determine the fair market value of the shares, the fair market value for the shares shall be determined in good faith by the contributing limited partner if such amount is equal to or greater than the most recent valuation of such Hedrin JV shares.

On December 31, 2009, Nordic delivered a written notice to us for a $1,000,000 capital increase to the Hedrin JV. In January 2010, Nordic made its capital contribution to the Hedrin JV of $500,000. We did not have sufficient funds to make such a capital contribution within the required time period prescribed in the limited partnership agreement.

As the general partner was unable to determine the fair market value of the shares, Nordic, the contributing limited partner, determined in good faith that the fair market value of the shares was equal to the most recent valuation. The most recent valuation was the February 2009 investment of $1,500,000 into the Hedrin JV by Nordic at $5,000 per share. As a result of Nordic’s investing an additional $500,000 in the Hedrin JV the ownership percentages of the Hedrin JV have changed from 50% to Nordic and 50% for us to 52.38% to Nordic and 47.62% for us. In the event that Nordic exercises its option to invest the remaining $500,000 of the $1,000,000 capital increase then the ownership percentage shall change to 54.55% for Nordic and 45.45% for us.

In April 2010, Nordic filed a Schedule 13D/A (the "Nordic Amended 13D"). We are not in agreement with the disclosure set forth in the Nordic Amended 13D and have written a letter to Nordic explaining our disagreements. The Nordic Amended 13D shows an aggregate number of shares of our common stock beneficially owned by Nordic as 216,666,666, or 65.5%. We believe the correct beneficial ownership is 85,714,285 shares, or 41.47%. The Nordic Amended 13D states that Nordic does not believe our determination of the anti-dilution shares accruing to Nordic as a result of the 2010 Private Placement was neither reasonable nor made in good faith. As we have previously stated we believe our determination was both reasonable and made in good faith. The Nordic Amended 13D further states that Nordic acquired the right to purchase an additional 5,555,556 shares of our common stock upon exercise of the Nordic Put as a result of Nordic's making an additional investment in the Hedrin JV of $500,000 in January 2010. We are not in agreement with this claim, we do not believe that Nordic is required to any adjustment to Nordic's Put as a result of Nordic making additional capital contributions to the Hedrin JV. In the letter to Nordic we note that Nordic's valuation suggestions for the warrants issued in the 2010 Private Placement ignores the concept of relative value inherent in the Hedrin JV Agreement.

Issuance of Secured Promissory Notes and Warrants

On September 11, 2008, we issued a secured promissory note in the principal amount of $12,000 to each of Douglas Abel, our former President and Chief Executive Officer and currently a director of our company; Michael Weiser, a former director of our company (who was a director at the time such loans were made); Timothy McInerney, a director of our company; Neil Herskowitz, a director of our company, and Michael McGuiness, our Chief Financial Officer and Chief Operating Officer and a director of our company. Principal and interest on the notes were payable in cash on March 10, 2009 unless paid earlier by us. In connection with the issuance of the notes, we issued to each noteholder a 5-year warrant to purchase 24,000 shares of our common stock at an exercise price of $0.20 per share. We granted to the noteholders a continuing security interest in certain specific refunds, deposits and repayments due to us and expected to be repaid to us in the next several months. The secured 10% notes were repaid in February 2009 along with interest thereon.

Issuance of Common Shares and Warrants

On March 2, 2010, we raised aggregate gross proceeds of approximately $2,547,500 pursuant to a private placement of our securities. We entered into subscription agreements with seventy-seven accredited investors pursuant to which we sold an aggregate of 101.9 units for a purchase price of $25,000 per unit. Pursuant to the subscription agreements, we issued to each investor units consisting of (i) 357,143 shares of our common stock, $0.001 par value per share and (ii) 535,714 warrants, each of which will entitle the holder to purchase one additional share of our common stock for a period of five years at an exercise price of $0.08 per share. Dr. Lindsay Rosenwald, a more than 5% beneficial owner of our common stock, purchased 10 units for $250,000.

We believe that all of the transactions set forth above were made on terms no less favorable to us than could have been obtained from unaffiliated third parties. All such transactions have been reviewed by the audit committee of our Board of Directors and approved by them. All future transactions between us and our officers, directors and principal shareholders and their affiliates will be on terms no less favorable than could be obtained from unaffiliated third parties and will be approved by our audit committee or another independent committee of our Board of Directors.

DESCRIPTION OF SECURITIES TO BE REGISTERED

General

Our certificate of incorporation, as amended and restated to date, authorizes the issuance of up to 500,000,000 shares of common stock, par value $0.001 per share, and 10,000,000 shares of “blank check” preferred stock, par value $0.001 per share. In June 2008, our stockholders approved an amendment to our certificate of incorporation to increase the total number of shares of our common stock authorized to be issued from 150,000,000 shares to 300,000,000 shares. In November 2009, our stockholders approved an amendment to our certificate of incorporation to increase the total number of shares of our common stock authorized to be issued to from 300,000,000 shares to 500,000,000 shares.

As of June 18, 2010, there were 120,965,260 shares of our common stock and no shares of preferred stock issued and outstanding. As of such date, warrants to purchase up to 160,370,781 shares of our common stock and options to purchase up to 11,534,936 shares of our common stock were issued and outstanding.

Common Stock

Voting. The holders of our common stock are entitled to one vote for each outstanding share of common stock owned by that stockholder on every matter properly submitted to the stockholders for their vote. Stockholders are not entitled to vote cumulatively for the election of directors.

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

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

Conversion, Redemption and Preemptive Rights. Holders of our common stock have no conversion, redemption, preemptive, subscription or similar rights.

Preferred Stock

We are authorized to issue up to 10,000,000 shares of preferred stock, none of which are outstanding, with the Board of Directors having the right to determine the designations, rights, preferences and powers of each series of preferred stock. Accordingly, the Board of Directors is empowered, without shareholder approval, to issue preferred stock with voting, dividend, conversion, redemption, liquidation or other rights which may be superior to the rights of the holders of common stock and could adversely affect the voting power and other equity interests of the holders of common stock.

Warrants and Rights Granted in Connection with Joint Venture

Put or Call Right

Pursuant to our joint venture agreement with Nordic Biotech Venture Fund II K/S, or Nordic, which was entered into in January 31, 2008 and amended on February 18, 2008, Nordic has the right to put up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by it in exchange for such number of shares of our common stock equal to the amount of Nordic’s investment in the Hedrin JV (not to exceed $5 million) divided by $0.14, as adjusted from time to time for stock splits and other specified events, multiplied by a conversion factor, which is (i) 1.00 for so long as Nordic’s distributions from the Hedrin JV are less than the amount of its investment, (ii) 1.25 for so long as Nordic’s distributions from the Hedrin JV are less than two times the amount of its investment but greater than or equal to the amount of its investment amount, (iii) 1.50 for so long as Nordic’s distributions from the Hedrin JV are less than three times the amount of its investment but greater than or equal to two times the amount of its investment amount, (iv) 2.00 for so long as Nordic’s distributions from the Hedrin JV are less than four times the amount of its investment but greater than or equal to three times the amount of its investment amount and (v) 3.00 for so long as Nordic’s distributions from Hedrin JV are greater than or equal to four times the amount of its investment. The put right expires upon the earlier to occur of (i) February 25, 2018 and (ii) 30 days after the date when Nordic’s distributions from the Hedrin JV exceed five times the amount Nordic has invested in the Hedrin JV (or 10 days after such date if we have provided Nordic notice thereof).

Pursuant to the joint venture agreement, we have the right to call up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic in exchange for such number of shares of our common stock equal to the portion of Nordic's investment in the Hedrin JV (not to exceed $5 million) that we call by the dollar amount of Nordic's investment in the Hedrin JV up to $5 million, divided by $0.07, as adjusted for the 2010 Private Placement, and as further adjusted from time to time for stock splits and other specified events. The call right is only exercisable by us if the price of our common stock has closed at or above $1.40 per share for 30 consecutive trading days. During the first 30 consecutive trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 25% of the call right. During the second 30 consecutive trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 50% of the call right on a cumulative basis. During the third consecutive 30 trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 75% of the call right on a cumulative basis. During the fourth consecutive 30 days in which our common stock closes at or above $1.40 per share, we may exercise up to 100% of the call right on a cumulative basis. Nordic may refuse the call, either by paying $1.5 million multiplied by the percentage of Nordic's investment being called or forfeiting an equivalent portion of the put right, calculated on a pro rata basis for the percentage of the Nordic equity interest called by us. The call right expires on February 25, 2013. For purposes of Nordic's right to put, and our right to call, up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic, the amount of Nordic's investment is $5,000,000.

In April 2010, Nordic filed a Schedule 13D/A (the "Nordic Amended 13D"). We are not in agreement with the disclosure set forth in the Nordic Amended 13D and have written a letter to Nordic explaining our disagreements. The Nordic Amended 13D shows an aggregate number of shares of our common stock beneficially owned by Nordic as 216,666,666, or 65.5%. We believe the correct beneficial ownership is 85,714,285 shares, or 41.47%. The Nordic Amended 13D states that Nordic does not believe our determination of the anti-dilution shares accruing to Nordic as a result of the 2010 Private Placement was neither reasonable nor made in good faith. As we have previously stated we believe our determination was both reasonable and made in good faith. The Nordic Amended 13D further states that Nordic acquired the right to purchase an additional 5,555,556 shares of our common stock upon exercise of the Nordic Put as a result of Nordic's making an additional investment in the Hedrin JV of $500,000 in January 2010. We are not in agreement with this claim, we do not believe that Nordic is required to any adjustment to Nordic's Put as a result of Nordic making additional capital contributions to the Hedrin JV. In the letter to Nordic we note that Nordic's valuation suggestions for the warrants issued in the 2010 Private Placement ignores the concept of relative value inherent in the Hedrin JV Agreement.

Warrant

In connection with our joint venture agreement with Nordic Biotech Venture Fund II K/S, on February 25, 2008, Nordic paid us a non-refundable fee of $150,000 in exchange for the right to receive a warrant to purchase up to 7,142,857 shares of our common stock at $0.14 per share, as adjusted from time to time for stock splits and other specified events, if Nordic did not exercise all or part of its put right on or before April 30, 2008. As of April 30, 2008, Nordic had not exercised any portion of its put right and we issued the warrant to Nordic.

The warrant entitles the holder to purchase up to 7,142,857 shares of our common stock (the “Original Warrant Shares”) at an exercise price of $0.14 per share for a period of five (5) years commencing on the date of issuance. The warrant may be exercised in whole or in part from time to time during the exercise period (i) by the surrender of the warrant certificate to us, together with the payment of the purchase price for the shares to be purchased or (ii) on a cashless basis, by the surrender of the warrant certificate to us and the cancellation of a portion of the warrant in payment of the purchase price for the shares to be purchased. The Original Warrant Shares are the subject of this prospectus and the registration statement of which this prospectus is a part.

The holder of the warrant is protected against dilution of the equity interest represented by the underlying shares of our common stock upon the occurrence of certain events, including, but not limited to, issuance of stock dividends or stock splits. In addition, the warrant contains certain weighted average anti-dilution protections in the event that we issue shares of common stock or securities convertible into shares of common stock at less than the then-current exercise price per share, subject to exceptions for, among other things, issuance of (i) options pursuant to existing stock option plans or stock option plans approved by our outside directors, (ii) securities upon the exercise, exchange or conversion of outstanding securities, (iii) securities issued pursuant to acquisition or strategic transactions approved by the majority of disinterested directors and (iv) less than 50,000 shares, subject to adjustment for stock splits, combinations and the like, in the aggregate which do not meet any of the foregoing conditions.

Pursuant to such anti-dilution provisions, in February 2009 the number of shares underlying the warrant was increased by 3,968,254 shares of our common stock and in March 2010 the number of shares underlying the warrant was increased by 3,174,603 shares of our common stock (the “Additional Warrant Shares”) to a total of 14,285,714 and the price was adjusted to $0.07 per share. The warrant, as adjusted pursuant to its anti-dilution provisions, entitles the holder to purchase up to 14,285,714 shares of our common stock at an exercise price of $0.08 per share for a period of five (5) years commencing on the date of issuance. The warrant may be exercised in whole or in part from time to time during the exercise period (i) by the surrender of the warrant certificate to us, together with the payment of the purchase price for the shares to be purchased or (ii) on a cashless basis, by the surrender of the warrant certificate to us and the cancellation of a portion of the warrant in payment of the purchase price for the shares to be purchased.

Registration Rights

In connection with the joint venture agreement, we and Nordic entered into a registration rights agreement, on February 25, 2008, as modified pursuant to a letter agreement, dated September 17, 2008, pursuant to which we agreed to file with the Securities and Exchange Commission, or the SEC, by no later than 10 calendar days following the date on which our Annual Report on Form 10-K for the year ended December 31, 2007 is required to be filed with the SEC, which was subsequently waived by Nordic until May 1, 2008, an initial registration statement registering the resale by Nordic of any shares of our common stock issuable to Nordic through the exercise of the warrant or the put right. This registration statement was declared effective on October 15, 2008. We also have agreed to file with the SEC any additional registration statements which may be required no later than 45 days after the date we first know such additional registration statement is required; provided, however, that (i) in the case of the classification by the FDA of Hedrin as a Class II or Class III medical device described above and the payment in full by Nordic of the related final milestone payment of $1.25 million, the registration statement with respect to the additional shares of our common stock relating to such additional investment must be filed within 45 days after achievement of such classification; and (ii) in the event we provide Nordic with notice of exercise of our right to call up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic, a registration statement with respect to the shares of our common stock payable to Nordic in connection with such call right (after giving effect to any reduction in the number of such shares resulting from Nordic’s refusal of all or a portion of such call in accordance with the terms of our joint venture agreement) must be filed within 16 days after delivery of such notice to Nordic. If we fail to file a registration statement on time or if a registration statement is not declared effective by the SEC within 105 days of the required filing date, or if we fail to maintain the effectiveness of a registration statement or otherwise fail to diligently pursue registration with the SEC in accordance with the terms of the registration rights agreement, we will be required to pay as partial liquidated damages and not as a penalty, to Nordic or its assigns, an amount equal to 0.5% of the amount invested in the Hedrin JV by Nordic pursuant to the joint venture agreement per month until the registration rights agreement is declared effective by the SEC; provided, however, that in no event shall the aggregate amount payable by us exceed 9% of the amount invested in the Hedrin JV by Nordic under the joint venture agreement.

On June 2, 2009, we filed an additional registration statement on Form S-1 with the SEC registering the additional 28,769,841 shares of our common stock that may be issued to Nordic upon exercise of a put right held by Nordic as a result of Nordic's additional investment of $1.25 million in Hedrin JV pursuant to the terms of tour agreement with Nordic and as adjusted pursuant to the anti-dilution provisions of the put right (the "Put Shares") and the additional 3,968,254 shares issuable upon exercise of an outstanding warrant held by Nordic. The SEC has informed us that we may not register the Put Shares for resale until Nordic exercises its put right and such shares of common stock are outstanding. Further, although we diligently pursued registration with the SEC, such registration statement was not declared effective within 105 days of the required filing date. We have withdrawn such registration statement in light of the SEC staff's position that the shares of common stock underlying Nordic's put right cannot be registered because such shares are not outstanding and do not underlie a currently outstanding convertible security.

Warrants Issued in Connection with 2008/2009 Private Placement

Warrants

On February 3, 2009, we completed a private placement of 345 units, with each unit consisting of a 12% senior secured note promissory note in the principal amount of $5,000 and a warrant to up to 166,667 shares of our common stock. Each warrant has an exercise price of $.09 per share and expires on December 31, 2013. The private placement was completed in three closings which occurred on November 19, 2008 with respect to 207 units, December 23, 2008 with respect to 56 units and February 3, 2009 with respect to 82 units.

Placement Agent

In connection with the first closing, we paid the placement agent approximately $151,225. As additional compensation for its services, we issued warrants to purchase up to an aggregate of 8,625,017 shares of our common stock at an exercise price of $.09 per share.

We also granted the placement agent the right to nominate a member of our Board of Directors and such director shall receive all compensation and benefits provided to our other directors. Additionally, upon such director's appointment to our Board of Directors, he shall be issued a warrant to purchase 1,000,000 shares of common stock at a per share exercise price equal to the greater of (i) the fair market value on the date of issuance or (ii) $.09. The Placement Agent subsequently irrevocably waived its right to nominate a member of our Board of Directors.

Registration Rights

In connection with the private placement, we, the placement agent and the purchasers entered into a registration rights agreement. Pursuant to the registration rights agreement, we agreed to file a registration statement to register the resale of the shares of our common stock issuable upon exercise of the warrants issued to the investors in the private placement, within 20 days of the final closing date and to cause the registration statement to be declared effective within 90 days (or 120 days upon full review by the SEC). On April 2, 2009, the registration rights agreement was amended to, among other things, require us to register the shares of common stock issuable upon exercise of the warrants issued to the placement agent as partial compensation for its services. We filed a registration statement relating to the registration of the shares underlying the warrants issued to the investors and the private placement agent on February 23, 2009, which was declared effective by the SEC on April 17, 2009.

Warrants Issued in Connection with 2010 Private Placement

Warrants

On April 8, 2010, we completed the 2010 Private Placement pursuant to which we issued approximately 121 units, with each unit consisting of (i) 357,143 shares of our common stock and (ii) warrants to purchase 535,714 shares of our common stock. Each warrant has an exercise price of $.08 per share and has a five year term. The private placement was completed in two closings which occurred on March 2, 2010 with respect to 101.9 units and April 8, 2010 with respect to 2.42 units. In addition on April 8, 2010, the holder of an outstanding 12% original issue discount senior subordinated convertible debenture, dated October 28, 2009, with a stated value of $400,000 and $21,886 of accrued interest, converted such debenture (including all accrued interest thereon) into 16.88 units. The conversion price was equal to the per unit purchase price paid by the investors in the private placement. We have no obligation to register the shares of common stock underlying these warrants.

Placement Agent

In connection with the 2010 Private Placement, we paid the placement agent approximately $312,000 in commission and expense allowance. As additional compensation for its services, we issued warrants to purchase up to an aggregate of 5,587,499 shares of our common stock at an exercise price of $.08 per share.

Registration Rights

In connection with the 2010 Private Placement, we entered into a registration rights agreement pursuant to which we agreed to file a registration statement to register the resale of the shares of our common stock issued in the private placement, within 60 days of the final closing date and to cause the registration statement to be declared effective within 150 days (or 180 days upon review by the SEC). The registration statement of which this prospectus forms a part relates to the registration of such shares of common stock. If this registration statement is not declared effective by the SEC within 150 days (or 180 days upon full review by the SEC), or otherwise fail to diligently pursue registration with the SEC in accordance with the terms of the registration rights agreement, we will be required to pay as partial liquidated damages and not as a penalty, to each selling securityholder on a monthly basis an amount in cash equal to 1.0% percent of the aggregate purchase price paid by such selling securityholder of the shares underlying the warrants such selling securityholder purchased in the private placement that are not then eligible for resale pursuant to this registration statement or any other registration statement; provided, however, that the maximum aggregate liquidated damages payable to a selling securityholder shall be 10% of the aggregate amount paid by such selling securityholder for its respective warrants. If we fail to pay any partial liquidated damages within 10 calendar days after the date payable, we will be required to pay such liquidation damages in cash only and shall pay interest thereon at a rate of 18% per annum (or such lesser maximum amount that is required to be paid by applicable law) to the selling securityholder, accruing daily from the date such partial liquidated damages are due until such amounts, plus all such interest thereon.

Additionally, pursuant to the terms of the 12% original issue discount senior subordinated convertible debenture we agreed to include in any registration statement filed by us the shares of common stock into which such debenture was converted as well as 2,222,222 shares of common stock issuable to the holder of such debenture upon the exercise of certain warrants and 222,222 shares of common stock issuable upon the exercise of warrants issued to the placement agent and its designees in connection with such transaction.

Limitations on Directors' Liability

As permitted by Delaware law, our certificate of incorporation provides the personal liability of our directors to us or our stockholders for monetary damages for breach of certain fiduciary duties as a director is eliminated. The effect of this provision is to restrict our rights and the rights of our stockholders in derivative suits to recover monetary damages against a director for breach of certain fiduciary duties as a director, except that a director will be personally liable for:

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

This provision does not affect a director's liability under the federal securities laws. To the extent that the our directors, officers and controlling persons are indemnified under the provisions contained in our certificate of incorporation, Delaware law or contractual arrangements against liabilities arising under the Securities Act, we have been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Delaware Takeover Statute

As a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law which contains specific provisions regarding "business combinations" between corporations organized under the laws of the State of Delaware and "interested stockholders." These provisions prohibit us from engaging in a business combination with an interested stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to such date, our board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- on or subsequent to such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

For purposes of these provisions, a "business combination" includes mergers, consolidations, exchanges, asset sales, leases and other transactions resulting in a financial benefit to the interested stockholder and an "interested stockholder" is any person or entity that beneficially owns 15% or more of our outstanding voting stock and any person or entity affiliated with or controlling or controlled by that person or entity.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Continental Stock Transfer. Its address 17 Battery Place, New York, NY 10004 and its telephone number is 212-509-4000.

Listing

Our common stock is listed on the Over the Counter Bulletin Board under the symbol "MHAN."

SHARES ELIGIBLE FOR FUTURE SALE

We cannot predict the effect, if any, that market sales of shares of our common stock or the availability of shares of our common stock for sale will have on the market price of our common stock prevailing from time to time. Sales of substantial amounts of our common stock, including shares issued upon exercise of outstanding warrants, in the public market after this offering could adversely affect market prices prevailing from time to time and could impair our ability to raise capital through the sale of our equity securities.

As of June 18, 2010, 120,965,260 shares of our common stock were outstanding, which includes 43,278,606 of the shares of common stock which are registered for resale hereunder. All of these shares are freely tradable without restriction or further registration under the Securities Act, except for any shares held by our affiliates, as that term in is defined in Rule 144 under the Securities Act.

Restricted shares may be sold in the public market only if registered or if they qualify for an exemption from registration under Rule 144 promulgated under the Securities Act, which rules are summarized below. As of June 18, 2010, 894,552 shares of the outstanding 1,214,524 shares of common stock that are held by our officers and directors (excluding shares issuable upon exercise of outstanding options and warrants held by our officers and directors) are eligible for sale under Rule 144.

Rule 144

The SEC recently adopted amendments to Rule 144, which became effective on February 15, 2008 and apply to securities acquired both before and after that date. Under these amendments, a person who has beneficially owned restricted common stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the three months preceding, a sale and (ii) we are subject to the Exchange Act periodic reporting requirements for at least three months before the sale.

Persons who have beneficially owned restricted common stock for at least six months but who are our affiliates at the time of, or at any time during the three months preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

- 1.0% of the number of ordinary shares then outstanding, which will equal 12,096,526 shares immediately after this offering; or

- the average weekly trading volume of the ordinary shares during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales under Rule 144 are also limited by manner of sale provisions, notice requirements and the availability of current public information about us.

SELLING SECURITYHOLDER

This prospectus relates to the possible resale or other disposition by the selling securityholder of 33,928,571 shares of our common stock, which consists of the 7,142857 Original Warrant Shares and the 26,785,714 Original Put Shares. The shares of our common stock underlying securities held by the selling securityholder are being registered for resale by the selling securityholder from time to time. See "Plan of Distribution." The securities held by the selling securityholder were acquired by the selling securityholder, as discussed below.

We and Nordic entered into a joint venture agreement on January 31, 2008, which was amended on February 18, 2008 and on June 9, 2008. Pursuant the joint venture agreement, in February 2008, (i) Nordic contributed cash in the amount of $2.5 million to H Pharmaceuticals K/S, a newly formed Danish limited partnership, or the Hedrin JV, in exchange for 50% of the equity interests in the Hedrin JV, and (ii) we contributed certain assets to North American rights (under license) to our Hedrin product to the Hedrin JV in exchange for $2.0 million in cash and 50% of the equity interests in the Hedrin JV. On or around June 30, 2008, in accordance with the terms of the joint venture agreement, Nordic contributed an additional $1.25 million in cash to the Hedrin JV, $1.0 million of which was distributed to us, and equity in the Hedrin JV was distributed to each of us and Nordic sufficient to maintain our respective ownership interests. Pursuant to the joint venture agreement, upon the classification by the U.S. Food and Drug Administration, or the FDA, of Hedrin as a Class II or Class III medical device, Nordic was required to contribute to the Hedrin JV an additional $1.25 million in cash, $0.5 million of which was to be distributed to us, and equity in the Hedrin JV was to be distributed to each of us and Nordic sufficient to maintain our respective ownership interests. The FDA notified the Hedrin JV that Hedrin has been classified as a Class III medical device and in February 2009, Nordic made the $1.25 million investment in the Hedrin JV, the Hedrin JV made the $0.5 million milestone payment to us.

The Hedrin JV is responsible for the development and commercialization of Hedrin for the North American market and all associated costs including clinical trials, if required, regulatory costs, patent costs, and future milestone payments owed to Thornton & Ross Ltd., or T&R, the licensor of Hedrin. The Hedrin JV engaged us to provide management services to the Hedrin JV in exchange for a management fee, which for 2010, on an annualized basis, is $300,000. The profits of the Hedrin JV will be shared by us and Nordic in accordance with our respective equity interests in the Hedrin JV, of which Nordic currently holds 52.38% and we currently hold 47.62%, except that Nordic is entitled to receive a minimum return each year from the Hedrin JV equal to 6% on Hedrin sales, as adjusted for any change in Nordic's equity interest in the Hedrin JV, before any distribution is made to us. If the Hedrin JV realizes a profit in excess of the Nordic minimum return in any year, then such excess shall first be distributed to us until our distribution and the Nordic minimum return are in the same ratio as our respective equity interests in the Hedrin JV and then the remainder, if any, is distributed to Nordic and us in the same ratio as our respective equity interests. However, in the event of a liquidation of the Hedrin JV, Nordic's distribution in liquidation must equal to the amount Nordic invested in the Hedrin JV ($5.5 million) plus 10% per year, less the cumulative distributions received by Nordic from the Hedrin JV before any distribution is made to us. If the Hedrin JV's assets in liquidation exceed the Nordic liquidation preference amount, then any excess shall first be distributed to us until our distribution and the Nordic liquidation preference amount are in the same ratio as our respective equity interests in the Hedrin JV and then the remainder, if any, is distributed to Nordic and us in the same ratio as our respective equity interests. Further, in no event shall Nordic's distribution in liquidation be greater than assets available for distribution in liquidation.

Pursuant to the terms of the joint venture agreement, Nordic has the right to nominate one person for election or appointment to our board of directors. The Hedrin JV's board of directors will consist of four members, two members appointed by us and two members appointed by Nordic. Nordic has the right to appoint one of the directors as chairman of the board. The chairman has certain tie breaking powers.

Pursuant to the joint venture agreement, Nordic has the right to put up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic in exchange for such number of shares of our common stock equal to the amount of Nordic's investment in the Hedrin JV divided by $0.14, as adjusted from time to time for stock splits and other specified events, multiplied by a conversion factor, which is (i) 1.00 for so long as Nordic's distributions from the Hedrin JV are less than the amount of its investment, (ii) 1.25 for so long as Nordic's distributions from the Hedrin JV are less than two times the amount of its investment but greater than or equal to the amount of its investment amount, (iii) 1.50 for so long as Nordic's distributions from the Hedrin JV are less than three times the amount of its investment but greater than or equal to two times the amount of its investment amount, (iv) 2.00 for so long as Nordic's distributions from the Hedrin JV are less than four times the amount of its investment but greater than or equal to three times the amount of its investment amount and (v) 3.00 for so long as Nordic's distributions from Hedrin JV are greater than or equal to four times the amount of its investment. The put right expires upon the earlier to occur of (i) February 25, 2018 and (ii) 30 days after the date when Nordic's distributions from the Hedrin JV exceed five times the amount Nordic has invested in the Hedrin JV (or 10 days after such date if we have provided Nordic notice thereof).

Pursuant to the joint venture agreement, we have the right to call up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic in exchange for such number of shares of our common stock equal to the portion of Nordic's investment in the Hedrin JV (not to exceed $5 million) that we call by the dollar amount of Nordic's investment in the Hedrin JV up to $5 million, divided by $0.07, as adjusted for the 2010 Private Placement, and as further adjusted from time to time for stock splits and other specified events. The call right is only exercisable by us if the price of our common stock has closed at or above $1.40 per share for 30 consecutive trading days. During the first 30 consecutive trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 25% of the call right. During the second 30 consecutive trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 50% of the call right on a cumulative basis. During the third consecutive 30 trading days in which our common stock closes at or above $1.40 per share, we may exercise up to 75% of the call right on a cumulative basis. During the fourth consecutive 30 days in which our common stock closes at or above $1.40 per share, we may exercise up to 100% of the call right on a cumulative basis. Nordic may refuse the call, either by paying $1.5 million multiplied by the percentage of Nordic's investment being called or forfeiting an equivalent portion of the put right, calculated on a pro rata basis for the percentage of the Nordic equity interest called by us. The call right expires on February 25, 2013. For purposes of Nordic's right to put, and our right to call, up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic, the amount of Nordic's investment is $5,000,000.

Pursuant to the joint venture agreement, upon the classification by the U.S. Food and Drug Administration, or the FDA, of Hedrin as a Class II or Class III medical device, Nordic was required to contribute to the Hedrin JV an additional $1.25 million in cash, $0.5 million of which was to be distributed to us and equity in the Hedrin JV was to be distributed to each of us and Nordic sufficient to maintain our respective ownership interests. The FDA notified the Hedrin JV that Hedrin has been classified as a Class III medical device and in February 2009, Nordic made the $1.25 million investment in the Hedrin JV, the Hedrin JV made the $0.5 million milestone payment to us.

In connection with our joint venture agreement, on February 25, 2008, Nordic paid us a non-refundable fee of $150,000 in exchange for the right to receive a warrant to purchase up to 7,142,857 shares of our common stock at $0.14 per share, as adjusted from time to time for stock splits and other specified events, if Nordic did not exercise all or part of its put right on or before April 30, 3008. As of April 30, 2008, Nordic had not exercised any portion of its put right and we issued the warrant to Nordic. Pursuant to the anti-dilution provisions in such warrant, in February 2009 the number of shares underlying the warrant was increased by 3,968,254 shares to a total of 11,111,111 and the price was adjusted to $0.09 per share. Pursuant to the anti-dilution provisions in such warrant, in March 2010 the number of shares underlying the warrant was increased by 3,174,603 shares to a total of 14,285,714 and the price was adjusted to $0.07 per share.

As per the limited partnership agreement between us and Nordic, in the event that a limited partner in the Hedrin JV determines, in its reasonable goods faith discretion, that the Hedrin JV requires additional capital for the proper conduct of its business that limited partner shall provide each other limited partner with a written request for contribution of such limited partner's proportionate share, in accordance to the then respective equity ownership in the Hedrin JV, of such requested additional capital amount.

As per the terms of the limited partnership agreement, if a limited partner declines to so contribute, elects to contribute but thereafter fails to do so timely, or elects to contribute and timely does contribute some, but not all of, its proportionate share of the requested additional capital amount, the other limited partner shall have the option to contribute the remaining balance of such requested additional capital amount.

As per the terms of the limited partnership agreement the general partner shall determine the fair market value of the shares for purposes of determining how to allocate the number of shares of the Hedrin JV to be issued in consideration for the contribution of capital. If the general partner is unable to determine the fair market value of the shares, the fair market value for the shares shall be determined in good faith by the contributing limited partner if such amount is equal to or greater than the most recent valuation of such Hedrin JV shares.

On December 31, 2009, Nordic delivered a written notice to us for a $1,000,000 capital increase to the Hedrin JV. In January 2010, Nordic made its capital contribution to the Hedrin JV of $500,000. We did not have sufficient funds to make such a capital contribution within the required time period prescribed in the limited partnership agreement.

As the general partner was unable to determine the fair market value of the shares, Nordic, the contributing limited partner, determined in good faith that the fair market value of the shares was equal to the most recent valuation. The most recent valuation was the February 2009 investment of $1,500,000 into the Hedrin JV by Nordic at $5,000 per share. As a result of Nordic's investing an additional $500,000 in the Hedrin JV the ownership percentages of the Hedrin JV have changed from 50% to Nordic and 50% for us to 52.38% to Nordic and 47.62% for us. In the event that Nordic exercises its option to invest the remaining $500,000 of the $1,000,000 capital increase then the ownership percentage shall change to 54.55% for Nordic and 45.45% for us.

In connection with the joint venture agreement, we entered into a registration rights agreement with Nordic on February 25, 2008, as modified pursuant to a letter agreement, dated September 17, 2008, pursuant to which we agreed to file with the Securities and Exchange Commission, or the SEC, an initial registration statement registering the resale by Nordic of any shares of our common stock issuable to Nordic through the exercise of the warrant or the put right, within10 calendar days following the date on which our annual report on Form 10-K for the year ended December 31, 2007 was required to be filed with the SEC, which was subsequently extended until May 1, 2008. We filed an initial registration statement on May 1, 2008, which was declared effective on October 15, 2008. We are amending the initial registration statement by filing a post-effective amendment no. 2 to that registration statement of which this prospectus is a part.

Except as described above, no material relationship exists between the selling securityholder and us nor has any such material relationships existed within the past three years.

In April 2010, Nordic filed a Schedule 13D/A (the "Nordic Amended 13D"). We are not in agreement with the disclosure set forth in the Nordic Amended 13D and have written a letter to Nordic explaining our disagreements. The Nordic Amended 13D shows an aggregate number of shares of our common stock beneficially owned by Nordic as 216,666,666, or 65.5%. As reflected below, we believe the correct beneficial ownership is 85,714,285 shares, or 41.47%. The Nordic Amended 13D states that Nordic does not believe our determination of the anti-dilution shares accruing to Nordic as a result of the 2010 Private Placement was neither reasonable nor made in good faith. As we have previously stated we believe our determination was both reasonable and made in good faith. The Nordic Amended 13D further states that Nordic acquired the right to purchase an additional 5,555,556 shares of our common stock upon exercise of its put right as a result of Nordic's additional investment in the Hedrin JV of $500,000 in January 2010. We are not in agreement with this claim, we do not believe that Nordic is required to any adjustment to its put right as a result of Nordic making additional capital contributions to the Hedrin JV. In the letter to Nordic we note that Nordic's valuation suggestions for the warrants issued in the 2010 Private Placement ignores the concept of relative value inherent in the Hedrin JV Agreement.

The following table lists the selling securityholder and presents certain information regarding our determination of its beneficial ownership of our common stock as well as the number of shares of our common stock it may sell from time to time pursuant to this prospectus. Except as set forth above, this table is prepared based on information supplied to us by the selling securityholder. As of June 18, 2010, 120,965,260 shares of our common stock were issued and outstanding. As used in this prospectus, the term "selling securityholder" includes the entity listed below and where the context requires, any donees, pledges, transferees or other successors in interest selling shares received after the date of this prospectus from the selling securityholder as a gift, pledge or other transfer.

Selling Securityholder	Number of Shares of Common Stock Beneficially owned prior to this Offering	Number of Shares Being Offered	Common Stock Beneficially Owned After this Offering	
			Number of Shares of Common Stock Beneficially owned after this Offering	Percent of Shares Beneficially owned after this Offering
Nordic Biotech Venture Fund II K/S	85,714,285(1)(2)	33,928,571(3)	51,785,714(1)(4)	29.98%

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(1) In April 2010, Nordic filed a Schedule 13D/A (the "Nordic Amended 13D"). We are not in agreement with the disclosure set forth in the Nordic Amended 13D and have written a letter to Nordic explaining our disagreements. The Nordic Amended 13D shows an aggregate number of shares of our common stock beneficially owned by Nordic as 216,666,666, or 65.5%. We believe the correct beneficial ownership is 85,714,285 shares, or 41.47%. The Nordic Amended 13D states that Nordic does not believe our determination of the anti-dilution shares accruing to Nordic as a result of the 2010 Private Placement was neither reasonable nor made in good faith. As we have previously stated we believe our determination was both reasonable and made in good faith. The Nordic Amended 13D further states that Nordic acquired the right to purchase an additional 5,555,556 shares of our common stock upon exercise of the Nordic Put as a result of Nordic's making an additional investment in the Hedrin JV of $500,000 in January 2010. We are not in agreement with this claim, we do not believe that Nordic is required to any adjustment to Nordic's Put as a result of Nordic making additional capital contributions to the Hedrin JV. In the letter to Nordic we note that Nordic's valuation suggestions for the warrants issued in the 2010 Private Placement ignores the concept of relative value inherent in the Hedrin JV Agreement.

(2) Consists of 71,428,571 shares (consisting of the Original Put Shares and the Additional Put Shares) issuable upon exercise of Nordic's right to put up to a 50% equity interest in H Pharmaceuticals of the 52.38% equity interest currently held by Nordic and 14,285,714 shares (consisting of the Original Warrant Shares and the Additional Warrant Shares) issuable upon exercise of an outstanding warrant held by Nordic. Does not include 71,428,571 shares issuable upon exercise of our right to call up to a 50% equity interest in H Pharmaceuticals K/S of the 52.38% equity interest currently held by Nordic to the extent such shares are not issued upon exercise of the selling securityholder's put right, which call right is subject to the satisfaction of certain conditions with respect to the closing price of our common stock and the selling securityholder's right to refuse such call upon payment of cash or forfeiture of equity interests in H Pharmaceuticals K/S. Florian Schonharting and Christian Hansen have voting and investment control over such securities.

(3) Consists of (i) 26,785,714 shares (the Original Put Shares) issuable upon exercise of the selling securityholder's right to put up to a 50% equity interest in H Pharmaceuticals K/S, a Danish limited partnership, of which we and the selling securityholder are partners, of the 52.38% equity interest currently held by Nordic and (ii) 7,142,857 shares (the Original Warrant Shares) issuable upon exercise of an outstanding warrant held by the selling securityholder. Florian Schonharting and Christian Hansen have voting and investment control over such securities.

(4) Consists of (i) 44,642,857 shares (the Additional Put Shares) issuable upon exercise of Nordic's right to put a 50% equity interest in H Pharmaceuticals K/S, a Danish limited partnership, of which we and Nordic are partners, of the 52.38% equity interest currently held by Nordic and (ii) 7,142,857 shares (the Additional Warrant Shares) issuable upon exercise of an outstanding warrant held by Nordic. Florian Schonharting and Christian Hansen have voting and investment control over such securities.

PLAN OF DISTRIBUTION

The selling securityholder of our common stock and any of its pledgees, assignees, and successors-in-interest may, from time to time, sell any or all of its shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling securityholder may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- broker-dealers may agree with the selling securityholder to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling securityholder may also sell shares under Rule 144 under the Securities Act of 1933, as amended (the “Securities Act”), if available, rather than under this prospectus.

Broker-dealers engaged by the selling securityholder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling securityholder (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with NASDR Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with NASDR IM-2440.

The selling securityholder and any broker-dealers or agents that are involved in selling the shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The selling securityholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute our common stock. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would exceed eight percent (8%).

LEGAL MATTERS

The legality of the securities offered in this prospectus has been passed upon for us by Lowenstein Sandler PC, Roseland, New Jersey.

EXPERTS

The financial statements as of December 31, 2009 and 2008 and for the years then ended, and the period beginning from August 6, 2001 (inception) to December 31, 2009, included in this prospectus have been audited by J.H. Cohn LLP, independent registered public accounting firm, as stated in its report appearing in this prospectus and elsewhere in the registration statement of which this prospectus forms a part, and have been so included in reliance upon the reports of such firm given upon its authority as experts in accounting and auditing.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by us of expenses incurred or paid by one of our directors, officers or controlling persons in the successful defense of any action, suit or proceeding) is asserted by that director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether that indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of that issue.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement of Form S-1, as amended, relating to the securities being offered through this prospectus. As permitted by the rules and regulations of the SEC, the prospectus does not contain all the information described in the registration statement. For further information about us and our securities, you should read our registration statement, including the exhibits and schedules. In addition, we will be subject to the requirements of the Securities Exchange Act of 1934, as amended, following the offering and thus will file annual, quarterly and special reports, proxy statements and other information with the SEC. These SEC filings and the registration statement are available to you over the Internet at the SEC's web site at http://www.sec.gov/. You may also read and copy any document we file with the SEC at the SEC's public reference room in at 100 F. Street, N.E., Room 1580,Washington, D.C. Please call the SEC at 1-800-SEC-0330 for further information about the public reference room. Statements contained in this prospectus as to the contents of any agreement or other document are not necessarily complete and, in each instance, you should review the agreement or document which has been filed as an exhibit to the registration statement.

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Part I – Financial Information
Item 1. Unaudited Condensed Consolidated Financial Statements

MANHATTAN PHARMACEUTICALS, INC. and SUBSIDIARIES
(A Development Stage Company)
Condensed Consolidated Balance Sheets

	March 31, 2010	December 31, 2009
	(unaudited)	(See Note 1)
Assets		
Current assets:		
Cash and cash equivalents	$ 2,017,280	$ 17,996
Debt issue costs, current portion	148,733	158,552
Other current assets	119,704	87,177
Total current assets	2,285,717	263,725
In-process research and development	17,742,110	-
Property and equipment, net	2,745	3,541
Debt issue costs	29,922	77,026
Other assets	21,370	21,370
Total assets	$ 20,081,864	$ 365,662
Liabilities and Stockholders' Deficiency		
Current Liabilities:		
Secured 12% notes payable, current portion, net	$ 1,655,461	$ 1,247,062
8% note payable	-	27,000
ICON note payable, current portion	333,333	-
Accounts payable and accrued expenses	302,728	291,175
Interest payable, current portion	290,439	182,193
Derivative liability	4,620,998	784,777
Total current liabilities	7,202,959	2,532,207
Convertible 5% notes payable	15,452,793	-
Secured 12% notes payable, non-current portion, net	-	384,473
Convertible 12% note payable, net	42,466	17,808
ICON convertible note payable, non-current portion	666,667	-
Non-interest bearing note payable, net	216,900	211,900
Interest payable, non-current portion	68,417	55,048
Exchange obligation	3,949,176	3,949,176
Total liabilities	27,599,378	7,150,612
Commitments and contingencies		
Stockholders' deficiency:		
Preferred stock, $.001 par value. Authorized 1,500,000 shares; no shares issued and outstanding at March 31, 2010 and December 31, 2009	-	-
Common stock, $.001 par value. Authorized 500,000,000 shares; 114,079,543 shares issued and outstanding at March 31, 2010 and 70,624,232 issued and outstanding on December 31, 2009	114,080	70,624
Contingently issuable shares	15,890	-
Additional paid-in capital	55,919,120	55,077,861
Deficit accumulated during the development stage	(63,566,604)	(61,933,435)
Total stockholders' deficiency	(7,517,514)	(6,784,950)
Total liabilities and stockholders' deficiency	$ 20,081,864	$ 365,662

See accompanying notes to consolidated financial statements.

MANHATTAN PHARMACEUTICALS, INC. and SUBSIDIARIES
(A Development Stage Company)
Condensed Consolidated Statements of Operations
(Unaudited)

	Three months ended March 31, 2010	Three months ended March 31, 2009	Cumulative period from August 6, 2001 (inception) to March 31, 2010
Revenue	$ -	$ -	$ -
Costs and expenses:			
Research and development	17,767	44,936	28,349,978
General and administrative	511,678	512,400	18,705,133
In-process research and development charge	-	-	11,887,807
Impairment of intangible assets	-	-	1,248,230
Loss on disposition of intangible assets	-	-	1,213,878
Total operating expenses	529,445	557,336	61,405,026
Operating loss	(529,445)	(557,336)	(61,405,026)
Other (income) expense:			
Equity in losses of Hedrin JV	-	135,786	750,000
Change in fair value of derivative	942,261	70,000	1,372,331
Interest and other income	(75,314)	(126,728)	(1,942,543)
Interest expense	236,777	125,450	878,177
Realized gain on sale of marketable equity securities	-	-	(76,032)
Total other (income) expense	1,103,724	204,508	981,933
Net loss	(1,633,169)	(761,844)	(62,386,959)
Preferred stock dividends (including imputed amounts)	-	-	(1,179,645)
Net loss applicable to common shares	$ (1,633,169)	$ (761,844)	$ (63,566,604)
Net loss per common share:			
Basic and diluted	$ (0.02)	$ (0.01)	
Weighted average shares of common stock outstanding:			
Basic and diluted	84,638,502	70,624,232	

See accompanying notes to consolidated financial statements.

MANHATTAN PHARMACEUTICALS, INC. and SUBSIDIARIES
(A Development Stage Company)
Condensed Consolidated Statements of Stockholders' Equity (Deficiency)
(Unaudited)

	Common stock shares	Common stock amount	Additional paid-in capital	Deficit accumulated during development stage	Other	Total stockholders' equity (deficiency)
Stock issued at $0.0004 per share for subscription receivable	10,167,741	$ 10,168	$ (6,168)	$ -	$ (4,000)	$ -
Net loss	-	-	-	(56,796)	-	(56,796)
Balance at December 31, 2001	10,167,741	10,168	(6,168)	(56,796)	(4,000)	(56,796)
Proceeds from subscription receivable	-	-	-	-	4,000	4,000
Stock issued at $0.0004 per share for license rights	2,541,935	2,542	(1,542)	-		1,000
Stock options issued for consulting services	-	-	60,589	-	(60,589)	-
Amortization of unearned consulting services	-	-	-	-	22,721	22,721
Common stock issued at $0.63 per share, net of expenses	3,043,332	3,043	1,701,275	-	-	1,704,318
Net loss	-	-		(1,037,320)		(1,037,320)
Balance at December 31, 2002	15,753,008	15,753	1,754,154	(1,094,116)	(37,868)	637,923
Common stock issued at $0.63 per share, net of expenses	1,321,806	1,322	742,369	-		743,691
Effect of reverse acquisition	6,287,582	6,287	2,329,954	-		2,336,241
Amortization of unearned consulting costs	-	-	-	-	37,868	37,868
Unrealized loss on short-term investments	-	-	-	-	(7,760)	(7,760)
Payment for fractional shares for stock combination	-	-	(300)	-		(300)
Preferred stock issued at $10 per share, net of expenses	-	-	9,045,176	-	1,000	9,046,176
Imputed preferred stock dividend			418,182	(418,182)		-
Net loss	-	-	-	(5,960,907)		(5,960,907)
Balance at December 31, 2003	23,362,396	23,362	14,289,535	(7,473,205)	(6,760)	6,832,932
						-
Exercise of stock options	27,600	27	30,073	-		30,100
Common stock issued at $1.10, net of expenses	3,368,952	3,369	3,358,349	-		3,361,718
Preferred stock dividend accrued	-	-	-	(585,799)		(585,799)
Preferred stock dividends paid by issuance of shares	-	-	281,073	-	25	281,098
Conversion of preferred stock to common stock at $1.10 per share	1,550,239	1,551	(1,380)	-	(171)	-
Warrants issued for consulting services	-	-	125,558	-	(120,968)	4,590
Amortization of unearned consulting costs	-	-	-	-	100,800	100,800
Unrealized gain on short-term investments and reversal of unrealized loss on short-term investments	-	-	-	-	20,997	20,997
Net loss	-	-	-	(5,896,031)	-	(5,896,031)
Balance at December 31, 2004	28,309,187	28,309	18,083,208	(13,955,035)	(6,077)	4,150,405
Common stock issued at $1.11 and $1.15, net of expenses	11,917,680	11,918	12,238,291	-		12,250,209
Common stock issued to vendor at $1.11 per share in satisfaction of accounts payable	675,675	676	749,324	-		750,000
Exercise of stock options	32,400	33	32,367	-		32,400
Exercise of warrants	279,845	279	68,212	-		68,491
Preferred stock dividend accrued	-	-	-	(175,663)		(175,663)
Preferred stock dividends paid by issuance of shares	-	-	477,736	—	42	477,778
Conversion of preferred stock to common stock at $1.10 per share	8,146,858	8,147	(7,251)	-	(896)	-
Share-based compensation	-	-	66,971	-	20,168	87,139
Reversal of unrealized gain on short-term investments	-	-	-	-	(12,250)	(12,250)
Stock issued in connection with acquisition of Tarpan Therapeutics, Inc.	10,731,052	10,731	11,042,253	-		11,052,984
Net loss	-	-	-	(19,140,997)		(19,140,997)
Balance at December 31, 2005	60,092,697	60,093	42,751,111	(33,271,695)	987	9,540,496
Cashless exercise of warrants	27,341	27	(27)	-		-
Share-based compensation	-	-	1,675,499	-		1,675,499
Unrealized loss on short-term investments	-	-	-	-	(987)	(987)
Costs associated with private placement	-	-	(15,257)	-		(15,257)
Net loss	-	-	-	(9,695,123)		(9,695,123)
Balance at December 31, 2006	60,120,038	60,120	44,411,326	(42,966,818)	-	1,504,628

MANHATTAN PHARMACEUTICALS, INC. and SUBSIDIARIES
(A Development Stage Company)
Condensed Consolidated Statements of Stockholders' Equity (Deficiency)
(Unaudited)

	Common stock shares	Common stock amount	Additional paid-in capital	Deficit accumulated during development stage	Other	Total stockholders' equity (deficiency)
Common stock issued at $0.84 and $0.90 per shares, net of expenses	10,185,502	$ 10,186	$ 7,841,999	$ -	$ -	$ 7,852,185
Common stock issued to directors at $0.72 per share in satisfaction of accounts payable	27,776	28	19,972	-	-	20,000
Common stock issued to in connection with in-licensing agreement at $0.90 per share	125,000	125	112,375	-	-	112,500
Common stock issued to in connection with in-licensing agreement at $0.80 per share	150,000	150	119,850	-	-	120,000
Exercise of warrants	10,327	15	7,219	-	-	7,234
Cashless exercise of warrants	5,589	-	(6)	-	-	(6)
Share-based compensation	-	-	1,440,956	-	-	1,440,956
Warrants issued for consulting	-	-	83,670	-	-	83,670
Net loss	-	-	-	(12,032,252)		(12,032,252)
Balance at December 31, 2007	70,624,232	70,624	54,037,361	(54,999,070)	-	(891,085)
Sale of warrant	-	-	150,000	-	-	150,000
Share-based compensation	-	-	463,890	-	-	463,890
Warrants issued with secured 12% notes	-	-	170,128	-	-	170,128
Net loss	-	-	-	(4,268,858)	-	(4,268,858)
Balance at December 31, 2008	70,624,232	70,624	54,821,379	(59,267,928)	-	(4,375,925)
Cumulative effect of a change in accounting principle	-	-	(150,000)	127,778	-	(22,222)
Balance at January 1, 2009, as adjusted	70,624,232	70,624	54,671,379	(59,140,150)	-	(4,398,147)
Share-based compensation	-	-	353,438	-	-	353,438
Warrants issued with secured 12% notes	-	-	46,125	-	-	46,125
Warrant issued to placement agent - secured 12% notes	-	-	6,919	-	-	6,919
Net loss	-	-	-	(2,793,285)	-	(2,793,285)
Balance at December 31, 2009	70,624,232	70,624	55,077,861	(61,933,435)	-	(6,784,950)
Common stock issued at $0.07, net of expenses	36,392,888	36,393	2,075,353	-	-	2,111,746
Shares issued and issuable in Merger	7,062,423	7,063	1,468,984	-	15,890	1,491,937
Derivative liability associated with issuance of common stock at $0.07	-	-	(2,893,960)	-	-	(2,893,960)
Share-based compensation	-	-	190,882	-	-	190,882
Net loss	-	-	-	(1,633,169)	-	(1,633,169)
Balance at March 31, 2010	114,079,543	$ 114,080	$ 55,919,120	$ (63,566,604)	$ 15,890	$ (7,517,514)

See accompanying notes to consolidated financial statements.

MANHATTAN PHARMACEUTICALS, INC. and SUBSIDIARIES
(A Development Stage Company)
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Three months ended March 31, 2010	Three months ended March 31, 2009	Cumulative period from August 6, 2001 (inception) to March 31, 2010
Cash flows from operating activities:			
Net loss	$ (1,633,169)	$ (761,844)	$ (62,386,959)
Adjustments to reconcile net loss to net cash used in operating activities:			
Equity in losses of Hedrin JV	-	135,786	750,000
Share-based compensation	190,882	104,097	4,373,194
Interest and amortization of OID and issue costs on Secured 12% Notes	110,507	119,060	694,480
Change in fair value of derivative	942,261	70,000	1,372,331
Shares issued in connection with in-licensing agreement	-	-	232,500
Warrants issued to consultant	-	-	83,670
Amortization of intangible assets	-	-	145,162
Gain on sale of marketable equity securities	-	-	(76,032)
Depreciation	796	1,576	228,258
Non cash portion of in-process research and development charge	-	-	11,721,623
Loss on impairment and disposition of intangible assets	-	-	2,462,108
Other	-	-	23,917
Changes in operating assets and liabilities, net of acquisitions:			
Decrease/(increase) in restricted cash	-	215,870	-
Decrease/(increase) in prepaid expenses and other current assets	88,343	(14,850)	59,408
Decrease/(increase) in other assets	-	-	(36,370)
Increase/(decrease) in accounts payable and accrued liabilities	(426,062)	(515,492)	(43,096)
Increase/(decrease) in interest payable, current portion	108,246	-	108,246
Increase/(decrease) in interest payable, non-current portion	13,369	-	13,369
Net cash used in operating activities	(604,827)	(645,797)	(40,274,191)
Cash flows from investing activities:			
Purchase of property and equipment	-	-	(239,608)
Cash acquired/(paid) in connection with acquisitions	519,365	-	493,334
Net cash provided from the purchase and sale of short-term investments	-	-	435,938
Proceeds from sale of license	-	-	200,001
Net cash provided by investing activities	519,365	-	889,665
Cash flows from financing activities:			
Proceeds from the Hedrin JV agreement	-	500,000	3,199,176
Sale of warrant	-	-	150,000
Repayment of Secured 10% Notes	-	(70,000)	-
Repayment of 8% Notes	(27,000)		-
Proceeds from sale of Secured 12% Notes	-	340,270	1,345,413
Proceeds from sale of Convertible 12% Notes	-	-	164,502
Repayments of notes payable to stockholders	-	-	(884,902)
Proceeds (costs) related to sale of common stock, net	2,111,746	-	28,008,008
Proceeds from sale of preferred stock, net	-	-	9,046,176
Proceeds from exercise of warrants and stock options	-	-	138,219
Other, net	-	-	235,214
Net cash provided by financing activities	2,084,746	770,270	41,401,806
Net increase in cash and cash equivalents	1,999,284	124,473	2,017,280
Cash and cash equivalents at beginning of period	17,996	106,023	-
Cash and cash equivalents at end of period	$ 2,017,280	$ 230,496	$ 2,017,280
Supplemental disclosure of cash flow information:			
Interest paid	$ 1,506	$ -	$ 32,936
Supplemental disclosure of noncash investing and financing activities:			
Investment in Hedrin JV	$ -	$ 250,000	$ 750,000
Warrants issued with Secured 12% Notes	-	-	223,172
Common stock issued in satisfaction of accounts payable	-	-	770,000
Imputed and accrued preferred stock dividend	-	-	1,179,645
Conversion of preferred stock to common stock	-	-	1,067
Preferred stock dividends paid by issuance of shares	-	-	759,134
Issuance of common stock for acquisitions	1,491,937	-	14,881,163
Issuance of common stock in connection with in-licensing agreement	-	-	232,500
Marketable equity securities received in connection with sale of license	-	-	359,907
Warrants issued to consultant	-	-	83,670
Net liabilities assumed over assets acquired in business combination	-	-	(675,416)

See accompanying notes to consolidated financial statements

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of Manhattan Pharmaceuticals, Inc. and subsidiaries ("Manhattan" or the "Company") have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and the rules and regulations of the Securities and Exchange Commission. Accordingly, the unaudited condensed consolidated financial statements do not include all information and footnotes required by accounting principles generally accepted in the United States of America for complete annual financial statements. In the opinion of management, the accompanying unaudited condensed consolidated financial statements reflect all adjustments, consisting of only normal recurring adjustments, considered necessary for a fair presentation. Interim operating results are not necessarily indicative of results that may be expected for the year ending December 31, 2010 or for any other interim period. These unaudited condensed consolidated financial statements should be read in conjunction with the Company's audited financial statements as of and for the year ended December 31, 2009, which are included in the Company's Annual Report on Form 10-K for such year. The condensed balance sheet as of December 31, 2009 has been derived from the audited financial statements included in the Form 10-K for that year.

As of March 31, 2010, the Company has not generated any revenues from the development of its products and is therefore still considered to be a development stage company.

On March 8, 2010, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement") by and among the Company, Ariston Pharmaceuticals, Inc., a Delaware corporation ("Ariston") and Ariston Merger Corp., a Delaware corporation and wholly-owned subsidiary of the Company (the "Merger Sub"). Pursuant to the terms and conditions set forth in the Merger Agreement, on March 8, 2010, the Merger Sub merged with and into Ariston (the "Merger"), with Ariston being the surviving corporation of the Merger. As a result of the Merger, Ariston became a wholly-owned subsidiary of the Company. The operating results of Ariston from March 8, 2010 to March 31, 2010 are included in the accompanying condensed consolidated statements of operations. The condensed consolidated balance sheets as of March 31, 2010 reflects the acquisition of Ariston, effective March 8, 2010, the date of the Merger.

Segment Reporting

The Company has determined that it operates in only one segment currently, which is biopharmaceutical research and development.

Financial Instruments

At March 31, 2010 and December 31, 2009, the fair values of cash and cash equivalents, accounts payable, the convertible 5% notes payable, the ICON convertible note payable and the secured 12% notes payable approximate their carrying values. At March 31, 2010 and December 31, 2009 the fair value of the convertible 12% note does not approximate its carrying value as a portion of the fair value is reflected as a component of derivative liability.

Equity in Joint Venture

The Company accounts for its investment in joint venture (see Note 5) using the equity method of accounting. Under the equity method, the Company records its pro-rata share of joint venture income or losses and adjusts the basis of its investment accordingly.

New Accounting Pronouncements

In May 2009, the Financial Accounting Standards Board ("FASB") issued a statement which sets forth the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. This statement was effective for interim or annual periods ending after June 15, 2009, and the Company adopted the provisions of this statement for the quarter ended June 30, 2009. The adoption of this statement did not have a material impact on the Company's financial statements. The Company has evaluated all events or transactions that occurred after March 31, 2010 up through the date we issued these financial statements, and we have disclosed all events or transactions that have a material impact on the Company's financial statements (see Note 10).

In August 2009, the FASB issued a new pronouncement to provide clarification on measuring liabilities at fair value when a quoted price in an active market is not available. In particular, this pronouncement specifies that a valuation technique should be applied that uses either the quote of the liability when traded as an asset, the quoted prices for similar liabilities when traded as assets, or another valuation technique consistent with existing fair value measurement guidance. This statement is prospectively effective for financial statements issued for interim or annual periods ending after October 1, 2009. The adoption of this statement at December 31, 2009 did not impact the Company's results of operations or financial condition.

In January 2010, the FASB issued a new pronouncement, Improving Disclosures about Fair Value Measurements(ASU 2010-06). This provision amends previous provisions that require reporting entities to make new disclosures about recurring and nonrecurring fair value measurements including the amounts of and reasons for significant transfers into and out of Level 1and Level 2 fair value measurements and separate disclosure of purchases, sales, issuances, and settlements in the reconciliation of Level 3 fair value measurements. This pronouncement was effective for interim and annual reporting periods beginning after December 15, 2009, except for Level 3 reconciliation disclosures which are effective for interim and annual periods beginning after December 15, 2010. The adoption of this pronouncement did not have a material impact on the Company's results of operations or financial condition.

In February 2010, the FASB issued new accounting guidance that amends the previous guidance to (1) eliminate the requirement for an SEC filer to disclose the date through which it has evaluated subsequent events, (2) clarify the period through which conduit bond obligors must evaluate subsequent events and (3) refine the scope of the disclosure requirements for reissued financial statements. The Company adopted this new accounting guidance for the quarterly period ended March 31, 2010. The adoption of this guidance did not have a material impact on our financial statements.

Ariston Merger

On March 8, 2010, the Company entered into the Merger Agreement by and among the Company, Ariston and Merger Sub. Pursuant to the terms and conditions set forth in the Merger Agreement, on March 8, 2010, the Merger Sub merged with and into Ariston, with Ariston being the surviving corporation of the Merger. As a result of the Merger, Ariston became a wholly-owned subsidiary of the Company.

Under the terms of the Merger Agreement, the consideration payable by the Company to the stockholders and note holders of Ariston consists of the issuance of 7,062,423 shares of the Company's common stock, par value $0.001 per share, ("Common Stock") at Closing (as defined in the Merger Agreement) plus the right to receive up to an additional 24,718,481 shares of Common Stock (the “Milestone Shares”) upon the achievement of certain product-related milestones described below. In addition, the Company has reserved 38,630,723 shares of its Common Stock for possible future issuance in connection with the conversion of $15.45 million of outstanding Ariston convertible promissory notes. The noteholders will not have any recourse to the Company for repayment of the notes (their sole recourse being to Ariston), but the noteholders will have the right to convert the notes into shares of the Company's Common Stock at the rate of $0.40 per share. Further, the Company has reserved 5,000,000 shares of its Common Stock for possible future issuance in connection with the conversion of $1.0 million of outstanding Ariston convertible promissory note issued in satisfaction of a trade payable. The noteholder will not have any recourse to the Company for repayment of the note (their sole recourse being to Ariston), but the noteholder will have the right to convert the note into shares of the Company's Common Stock at the rate of $0.20 per share.

Upon the achievement of the milestones described below, the Company would be obligated to issue portions of the Milestone Shares to the former Ariston stockholders and noteholders:

- Upon the affirmative decision of the Company’s Board of Directors, provided that such decision is made prior to March 8, 2011, to further develop the AST-915, either internally or through a corporate partnership, the Company would issue 8,828,029 of the Milestone Shares.
- Upon the acceptance by the FDA of the Company's filing of the first New Drug Application for the AST-726 product candidate, the Company would issue 7,062,423 of the Milestone Shares.
- Upon the Company receiving FDA approval to market the AST-726 product candidate in the United States of America, the Company would issue 8,828,029 of the Milestone Shares.

Certain members and former members of the Company's board of directors and principal stockholders of the Company owned Ariston securities. Timothy McInerney, a director of Manhattan, owned 16,668 shares of Ariston common stock which represented less than 1% of Ariston’s outstanding common stock as of the closing of the Merger. Neil Herskowitz, a director of Manhattan, indirectly owned convertible promissory notes of Ariston with interest and principal in the amount of $192,739. Michael Weiser, a director of Manhattan, owned 117,342 shares of Ariston common stock, which represented approximately 2.1% of Ariston’s outstanding common stock as of the closing of the Merger. Lindsay Rosenwald, a more than 5% beneficial owner of Manhattan common stock, in his individual capacity and indirectly through trusts and companies he controls owned 497,911 shares of Ariston common stock, which represented approximately 8.9% of Ariston’s outstanding common stock as of the closing of the Merger and indirectly owned convertible promissory notes of Ariston in the amount of $141,438.

The Company merged with Ariston principally to add new products to our portfolio. Prior to the Merger, Ariston was a private, clinical stage specialty biopharmaceutical company based in Shrewsbury, Massachusetts that in-licenses, develops and plans to market novel therapeutics for the treatment of serious disorders of the central and peripheral nervous systems.

The Merger date fair value of the total consideration paid was $1,491,937 which consisted of 7,062,423 shares of the Company's common stock issued upon the Merger and 15,890,452 contingently issuable shares upon Ariston's attaining certain milestones as described above. The Company does not believe the attainment of the milestone for AST-915 is highly probable and has recorded no contingent consideration relative to it. The par value of the contingently issuable common shares is reflected in the accompanying condensed consolidated balance sheets as of March 31, 2010 as a component of stockholders' deficiency, contingently issuable shares.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the Merger date:

Cash and cash equivalents	$	519,365
Other assets		120,870
Total identifiable assets		640,235
Accounts payable and accrued expenses		437,615
ICON convertible note payable		1,000,000
5% convertible notes payable		15,452,793
Total identifiable liabilities		16,890,408
Net identifiable assets (liabilities)		(16,250,173)
In-process research and development acquired		17,742,110
Net assets acquired	$	1,491,937

The following supplemental pro forma information presents the financial results as if the acquisition of Ariston had occurred on January 1, 2009 for the quarter ended March 31, 2009 and on January 1, 2010 for the quarter ended March 31, 2010. This supplemental pro forma information has been prepared for comparative purposes and does not purport to be indicative of what would have occurred had the acquisition been made on January 1, 2009 or January 1, 2010, nor are they indicative of future results.

Pro forma consolidated results:	**Quarter ended March 31,**			
		2009		**2010**
Revenue	$	-	$	-
Net loss	$	(1,544,229)	$	(1,787,172)
Basic and diluted earnings per share	$	(0.02)	$	(0.02)

2. LIQUIDITY

The Company incurred a net loss of $1,633,169 and negative cash flows from operating activities of $604,827 for the three month period ended March 31, 2010 and negative cash flows from operating activities of $645,797 for the three month period ended March 31, 2009. The net loss applicable to common shares from date of inception, August 6, 2001, to March 31, 2010 amounts to $63,566,604.

In the first quarter of 2009 the Company received approximately $0.3 million from the final closing of the sale of Secured 12% Notes and approximately $0.5 million in February 2009 from a joint venture agreement.

In the first quarter of 2010, the Company received $40,000 from Ariston Pharmaceuticals, Inc. in exchange for notes in January 2010 and approximately $2.1 million from an equity financing transaction (see Note 7). The Company repaid the $40,000 received from Ariston in the first quarter of 2010 and the $27,000 received from Ariston in the fourth quarter of 2009 together with interest thereon prior to the Merger.

Management believes that the Company will continue to incur net losses through at least March 31, 2011 and for the foreseeable future thereafter. Based on the resources of the Company available at March 31, 2010, management believes that the Company has sufficient capital to fund its operations through the end of 2010. Management believes that the Company will need additional equity or debt financing or will need to generate positive cash flow from a joint venture agreement, see Note 5, or generate revenues through licensing of its products or entering into strategic alliances to be able to sustain its operations into 2011. Furthermore, the Company will need additional financing thereafter to complete development and commercialization of our products. There can be no assurances that we can successfully complete development and commercialization of our products.

The Company's continued operations will depend on its ability to raise additional funds through various potential sources such as equity and debt financing, collaborative agreements, strategic alliances and its ability to realize the full potential of its technology in development. Additional funds may not become available on acceptable terms, and there can be no assurance that any additional funding that the Company does obtain will be sufficient to meet the Company's needs in the long-term.

These matters raise substantial doubt about the Company's ability to continue as a going concern. The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty.

3. COMPUTATION OF NET LOSS PER COMMON SHARE

Basic net loss per common share is calculated by dividing net loss applicable to common shares by the weighted-average number of common shares outstanding for the period. Diluted net loss per common share is the same as basic net loss per common share, since potentially dilutive securities from stock options and stock warrants would have an antidilutive effect because the Company incurred a net loss during each period presented. The amounts of potentially dilutive securities excluded from the calculation were 164,890,446 and 95,358,343 shares at March 31, 2010 and December 31, 2009, respectively. These amounts do not include the 71,428,571 shares issuable upon the exercise of the put or call rights issued in connection with the Hedrin JV (see Note 5) which were subject to anti-dilution rights upon the issuance of common shares in the 2010 equity financing transaction (see Note 7).

4. SHARE-BASED COMPENSATION

The Company has stockholder-approved stock incentive plans for employees, directors, officers and consultants. Prior to January 1, 2006, the Company accounted for the employee, director and officer plans using the intrinsic value method. Effective January 1, 2006, the Company adopted the share-based payment method for employee options using the modified prospective transition method. This new method of accounting for stock options eliminated the option to use the intrinsic value method and required the Company to expense the fair value of all employee options over the vesting period. Under the modified prospective transition method, the Company recognized compensation cost for the quarters ended March 31, 2010 and 2009 which includes a) period compensation cost related to share-based payments granted prior to, but not yet vested, as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions; and b) period compensation cost related to share-based payments granted on or after January 1, 2006, based on the grant date fair value estimated in accordance with the new accounting methodology. In accordance with the modified prospective method, the Company has not restated prior period results.

The Company recognizes compensation expense related to stock option grants on a straight-line basis over the vesting period. For the three month periods ended March 31, 2010 and 2009, the Company recognized share-based employee compensation cost of $190,882 and $104,097, respectively. The Company did not capitalize any share-based compensation cost.

Options granted to consultants and other non-employees are recorded at fair value at the date of grant and subsequently adjusted to fair value at the end of each reporting period until such options vest, and the fair value of the options, as adjusted, is amortized to consulting expense over the related vesting period. Accordingly, such options are recorded at fair value at the date of grant and subsequently adjusted to fair value at the end of each reporting period until such options vest, and the fair value of the options, as adjusted, is amortized to consulting expense over the related vesting period. As a result of adjusting consultant and other non-employee options to fair value as of March 31, 2010 and 2009 respectively, net of amortization, the Company recognized an increase to general and administrative and research and development expenses of $249 for the three month period ended March 31, 2010 and an increase to general and administrative and research and development expenses of $378 for the three month period ended March 31, 2009. The Company has allocated share-based compensation costs to general and administrative and research and development expenses as follows:

	Three months ended March 31,	
	2010	2009
General and administrative expense:		
Share-based employee compensation cost	$ 190,633	$ 103,719
Share-based consultant and non-employee cost	25	38
	190,658	103,757
Research and development expense		
Share-based employee compensation cost	-	-
Share-based consultant and non-employee cost	224	340
	224	340
Total share-based cost	**$ 190,882**	**$ 104,097**

To compute compensation expense in 2010 and 2009 the Company estimated the fair value of each option award on the date of grant using the Black-Scholes model. The Company based the expected volatility assumption on a volatility index of peer companies as the Company did not have a sufficient number of years of historical volatility of its common stock. The expected term of options granted represents the period of time that options are expected to be outstanding. The Company estimated the expected term of stock options by the simplified method. The expected forfeiture rates are based on the historical employee forfeiture experiences. To determine the risk-free interest rate, the Company utilized the U.S. Treasury yield curve in effect at the time of grant with a term consistent with the expected term of the Company's awards. The Company has not declared a dividend on its common stock since its inception and has no intentions of declaring a dividend in the foreseeable future and therefore used a dividend yield of zero.

The following table shows the weighted average assumptions the Company used to develop the fair value estimates for the determination of the compensation charges in 2010 and 2009:

	Three months ended March 31,	
	2010	2009
Expected volatility	88%	94%
Dividend yield	-	-
Expected term (in years)	6	6
Risk-free interest rate	2.47%	1.88%

The Company has shareholder-approved incentive stock option plans for employees under which it has granted non-qualified and incentive stock options. In December 2003, the Company established the 2003 Stock Option Plan (the "2003 Plan"), which provided for the granting of up to 5,400,000 options to officers, directors, employees and consultants for the purchase of stock. In August 2005, the Company increased the number of shares of common stock reserved for issuance under the 2003 Plan by 2,000,000 shares. In May 2007, the Company increased the number of shares of common stock reserved for issuance under the 2003 Plan by 3,000,000 shares. In November 2009, the Company increased the number of shares of common stock reserved for issuance under the 2003 plan by an additional 4,600,000 shares. At March 31, 2010, 15,000,000 shares were authorized for issuance. The options have a maximum term of 10 years and vest over a period determined by the Company's Board of Directors (generally 3 years) and are issued at an exercise price equal to or greater than the fair market value of the shares at the date of grant. The 2003 Plan expires on December 10, 2013 or when all options have been granted, whichever is sooner. At March 31, 2010 options to purchase 11,584,936 shares were outstanding, 27,776 shares of common stock were issued and there were 3,387,288 shares reserved for future grants under the 2003 Plan.

In July 1995, the Company established the 1995 Stock Option Plan (the"1995 Plan"), which provided for the granting of options to purchase up to 130,000 shares of the Company's common stock to officers, directors, employees and consultants. The 1995 Plan was amended several times to increase the number of shares reserved for stock option grants. In June 2005 the 1995 Plan expired and no further options can be granted. At March 31, 2010 options to purchase 1,137,240 shares were outstanding and no shares were reserved for future stock option grants under the 1995 Plan.

A summary of the status of the Company's stock options as of March 31, 2010 and changes during the period then ended is presented below:

	Shares	Weighted average exercise price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at December 31, 2009	7,459,936	$ 0.7180	6.160	
Granted	4,125,000	$ 0.0701	9.330	
Exercised	-			
Cancelled				
Outstanding at March 31, 2010	11,584,936	$ 0.4871	6.680	$ 57,500
Exercisable at March 31, 2010	9,886,602	$ 0.5491	6.150	$ -
Weighted-average fair value of options granted during the three month period ended March 31, 2010	$ 0.0464			

As of March 31, 2010, the total compensation cost related to nonvested option awards not yet recognized is $83,607. The weighted average period over which it is expected to be recognized is approximately 2.6 years.

5. JOINT VENTURE

In February 2008, the Company and Nordic Biotech Advisors ApS through its investment fund Nordic Biotech Venture Fund II K/S ("Nordic") entered into a joint venture agreement (the "Hedrin JV Agreement") to develop and commercialize the Company's North American rights (under license) to its Hedrin product.

Pursuant to the Hedrin JV Agreement, Nordic formed a new Danish limited partnership, H Pharmaceuticals K/S, (the "Hedrin JV") and provided it with initial funding of $2.5 million and the Company assigned and transferred its North American rights in Hedrin to the Hedrin JV in return for a $2.0 million cash payment from the Hedrin JV and equity in the Hedrin JV representing 50% of the nominal equity interests in the Hedrin JV. At closing the Company recognized an investment in the Hedrin JV of $250,000 and an exchange obligation of $2,054,630. The exchange obligation represents the Company's obligation to Nordic to issue the Company's common stock in exchange for all or a portion of Nordic's equity interest in the Hedrin JV upon the exercise by Nordic of the put issued to Nordic in the Hedrin JV Agreement transaction. The put is described below.

In June 2008, Nordic invested an additional $1.0 million, for a total of $3.5 million, in the Hedrin JV and made an advance of $250,000 to the Hedrin JV and the Hedrin JV made an additional $1.0 million payment, for a total of $3.0 million, to the Company. The Hedrin JV also distributed additional ownership equity sufficient for each of the Company and Nordic to maintain their ownership interest at 50%. The FDA classified Hedrin as a Class III medical device in February 2009. Upon attaining this classification of Hedrin by the FDA, Nordic invested an additional $1.25 million, for a total investment of $5 million, into the Hedrin JV, the Hedrin JV paid an additional $0.5 million, for a total of $3.5 million, to the Company and the $250,000 that Nordic advanced to the Hedrin JV in June became an equity investment in the Hedrin JV by Nordic.

In February 2009, the Company's exchange obligation increased by $1,000,000 and the Company's investment in the Hedrin JV increased by $500,000 as a result of the investment by Nordic of an additional $1.25 million into the Hedrin JV, the reclassification of the advance made by Nordic in June 2008 to the Hedrin JV of $250,000 into an equity interest and the payment of $500,000 by the Hedrin JV to the Company. At March 31,2010, the Company's exchange obligation is $3,949,176.

During the quarters ended March 31, 2010 and 2009, the Company recognized $0 and $135,786, respectively, of equity in the losses of the Hedrin JV. This reduced the carrying value of its investment in the Hedrin JV to $0 at March 31, 2010 and $364,214 at March 31, 2009. As of March 31, 2010, the Company's share of the losses is $670,288; equity in losses of Hedrin JV previously recognized was $500,000 leaving a remaining balance of $170,288 of losses that was not recognized at March 31, 2010.

The Hedrin JV is responsible for the development and commercialization of Hedrin for the North American market and all associated costs including clinical trials, if required, regulatory costs, patent costs, and future milestone payments owed to T&R, the licensor of Hedrin.

The Hedrin JV has engaged the Company to provide management services to the Limited Partnership in exchange for a management fee. For the quarters ended March 31, 2010 and 2009, the Company has recognized $75,000 and $108,845, respectively, of other income from management fees earned from the Hedrin JV which is included in the Company's statements of operations for the quarters ended March 31, 2010 and 2009 as a component of interest and other income.

As per the Limited Partnership Agreement between the Company and Nordic (the "LPA") in the event that a limited partner in the Hedrin JV (a "Limited Partner") determines, in its reasonable good faith discretion, that the Hedrin JV requires additional capital for the proper conduct of its business that Limited Partner shall provide each Limited Partner with a written request for contribution of such Limited Partner's proportionate share, in accordance to the then respective equity ownership in the Hedrin JV, of such requested additional capital amount.

As per the terms of the LPA, if a Limited Partner declines to so contribute, elects to contribute but thereafter fails to do so timely, or elects to contribute and timely does contribute some, but not all of, its proportionate share of the requested additional capital amount, the other Limited Partner shall have the option to contribute the remaining balance of such requested additional capital amount.

As per the terms of the LPA, the General Partner shall determine the fair market value of the shares for purposes of determining how to allocate the number of shares of the Hedrin JV to be issued in consideration for the contribution of capital. If the General Partner is unable to determine the fair market value of the shares, the fair market value for the shares shall be determined in good faith by the contributing Limited Partner if such amount is equal to or greater than the most recent valuation of such Hedrin JV shares.

On December 31, 2009, Nordic Biotech Venture Fund II ("Nordic") delivered a written notice to the Company for a $1,000,000 capital increase to the Hedrin JV. In January 2010, Nordic made its capital contribution to the Hedrin JV of $500,000. The Company did not have sufficient funds to make such a capital contribution within the required time prescribed in the LPA.

The General Partner was unable to determine the fair market value of the shares. The contributing Limited Partner, Nordic, determined in good faith that the fair market value of the shares is equal to the most recent valuation. The most recent valuation was the February 2009 investment of $1,500,000 into the Hedrin JV by Nordic at $5,000 per share. As a result of Nordic's investing an additional $500,000 in the Hedrin JV the ownership percentages of the Hedrin JV have changed from 50% to Nordic and 50% for the Company to 52.38% to Nordic and 47.62% for the Company. In the event that Nordic exercises its option to invest the remaining $500,000 of the $1,000,000 capital increase then the ownership percentage shall change to 54.55% for Nordic and 45.45% for the Company.

6. NOTES PAYABLE

a. Secured 10% Notes Payable

In September 2008, Manhattan entered into a series of Secured 10% Notes (the "Secured 10% Notes") with certain of our directors, officers and an employee (the "Secured 10% Note Holders") for aggregate of $70,000. Principal and interest on the Secured 10% Notes shall be paid in cash on March 10, 2009 unless paid earlier by us. Pursuant to the Secured 10% Notes, we also issued to the Secured 10% Note Holders 5-year warrants to purchase an aggregate of 140,000 shares of our common stock at an exercise price of $0.20 per share. Manhattan granted to the Secured 10% Note Holders a continuing security interest in certain specific refunds, deposits and repayments due Manhattan and expected to be repaid to Manhattan in the next several months. The Secured 10% Notes plus interest were repaid on February 4, 2009.

b. Secured 12% Notes Payable

On November 19, 2008, December 23, 2008 and February 3, 2009, the Company completed the first, second and final closings on a financing transaction (the "Secured 12% Notes Transaction"). The Company sold $1,725,000 of 12% senior secured notes (the "Secured 12% Notes") and issued warrants to the investors to purchase 57.5 million shares of the Company's common stock at $0.09 per share. The warrants expire on December 31, 2013. Net proceeds of $1.4 million were realized from the three closings. In addition, $78,000 of issuance costs were paid outside of the closings. Per the terms of the 12% Notes Transaction the net proceeds were paid into a deposit account (the "Deposit Account") and are to be paid out to the Company in monthly installments of $113,300 retroactive to October 1, 2008 and a one-time payment of $200,000. Per the terms of the 12% Notes Transaction the monthly installments are to be used exclusively to fund the current operating expenses of the Company and the one-time payment was to be used for trade payables incurred prior to October 1, 2008. The Company received $876,700 of such monthly installments and the one time payment of $200,000 during the year ended December 31, 2009. There was no remaining balance in the Deposit Account at December 31, 2009.

National Securities Corporation ("National") was the placement agent for the 12% Notes Transaction. National's compensation for acting as placement agent is a cash fee of 10% of the gross proceeds received, a non-accountable expense allowance of 1.5% of the gross proceeds, reimbursement of certain expenses and a warrant to purchase such number of shares of the Company's common stock equal to 15% of the shares underlying the warrants issued to the investors. The Company paid National a total of $202,000 in placement agent fees, a non-accountable expense allowance and reimbursement of certain expenses. In addition, the Company issued warrants to purchase 8.6 million shares of the Company's common stock at $0.09 per share. These warrants were valued at $29,110 and are a component of Secured 12% notes payable issue costs. The warrants expire on December 31, 2013.

The Secured 12% Notes mature two years after issuance. Interest on the Secured 12% Notes is compounded quarterly and payable at maturity. At March 31, 2010 and December 31, 2009, accrued and unpaid interest on the Secured 12% Notes amounted to approximately $290,000 and $229,000, and is reflected in the accompanying balance sheets at March 31, 2010 and December 31, 2009, respectively, as interest payable on secured 12% notes payable. The Secured 12% Notes are secured by a pledge of all of the Company's assets except for its investment in the Hedrin JV. In addition, to provide additional security for the Company's obligations under the notes, the Company entered into a default agreement, which provides that upon an event of default under the notes, the Company shall, at the request of the holders of the notes, use reasonable commercial efforts to either (i) sell a part or all of the Company's interests in the Hedrin joint venture or (ii) transfer all or part of the Company's interest in the Hedrin JV to the holders of the notes, as necessary, in order to fulfill the Company's obligations under the notes, to the extent required and to the extent permitted by the applicable Hedrin joint venture agreements.

In connection with the private placement, the Company, the placement agent and the investors entered into a registration rights agreement. Pursuant to the registration rights agreement, we agreed to file a registration statement to register the resale of the shares of our common stock issuable upon exercise of the warrants issued to the investors in the private placement, within 20 days of the final closing date and to cause the registration statement to be declared effective within 90 days (or 120 days upon full review by the Securities and Exchange Commission). During the year ended December 31, 2009 we filed the registration statement, received a comment letter from the SEC and responded to the comment letter from the SEC. The registration statement was declared effective on April 17, 2009.

The Company incurred a total of approximately $424,000 of costs in the issuance of the $1,725,000 of Secured 12% Notes sold in 2008 and 2009. These costs were capitalized and are being amortized over the life of the Secured 12% Notes into interest expense. During the quarter ended March 31, 2010 and the year ended December 31, 2009, the amount amortized into interest expense was approximately $52,000 and $206,000, respectively. The remaining unamortized balance of approximately $149,000 and $201,000 is reflected in the accompanying balance sheets as of March 31, 2010 and December 31, 2009, respectively, as Secured 12% Notes payable issue costs.

The Company recognized an original issue discount (the "OID") of approximately $194,000 on the issuance of the Secured 12% Notes sold for the value of the warrants issued to the investors. The OID is being amortized over the life of the Secured 12% Notes into interest expense. During the quarter ended March 31, 2010 and year ended December 31, 2009 the amount amortized into interest expense was approximately $24,000 and $94,000, respectively. The remaining unamortized balance of approximately $69,000 and $93,000 has been netted against the face amount of the Secured 12% Notes in the accompanying balance sheets as of March 31, 2010 and December 31, 2009, respectively. As per the terms of the 12% Notes Transaction the Company's officers agreed to certain modifications of their employment agreements.

c. 8% Note Payable

On December 21, 2009, the Company entered into a Future Advance Promissory Note (the "8% Note") with Ariston under which the Company may withdraw up to $67,000 bearing interest at a rate of 8%. As of December 31, 2009, the Company had withdrawn $27,000 from Ariston subject to the terms of the 8% Note. On January 13, 2010, the Company withdrew an additional $20,000 subject to the 8% Note and on January 28, 2010, the Company withdrew an additional $20,000 subject to the 8% Note.

On March 4, 2010, the Company repaid Ariston the $67,000 withdrawn subject to the 8% Note and accrued interest of $816.

d. Non-interest Bearing Note Payable

On October 27, 2009, the Company entered into a Settlement Agreement and Mutual Release with Swiss Pharma Contract LTD ("Swiss Pharma") pursuant to which the Company agreed to pay Swiss Pharma $200,000 and issue to Swiss Pharma an interest free promissory note in the principal amount of $250,000 in full satisfaction of the September 5, 2008 arbitration award. The amount of the Arbitration award was $683,027 at September 30, 2009 and was included as a component of accrued expenses.

In connection with the non-interest bearing note, the Company recognized an original issue discount of $40,000 of imputed interest on the note, which is being amortized into interest expense on a straight-line basis over the two-year term of the note. For the quarter ended March 31, 2010 and the year ended December 31, 2009, the Company amortized $5,000 and $1,900 of the OID into interest expense, respectively. The remaining unamortized balance of $33,100 has been netted against the face amount of the non-interest bearing note payable in the accompanying balance sheets as of March 31, 2010.

e. Convertible 12% Note Payable

In conjunction with the Settlement Agreement and Mutual Release with Swiss Pharma described above, on October 28, 2009, the Company entered into a Subscription Agreement (the "Subscription Agreement") pursuant to which it sold a 12% Original Issue Discount Senior Subordinated Convertible Debenture with a stated value of $400,000 (the "Convertible 12% Note") and a warrant to purchase 2,222,222 shares of the Company's common stock, par value $.001 per share for a purchase price of $200,000. The Convertible 12% Note is convertible into shares of Common Stock at an initial conversion price of $0.09 per share, subject to adjustment, or, in the event the Company issues new securities in connection with a financing, the Convertible 12% Note may be converted into such new securities at a conversion price equal to the purchase price paid by the purchasers of such new securities. The Company may also, in its sole discretion, elect to pay interest due on the Convertible 12% Note quarterly in shares of the Company's common stock provided such shares are subject to an effective registration statement. The Convertible 12% Note is subordinated to the Company's outstanding Secured 12% Notes. The Warrant is exercisable at an exercise price of $0.11 per share, subject to adjustment. Because the Convertible 12% Note and the Warrant are convertible into shares of the Company, subject to adjustment, the conversion feature is subject to Derivative Liability accounting (see Note 8).

National Securities Corporation ("National") was the placement agent for the Convertible 12% Note transaction. In connection with the issuance of the Securities, the Company issued warrants to purchase an aggregate of 222,222 shares of Common Stock at an exercise price of $0.11 per share, subject to adjustment, to the placement agent and certain of its designees. Because the warrant is convertible into shares of the Company, subject to adjustment, the warrants are subject to Derivative Liability accounting (see Note 8). The warrants expire on October 28, 2014.

The Convertible 12% Notes mature two years after issuance. Interest on the Convertible 12% Note is compounded quarterly and payable at maturity. At March 31, 2010 and December 31, 2009, accrued and unpaid interest on the Convertible 12% Note amounted to approximately $21,000 and $9,000, respectively, and is reflected in the accompanying balance sheet at March 31, 2010 and December 31, 2009, respectively, as interest payable on convertible 12% notes payable.

The Company incurred a total of approximately $38,000 of costs in the issuance of the Convertible 12% Note sold in 2009. These costs were capitalized and are being amortized over the life of the Convertible 12% Note into interest expense. During the quarter ended March 31, 2010 and the year ended December 31, 2009, the amount amortized into interest expense was approximately $5,000 and $3,000, respectively. The remaining unamortized balance of approximately $30,000 and $35,000, respectively, is reflected in the accompanying balance sheet as of March 31, 2010 and December 31, 2009, as a non-current asset, convertible 12% note payable issue costs.

The Company recognized an original issue discount of approximately $200,000 on the issuance of the Convertible 12% Notes. The OID is being amortized over the life of the Convertible 12% Notes into interest expense. During the quarter ended March 31, 2010 and the year ended December 31, 2009 the amount amortized into interest expense was approximately $24,000 and $18,000, respectively. The remaining unamortized balance of approximately $158,000 and $182,000 has been netted against the face amount of the Convertible 12% Notes in the accompanying balance sheet as of March 31, 2010 and December 31, 2009, respectively.

f. Convertible 5% Notes Payable

Upon the Merger, Ariston issued $15,452,793 of five-year 5% notes payable (the "5% Notes Payable") in satisfaction of several note payable issuances. The cumulative liability including accrued and unpaid interest of these several issuances of notes was $15,452,793 as of the Merger date. Interest is payable at maturity and compounds annually. The 5% Notes Payable and accrued and unpaid interest thereon are convertible at the option of the holder into the Company's common stock at the conversion price of $0.40 per share. Ariston agreed to make quarterly payments on the 5% Notes Payable equal to 50% of the gross proceeds resulting from the revenues received from the exploitation or commercialization of Ariston's product candidates, AST-726 and AST915. The 5% Notes Payable are solely the obligation of Ariston and have no recourse to the Company other than the conversion feature discussed above.

g. ICON Convertible Note Payable

Upon the Merger, Ariston satisfied an account payable of $1,275,188 to ICON Clinical Research Limited through the payment of $275,188 in cash and the issuance of a three-year 5% note payable (the “ICON Note Payable”). The principal is to be repaid in 36 monthly installments of $27,778 commencing in April 2010. Interest is payable monthly in arrears. . The ICON Convertible Note Payable is convertible at the option of the holder into the Company’s common stock at the conversion price of $0.20 per share.

7. 2010 EQUITY FINANCING

On March 2, 2010, the Company raised aggregate gross proceeds of approximately $2,547,500 pursuant to a private placement of its securities (the “2010 Equity Financing”). The Company entered into subscription agreements (the "Subscription Agreements") with seventy-seven accredited investors (the "Investors") pursuant to which the Company sold an aggregate of 101.9 Units (as defined herein) for a purchase price of $25,000 per Unit. Pursuant to the Subscription Agreements, the Company issued to each Investor units (the "Units") consisting of (i) 357,143 shares of common stock, $0.001 par value per share (the “Common Stock” or “Shares”) of the Company and (ii) 535,714 warrants (each a “Warrant” and collectively the “Warrants”), each of which will entitle the holder to purchase one additional share of Common Stock for a period of five years (each a “Warrant Share” and collectively the “Warrant Shares”) at an exercise price of $0.08 per share. Because the Warrant Shares are convertible into shares of the Company, subject to adjustment, the conversion feature is subject to Derivative Liability accounting (see Note 8).

National was the placement agent for the 2010 Equity Financing transaction. In connection with the issuance of the Securities, the Company issued warrants to purchase an aggregate of 3,369,289 shares of Common Stock at an exercise price of $0.08 per share, subject to adjustment, to the placement agent and certain of its designees. Because the warrant is convertible into shares of the Company, subject to adjustment, the warrants are subject to Derivative Liability accounting (see Note 8). The warrants expire on March 2, 2015.

The Nordic Put and Nordic Warrant were issued at a value of $0.14 per share and were issued with anti-dilution rights. The issuance of any securities at a value of less than $0.14 per share activates Nordic’s anti-dilution rights. The Secured 12% Note transaction included warrants with an exercise price of $0.09 per share, this activated Nordic’s anti-dilution rights as reflected in the table below under the caption “Before the Equity Pipe Transaction”. Any issuances of any securities subsequent to the Secured 12% Note transaction at a value of less than $0.09 further activates Nordic’s anti-dilution rights. The Equity Pipe transaction in March 2010 effectively included the sale of one share of common stock and a warrant to purchase 1.5 shares of common stock for a price of $0.07. The JV Agreement between Nordic and Manhattan governs the antidilution protection to Nordic. Section 5.1 of that agreement state ”If shares of Common Stock or Common Stock Equivalents are issued or sold together with other stock or securities or other assets of MHA (Manhattan) for a consideration which covers both, the effective price per share shall be computed with regard to the portion of the consideration so received that may reasonably be determined in good faith by the Board of Directors, to be allocable to such Common Stock or Common Stock Equivalent.” The good faith determination of the effective price per share was $0.07 for each share of common stock sold and a de minimus value to the warrants. The Nordic Put and the Nordic Warrant are now valued at a price of $0.07 per share. The following table shows the effect of Nordic’s anti-dilution rights.

	Shares Issuable Upon Exercise of Nordic's Put	Shares Issuable Upon Exercise of Nordic's Warrant	Total Shares Issuable Upon Exercise of Nordic's Put and Warrant
Before the Equity Pipe Transaction	55,555,556	11,111,111	66,666,667
Antidilution shares	15,873,015	3,174,603	19,047,618
After the Equity Pipe Transaction	71,428,571	14,285,714	85,714,285

In March 2010, we received correspondence from Nordic that questions how we calculated the anti-dilution shares, as shown above, and suggesting that we did not employ a good faith estimate. We believe our determination was made in good faith and is appropriate. See Note 11.

All of the Investors represented that they were “accredited investors,” as that term is defined in Rule 501(a) of Regulation D under the Securities Act, and the sale of the Units was made in reliance on exemptions provided by Regulation D and Section 4(2) of the Securities Act of 1933, as amended.

In connection with the closing of the private placement, the Company, the placement agent acting in connection with the private placement (the “Placement Agent”) and the Investors entered into a Registration Rights Agreement, dated as of March 2, 2010, and the Company agreed to file a registration statement to register the resale of the Shares, within 60 days of the final closing date and to cause the registration statement to be declared effective within 150 days (or 180 days upon review by the SEC).

The Company received net proceeds of approximately $2,100,000 after payment of an aggregate of approximately $300,000 of commissions and expense allowance to the Placement Agent, and approximately $100,000 of other offering and related costs in connection with the private placement. In addition, the Company issued a warrant to purchase 3,639,289 shares of Common Stock at an exercise price of $0.08 per share to the Placement Agent as additional compensation for its services.

The Company did not use any form of advertising or general solicitation in connection with the sale of the Units. The Shares, the Warrants and the Warrant Shares are non-transferable in the absence of an effective registration statement under the Act, or an available exemption therefrom, and all certificates are imprinted with a restrictive legend to that effect.

8. DERIVATIVE LIABILITY

In April 2008, the FASB issued a pronouncement which provides guidance on determining what types of instruments or embedded features in an instrument held by a reporting entity can be considered indexed to its own stock for the purpose of evaluating the first criteria of the scope exception in the pronouncement on accounting for derivatives. This pronouncement was effective for financial statements issued for fiscal years beginning after December 15, 2008. The adoption of these requirements can affect the accounting for warrants and many convertible instruments with provisions that protect holders from a decline in the stock price (or “down-round” provisions). For example, warrants with such provisions will no longer be recorded in equity. Down-round provisions reduce the exercise price of a warrant or convertible instrument if a company either issues equity shares for a price that is lower than the exercise price of those instruments or issues new warrants or convertible instruments that have a lower exercise price. We evaluated whether warrants to acquire stock of the Company contain provisions that protect holders from declines in the stock price or otherwise could result in modification of the exercise price under the respective warrant agreements. We determined that the warrant issued to Nordic in April 2008 (the “Nordic Warrant”), the warrants issued in connection with the 2009 sale of the Convertible 12% Note Payable, and the warrants issued in connection with the 2010 Equity Financing contained such provisions, thereby concluding they were not indexed to the Company’s own stock and were reclassified from equity to derivative liabilities.

In accordance with this pronouncement, the Company estimated the fair value of the Nordic Warrant as of January 1, 2009 to be $22,222 by recording a reduction in additional paid-in capital of $150,000 and a decrease in deficit accumulated during the development stage of $127,778. The effect of this adjustment is recorded as a cumulative effect of change in accounting principle in our statements of stockholders’ equity (deficiency). As of March 31, 2010, the fair value of these derivatives was $815,714 as recorded in the accompanying balance sheet as of March 31, 2010, as a component of a current liability, derivative liability. The change of $332,381 in fair value during the quarter ended March 31, 2010 is reported as a non-cash charge in our statement of operations as a component of other (income) expense.

In accordance with this pronouncement the Company estimated the fair value at the date of issuance of the conversion feature of the Convertible 12% Note and the fair value of the related warrants to purchase 2,444,444 shares of the Company’s common stock at $175,100 and $27,390, respectively. As of March 31, 2010 the fair value of these derivatives totaled $375,622 and are recorded in the accompanying balance sheet as of March 31, 2010 as a component of derivative liability. The change in fair value of $74,177 during quarter ended March 31, 2010 is reported as a non-cash charge in our statement of operations as a component of other (income) expense.

Additionally, in accordance with this pronouncement the Company estimated the fair value at the date of issuance of the 54,589,266 warrants issued in connection with the 2010 Equity Financing and the fair value of the related 3,369,289 warrants issued to the placement agents in the 2010 Equity Financing at $2,713,087 and $180,873, respectively. As of March 31, 2010 the fair value of these derivatives totaled $3,429,662 and are recorded in the accompanying consolidated balance sheet as of March 31, 2010 as a component of derivative liability. The change in fair value of $535,703 during quarter ended March 31, 2010 is reported as a non-cash charge in the consolidated statement of operations as a component of other (income) expense.

9. LICENSE AGREEMENTS

Altoderm License Agreement

On April 3, 2007, the Company entered into a license agreement for “Altoderm” (the “Altoderm Agreement”) with T&R. Pursuant to the Altoderm Agreement, the Company acquired an exclusive North American license to certain patent rights and other intellectual property relating to Altoderm, a topical skin lotion product candidate using sodium cromoglicate for the treatment of atopic dermatitis.

In February 2009, the Company terminated the Altoderm Agreement. The Company has no further financial liability or commitment to T&R under the Altoderm Agreement.

Altolyn License Agreement

On April 3, 2007, the Company and T&R also entered into a license agreement for "Altolyn" (the "Altolyn Agreement"). Pursuant to the Altolyn Agreement, the Company acquired an exclusive North American license to certain patent rights and other intellectual property relating to Altolyn, an oral formulation product candidate using sodium cromoglicate for the treatment of mastocytosis, food allergies, and inflammatory bowel disorder.

In February 2009, the Company terminated the Altolyn Agreement for convenience. The Company has no further financial liability or commitment to T&R under the Altolyn Agreement.

IGI Agreement for PTH (1-34)

On April 1, 2005, as part of the acquisition of Tarpan Therapeutics, Inc., the Company acquired a Sublicense Agreement with IGI, Inc. (the "IGI Agreement") dated April 14, 2004. Under the IGI Agreement the Company received the exclusive, world-wide, royalty bearing sublicense to develop and commercialize the licensed technology for the treatment of psoriasis.

In May 2009, the Company terminated the IGI Agreement. The Company has no further financial liability or commitment to IGI, Inc. under the IGI Agreement.

10. SUBSEQUENT EVENTS

Final Closing of 2010 Equity Financing

On April 8, 2010, the Company completed the final closing of the 2010 Equity Financing (see Note 7). In connection with the final closing, the Company sold an aggregate of 2.4 additional Units and received net proceeds of approximately $51,700 after payment of an aggregate of $8,300 of commissions and expense allowance to placement agent. In connection with the final closing, the Company also issued a warrant to purchase 12,857 shares of Common Stock at an exercise price of $0.08 per share to the placement agent as additional compensation for its services.

In addition on April 8, 2010, the holder the 12% Convertible Note (see Note 6) with a stated value of $400,000 and $21,886 of accrued interest, exercised its option to convert its Debenture (including all accrued interest thereon) into 16.88 Units. The conversion price was equal to the per Unit purchase price paid by the Investors in the private placement.

The Company issued a total of 6,885,717 shares of common stock and warrants to purchase 10,328,566 shares of common stock at an exercise price of $0.08 per share to the investors in the final closing of the 2010 Equity Financing, including the conversion of the 12% Convertible Note.

Disagreement with Nordic

In April 2010 Nordic filed a Schedule 13D/A (the "Amended 13D"). The Company is not in agreement with the Amended 13D and has written a letter to Nordic explaining its disagreements. The Amended 13D shows an aggregate number of shares of the Company's common stock beneficially owned by Nordic of 216,666,666, or 65.5%. The Company believes the correct beneficial ownership is 85,714,286 shares, or 42.9%. The Amended 13D/A states that Nordic does not believe the Company's determination of the anti-dilution shares accruing to Nordic as a result of the 2010 Equity Financing was neither reasonable nor made in good faith. As the Company has previously stated we believe our determination was both reasonable and made in good faith. The Amended 13D/A further states that Nordic acquired the right to purchase an additional 5,555,556 shares of the Company's common stock upon exercise of the Nordic Put as a result of Nordic's making an additional investment in the Hedrin JV of $500,000 in January 2010. The Company is not in agreement with this claim, there is no adjustment to Nordic's Put as a result of Nordic making additional capital contributions to the Hedrin JV. In the letter to Nordic the Company also points out that Nordic's valuation suggestions for the warrants issued in the 2010 Equity Financing ignore the concept of relative value inherent in the Hedrin JV Agreement.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders
Manhattan Pharmaceuticals, Inc.

We have audited the accompanying balance sheets of Manhattan Pharmaceuticals, Inc. (a development stage company) as of December 31, 2009 and 2008, and the related statements of operations, stockholders' equity (deficiency) and cash flows for the years then ended and for the period from August 6, 2001 (date of inception) to December 31, 2009. These financial statements are the responsibility of the Company's management. 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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes 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 Manhattan Pharmaceuticals, Inc. as of December 31, 2009 and 2008, and its results of operations and cash flows for the years then ended and for the period from August 6, 2001 (date of inception) to December 31, 2009, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 13 to the financial statements, the Company adopted new accounting guidance for whether an equity linked financial instrument is indexed to its own stock.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has incurred net losses and negative cash flows from operating activities from its inception through December 31, 2009 and has an accumulated deficit and negative working capital as of December 31, 2009. These matters raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plans regarding these matters are also described in Note 2. The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ J.H. Cohn LLP

Roseland, New Jersey
March 31, 2010

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

	December 31, 2009	December 31, 2008
Assets		
Current assets:		
Cash and cash equivalents	$ 17,996	$ 106,023
Restricted cash	-	730,499
Secured 12% notes payable issue costs, current portion	158,552	-
Other current assets	87,177	37,718
Total current assets	263,725	874,240
Property and equipment, net	3,541	9,072
Secured 12% notes payable issue costs	42,420	330,756
Convertible 12% note payable issue costs	34,606	-
Other assets	21,370	34,895
Total assets	$ 365,662	$ 1,248,963
Liabilities and Stockholders' Deficiency		
Current Liabilities:		
Secured 10% notes payable	$ -	$ 70,000
8% note payable	27,000	-
Secured 12% notes payable, current portion, net	1,247,062	-
Accounts payable	215,400	542,296
Interest payable on secured 12% notes, current portion	182,193	-
Accrued expenses	75,775	874,072
Derivative liability	784,777	-
Total current liabilities	2,532,207	1,486,368
Secured 12% notes payable, net	384,473	1,174,107
Interest payable on secured 12% notes payable	46,381	15,237
Convertible 12% note payable, net	17,808	-
Interest payable on convertible 12% note	8,667	-
Non-interest bearing note payable, net	211,900	-
Exchange obligation	3,949,176	2,949,176
Total liabilities	7,150,612	5,624,888
Commitments and contingencies		
Stockholders' deficiency:		
Preferred stock, $.001 par value. Authorized 1,500,000 shares; no shares issued and outstanding at December 31, 2009 and 2008	-	-
Common stock, $.001 par value. Authorized 500,000,000 shares; 70,624,232 shares issued and outstanding at December 31, 2009 and 2008	70,624	70,624
Additional paid-in capital	55,077,861	54,821,379
Deficit accumulated during the development stage	(61,933,435)	(59,267,928)
Total stockholders' deficiency	(6,784,950)	(4,375,925)
Total liabilities and stockholders' deficiency	$ 365,662	$ 1,248,963

See accompanying notes to financial statements.

MANHATTAN PHARMACEUTICALS, INC.
(A Development Stage Company)
Statements of Operations

	Years ended December 31,		Cumulative period from August 6, 2001 (inception) to December 31,
	2009	2008	2009
Revenue	$ -	$ -	$ -
Costs and expenses:			
Research and development	40,376	1,802,793	28,332,211
General and administrative	1,731,182	2,609,910	18,193,455
In-process research and development charge	-	-	11,887,807
Impairment of intangible assets	-	-	1,248,230
Loss on disposition of intangible assets	-	-	1,213,878
Total operating expenses	1,771,558	4,412,703	60,875,581
Operating loss	(1,771,558)	(4,412,703)	(60,875,581)
Other (income) expense:			
Equity in losses of Hedrin JV	500,000	250,000	750,000
Interest and other income	(586,697)	(458,634)	(1,867,229)
Change in fair value of derivative	560,065	-	430,070
Interest and amortization expense	548,359	64,790	641,400
Realized gain on sale of marketable equity securities	-	-	(76,032)
Total other (income) expense	1,021,727	(143,844)	(121,791)
Net loss	(2,793,285)	(4,268,859)	(60,753,790)
Preferred stock dividends (including imputed amounts)	-	-	(1,179,645)
Net loss applicable to common shares	$ (2,793,285)	$ (4,268,859)	$ (61,933,435)
Net loss per common share:			
Basic and diluted	$ (0.04)	$ (0.06)	
Weighted average shares of common stock outstanding:			
Basic and diluted	70,624,232	70,624,232	

See accompanying notes to financial statements.

MANHATTAN PHARMACEUTICALS, INC.
(A Development Stage Company)
Statements of Stockholders' Equity (Deficiency)

	Common stock shares	Common stock amount	Additional paid-in capital	Deficit accumulated during development stage	Other	Total stockholders' equity (deficiency)
Stock issued at $0.0004 per share for subscription receivable	10,167,741	$ 10,168	$ (6,168)	$ -	$ (4,000)	$ -
Net loss	-	-	-	(56,796)	-	(56,796)
Balance at December 31, 2001	10,167,741	10,168	(6,168)	(56,796)	(4,000)	(56,796)
Proceeds from subscription receivable	-	-	-	-	4,000	4,000
Stock issued at $0.0004 per share for license rights	2,541,935	2,542	(1,542)	-		1,000
Stock options issued for consulting services	-	-	60,589	-	(60,589)	-
Amortization of unearned consulting services	-	-	-	-	22,721	22,721
Common stock issued at $0.63 per share, net of expenses	3,043,332	3,043	1,701,275	-	-	1,704,318
Net loss	-	-	-	(1,037,320)		(1,037,320)
Balance at December 31, 2002	15,753,008	15,753	1,754,154	(1,094,116)	(37,868)	637,923
Common stock issued at $0.63 per share, net of expenses	1,321,806	1,322	742,369	-		743,691
Effect of reverse acquisition	6,287,582	6,287	2,329,954	-		2,336,241
Amortization of unearned consulting costs	-	-	-	-	37,868	37,868
Unrealized loss on short-term investments	-	-	-	-	(7,760)	(7,760)
Payment for fractional shares for stock combination	-	-	(300)	-		(300)
Preferred stock issued at $10 per share, net of expenses	-	-	9,045,176	-	1,000	9,046,176
Imputed preferred stock dividend			418,182	(418,182)		-
Net loss	-	-	-	(5,960,907)		(5,960,907)
Balance at December 31, 2003	23,362,396	23,362	14,289,535	(7,473,205)	(6,760)	6,832,932
						-
Exercise of stock options	27,600	27	30,073	-		30,100
Common stock issued at $1.10, net of expenses	3,368,952	3,369	3,358,349	-		3,361,718
Preferred stock dividend accrued	-	-	-	(585,799)		(585,799)
Preferred stock dividends paid by issuance of shares	-	-	281,073	-	25	281,098
Conversion of preferred stock to common stock at $1.10 per share	1,550,239	1,551	(1,380)	-	(171)	-
Warrants issued for consulting services	-	-	125,558	-	(120,968)	4,590
Amortization of unearned consulting costs	-	-	-	-	100,800	100,800
Unrealized gain on short-term investments and reversal of unrealized loss on short-term investments	-	-	-	-	20,997	20,997
Net loss	-	-	-	(5,896,031)	-	(5,896,031)
Balance at December 31, 2004	28,309,187	28,309	18,083,208	(13,955,035)	(6,077)	4,150,405
Common stock issued at $1.11 and $1.15, net of expenses	11,917,680	$ 11,918	$ 12,238,291	$ -		$ 12,250,209
Common stock issued to vendor at $1.11 per share in satisfaction of accounts payable	675,675	676	749,324	-		750,000
Exercise of stock options	32,400	33	32,367	-		32,400
Exercise of warrants	279,845	279	68,212	-		68,491
Preferred stock dividend accrued	-	-	-	(175,663)		(175,663)
Preferred stock dividends paid by issuance of shares	-	-	477,736	—	42	477,778
Conversion of preferred stock to common stock at $1.10 per share	8,146,858	8,147	(7,251)	-	(896)	-
Share-based compensation	-	-	66,971	-	20,168	87,139
Reversal of unrealized gain on short-term investments	-	-	-	-	(12,250)	(12,250)
Stock issued in connection with acquisition of Tarpan Therapeutics, Inc.	10,731,052	10,731	11,042,253	-		11,052,984
Net loss	-	-	-	(19,140,997)		(19,140,997)
Balance at December 31, 2005	60,092,697	60,093	42,751,111	(33,271,695)	987	9,540,496
Cashless exercise of warrants	27,341	27	(27)	-		-
Share-based compensation	-	-	1,675,499	-		1,675,499
Unrealized loss on short-term investments	-	-	-	-	(987)	(987)
Costs associated with private placement	-	-	(15,257)	-		(15,257)
Net loss	-	-	-	(9,695,123)		(9,695,123)
Balance at December 31, 2006	60,120,038	60,120	44,411,326	(42,966,818)	-	1,504,628

MANHATTAN PHARMACEUTICALS, INC.
(A Development Stage Company)
Statements of Stockholders' Equity (Deficiency)

	Common stock shares	Common stock amount	Additional paid-in capit al	Deficit accumulated during development stage	Other	Total stockholders' equity (deficiency)
Common stock issued at $0.84 and $0.90 per shares, net of expenses	10,185,502	$ 10,186	$ 7,841,999	$ -	$ -	$ 7,852,185
Common stock issued to directors at $0.72 per share in satisfaction of accounts payable	27,776	28	19,972	-	-	20,000
Common stock issued to in connection with in-licensing agreement at $0.90 per share	125,000	125	112,375	-	-	112,500
Common stock issued to in connection with in-licensing agreement at $0.80 per share	150,000	150	119,850	-	-	120,000
Exercise of warrants	10,327	15	7,219	-	-	7,234
Cashless exercise of warrants	5,589	-	(6)	-	-	(6)
Share-based compensation	-	-	1,440,956	-	-	1,440,956
Warrants issued for consulting	-	-	83,670	-	-	83,670
Net loss	-	-	-	(12,032,252)		(12,032,252)
Balance at December 31, 2007	70,624,232	70,624	54,037,361	(54,999,070)	-	(891,085)
Sale of warrant	-	-	150,000	-	-	150,000
Share-based compensation	-	-	463,890	-	-	463,890
Warrants issued with secured 12% notes	-	-	170,128	-	-	170,128
Net loss	-	-	-	(4,268,858)	-	(4,268,858)
Balance at December 31, 2008	70,624,232	70,624	54,821,379	(59,267,928)	-	(4,375,925)
Cumulative effect of a change in accounting principle	-	-	(150,000)	127,778	-	(22,222)
Balance at January 1, 2009, as adjusted	70,624,232	70,624	54,671,379	(59,140,150)	-	(4,398,147)
Share-based compensation	-	-	353,438	-	-	353,438
Warrants issued with secured 12% notes	-	-	46,125	-	-	46,125
Warrant issued to placement agent - secured 12% notes	-	-	6,919	-	-	6,919
Net loss	-	-	-	(2,793,285)	-	(2,793,285)
Balance at December 31, 2009	70,624,232	$ 70,624	$ 55,077,861	$ (61,933,435)	$ -	$ (6,784,950)

See accompanying notes to financial statements.

MANHATTAN PHARMACEUTICALS, INC.
(A Development Stage Company)
Statements of Cash Flows

	Years Ended,		Cumulative period from August 6, 2001 (inception) to December 31,
	2009	2008	2009
Cash flows from operating activities:			
Net loss	$ (2,793,285)	$ (4,268,858)	$ (60,753,790)
Adjustments to reconcile net loss to net cash used in operating activities:			
Equity in losses of Hedrin JV	500,000	250,000	750,000
Share-based compensation	353,438	463,890	4,182,311
Interest and amortization of OID and issue costs on Secured 12% Notes	543,182	38,574	583,973
Change in fair value of derivative	560,065	-	430,070
Shares issued in connection with in-licensing agreement	-	-	232,500
Warrants issued to consultant	-	-	83,670
Amortization of intangible assets	-	-	145,162
Gain on sale of marketable equity securities	-	-	(76,032)
Depreciation	5,531	26,106	227,462
Non cash portion of in-process research and development charge	-	-	11,721,623
Loss on impairment and disposition of intangible assets	-	-	2,462,108
Other	-	18,327	23,917
Changes in operating assets and liabilities, net of acquisitions:			
Decrease (increase) in restricted cash	730,499	(730,499)	-
Decrease in prepaid expenses and other current assets	(49,460)	178,134	(28,934)
Decrease (increase) in other assets	13,525	35,611	(36,370)
Increase (decrease) in accounts payable	(326,896)	(737,189)	635,613
Increase (decrease) in accrued expenses	(586,398)	281,895	(252,647)
Net cash used in operating activities	(1,049,799)	(4,444,009)	(39,669,364)
Cash flows from investing activities:			
Purchase of property and equipment	-	(8,973)	(239,608)
Cash paid in connection with acquisitions	-	-	(26,031)
Net cash provided from the purchase and sale of short-term investments	-	-	435,938
Proceeds from sale of license	-	-	200,001
Net cash (used in) provided by investing activities	-	(8,973)	370,300
Cash flows from financing activities:			
Proceeds from the Hedrin JV agreement	500,000	2,699,176	3,199,176
Sale of warrant	-	150,000	150,000
Proceeds from sale of (repayment of) Secured 10% Notes	(70,000)	70,000	-
Proceeds from sale of Secured 12% Notes	340,270	990,143	1,345,413
Proceeds from sale of 8% Note	27,000	-	27,000
Proceeds from sale of Convertible 12% Notes	164,502	-	164,502
Repayments of notes payable to stockholders	-	-	(884,902)
Proceeds (costs) related to sale of common stock, net	-	-	25,896,262
Proceeds from sale of preferred stock, net	-	-	9,046,176
Proceeds from exercise of warrants and stock options	-	-	138,219
Other, net	-	-	235,214
Net cash provided by financing activities	961,772	3,909,319	39,317,060
Net (decrease) increase in cash and cash equivalents	(88,027)	(543,663)	17,996
Cash and cash equivalents at beginning of period	106,023	649,686	-
Cash and cash equivalents at end of period	$ 17,996	$ 106,023	$ 17,996
Supplemental disclosure of cash flow information:			
Interest paid	$ 5,397	$ 475	$ 31,430
Supplemental disclosure of noncash investing and financing activities:			
Investment in Hedrin JV	$ 500,000	$ 250,000	$ 250,000
Warrants issued with Secured 12% Notes	53,044	170,128	223,172
Warrants issued with 12% Notes	27,390	-	27,390
Note issued to settle accrued expenses	211,900	-	211,900
Common stock issued in satisfaction of accounts payable	-	-	770,000
Imputed and accrued preferred stock dividend	-	-	1,179,645
Conversion of preferred stock to common stock	-	-	1,067
Preferred stock dividends paid by issuance of shares	-	-	759,134
Issuance of common stock for acquisitions	-	-	13,389,226
Issuance of common stock in connection with in-licensing agreement	-	-	232,500
Marketable equity securities received in connection with sale of license	-	-	359,907
Warrants issued to consultant	-	-	83,670
Net liabilities assumed over assets acquired in business combination	-	-	(675,416)
Cashless exercise of warrants	-	-	33

See accompanying notes to financial statements.

(1) Merger and Nature of Operations

2003 Reverse Merger

On February 21, 2003, the Company (formerly known as “Atlantic Technology Ventures, Inc.”) completed a reverse acquisition of privately held Manhattan Research Development, Inc. (“Manhattan Research”) (formerly Manhattan Pharmaceuticals, Inc.), a Delaware corporation. At the effective time of the merger, the outstanding shares of common stock of Manhattan Research automatically converted into shares of the Company’s common stock representing 80 percent of the Company’s outstanding voting stock after giving effect to the merger. Since the stockholders of Manhattan Research received the majority of the voting shares of the Company, the merger was accounted for as a reverse acquisition whereby Manhattan Research was the accounting acquirer (legal acquiree) and the Company was the accounting acquiree (legal acquirer) under the purchase method of accounting. In connection with the merger, the Company changed its name from “Atlantic Technology Ventures, Inc.” to “Manhattan Pharmaceuticals, Inc.” The results of the combined operations have been included in the Company’s financial statements since February 2003.

As described above, the Company resulted from the February 21, 2003 reverse merger between Atlantic Technology Ventures, Inc. (“Atlantic”), which was incorporated on May 18, 1993, and privately-held Manhattan Research Development, Inc., incorporated on August 6, 2001. The Company was incorporated in the State of Delaware. In connection with the merger, the former stockholders of Manhattan Research received a number of shares of Atlantic's common stock so that following the merger they collectively owned 80 percent of the outstanding shares. Upon completion of the merger, Atlantic changed its name to Manhattan Pharmaceuticals, Inc. and thereafter adopted the business of Manhattan Research.

The Company is a biopharmaceutical company focused on developing and commercializing innovative pharmaceutical therapies for underserved patient populations. The Company acquires rights to these technologies by licensing or otherwise acquiring an ownership interest, funding their research and development and eventually either bringing the technologies to market or out-licensing. We currently have two product candidates in development: Hedrin™, a novel, non-insecticide treatment of pediculitis (head lice) which is being developed by the Hedrin JV (see note 6) and a topical product for the treatment of psoriasis. During 2009, the Company discontinued development of PTH (1-34), Altoderm and Altolyn.

Acquisition of Tarpan Therapeutics, Inc.

In April 2005, the Company merged with Tarpan Therapeutics, Inc., a Delaware corporation (“Tarpan”), and Tarpan Acquisition Corp., a Delaware corporation. The acquisition of Tarpan has been accounted for by the Company under the purchase method of accounting. Under the purchase method, assets acquired and liabilities assumed by the Company are recorded at their estimated fair values and the results of operations of the acquired company are consolidated with those of the Company from the date of acquisition. The excess purchase price paid by the Company to acquire the net assets of Tarpan was allocated to acquired in-process research and development totaling $11,887,807. As required by the purchase method of accounting, the Company recorded a charge in its consolidated statement of operations for the year ended December 31, 2005 for the in-process research and development.

(2) Liquidity and Basis of Presentation

Liquidity

The Company incurred a net loss of $2,793,285 and negative cash flows from operating activities of $1,049,799 for the year ended December 31, 2009 and a net loss of $4,268,858 and negative cash flows from operating activities of $4,444,009 for the year ended December 31, 2008. The net loss applicable to common shares from date of inception, August 6, 2001, to December 31, 2009 amounts to $61,933,435.

The Company received approximately $1.8 million in February 2008 and approximately $0.9 million in June 2008 from a joint venture agreement. This joint venture agreement is more fully described in Note 8. The Company also received $70,000 in Secured 10% Notes in September 2008 which was repaid in full in February 2009. The Company received $1.0 million in November and December 2008 from the sale of Secured 12% Notes.

The Company received approximately $0.3 million in February 2009 from the final closing of the sale of Secured 12% Notes, approximately $0.5 million in February 2009 from a joint venture agreement, approximately $0.2 million from the sale of a Convertible 12% Note and approximately $27,000 from Ariston Pharmaceuticals, Inc. in exchange for a note in December 2009. In addition, the Company issued a $0.2 million non-interest bearing note in connection with the Swiss Pharma Settlement. These notes are more fully described in Notes 9, 10, 11 and 12.

Management believes that the Company will continue to incur net losses through at least December 31, 2010 and for the foreseeable future thereafter. Based on the resources of the Company available at December 31, 2009 and the net proceeds of $2.2 received in March 2010 from the sale of common stock and warrants, management believes that the Company has sufficient capital to fund its operations through 2010. Management believes that the Company will need additional equity or debt financing or will need to generate positive cash flow from a joint venture agreement (see Note 6) or generate revenues through licensing of its products or entering into strategic alliances to be able to sustain its operations into 2010. Furthermore, we will need additional financing thereafter to complete development and commercialization of our products. There can be no assurances that we can successfully complete development and commercialization of our products.

The Company’s continued operations will depend on its ability to raise additional funds through various potential sources such as equity and debt financing, collaborative agreements, strategic alliances and its ability to realize the full potential of its technology in development. Additional funds may not become available on acceptable terms, and there can be no assurance that any additional funding that the Company does obtain will be sufficient to meet the Company’s needs in the long-term.

These matters raise substantial doubt about the Company’s ability to continue as a going concern. The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty.

(3) Summary of Significant Accounting Policies

Basis of Presentation

The Company has not generated any revenue from its operations and, accordingly, the financial statements have been prepared in accordance with the provisions of accounting and reporting for Development Stage Enterprises.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

Research and Development

All research and development costs are expensed as incurred and include costs of consultants who conduct research and development on behalf of the Company and its subsidiaries. Costs related to the acquisition of technology rights and patents for which development work is still in process are expensed as incurred and considered a component of research and development costs.

The Company often contracts with third parties to facilitate, coordinate and perform agreed-upon research and development of a new drug. To ensure that research and development costs are expensed as incurred, the Company records monthly accruals for clinical trials and preclinical testing costs based on the work performed under the contracts.

These contracts typically call for the payment of fees for services at the initiation of the contract and/or upon the achievement of certain milestones. This method of payment often does not match the related expense recognition resulting in either a prepayment, when the amounts paid are greater than the related research and development costs expensed, or an accrued liability, when the amounts paid are less than the related research and development costs expensed.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between financial statement carrying amounts of existing assets and liabilities, and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is provided when it is more likely than not that some portion or all of the deferred tax assets will not be realized.

Computation of Net Loss per Common Share

Basic net loss per common share is calculated by dividing net loss applicable to common shares by the weighted-average number of common shares outstanding for the period. Diluted net loss per common share is the same as basic net loss per common share, since potentially dilutive securities from stock options, stock warrants and convertible preferred stock would have an antidilutive effect because the Company incurred a net loss during each period presented. The amounts of potentially dilutive securities excluded from the calculation were 99,159,628 and 80,068,144 shares at December 31, 2009 and 2008, respectively. These amounts do not include the 55,555,555 shares issuable upon the exercise of the put or call rights issued in connection with the Hedrin JV (see Note 6) which were subject to anti-dilution rights upon the issuance of warrants with the Secured 12% Notes (see Note 8).

Share-Based Compensation

The Company has stockholder-approved stock incentive plans for employees, directors, officers and consultants. Prior to January 1, 2006, the Company accounted for the employee, director and officer plans using the intrinsic value method. Effective January 1, 2006, the Company adopted the share-based payment method for employee options using the modified prospective transition method. This new method of accounting for stock options eliminated the option to use the intrinsic value method and required the Company to expense the fair value of all employee options over the vesting period. Under the modified prospective transition method, the Company recognized compensation cost for the years ended December 31, 2009 and 2008 which includes a) period compensation cost related to share-based payments granted prior to, but not yet vested, as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions; and b) period compensation cost related to share-based payments granted on or after January 1, 2006, based on the grant date fair value estimated in accordance with the new accounting methodology. In accordance with the modified prospective method, the Company has not restated prior period results.

The Company recognizes compensation expense related to stock option grants on a straight-line basis over the vesting period. For the years ended December 31, 2009 and 2008, the Company recognized share-based employee compensation cost of $353,438 and $463,890, respectively. The Company did not capitalize any share-based compensation cost.

Options granted to consultants and other non-employees are recorded at fair value at the date of grant and subsequently adjusted to fair value at the end of each reporting period until such options vest, and the fair value of the options, as adjusted, is amortized to consulting expense over the related vesting period. As a result of adjusting consultant and other non-employee options to fair value as of December 31, 2009 and 2008, respectively, net of amortization, the Company recognized an increase to general and administrative and research and development expenses of $1,725 for the year ended December 31, 2009 and an increase to general and administrative and research and development expenses of $1,579 for the year ended December 31, 2008. The Company has allocated share-based compensation costs to general and administrative and research and development expenses as follows:

	2009	2008
General and administrative expense:		
Share-based employee compensation cost	$ 351,713	$ 341,706
Share-based consultant and non-employee cost	172	158
	351,885	341,864
Research and development expense		
Share-based employee compensation cost	-	120,605
Share-based consultant and non-employee cost	1,553	1,421
	1,553	122,026
Total share-based compensation	**$ 353,438**	**$ 463,890**

To compute compensation expense in 2009 and 2008 the Company estimated the fair value of each option award on the date of grant using the Black-Scholes model. The Company based the expected volatility assumption on a volatility index of peer companies as the Company did not have a sufficient number of years of historical volatility of its common stock. The expected term of options granted represents the period of time that options are expected to be outstanding. The Company estimated the expected term of stock options by the simplified method. The expected forfeiture rates are based on the historical employee forfeiture experiences. To determine the risk-free interest rate, the Company utilized the U.S. Treasury yield curve in effect at the time of grant with a term consistent with the expected term of the Company's awards. The Company has not declared a dividend on its common stock since its inception and has no intentions of declaring a dividend in the foreseeable future and therefore used a dividend yield of zero.

The following table shows the weighted average assumptions the Company used to develop the fair value estimates for the determination of the compensation charges in 2009 and 2008:

	2009	2008
Expected volatility	94%	92.0%
Dividend yield	-	-
Expected term (in years)	6.5	5 - 10
Risk-free interest rate	2.63	2.81

The Company has shareholder-approved incentive stock option plans for employees under which it has granted non-qualified and incentive stock options. In December 2003, the Company established the 2003 Stock Option Plan (the "2003 Plan"), which provided for the granting of up to 5,400,000 options to officers, directors, employees and consultants for the purchase of stock. In August 2005, the Company increased the number of shares of common stock reserved for issuance under the 2003 Plan by 2,000,000 shares. In May 2007, the Company increased the number of shares of common stock reserved for issuance under the 2003 Plan by 3,000,000 shares. At December 31, 2009, 10,400,000 shares were authorized for issuance. The options have a maximum term of 10 years and vest over a period determined by the Company's Board of Directors (generally 3 years) and are issued at an exercise price equal to or greater than the fair market value of the shares at the date of grant. The 2003 Plan expires on December 10, 2013 or when all options have been granted, whichever is sooner. At December 31, 2009, options to purchase 6,322,696 shares were outstanding, 27,776 shares of common stock were issued and there were 4,049,528 shares reserved for future grants under the 2003 Plan.

In July 1995, the Company established the 1995 Stock Option Plan (the "1995 Plan"), which provided for the granting of options to purchase up to 130,000 shares of the Company's common stock to officers, directors, employees and consultants. The 1995 Plan was amended several times to increase the number of shares reserved for stock option grants. In June 2005 the 1995 Plan expired and no further options can be granted. At December 31, 2009, options to purchase 1,137,240 shares were outstanding and no shares were reserved for future stock option grants under the 1995 Plan.

Financial Instruments

At December 31, 2009 and 2008, the fair values of cash and cash equivalents, accounts payable and the secured 12% notes payable approximate their carrying values. At December 31, 2009 the fair value of the convertible 12% note does not approximate its carrying value as a portion of the fair value is reflected as a component of derivative liability.

Cash and Cash Equivalents

Cash equivalents consist of cash or short term investments with original maturities at the time of purchase of three months or less.

Property and Equipment

Property and equipment are stated at cost. Depreciation is provided using the straight-line method over estimated useful lives. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts, and any resulting gain or loss is recognized in operations for the period. Amortization of leasehold improvements is calculated using the straight-line method over the remaining term of the lease or the life of the asset, whichever is shorter. The cost of repairs and maintenance is charged to operations as incurred; significant renewals and improvements are capitalized.

Equity in Joint Venture

The Company accounts for its investment in joint venture (See Note 6) using the equity method of accounting. Under the equity method, the Company records its pro-rata share of joint venture income or losses and adjusts the basis of its investment accordingly.

New Accounting Pronouncements

In June 2009, the Financial Accounting Standards Board ("FASB") issued the FASB Accounting Standards Codification ("Codification") as the single source of authoritative U.S. generally accepted accounting principles ("U.S. GAAP") recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative U.S. GAAP for SEC registrants. The Codification is effective for financial statements issued for interim and annual periods ending after September 15, 2009. The Codification will supersede all existing non-SEC accounting and reporting standards. All other nongrandfathered non-SEC accounting literature not included in the Codification will become nonauthoritative. The FASB will not issue new standards in the form of Statements, FASB Staff Positions, or Emerging Issues Task Force Abstracts. Instead, the FASB will issue Accounting Standards Updates, which will serve only to: (a) update the Codification; (b) provide background information about the guidance; and (c) provide the bases for conclusions on the change(s) in the Codification.

In December 2007, the FASB issued a statement that requires all entities to report noncontrolling (minority) interests in subsidiaries as equity in the consolidated financial statements. This statement establishes a single method of accounting for changes in a parent's ownership interest in a subsidiary that do not result in deconsolidation and expands disclosures in the consolidated financial statements. This statement was effective for fiscal years beginning after December 15, 2008 and interim periods within those fiscal years. The adoption of this statement did not have any impact on the Company’s financial statements.

In February 2008, the FASB issued two Staff Positions as well as other accounting pronouncements that address fair value measurements on lease classification. The adoption of these pronouncements did not have a material impact on the Company’s financial statements.

In March 2008, the FASB issued a pronouncement which requires expanded disclosures about an entity's derivative instruments and hedging activities. This pronouncement requires qualitative disclosures about objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of and gains and losses on derivative instruments, and disclosures about credit-risk-related contingent features in derivative instruments. This pronouncement was effective for the Company as of January 1, 2009, and its adoption did not have any impact on the Company’s financial statements.

In June 2008, the FASB ratified a pronouncement which provides that an entity should use a two step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions. It also clarifies the impact of foreign currency denominated strike prices and market-based employee stock option valuation instruments on the evaluation. This statement was effective for fiscal years beginning after December 15, 2008. The adoption of this statement had a significant impact on the Company’s financial statements (see Note 13 to our financial statements for the period ended December 31, 2009).

In April 2009, the FASB issued a pronouncement which provides guidance on determining when there has been a significant decrease in the volume and level of activity for an asset or liability, when a transaction is not orderly, and how that information must be incorporated into a fair value measurement. This pronouncement also requires expanded disclosures on valuation techniques and inputs and specifies the level of aggregation required for all quantitative disclosures. The provisions of this pronouncement were effective for the Company’s quarter ending June 30, 2009. The adoption of this pronouncement did not have any impact on the Company’s financial statements.

In April 2009, the FASB issued several pronouncements which makes the guidance on other-than-temporary impairments of debt securities more operational and requires additional disclosures when a company records an other-than-temporary impairment. These pronouncements were effective for interim and annual reporting periods ending after June 15, 2009. The Company adopted these principles in the second quarter of 2009, which did not have any impact on the Company’s financial statements.

In April 2009, the FASB issued several statements which require companies to disclose in interim financial statements the fair value of financial instruments. However, companies are not required to provide in interim periods the disclosures about the concentration of credit risk of all financial instruments that are currently required in annual financial statements. The fair-value information disclosed in the footnotes must be presented together with the related carrying amount, making it clear whether the fair value and carrying amount represent assets or liabilities and how the carrying amount relates to what is reported in the balance sheet. In addition, the companies are required to disclose the method or methods and significant assumptions used to estimate the fair value of financial instruments and a discussion of changes, if any, in the method or methods and significant assumptions during the period. This statement shall be applied prospectively and was effective for interim and annual periods ending after June 15, 2009. To the extent relevant, the Company adopted the disclosure requirements of this pronouncement for the quarter ended June 30, 2009. The adoption of these statements did not have a material impact on the Company's financial statements

In May 2009, the FASB issued a statement which sets forth the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. This statement was effective for interim or annual periods ending after June 15, 2009, and the Company adopted the provisions of this statement for the quarter ended June 30, 2009. The adoption of this statement did not have a material impact on the Company's financial statements. The Company has evaluated all events or transactions that occurred after December 31, 2009 up through the date we issued these financial statements, and we have disclosed all events or transactions that have a material impact on the Company's financial statements (see Note 18).

In August 2009, the FASB issued a new pronouncement to provide clarification on measuring liabilities at fair value when a quoted price in an active market is not available. In particular, this pronouncement specifies that a valuation technique should be applied that uses either the quote of the liability when traded as an asset, the quoted prices for similar liabilities when traded as assets, or another valuation technique consistent with existing fair value measurement guidance. This statement is prospectively effective for financial statements issued for interim or annual periods ending after October 1, 2009. The adoption of this statement at December 31, 2009 did not impact the Company's results of operations or financial condition.

(4) Property and Equipment

Property and equipment consists of the following at December 31:

	2009	2008
Property and equipment	$ 35,905	$ 35,905
Less accumulated depreciation	(32,364)	(26,833)
Net property and equipment	$ 3,541	$ 9,072

(5) Stockholders' Equity

As described in Note 1 the Company completed a reverse acquisition of privately held Manhattan Research Development, Inc. on February 21, 2003. In July 2003, the Board of Directors adopted a resolution authorizing an amendment to the certificate of incorporation providing for a 1-for-5 combination of the Company's common stock. The resolution approving the 1-for-5 combination was thereafter consented to in writing by holders of a majority of the Company's outstanding common stock and became effective in September 2003. Accordingly, all share and per share information in these financial statements has been restated to retroactively reflect the 1-for-5 combination and the effects of the Reverse Merger.

2001

During 2001, the Company issued 10,167,741 shares of its common stock to investors for subscriptions receivable of $4,000 or $0.0004 per share. During 2002, the Company received the $4,000 subscription receivable.

2002

During 2002, the Company issued 2,541,935 shares of its common stock to Oleoyl-estrone Developments, S.L. ("OED") in conjunction with a license agreement (the OED License Agreement"). We valued these shares at their then estimated fair value of $1,000.

During 2002, the Company issued options to purchase 1,292,294 shares of its common stock in conjunction with several consulting agreements. The fair value of these options was $60,589. The Company expensed $22,721 in 2002 and $37,868 in 2003.

During 2002 and 2003, the Company completed two private placements. During 2002, the Company issued 3,043,332 shares of its common stock at $0.63 per share and warrants to purchase 304,333 of its common stock in a private placement. After deducting commissions and other expenses relating to the private placement, the Company received net proceeds of $1,704,318.

2003

During 2003, the Company issued an additional 1,321,806 shares of its common stock at $0.63 per share and warrants to purchase 132,181 shares of its common stock. After deducting commissions and other expenses relating to the private placement, the Company received net proceeds of $743,691. In connection with these private placements, the Company issued to the placement agent warrants to purchase 1,658,753 shares of its common stock.

As described in Note 1, during 2003, the Company completed a reverse acquisition. The Company issued 6,287,582 shares of its common stock with a value of $2,336,241 in the reverse acquisition.

In November 2003, the Company issued 1,000,000 shares of its newly-designated Series A Convertible Preferred Stock (the "Convertible Preferred") at a price of $10 per share in a private placement. After deducting commissions and other expenses relating to the private placement, the Company received net proceeds of $9,046,176. Each share of Convertible Preferred was convertible at the holder's election into shares of the Company's common stock at a conversion price of $1.10 per share. The conversion price of the Convertible Preferred was less than the market value of the Company's common stock on the date of issuance. Accordingly for the year ended December 31, 2003 the Company recorded a separate charge to deficit accumulated during development stage for the beneficial conversion feature associated with the issuance of Convertible Preferred of $418,182. The Convertible Preferred had a payment-in-kind annual dividend of five percent. Maxim Group, LLC of New York, together with Paramount Capital, Inc., a related party, acted as the placement agents in connection with the private placement.

2004

During 2004, the Company issued 3,368,952 shares of its common stock at a price of $1.10 per share in a private placement. After deducting commissions and other expenses relating to the private placement, the Company received net proceeds of $3,361,718. In connection with the common stock private placement and the Convertible Preferred private placement, the Company issued to the placement agents a warrant to purchase 1,235,589 shares of its common stock.

During 2004, the Company recorded a dividend on the Convertible Preferred of $585,799. 24,901 shares of Convertible Preferred were issued in payment of $282,388 of this in-kind dividend. Also during 2004, 170,528 shares of Convertible Preferred were converted into 1,550,239 shares of the Company's common stock at $1.10 per share.

During 2004, the Company issued 27,600 shares of common stock upon the exercise of stock options.

During 2004, the Company issued warrants to purchase 110,000 shares of its common stock in conjunction with three consulting agreements. The fair value of these warrants was $120,968. The Company expensed $100,800 in 2004 and $20,168 in 2005.

2005

In August 2005, the Company issued 11,917,680 shares of its common stock and warrants to purchase 2,383,508 shares of its common stock in a private placement at $1.11 and $1.15 per share. After deducting commissions and other expenses relating to the private placement the Company received net proceeds of $12,250,209. Paramount BioCapital, Inc. ("Paramount"), an affiliate of a significant stockholder of the Company, acted as placement agent and was paid cash commissions and expenses of $967,968 of which $121,625 was paid to certain selected dealers engaged by Paramount in the private placement. The Company also issued warrants to purchase 595,449 shares of common stock to Paramount and certain select dealers, of which Paramount received warrants to purchase 517,184 common shares. Timothy McInerney and Dr. Michael Weiser, each a director of the Company, were employees of Paramount BioCapital, Inc. at the time of the transaction.

During 2005, the Company recorded a dividend on the Convertible Preferred of $175,663. 41,781 shares of Convertible Preferred were issued in payment of this $175,663 in-kind dividend and the unpaid portion of the 2004 in-kind dividend, $303,411. Also during 2005, the remaining 896,154 shares of Convertible preferred were converted into 8,146,858 shares of the Company's common stock.

During 2005, the Company issued 675,675 shares of its common stock at $1.11 per share and warrants to purchase 135,135 shares of its common stock to Cato BioVentures, an affiliate of Cato Research, Inc., in exchange for satisfaction of $750,000 of accounts payable owed by the Company to Cato Research, Inc. Since the value of the shares and warrants issued was approximately $750,000, there is no impact on the statement of operations for this transaction.

During 2005, the Company issued 312,245 shares of common stock upon the exercise of stock options and warrants.

As described in Note 1, in April 2005, the Company completed the Merger with Tarpan. In accordance with the Agreement, the stockholders of Tarpan received 10,731,052 shares of the Company's common stock with a value of $11,052,984.

2006

During 2006, the Company issued 27,341 shares of common stock upon the exercise of warrants.

2007

On March 30, 2007, the Company entered into a series of subscription agreements with various institutional and other accredited investors for the issuance and sale in a private placement of an aggregate of 10,185,502 shares of its common stock for total net proceeds of approximately $7.85 million, after deducting commissions and other costs of the transaction. Of the total amount of shares issued, 10,129,947 were sold at a per share price of $0.84, and an additional 55,555 shares were sold to an entity affiliated with a director of the Company, at a per share price of $0.90, the closing sale price of the common stock on March 29, 2007. Pursuant to the subscription agreements, the Company also issued to the investors 5-year warrants to purchase an aggregate of 3,564,897 shares of common stock at an exercise price of $1.00 per share. The warrants are exercisable during the period commencing September 30, 2007 and ending March 30, 2012. Gross and net proceeds from the private placement were $8,559,155 and $7,852,185, respectively.

Pursuant to these subscription agreements the Company filed a registration statement on Form S-3 covering the resale of the shares issued in the private placement, including the shares issuable upon exercise of the investor warrants and the placement agent warrants, with the Securities and Exchange Commission on May 9, 2007, which was declared effective by the Securities and Exchange Commission on May 18, 2007.

The Company engaged Paramount, an affiliate of a significant stockholder of the Company, as its placement agent in connection with the private placement. In consideration for its services, the Company paid aggregate cash commissions of approximately $600,000 and issued to Paramount a 5-year warrant to purchase an aggregate of 509,275 shares at an exercise price of $1.00 per share.

2008

During 2008, the Company issued warrants to purchase 140,000 shares of its common stock to directors, officers and an employee in conjunction with the secured 10% notes (see Note 8).

During 2008, the Company issued a put for the issuance of 55.6 million shares of its common stock and a warrant to purchase 11.1 million shares of its common stock in conjunction with a joint venture transaction (see Notes 6 and 9).

During 2008, the Company issued warrants to purchase 50.4 million shares of its common stock to the investors and the placement agent in conjunction with the sale of the secured 12% notes (see Note 10).

2009

During 2009, the Company issued warrants to purchase 15.7 million shares of its common stock to the investors and the placement agent in conjunction with the sale of the secured 12% notes (see Note 9).

During 2009, the Company issued warrants to purchase 2.4 million shares of its common stock to the investors and the placement agent in conjunction with the sale of the convertible 12% notes (see Note 12).

(6) Joint Venture

In February 2008, the Company and Nordic Biotech Advisors ApS through its investment fund Nordic Biotech Venture Fund II K/S (“Nordic”) entered into a 50/50 joint venture agreement (the “Hedrin JV Agreement”) to develop and commercialize the Company's North American rights (under license) to its Hedrin product.

Pursuant to the Hedrin JV Agreement, Nordic formed a new Danish limited partnership, Hedrin Pharmaceuticals K/S, (the "Hedrin JV") and provided it with initial funding of $2.5 million and the Company assigned and transferred its North American rights in Hedrin to the Hedrin JV in return for a $2.0 million cash payment from the Hedrin JV and equity in the Hedrin JV representing 50% of the nominal equity interests in the Hedrin JV. At closing the Company recognized an investment in the Hedrin JV of $250,000 and an exchange obligation of $2,054,630. The exchange obligation represents the Company’s obligation to Nordic to issue the Company’s common stock in exchange for all or a portion of Nordic’s equity interest in the Hedrin JV upon the exercise by Nordic of the put issued to Nordic in the Hedrin JV Agreement transaction. The put is described below.

The original terms of the Hedrin JV Agreement also provided that should the Hedrin JV be successful in achieving a payment milestone, namely that by September 30, 2008, the FDA determines to treat Hedrin as a medical device, Nordic will purchase an additional $2.5 million of equity in the Hedrin JV, whereupon the Hedrin JV will pay the Company an additional $1.5 million in cash and issue additional equity in the JV valued at $2.5 million, thereby maintaining the Company’s 50% ownership interest in the Hedrin JV. These terms have been amended as described below.

In June 2008, the Hedrin JV Agreement was amended (the "Hedrin JV Amended Agreement"). Under the amended terms Nordic invested an additional $1.0 million, for a total of $3.5 million, in the Hedrin JV and made an advance of $250,000 to the Hedrin JV and the Hedrin JV made an additional $1.0 million payment, for a total of $3.0 million, to the Company. The Hedrin JV also distributed additional ownership equity sufficient for each of the Company and Nordic to maintain their ownership interest at 50%. The FDA classified Hedrin as a Class III medical device in February 2009. Under the amended terms, upon attaining this classification of Hedrin by the FDA, Nordic invested an additional $1.25 million, for a total investment of $5 million, into the Hedrin JV, the Hedrin JV paid an additional $0.5 million, for a total of $3.5 million, to the Company and the $250,000 that Nordic advanced to the Hedrin JV in June became an equity investment in the Hedrin JV by Nordic. The Hedrin JV was obligated to issue to the Company and Nordic additional ownership interest in the Hedrin JV, thereby maintaining each of the Company’s and Nordic’s 50% ownership interest in the Hedrin JV.

In February 2009, the Company's exchange obligation increased by $1,000,000 and the Company's investment in the Hedrin JV increased by $500,000 as a result of the investment by Nordic of an additional $1.25 million into the Hedrin JV, the reclassification of the advance made by Nordic in June 2008 to the Hedrin JV of $250,000 into an equity interest and the payment of $500,000 by the Hedrin JV to the Company. At December 31, 2009, the Company's exchange obligation is $3,949,176.

During the years ended December 31, 2009 and 2008, the Company recognized $500,000 and $250,000, respectively, of equity in the losses of the Hedrin JV. This reduced the carrying value of its investment in the Hedrin JV to $0 at both December 31, 2009 and 2008. As of December 31, 2009, the Company's share of the losses is $553,688; equity in losses of Hedrin JV previously recognized was $250,000 leaving a $250,000 share of the cumulative losses of the Hedrin JV that was recognized by the Company at December 31, 2009, and a remaining balance of $53,688 of losses was not recognized at December 31, 2009.

Nordic has an option to put all or a portion of its equity interest in the Hedrin JV to the Company in exchange for the Company's common stock. The shares of the Company's common stock to be issued upon exercise of the put will be calculated by multiplying the percentage of Nordic's equity in the Hedrin JV that Nordic decides to put to the Company multiplied by the dollar amount of Nordic's investment in Limited Partnership divided by $0.09, as adjusted from time to time. The put option is exercisable immediately and expires at the earlier of ten years or when Nordic's distributions from the Limited Hedrin JV exceed five times the amount Nordic invested in the Hedrin JV.

The Company has an option to call all or a portion of Nordic's equity interest in the Hedrin JV in exchange for the Company's common stock. The Company cannot begin to exercise its call until the price of the Company's common stock has closed at or above $1.40 per share for 30 consecutive trading days. During the first 30 consecutive trading day period in which the Company's common stock closes at or above $1.40 per share the Company can exercise up to 25% of its call option. During the second 30 consecutive trading day period in which the Company's common stock closes at or above $1.40 per share the Company can exercise up to 50% of its call option on a cumulative basis. During the third 30 consecutive trading day period in which the Company's common stock closes at or above $1.40 per share the Company can exercise up to 75% of its call option on a cumulative basis. During the fourth 30 consecutive trading day period in which the Company's common stock closes at or above $1.40 per share the Company can exercise up to 100% of its call option on a cumulative basis. The shares of the Company's common stock to be issued upon exercise of the call will be calculated by multiplying the percentage of Nordic's equity in the Limited Partnership that the Company calls, as described above, multiplied by the dollar amount of Nordic's investment in the Hedrin JV divided by $0.09. Nordic can refuse the Company's call by either paying the Company up to $1.5 million or forfeiting all or a portion of their put, calculated on a pro rata basis for the percentage of the Nordic equity interest called by the Company.

The Hedrin JV is responsible for the development and commercialization of Hedrin for the North American market and all associated costs including clinical trials, if required, regulatory costs, patent costs, and future milestone payments owed to T&R, the licensor of Hedrin.

The Hedrin JV has engaged the Company to provide management services to the Limited Partnership in exchange for a management fee. For the years ended December 31, 2009 and 2008, the Company has recognized $333,845 and $446,806, respectively, of other income from management fees earned from the Hedrin JV which is included in the Company's statements of operations for the years ended December 31, 2009 and 2008 as a component of interest and other income.

Nordic paid to the Company a non-refundable fee of $150,000 at the closing for the right to receive a warrant covering 11.1 million shares of the Company's common stock, as adjusted due to the 12% Notes Transaction (Note 9) exercisable for $0.09 per share.. The warrant is issuable 90 days from closing, provided Nordic has not exercised all or a part of its put, as described below. The Company issued the warrant to Nordic on April 30, 2008. The per share exercise price of the warrant was initially based on the volume weighted average price of the Company's common stock for the period prior to the signing of the Hedrin JV Agreement and has been subsequently adjusted due to the 12% Notes Transaction (see Note 9). On March 2, 2010, pursuant to a private placement of its securities, the Company issued the Company's common stock and warrants with an exercise price of $0.08 per share, further adjusting the Nordic warrant, (see note 18).

The Hedrin JV's Board consists of 4 members, 2 appointed by the Company and 2 appointed by Nordic. Nordic has appointed one of the directors as chairman of the Board. The chairman has certain tie breaking powers.

Nordic has the right to nominate a person to serve on the Company's Board of Directors. Nordic has nominated a person, however, that person has declined to stand for appointment to the Company's Board of Directors.

The Company granted Nordic registration rights for the shares to be issued upon exercise of the warrant, the put or the call. The Company filed an initial registration statement on May 1, 2008. The registration statement was declared effective on October 15, 2008. On June 2, 2009, the Company filed an additional Registration Statement registering the additional 28,769,841 shares of Common Stock that may be issued to Nordic upon exercise of a put right held by Nordic as a result of Nordic's additional investment of $1,250,000 in Hedrin JV pursuant to the terms of the Partnership Agreement and as adjusted pursuant to the anti-dilution provisions of the put right (the "Put Shares") and the additional 3,968,254 shares issuable upon exercise of an outstanding warrant held by Nordic. The Securities and Exchange Commission ("SEC") has informed the Company that the Company may not register the Put Shares for resale until Nordic exercises its put right and such shares of Common Stock are outstanding. The Company believes that it has used commercially reasonable efforts to cause the registration statement to be declared effective and has satisfied its obligations under the registration rights agreement with respect to the registration of the Put Shares. The Company is awaiting input from Nordic as to whether Nordic would like the Company to continue to pursue registration of the additional 3,968,254 shares issuable upon exercise of an outstanding warrant held by Nordic which were included within the June 2009 registration statement.

The Company is required to file additional registration statements, if required, within 45 days of the date the Company first knows that such additional registration statement was required. The Company is required to use commercially reasonable efforts to cause the additional registration statements to be declared effective by the SEC within 105 calendar days from the filing date (the "Effective Date"). If the Company fails to file a registration statement on time or if a registration statement is not declared effective by the SEC within 105 days of filing the Company will be required to pay to Nordic, or its assigns, an amount in cash, as partial liquidated damages, equal to 0.5% per month of the amount invested in the Hedrin JV by Nordic until the registration statement is declared effective by the SEC. In no event shall the aggregate amount payable by the Company exceed 9% of the amount invested in the Hedrin JV by Nordic.

The profits of the Hedrin JV will be shared by the Company and Nordic in accordance with their respective equity interests in the Limited Partnership, which are currently 50% to each, except that Nordic will get a minimum distribution from the Hedrin JV equal to 6% on Hedrin sales, as adjusted for any change in Nordic's equity interest in the Limited Partnership. If the Hedrin JV realizes a profit equal to or greater than a 12% royalty on Hedrin sales, then profits will be shared by the Company and Nordic in accordance with their respective equity interests in the Limited Partnership. However, in the event of a liquidation of the Limited Partnership, Nordic's distribution in liquidation will be at least equal to the amount Nordic invested in the Hedrin JV ($5 million) plus 10% per year, less the cumulative distributions received by Nordic from the Hedrin JV. If the Hedrin JV's assets in liquidation exceed the Nordic liquidation preference amount, then any excess shall be distributed to the Company until its distribution and the Nordic liquidation preference amount are in the same ratio as the respective equity interests in the Hedrin JV and the remainder, if any, shall be distributed to Nordic and the Company in the same ratio as the respective equity interests. Further, in no event shall Nordic's distribution in liquidation be greater than assets available for distribution in liquidation.

(7) American Stock Exchange

In September 2007, the Company received notice from the staff of The American Stock Exchange, or AMEX, indicating that the Company was not in compliance with certain continued listing standards set forth in the AMEX Company Guide. Specifically, AMEX notice cited the Company's failure to comply, as of June 30, 2007, with section 1003(a)(ii) of the AMEX Company Guide as the Company had less than $4,000,000 of stockholders' equity and had losses from continuing operations and /or net losses in three or four of our most recent fiscal years and with section 1003(a)(iii) which requires the Company to maintain $6,000,000 of stockholders' equity if the Company has experienced losses from continuing operations and /or net losses in its five most recent fiscal years.

In order to maintain our AMEX listing, the Company was required to submit a plan to AMEX advising the exchange of the actions the Company has taken, or will take, that would bring the Company into compliance with all the continued listing standards by April 16, 2008. The Company submitted such a plan in October 2007. If the Company is not in compliance with the continued listing standards at the end of the plan period, or if the Company has not made progress consistent with the plan during the period, AMEX staff could have initiated delisting proceedings.

Under the terms of the Hedrin JV Agreement, the number of potentially issuable shares represented by the put and call features thereof and the warrant issuable to Nordic, would exceed 19.9% of the Company's total outstanding shares and would be issued at a price below the greater of book or market value. As a result, under AMEX regulations, the Company would not have been able to complete the transaction without first receiving either stockholder approval for the transaction, or a formal "financial viability" exception from AMEX's stockholder approval requirement. The Company estimated that obtaining stockholder approval to comply with AMEX regulations would take a minimum of 45 days to complete. The Company discussed the financial viability exception with AMEX for several weeks and had neither received the exception nor been denied the exception. The Company determined that our financial condition required the Company to complete the transaction immediately, and that the Company's financial viability depended on the completion of the Hedrin JV Agreement without further delay.

Accordingly, to maintain the Company's financial viability, on February 28, 2008, the Company announced that it had formally notified AMEX that the Company intended to voluntarily delist its common stock from AMEX. The delisting became effective on March 26, 2008.

The Company's common stock now trades on the Over the Counter Bulletin Board under the symbol "MHAN". The Company intends to maintain corporate governance, disclosure and reporting procedures consistent with applicable law.

(8) Secured 10% Notes Payable

In September 2008, Manhattan entered into a series of Secured 10% Notes (the "Secured 10% Notes") with certain of our directors, officers and an employee (the "Secured 10% Note Holders") for aggregate of $70,000. Principal and interest on the Secured 10% Notes shall be paid in cash on March 10, 2009 unless paid earlier by us. Pursuant to the Secured 10% Notes, we also issued to the Secured 10% Note Holders 5-year warrants to purchase an aggregate of 140,000 shares of our common stock at an exercise price of $0.20 per share. Manhattan granted to the Secured 10% Note Holders a continuing security interest in certain specific refunds, deposits and repayments due Manhattan and expected to be repaid to Manhattan in the next several months. At December 31, 2008 accrued and unpaid interest on the Secured 10% Notes amounted to $1,764 and is reflected in the accompanying balance sheet as of December 31, 2008 as a component of accrued expenses. The Secured 10% Notes plus interest were repaid on February 4, 2009.

(9) Secured 12% Notes Payable

On November 19, 2008, December 23, 2008 and February 3, 2009, the Company completed the first, second and final closings on a financing transaction (the "Secured 12% Notes Transaction"). The Company sold $1,725,000 of 12% senior secured notes (the "Secured 12% Notes") and issued warrants to the investors to purchase 57.5 million shares of the Company's common stock at $0.09 per share. The warrants expire on December 31, 2013. Net proceeds of $1.4 million were realized from the three closings. In addition, $78,000 of issuance costs were paid outside of the closings. Per the terms of the 12% Notes Transaction the net proceeds were paid into a deposit account (the "Deposit Account") and are to be paid out to the Company in monthly installments of $113,300 retroactive to October 1, 2008 and a one-time payment of $200,000. Per the terms of the 12% Notes Transaction the monthly installments are to be used exclusively to fund the current operating expenses of the Company and the one-time payment was to be used for trade payables incurred prior to October 1, 2008. The Company received $876,700 of such monthly installments and the one time payment of $200,000 during the year ended December 31, 2009. There was no remaining balance in the Deposit Account at December 31, 2009.

National Securities Corporation (“National”) was the placement agent for the 12% Notes Transaction. National’s compensation for acting as placement agent is a cash fee of 10% of the gross proceeds received, a non-accountable expense allowance of 1.5% of the gross proceeds, reimbursement of certain expenses and a warrant to purchase such number of shares of the Company’s common stock equal to 15% of the shares underlying the warrants issued to the investors. The Company paid National a total of $202,000 in placement agent fees, a non-accountable expense allowance and reimbursement of certain expenses, of which $47,000 was paid during the year ended December 31, 2009. In addition, the Company issued warrants to purchase 8.6 million shares of the Company’s common stock at $0.09 per share. These warrants were valued at $29,110 and are a component of Secured 12% notes payable issue costs. The warrants expire on December 31, 2013.

The Secured 12% Notes mature two years after issuance. Interest on the Secured 12% Notes is compounded quarterly and payable at maturity. At December 31, 2009 and 2008, accrued and unpaid interest on the Secured 12% Notes amounted to approximately $229,000 and $15,000, and is reflected in the accompanying balance sheets at December 31, 2009 and 2008, respectively, as interest payable on secured 12% notes payable. The Secured 12% Notes are secured by a pledge of all of the Company’s assets except for its investment in the Hedrin JV. In addition, to provide additional security for the Company’s obligations under the notes, the Company entered into a default agreement, which provides that upon an event of default under the notes, the Company shall, at the request of the holders of the notes, use reasonable commercial efforts to either (i) sell a part or all of the Company’s interests in the Hedrin joint venture or (ii) transfer all or part of the Company’s interest in the Hedrin JV to the holders of the notes, as necessary, in order to fulfill the Company’s obligations under the notes, to the extent required and to the extent permitted by the applicable Hedrin joint venture agreements.

In connection with the private placement, the Company, the placement agent and the investors entered into a registration rights agreement. Pursuant to the registration rights agreement, we agreed to file a registration statement to register the resale of the shares of our common stock issuable upon exercise of the warrants issued to the investors in the private placement, within 20 days of the final closing date and to cause the registration statement to be declared effective within 90 days (or 120 days upon full review by the Securities and Exchange Commission). During the year ended December 31, 2009 we filed the registration statement, received a comment letter from the SEC and responded to the comment letter from the SEC. The registration statement was declared effective on April 17, 2009.

The issuance to the investors of warrants to purchase shares of the Company’s common stock at $0.09 per share changes the number of shares represented by the Nordic Put and the number of shares and exercise price of the Nordic Warrant. The Nordic Put and Nordic Warrant were issued at a value of $0.14 per share and were issued with anti-dilution rights. The issuance of any securities at a value of less than $0.14 per share activates Nordic’s anti-dilution rights. As a result of this transaction the exercise price of the Nordic Put and the Nordic Warrant were reduced to a price of $0.09 per share. The following table shows the effect of Nordic’s anti-dilution rights.

	Shares Issuable Upon Exercise of Nordic's Put	Shares Issuable Upon Exercise of Nordic's Warrant	Total Shares Issuable Upon Exercise of Nordic's Put and Warrant
Before the 12% Notes Transaction	35,714,287	7,142,857	42,857,144
Antidilution shares	19,841,269	3,968,254	23,809,523
After the 12% Notes Transaction	55,555,556	11,111,111	66,666,667

An equity transaction completed in March 2010 had a further anti-dilutive effect on the Nordic Put and Warrant (see Note 18).

The Company incurred a total of approximately $424,000 of costs in the issuance of the $1,725,000 of Secured 12% Notes sold in 2008 and 2009. These costs were capitalized and are being amortized over the life of the Secured 12% Notes into interest expense. During the years ended December 31, 2009 and 2008, the amount amortized into interest expense was approximately $206,000 and $16,000, respectively. The remaining unamortized balance of approximately $201,000 and $331,000 is reflected in the accompanying balance sheets as of December 31, 2009 and 2008, respectively, as Secured 12% Notes payable issue costs.

The Company recognized an original issue discount (the “OID”) of approximately $194,000 on the issuance of the Secured 12% Notes sold for the value of the warrants issued to the investors. The OID is being amortized over the life of the Secured 12% Notes into interest expense. During the years ended December 31, 2009 and 2008 the amount amortized into interest expense was approximately $94,000 and $7,000, respectively. The remaining unamortized balance of approximately $93,000 and $141,000 has been netted against the face amount of the Secured 12% Notes in the accompanying balance sheets as of December 31, 2009 and 2008, respectively. As per the terms of the 12% Notes Transaction the Company’s officers agreed to certain modifications of their employment agreements.

(10) 8% Note Payable

On December 21, 2009, the Company entered into a Future Advance Promissory Note (the “8% Note”) with Ariston under which the Company may withdraw up to $67,000. Principal and interest accrued at 8% shall be due and payable to Ariston on February 10, 2010. As of December 31, 2009, the Company has withdrawn $27,000 from Ariston subject to the terms of the 8% Note, and is included in the accompanying balance sheet as of December 31, 2009, as a current liability, 8% note payable.

(11) Non-interest Bearing Note Payable

On October 27, 2009, the Company entered into a Settlement Agreement and Mutual Release with Swiss Pharma Contract LTD (“Swiss Pharma”) pursuant to which the Company agreed to pay Swiss Pharma $200,000 and issue to Swiss Pharma an interest free promissory note in the principal amount of $250,000 in full satisfaction of the September 5, 2008 arbitration award. The amount of the Arbitration award was $683,027 at September 30, 2009 and was included as a component of accrued expenses.

In connection with the non-interest bearing note, the Company recognized an original issue discount (“OID”) of $40,000 of imputed interest on the note, which is being amortized into interest expense on a straight line basis over the two-year term of the note. For the year ended December 31, 2009, the Company amortized $1,900 of the OID into interest expense. The remaining unamortized balance of $38,100 has been netted against the face amount of the non-interest bearing note payable in the accompanying balance sheets as of December 31, 2009.

(12) Convertible 12% Note Payable

In conjunction with the Settlement Agreement and Mutual Release with Swiss Pharma described above, on October 28, 2009, the Company entered into a Subscription Agreement (the "Subscription Agreement") pursuant to which it sold a 12% Original Issue Discount Senior Subordinated Convertible Debenture with a stated value of $400,000 (the "Convertible 12% Note") and a warrant to purchase 2,222,222 shares of the Company's common stock, par value $.001 per share for a purchase price of $200,000. The Convertible 12% Note is convertible into shares of Common Stock at an initial conversion price of $0.09 per share, subject to adjustment, or, in the event the Company issues new securities in connection with a financing, the Convertible 12% Note may be converted into such new securities at a conversion price equal to the purchase price paid by the purchasers of such new securities. The Company may also, in its sole discretion, elect to pay interest due on the Convertible 12% Note quarterly in shares of the Company's common stock provided such shares are subject to an effective registration statement. The Convertible 12% Note is subordinated to the Company's outstanding Secured 12% Notes. The Warrant is exercisable at an exercise price of $0.11 per share, subject to adjustment. Because the Convertible 12% Note and the Warrant are convertible into shares of the Company, subject to adjustment, the conversion feature is subject to Derivative Liability accounting (see Note 13).

National Securities Corporation ("National") was the placement agent for the Convertible 12% Note transaction. In connection with the issuance of the Securities, the Company issued warrants to purchase an aggregate of 222,222 shares of Common Stock at an exercise price of $0.11 per share, subject to adjustment, to the placement agent and certain of its designees. Because the warrant is convertible into shares of the Company, subject to adjustment, the warrants are subject to Derivative Liability accounting (see Note 13). The warrants expire on October 28, 2014.

The Convertible 12% Notes mature two years after issuance. Interest on the Convertible 12% Note is compounded quarterly and payable at maturity. At December 31, 2009, accrued and unpaid interest on the Convertible 12% Note amounted to approximately $9,000, and is reflected in the accompanying balance sheet at December 31, 2009 as interest payable on convertible 12% notes payable.

The Company incurred a total of approximately $38,000 of costs in the issuance of the Convertible 12% Note sold in 2009. These costs were capitalized and are being amortized over the life of the Convertible 12% Note into interest expense. During the year ended December 31, 2009, the amount amortized into interest expense was approximately $3,000. The remaining unamortized balance of approximately $35,000 is reflected in the accompanying balance sheet as of December 31, 2009, as a non-current asset, convertible 12% note payable issue costs.

The Company recognized an original issue discount (the "OID") of approximately $200,000 on the issuance of the Convertible 12% Notes. The OID is being amortized over the life of the Convertible 12% Notes into interest expense. During the year ended December 31, 2009 the amount amortized into interest expense was approximately $18,000. The remaining unamortized balance of approximately $182,000 has been netted against the face amount of the Convertible 12% Notes in the accompanying balance sheet as of December 31, 2009.

(13) Derivative Liability

In April 2008, the FASB issued a pronouncement which provides guidance on determining what types of instruments or embedded features in an instrument held by a reporting entity can be considered indexed to its own stock for the purpose of evaluating the first criteria of the scope exception in the pronouncement on accounting for derivatives. This pronouncement was effective for financial statements issued for fiscal years beginning after December 15, 2008. The adoption of these requirements can affect the accounting for warrants and many convertible instruments with provisions that protect holders from a decline in the stock price (or “down-round” provisions). For example, warrants with such provisions will no longer be recorded in equity. Down-round provisions reduce the exercise price of a warrant or convertible instrument if a company either issues equity shares for a price that is lower than the exercise price of those instruments or issues new warrants or convertible instruments that have a lower exercise price. We evaluated whether warrants to acquire stock of the Company contain provisions that protect holders from declines in the stock price or otherwise could result in modification of the exercise price under the respective warrant agreements. We determined that the warrant issued to Nordic in April 2008 (the “Nordic Warrant”) and the warrants issued in connection with the 2009 sale of the 12% Notes Payable contained such provisions, thereby concluding they were not indexed to the Company’s own stock and were reclassified from equity to derivative liabilities.

In accordance with this pronouncement, the Company estimated the fair value of the Nordic Warrant as of January 1, 2009 to be $22,222 by recording a reduction in additional paid in capital of $150,000 and a decrease in deficit accumulated during the development stage of $127,778. The effect of this adjustment is recorded as a cumulative effect of change in accounting principle in our statements of stockholders’ equity (deficiency). As of December 31, 2009, the fair value of these derivatives was $483,333 as recorded in the accompanying balance sheet as of December 31, 2009, as a component of a current liability, derivative liability. The change of $461,111 in fair value during the year ended December 31, 2009 is reported as a non-cash charge in our statement of operations as a component of other (income) expense. In accordance with this pronouncement the Company estimated the fair value at the date of issuance of the conversion feature of the Convertible 12% Note and the fair value of the related warrants to purchase 2,444,444 shares of the Company’s common stock at $175,100 and $27,390, respectively. As of December 31, 2009 the fair value of these derivatives totaled $301,444 and are recorded in the accompanying balance sheet as of December 31, 2009 as a component of derivative liability. The change in fair value of $98,954 during the period from issuance to December 31, 2009 is reported as a non-cash charge in our statement of operations as a component of other (income) expense.

(14) Stock Options

A summary of the status of the Company's stock options as of December 31, 2009 and changes during the period then ended is presented below:

	Shares	Weighted average exercise price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at December 31, 2008	10,633,836	$ 0.938		
Granted	-			
Exercised	-			
Canceled	3,007,234	$ 1.485		
Forfeited	166,666	$ 0.950		
Outstanding at December 31, 2009	7,459,936	$ 0.718	6.160	$ -
Exercisable at December 31, 2009	6,750,776	$ 0.755	5.970	$ -
Vested and expected to vest at December 31, 2009	7,451,598	$ 0.718	6.160	$ -
Weighted-average fair value of options granted during the year ended December 31, 2009	None issued			

As of December 31, 2009 and 2008, the total compensation cost related to nonvested option awards not yet recognized is $55,249 and $425,660, respectively. The weighted average period over which it is expected to be recognized is approximately 0.26 and 1.18 years, respectively.

The following table summarizes the information about stock options outstanding at December 31, 2009:

Exercise Price	Number of Options Outstanding	Weighted Average Remaining Life	Number of Options Exercisable
$0.12 - $0.17	2,950,000	8.23	2,441,675
$0.20 - $0.28	260,750	2.05	260,750
$0.70 - $1.00	2,578,853	5.10	2,378,018
$1.35 - $1.65	1,670,333	4.76	1,670,333
Total	7,459,936		6,750,776

(15) Stock Warrants

The following table summarizes the information about warrants to purchase shares of our common stock outstanding at December 31, 2009:

Exercise Price	Number of Warrants Outstanding	Remaining Contractual Life (years)	Number of Warrants Exercisable
$ 1.49	276,741	0.67	276,741
1.44	2,837,351	0.65	2,837,351
1.00	4,074,172	2.25	4,074,172
0.28	150,000	2.64	150,000
0.09	11,111,111	3.29	11,111,111
0.09	39,675,079	3.89	39,675,079
0.09	10,733,355	3.97	10,733,355
0.09	15,716,698	4.09	15,716,698
0.20	140,000	3.69	140,000
0.11	2,444,444	4.83	2,444,444
Total	87,158,951		87,158,951

(16) Income Taxes

There was no current or deferred income tax expense for the years ended December 31, 2009 or 2008 because of the Company's operating losses.

The components of deferred tax assets as of December 31, 2009 and 2008 are as follows:

	2009	2008
Deferred tax assets:		
Tax loss carryforwards	$ 23,170,000	$ 23,947,000
Research and development credit	1,799,000	1,769,000
In-process research and development charge	4,850,000	4,850,000
Share-based compensation	1,603,000	1,459,000
Other	537,000	-
Gross deferred tax assets	31,959,000	32,025,000
Less valuation allowance	(31,959,000)	(32,025,000)
Net deferred tax assets	$ -	$ -

The reasons for the difference between actual income tax benefit for the years ended December 31, 2009 and 2008 and the amount computed by applying the statutory Federal income tax rate to losses before income tax benefit are as follows:

	2009		2008	
	Amount	% of Pre-tax loss	Amount	% of Pre-tax loss
Federal income tax benefit at statutory rate	$ (944,000)	(34.0)%	$ (1,451,000)	(34.0)%
State income taxes, net of federal tax	(188,000)	(6.8)%	(290,000)	(6.8)%
Research and development credits	(50,000)	(3.0)%	(130,000)	(3.0)%
Other	-	0.0%	1,000	0.0%
Change in valuation allowance	1,182,000	43.8%	1,870,000	43.8%
	$ -	0.0%	$ -	0.0%

A valuation allowance is provided when it is more likely than not that some portion or all of the deferred tax assets will not be realized. The net change in the total valuation allowance for the years ended December 31, 2009 and 2008 was an increase of $1,182,000 and $1,870,000, respectively. The tax benefit assumed using the Federal statutory tax rate of 34% has been reduced to an actual benefit of zero due principally to the aforementioned valuation allowance.

At December 31, 2009, the Company had unused Federal and state net operating loss carryforwards of approximately $58,523,000 and $48,128,000, respectively. The net operating loss carryforwards expire in various amounts through 2029 for Federal and state income tax purposes. The Tax Reform Act of 1986 contains provisions which limit the ability to utilize net operating loss carryforwards in the case of certain events including significant changes in ownership interests. Accordingly, a substantial portion of the Company's net operating loss carryforwards above will be subject to annual limitations (currently approximately $100,000) in reducing any future year's taxable income. At December 31, 2009, the Company also had research and development credit carryforwards of approximately $1,799,000 for Federal income tax purposes which expire in various amounts through 2029.

The Company files income tax returns in the U.S. Federal, State and Local jurisdictions. With certain exceptions, the Company is no longer subject to U.S. Federal and state income tax examinations by tax authorities for years prior to 2006. However, net operating loss carryforwards and tax credits generated from those prior years could still be adjusted upon audit. Effective January 1, 2007, the Company adopted guidance under ASC Topic 740-10 (formerly FIN 48, "Accounting for Uncertainty in Income Taxes – an interpretation of FASB Statement No. 109") which clarifies the accounting and disclosure for uncertainty in income taxes. The adoption of this interpretation did not have a material impact to the financial statements. The Company recognizes interest and penalties to uncertain tax position in income tax expense in the statement of operations.

The Company had no unrecognized tax benefits at December 31, 2009 that would affect the annual effective tax rate. Further, the Company is unaware of any positions for which it is reasonably possible that the total amounts of unrecognized tax benefits will significantly increase or decrease within the next twelve months.

(17) License and Consulting Agreements

IGI Agreement for PTH (1-34)
On April 1, 2005, as part of the acquisition of Tarpan Therapeutics, Inc., the Company acquired a Sublicense Agreement with IGI, Inc. (the "IGI Agreement") dated April 14, 2004. Under the IGI Agreement the Company received the exclusive, world-wide, royalty bearing sublicense to develop and commercialize the licensed technology (see Note 1). Under the terms of the IGI Agreement, the Company was responsible for the cost of the preclinical and clinical development of the project, including research and development, manufacturing, laboratory and clinical testing and trials and marketing of licensed products for which the company will be responsible.

In consideration for the Company's rights under the IGI Agreement, a payment of $300,000 was made upon execution of the agreement, prior to the Company's acquisition of Tarpan. In addition the IGI Agreement required the Company to make certain milestone payments as follows: $300,000 payable upon the commencement of a Phase 2 clinical trial; $500,000 upon the commencement of a Phase 3 clinical trial; $1,500,000 upon the acceptance of an NDA application by the FDA; $2,400,000 upon the approval of an NDA by the FDA; $500,000 upon the commencement of a Phase 3 clinical trial for an indication other than psoriasis; $1,500,000 upon the acceptance of and NDA application for an indication other than psoriasis by the FDA; and $2,400,000 upon the approval of an NDA for an indication other than psoriasis by the FDA.

During 2007, we achieved the milestone of the commencement of Phase 2 clinical trial. As a result $300,000 became payable to IGI. This $300,000 is included in research and development expense for the year ended December 31, 2007. Payment was made to IGI in February 2008.

In addition, the Company was obligated to pay IGI, Inc. an annual royalty of 6% annual net sales on annual net sales up to $200,000,000. In any calendar year in which net sales exceed $200,000,000, the Company was obligated to pay IGI, Inc. an annual royalty of 9% annual net sales. In May 2009, the Company terminated the IGI Agreement. The Company has no further financial liability or commitment to IGI, Inc. under the IGI Agreement.

Hedrin License Agreement
On June 26, 2007, the Company entered into an exclusive license agreement for "Hedrin" (the "Hedrin License Agreement") with Thornton & Ross Ltd. ("T&R") and Kerris, S.A. ("Kerris"). Pursuant to the Hedrin License Agreement, the Company has acquired an exclusive North American license to certain patent rights and other intellectual property relating to Hedrin(TM), a non-insecticide product candidate for the treatment of head lice. In addition, on June 26, 2007, the Company entered into a supply agreement with T&R pursuant to which T&R will be the Company's exclusive supplier of Hedrin product the "Hedrin Supply Agreement".

In consideration for the license, the Company issued to T&R and Kerris (jointly, the "Licensor") a combined total of 150,000 shares of its common stock valued at $120,000. In addition, the Company also made a cash payment of $600,000 to the Licensor. These amounts are included in research and development expense. Further, the Company agreed to make future milestone payments to the Licensor in the aggregate amount of $2,500,000 upon the achievement of various clinical, regulatory, and patent issuance milestones, as well as up to $2,500,000 in a one-time success fee based on aggregate sales of the product by the Company and its licensees of at least $50,000,000. The Company also agreed to pay royalties of 8% (or, under certain circumstances, 4%) on net sales of licensed products. The Company's exclusivity under the Hedrin License Agreement is subject to an annual minimum royalty payment of $1,000,000 (or, under certain circumstances, $500,000) in each of the third through seventh years following the first commercial sale of Hedrin. The Company may sublicense its rights under the Hedrin Agreement with the consent of Licensor and the proceeds resulting from such sublicenses will be shared with the Licensor.

Pursuant to the supply agreement, the Company has agreed that it and its sublicensees will purchase their respective requirements of the Hedrin product from T&R at agreed upon prices. Under certain circumstances where T&R is unable to supply Hedrin products in accordance with the terms and conditions of the Supply Agreement, the Company may obtain products from an alternative supplier subject to certain conditions. The term of the Supply Agreement ends upon termination of the Hedrin Agreement.

In February 2008 the Company assigned and transferred its rights in Hedrin to a joint venture (see Note 6).

Altoderm License Agreement
On April 3, 2007, the Company entered into a license agreement for “Altoderm” (the “Altoderm Agreement”) with T&R. Pursuant to the Altoderm Agreement, the Company acquired an exclusive North American license to certain patent rights and other intellectual property relating to Altoderm, a topical skin lotion product candidate using sodium cromoglicate for the treatment of atopic dermatitis.

In February 2009, the Company terminated the Altoderm Agreement. The Company has no further financial liability or commitment to T&R under the Altoderm Agreement.

Altolyn License Agreement
On April 3, 2007, the Company and T&R also entered into a license agreement for “Altolyn” (the “Altolyn Agreement”). Pursuant to the Altolyn Agreement, the Company acquired an exclusive North American license to certain patent rights and other intellectual property relating to Altolyn, an oral formulation product candidate using sodium cromoglicate for the treatment of mastocytosis, food allergies, and inflammatory bowel disorder.

In February 2009, the Company terminated the Altolyn Agreement for convenience. The Company has no further financial liability or commitment to T&R under the Altolyn Agreement.

(18) Subsequent events – Unaudited

8% Note
On January 13, 2010, the Company withdrew $20,000 subject to the 8% Note with Ariston Pharmaceuticals, Inc. (see Note 10 above). Additionally, on January 28, 2010, the Company withdrew an additional $20,000 subject to the 8% Note. On March 4, 2010, the Company repaid Ariston the $67,000 withdrawn subject to the 8% Note and accrued interest of $816.

Equity PIPE

On March 2, 2010, the Company raised aggregate gross proceeds of approximately $2,547,500 pursuant to a private placement of its securities. The Company entered into subscription agreements (the "Subscription Agreements") with seventy-seven accredited investors (the "Investors") pursuant to which the Company sold an aggregate of 101.9 Units (as defined herein) for a purchase price of $25,000 per Unit. Pursuant to the Subscription Agreements, the Company issued to each Investor units (the "Units") consisting of (i) 357,143 shares of common stock, $0.001 par value per share (the “Common Stock” or “Shares”) of the Company and (ii) 535,714 warrants (each a “Warrant” and collectively the “Warrants”), each of which will entitle the holder to purchase one additional share of Common Stock for a period of five years (each a “Warrant Share” and collectively the “Warrant Shares”) at an exercise price of $0.08 per share.

The Nordic Put and Nordic Warrant were issued at a value of $0.14 per share and were issued with anti-dilution rights. The issuance of any securities at a value of less than $0.14 per share activates Nordic’s anti-dilution rights. The Secured 12% Note transaction included warrants with an exercise price of $0.09 per share, this activated Nordic’s anti-dilution rights as reflected in the table below under the caption “Before the Equity Pipe Transaction”. Any issuances of any securities subsequent to the Secured 12% Note transaction at a value of less than $0.09 further activates Nordic’s anti-dilution rights. The Equity Pipe transaction in March 2010 effectively included the sale of one share of common stock and a warrant to purchase 1.5 shares of common stock for a price of $0.07. The JV Agreement between Nordic and Manhattan governs the antidilution protection to Nordic. Section 5.1 of that agreement state ”If shares of Common Stock or Common Stock Equivalents are issued or sold together with other stock or securities or other assets of MHA (Manhattan) for a consideration which covers both, the effective price per share shall be computed with regard to the portion of the consideration so received that may reasonably be determined in good faith by the Board of Directors, to be allocable to such Common Stock or Common Stock Equivalent.” The good faith determination of the effective price per share was $0.07 for each share of common stock sold and a de minimus value to the warrants. The Nordic Put and the Nordic Warrant are now valued at a price of $0.07 per share. The following table shows the effect of Nordic’s anti-dilution rights.

	Shares Issuable Upon Exercise of Nordic's Put	**Shares Issuable Upon Exercise of Nordic's Warrant**	**Total Shares Issuable Upon Exercise of Nordic's Put and Warrant**
Before the Equity Pipe Transaction	55,555,556	11,111,111	66,666,667
Antidilution shares	15,873,015	3,174,603	19,047,618
After the Equity Pipe Transaction	71,428,571	14,285,714	85,714,285

In March 2010, we received correspondence from Nordic that questions how we calculated the anti-dilution shares, as shown above, and suggesting that we did not employ a good faith estimate. We believe our determination was made in good faith and is appropriate.

All of the Investors represented that they were “accredited investors,” as that term is defined in Rule 501(a) of Regulation D under the Securities Act, and the sale of the Units was made in reliance on exemptions provided by Regulation D and Section 4(2) of the Securities Act of 1933, as amended.

In connection with the closing of the private placement, the Company, the placement agent acting in connection with the private placement (the “Placement Agent”) and the Investors entered into a Registration Rights Agreement, dated as of March 2, 2010, and the Company agreed to file a registration statement to register the resale of the Shares, within 60 days of the final closing date and to cause the registration statement to be declared effective within 150 days (or 180 days upon review by the SEC).

The Company received net proceeds of approximately $2,158,000 after payment of an aggregate of $305,700 of commissions and expense allowance to the Placement Agent, and approximately $83,000 of other offering and related costs in connection with the private placement. In addition, the Company issued a warrant to purchase 3,639,289 shares of Common Stock at an exercise price of $0.08 per share to the Placement Agent as additional compensation for its services.

The Company did not use any form of advertising or general solicitation in connection with the sale of the Units. The Shares, the Warrants and the Warrant Shares are non-transferable in the absence of an effective registration statement under the Act, or an available exemption therefrom, and all certificates are imprinted with a restrictive legend to that effect.

Hedrin JV

As per the Limited Partnership Agreement between the Company and Nordic (the "LPA") in the event that a limited partner in the Hedrin JV (a "Limited Partner") determines, in its reasonable goods faith discretion, that the Hedrin JV requires additional capital for the proper conduct of its business that Limited Partner shall provide each Limited Partner with a written request for contribution of such Limited Partner's proportionate share, in accordance to the then respective equity ownership in the Hedrin JV, of such requested additional capital amount.

As per the terms of the LPA, if a Limited Partner declines to so contribute, elects to contribute but thereafter fails to do so timely, or elects to contribute and timely does contribute some, but not all of, its proportionate share of the requested additional capital amount, the other Limited Partner shall have the option to contribute the remaining balance of such requested additional capital amount.

As per the terms of the LPA, the General Partner shall determine the fair market value of the shares for purposes of determining how to allocate the number of shares of the Hedrin JV to be issued in consideration for the contribution of capital. If the General Partner is unable to determine the fair market value of the shares, the fair market value for the shares shall be determined in good faith by the contributing Limited Partner if such amount is equal to or greater than the most recent valuation of such Hedrin JV shares.

On December 31, 2009 Nordic Biotech Venture Fund II ("Nordic") delivered a written notice to the Company for a $1,000,000 capital increase to the Hedrin JV. In January 2010, Nordic made its capital contribution to the Hedrin JV of $500,000. The Company did not have sufficient funds to make such a capital contribution within the required time prescribed in the LPA.

The General Partner was unable to determine the fair market value of the shares. The contributing Limited Partner, Nordic, determined in good faith that the fair market value of the shares is equal to the most recent valuation. The most recent valuation was the February 2009 investment of $1,500,000 into the Hedrin JV by Nordic at $5,000 per share. As a result of Nordic's investing an additional $500,000 in the Hedrin JV the ownership percentages of the Hedrin JV have changed from 50% to Nordic and 50% for the Company to 52.38% to Nordic and 47.62% for the Company. In the event that Nordic exercises its option to invest the remaining $500,000 of the $1,000,000 capital increase then the ownership percentage shall change to 54.55% for Nordic and 45.45% for the Company.

Ariston Merger

On March 8, 2010, Manhattan Pharmaceuticals, Inc. (the “Company” or "Manhattan") entered into an Agreement and Plan of Merger (the "Merger Agreement") by and among the Company, Ariston Pharmaceuticals, Inc., a Delaware corporation ("Ariston") and Ariston Merger Corp., a Delaware corporation and wholly-owned subsidiary of the Company (the "Merger Sub"). Pursuant to the terms and conditions set forth in the Merger Agreement, on March 8, 2010, the Merger Sub merged with and into Ariston (the "Merger"), with Ariston being the surviving corporation of the Merger. As a result of the Merger, Ariston became a wholly-owned subsidiary of the Company.

Under the terms of the Merger Agreement, the consideration payable by the Company to the stockholders and note holders of Ariston consists of the issuance of 7,062,423 shares of the Company's common stock, par value $0.001 per share, ("Common Stock") at Closing (as defined in the Merger Agreement) plus the right to receive up to an additional 24,718,481 shares of Common Stock (the “Milestone Shares”) upon the achievement of certain product-related milestones described below. In addition, the Company has reserved 38,630,723 shares of its Common Stock for possible future issuance in connection with the conversion of $15.45 million of outstanding Ariston convertible promissory notes. The note holders will not have any recourse to the Company for repayment of the notes (their sole recourse being to Ariston), but the note holders will have the right to convert the notes into shares of the Company's Common Stock at the rate of $0.40 per share. Further, the Company has reserved 5,000,000 shares of its Common Stock for possible future issuance in connection with the conversion of $1.0 million of outstanding Ariston convertible promissory note issued in satisfaction of a trade payable. The note holder will not have any recourse to the Company for repayment of the note (their sole recourse being to Ariston), but the note holder will have the right to convert the note into shares of the Company's Common Stock at the rate of $0.20 per share.

Upon the achievement of the milestones described below, the Company would be obligated to issue portions of the Milestone Shares to the former Ariston stockholders and noteholders:

- Upon the affirmative decision of the Company’ Board of Directors, provided that such decision is made prior to March 8, 2011, to further develop the AST-914 metabolite product candidate, either internally or through a corporate partnership, the Company would issue 8,828,029 of the Milestone Shares.
- Upon the acceptance by the FDA of the Company's filing of the first New Drug Application for the AST-726 product candidate, the Company would issue 7,062,423 of the Milestone Shares.
- Upon the Company receiving FDA approval to market the AST-726 product candidate in the United States of America, the Company would issue 8,828,029 of the Milestone Shares.

Certain members of the Company's board of directors and principal stockholders of the Company owned Ariston securities. Timothy McInerney, a director of Manhattan, owned 16,668 shares of Ariston common stock which represented less than 1% of Ariston’s outstanding common stock as of the closing of the Merger. Neil Herskowitz, a director of Manhattan, indirectly owned convertible promissory notes of Ariston with interest and principal in the amount of $192,739. Michael Weiser, a director of Manhattan, owned 117,342 shares of Ariston common stock, which represented approximately 2.1% of Ariston’s outstanding common stock as of the closing of the Merger. Lindsay Rosenwald, a more than 5% beneficial owner of Manhattan common stock, in his individual capacity and indirectly through trusts and companies he controls owned 497,911 shares of Ariston common stock, which represented approximately 8.9% of Ariston’s outstanding common stock as of the closing of the Merger and indirectly owned convertible promissory notes of Ariston in the amount of $141,438.

The Company merged with Ariston principally to add new products to our portfolio. Prior to the Mereger, Ariston was a private, clinical stage specialty biopharmaceutical company based in Shrewsbury, Massachusetts that in-licenses, develops and plans to market novel therapeutics for the treatment of serious disorders of the central and peripheral nervous systems.

The initial accounting for the Merger was incomplete as of the date of these financials statements, therefore certain required disclosures for the Merger could not be made.

33,928,571 Shares
of Common Stock

Manhattan Pharmaceuticals, Inc.

Prospectus

________ __, 2010

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth an estimate of the fees and expenses relating to the issuance and distribution of the securities being registered hereby, other than underwriting discounts and commissions, all of which shall be borne by Manhattan Pharmaceuticals, Inc. (the "Registrant" or the "Company"). All of such fees and expenses, except for the SEC Registration Fee, are estimated:

SEC registration fee	$	333.00
Legal fees and expenses		10,000.00
Printing fees and expenses		1,000.00
Accounting fees and expenses		10,000.00
Miscellaneous fees and expenses		2,000.00
Total	$	23,333.00

Item 14. Indemnification of Officers and Directors

Under provisions of the amended and restated certificate of incorporation and bylaws of the Registrant, directors and officers will be indemnified for any and all judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys fees, in connection with threatened, pending or completed actions, suits or proceedings, whether civil, or criminal, administrative or investigative (other than an action arising by or in the right of the Registrant), if such director or officer has been wholly successful on the merits or otherwise, or is found to have acted in good faith and in a manner he or she reasonably believes to be in or not opposed to the best interests of the Registrant, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. In addition, directors and officers will be indemnified for reasonable expenses in connection with threatened, pending or completed actions or suits by or in the right of Registrant if such director or officer has been wholly successful on the merits or otherwise, or is found to have acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Registrant, except in the case of certain findings by a court that such person is liable for negligence or misconduct in his or her duty to the Registrant unless such court or the Delaware Court of Chancery also finds that such person is nevertheless fairly and reasonably entitled to indemnity. The Registrant's certificate of incorporation also eliminates the liability of directors of the Registrant for monetary damages to the fullest extent permissible under Delaware law.

Section 145 of the Delaware General Corporation Law states:

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

(b) A corporation shall have power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expense which the Court of Chancery or such other court shall deem proper.

Securities and Securities and Exchange Commission Position Regarding Indemnification Liabilities Arising Under the Securities Act

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the Registrant pursuant to the foregoing provisions, the Registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is therefore unenforceable.

Item 15. Recent Sales of Unregistered Securities.

On March 30, 2007, the Registrant entered into a series of subscription agreements with various institutional and other accredited investors for the issuance and sale in a private placement of an aggregate of 10,185,502 shares of the Registrant's common stock for total gross proceeds of approximately $8.56 million. Of the total amount of shares issued, 10,129,947 were sold at a per share price of $0.84, and an additional 55,555 shares were sold to an entity affiliated with Neil Herskowitz, a director of the Registrant, at a per share price of $0.90, the closing sale price of the Registrant's common stock on March 29, 2007. Pursuant to the subscription agreements, the Registrant also issued to the investors 5-year warrants to purchase an aggregate of 3,564,897 shares of the Registrant's common stock at an exercise price of $1.00 per share. The warrants are exercisable during the period commencing September 30, 2007 and ending March 30, 2012. Pursuant to the subscription agreements, the Registrant agreed to file a registration statement with the Securities and Exchange Commission on or before May 14, 2007 covering the resale of the shares issued in the private placement, including the shares issuable upon exercise of the investor warrants. The Registrant engaged Paramount BioCapital, Inc., as its placement agent in connection with the private placement. In consideration for its services, the Registrant paid aggregate cash commissions of approximately $600,000 and issued to Paramount a 5-year warrant to purchase an aggregate of 509,275 shares at an exercise price of $1.00 per share. The sale of the shares and warrants was not registered under the Securities Act of 1933. Rather, the offer and sale of such securities was made in reliance on the exemption from registration requirements provided by Section 4(2) of the Securities Act and Regulation D promulgated thereunder. Each of the investors was "accredited" (as defined under Regulation D) and no general solicitation was used in connection with the offer and sale of such securities.

In April 2007, in partial consideration for entering into a license agreement, the Registrant issued to Thornton & Ross Ltd., the licensor, a total of 125,000 shares of the Registrant's common stock in accordance with the terms thereof. The issuance of such common stock was considered to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act, or Regulation D promulgated thereunder, as a transaction by an issuer not involving a public offering. The recipient of such common stock represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the share certificates issued in this transaction. All recipients either received adequate information about us or had access to such information.

In June 2007, in consideration for entering into a license agreement, the Registrant issued to each of Thornton & Ross, Ltd. and Kerra, S.A., each a licensor thereunder, 75,000 shares of the Registrant's common stock in accordance with the terms thereof. The issuances of such common stock were considered to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act, or Regulation D promulgated thereunder, as transactions by an issuer not involving a public offering. The recipients of such common stock represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the share certificates issued in these transactions. All recipients either received adequate information about the Registrant or had access to such information.

In January 2008, the Registrant and Nordic Biotech Venture Fund II K/S ("Nordic"), entered into a joint venture agreement the Registrant, as amended on February 18, 2008 and June 9, 2008 (the "Joint Venture Agreement"), pursuant to which in February 2008, (i) Nordic contributed cash in the amount of $2.5 million to H Pharmaceuticals K/S, a newly formed Danish limited partnership(the "Hedrin JV") in exchange for 50% of the equity interests in the Hedrin JV, and (ii) the Registrant contributed certain assets to North American rights (under license) to our Hedrin product to the Hedrin JV in exchange for $2.0 million in cash and 50% of the equity interests in the Hedrin JV. On or around June 30, 2008, in accordance with the terms of the Joint Venture Agreement, Nordic contributed an additional $1.25 million in cash to the Hedrin JV, $1.0 million of which was distributed to us and equity in the Hedrin JV was distributed to each of us and Nordic sufficient to maintain our respective ownership interests. Pursuant to the joint venture agreement, upon the classification by the U.S. Food and Drug Administration, or the FDA, of Hedrin as a Class II or Class III medical device, Nordic was required to contribute to the Hedrin JV an additional $1.25 million in cash, $0.5 million of which was to be distributed to us and equity in the Hedrin JV was to be distributed to each of us and Nordic sufficient to maintain our respective ownership interests. The FDA notified the Hedrin JV that Hedrin has been classified as a Class III medical device and in February 2009, Nordic made the $1.25 million investment in the Hedrin JV, the Hedrin JV made the $0.5 million milestone payment to us.

Pursuant to the Joint Venture Agreement, Nordic has the right to put up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic in exchange for such number of shares of common stock equal to the amount of Nordic's investment in the Hedrin JV (not to exceed $5 million) divided by $0.14, as adjusted from time to time for stock splits and other specified events, multiplied by a conversion factor, which is (i) 1.00 for so long as Nordic's distributions from the Hedrin JV are less than the amount of its investment, (ii) 1.25 for so long as Nordic's distributions from the Hedrin JV are less than two times the amount of its investment but greater than or equal to the amount of its investment amount, (iii) 1.50 for so long as Nordic's distributions from the Hedrin JV are less than three times the amount of its investment but greater than or equal to two times the amount of its investment amount, (iv) 2.00 for so long as Nordic's distributions from the Hedrin JV are less than four times the amount of its investment but greater than or equal to three times the amount of its investment amount and (v) 3.00 for so long as Nordic's distributions from Hedrin JV are greater than or equal to four times the amount of its investment. The put right expires upon the earlier to occur of (i) February 25, 2018 and (ii) 30 days after the date when Nordic's distributions from the Hedrin JV exceed five times the amount Nordic has invested in the Hedrin JV (or 10 days after such date if the Registrant has provided Nordic notice thereof). Pursuant to the Joint Venture Agreement, the Registrant has the right to call up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic in exchange for such number of shares of common stock equal to the portion of Nordic's investment in the Hedrin JV (not to exceed $5 million) that the Registrant calls by the dollar amount of Nordic's investment in the Hedrin JV up to $5 million, divided by $0.07, as adjusted for the sale of the Registrant's 2010 private placement, and as further adjusted from time to time for stock splits and other specified events. The call right is only exercisable by the Registrant if the price of common stock has closed at or above $1.40 per share for 30 consecutive trading days. During the first 30 consecutive trading days in which the common stock closes at or above $1.40 per share, the Registrant may exercise up to 25% of the call right. During the second 30 consecutive trading days in which the common stock closes at or above $1.40 per share, the Registrant may exercise up to 50% of the call right on a cumulative basis. During the third consecutive 30 trading days in which the common stock closes at or above $1.40 per share, the Registrant may exercise up to 75% of the call right on a cumulative basis. During the fourth consecutive 30 days in which the common stock closes at or above $1.40 per share, the Registrant may exercise up to 100% of the call right on a cumulative basis. Nordic may refuse the call, either by paying $1.5 million multiplied by the percentage of Nordic's investment being called or forfeiting an equivalent portion of the put right, calculated on a pro rata basis for the percentage of the Nordic equity interest called by us. The call right expires on February 25, 2013. For purposes of Nordic's right to put, and our right to call, up to a 50% equity interest in the Hedrin JV of the 52.38% equity interest currently held by Nordic, the amount of Nordic's investment is $5,000,000.

In connection with the Joint Venture Agreement, on February 25, 2008, Nordic paid the Registrant a non-refundable fee of $150,000 in exchange for the right to receive a warrant to purchase up to 7,142,857 shares of common stock at $0.14 per share, as adjusted from time to time for stock splits and other specified events, if Nordic did not exercise all or part of its put right on or before April 30, 2008. As of April 30, 2008, Nordic had not exercised any portion of its put right and the Registrant issued the warrant to Nordic. Subsequently pursuant to the anti-dilution provisions of the warrant, the warrant was adjusted to increase the number of shares underlying the warrant to a total of 14,285,714 shares and to adjust the exercise price to $0.08 per share.

The offering and sale of the securities under the Joint Venture Agreement were considered to be exempt from registration under the Securities Act, by virtue of Section 4(2) thereof and the provisions of Regulation D promulgated thereunder. Nordic has represented to the Registrant that it is an “accredited investor,” as that term is defined in Rule 501(a) of Regulation D under the Securities Act.

On September 11, 2008, the Registrant entered into a series of 10% secured promissory notes with certain of its directors and officers and an employee of the Registrant (for aggregate of $70,000. The maturity date for principal and interest on the notes was March 10, 2009 unless paid earlier by the Registrant. These notes were repaid in February 2009 along with all interest thereon. In connection with the issuance of the notes, the Registrant also issued to the note holders 5-year warrants to purchase an aggregate of 140,000 shares of the Registrant’s common stock at an exercise price of $0.20 per share. The Registrant granted to the note holders a continuing security interest in certain specific refunds, deposits and repayments due to the Registrant and expected to be repaid to the Registrant in the next several months. The issuance of such securities was considered to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act, or Regulation D promulgated thereunder, as a transaction by an issuer not involving a public offering. The recipient of such securities represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the warrant certificates issued in this transaction. All recipients either received adequate information about us or had access to such information.

On February 3, 2009, the Registrant completed a private placement (the “2009 Private Placement”) of 345 units, with each unit consisting of a 12% senior secured note promissory note in the principal amount of $5,000 and a warrant to purchase up to 166,667 shares of common stock at an exercise price of $.09 per share which expires on December 31, 2013, for aggregate gross proceeds of $1,780,500. The private placement was completed in three closings which occurred on November 19, 2008 with respect to 207 units, December 23, 2008 with respect to 56 units and February 3, 2009 with respect to 82 units.

On November 19, 2008, the Registrant completed the initial closing of the 2009 Private Placement pursuant to which it sold 207 units. In connection with the initial closing, the Registrant issued a warrant to purchase 5,175,010 shares of common stock at an exercise price of $.09 per share to the placement agent as partial compensation for its services. The Registrant granted the placement agent the right to nominate a member of its Board of Directors and such director shall receive all compensation and benefits provided to its other directors. Additionally, upon such director’s appointment to the Board of Directors, he or she shall be issued a warrant to purchase 1,000,000 shares of common stock at a per share exercise price equal to the greater of (i) the fair market value on the date of issuance or (ii) $.09. The placement agent subsequently irrevocably waived its right to nominate a member of the Registrant's Board of Directors.

On December 23, 2008, the Registrant completed a second closing of the 2009 Private Placement under the terms of the Securities Purchase Agreement. At the second closing, the Registrant sold an additional 56 units to investors. In connection with the second closing, the Registrant issued to the placement agent a warrant to purchase 1,400,003 shares of common stock at an exercise price of $.09 per share as additional compensation for its services.

On February 3, 2009, the Registrant completed a third closing of the 2009 Private Placement under the terms of the Securities Purchase Agreement. At the third closing, the Registrant sold an additional 82 units to investors. In connection with the third closing, the Registrant issued to the placement agent a warrant to purchase 2,050,004 shares of common stock at an exercise price of $.09 per share as additional compensation for its services.

All of the investors represented in the 2009 Private Placement represented that they were “accredited investors,” as that term is defined in Rule 501(a) of Regulation D under the Securities Act, and the sale of the units was made in reliance on exemptions provided by Regulation D and Section 4(2) of the Securities Act of 1933, as amended.

On October 28, 2009, the Registrant entered into a Subscription Agreement pursuant to which it issued a 12% original issue discount senior subordinated convertible debenture with a stated value of $400,000 and a warrant to purchase 2,222,222 shares of the Registrant’s common stock. The warrant is exercisable at an exercise price of $0.11 per share, subject to adjustment, prior to October 28, 2014. The convertible 12% debenture was subordinated to the Registrant's outstanding 12% senior secured promissory notes issued in the 2009 Private Placement in the principal amount of $1,725,000. The convertible 12% debenture was convertible into shares of common stock at an initial conversion price of $0.09 per share, subject to adjustment, or, in the event the Registrant issues new securities in connection with a financing the convertible 12% debenture may be converted into such new securities at a conversion price equal to the purchase price paid by the purchasers of such new securities. On April 8, 2010, the holder converted the convertible 12% debenture, including accrued interest, into approximately 17 units, with each unit consisting of (i) 357,143 shares of our common stock and (ii) warrants to purchase 535,714 shares of our common stock at a per share purchase price of $0.08. In connection with the issuance of convertible 12% debenture and the warrant, the Registrant issued warrants to purchase an aggregate of 222,222 shares of common stock at an exercise price of $0.11 per share to the placement agent, and certain of its designees (each of whom represented that he, she or it was an “accredited investor” as that term is defined in Rule 501(a) of Regulation D of the Securities Act) as compensation for its services. The purchaser of the convertible 12% debenture and the warrant represented that it was an “accredited investor,” as that term is defined in Rule 501(a) of Regulation D under the Securities Act, and the sale of the Securities was made in reliance on exemptions provided by Regulation D and Section 4(2) of the Securities Act of 1933, as amended. The Registrant did not use any form of advertising or general solicitation in connection with the sale of the Securities. The convertible 12% debenture and the warrant (including the shares of common stock issuable upon exercise or conversion thereof) are non-transferable in the absence of an effective registration statement under the Securities Act of 1933, as amended, or an available exemption therefrom, and all certificates are imprinted with a restrictive legend to that effect.

On April 8, 2010, the Registrant completed a private placement of approximately 121 units, with each unit consisting of (i) 357,143 shares of our common stock, $0.001 par value per share and (ii) 535,714 common stock purchase warrants, each of which will entitle the holder to purchase one additional share of our common stock for a period of five years at an exercise price of $0.08 per share. The purchase price for each unit was $25,000.

The first closing of the private place was completed on March 2, 2010, at which the Registrant sold an aggregate of 101.9 units. In connection with the first closing, the Registrant issued a warrant to purchase 3,639,289 shares of common stock at an exercise price of $0.08 per share to the placement agent as partial compensation for its services. The final closing of the private placement was completed on April 8, 2010, at which the Registrant sold an aggregate of 2.4 additional units. In connection with the final closing, the Registrant issued a warrant to purchase 12,857 shares of common stock at an exercise price of $0.08 per share to the placement agent as partial compensation for its services. In addition, on April 8, 2010, the holder of an outstanding 12% Original Issue Discount Senior Subordinated Convertible Debenture, dated October 28, 2009, with a stated value of $400,000 and $21,886 of accrued interest, exercised its option to convert such debenture (including all accrued interest thereon) into 16.88 units. The conversion price was equal to the per unit purchase price paid by the investors in the private placement. Each of the investors in the private placement and the holder of the debenture represented that they were “accredited investors,” as that term is defined in Rule 501(a) of Regulation D under the Securities Act, and the sale of the Units was made in reliance on exemptions provided by Regulation D and Section 4(2) of the Securities Act of 1933, as amended.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

The following documents are included or incorporated by reference in this report.

Exhibit No.	Description
2.1	Agreement and Plan of Merger among the Company, Manhattan Pharmaceuticals Acquisition Corp. and Manhattan Research Development, Inc. (formerly Manhattan Pharmaceuticals, Inc.) dated December 17, 2002 (incorporated by reference to Exhibit 2.1 from Form 8-K filed March 5, 2003).
2.2	Agreement and Plan of Merger among the Registrant, Tarpan Therapeutics, Inc. and Tarpan Acquisition Corp., dated April 1, 2005 (incorporated by reference to Exhibit 2.1 of the Registrant's Form 8-K/A filed June 15, 2005).
2.3	Agreement and Plan of Merger among the Registrant, Ariston Pharmaceuticals, Inc., and Ariston Merger Corp. dated March 8, 2010 (incorporated by reference to the Registrant's Current Report on Form 8-K filed March 12, 2010.
3.1	Certificate of incorporation, as amended through September 25, 2003 (incorporated by reference to Exhibit 3.1 to the Registrant's Form 10-QSB for the quarter ended September 30, 2003).
3.2	Bylaws, as amended to date (incorporated by reference from Registrant's registration statement on Form SB-2, as amended (File No.33-98478)).
4.1	Specimen common stock certificate (incorporated by reference from Registrant's registration statement on Form SB-2, as amended (File No.33-98478)).
4.2	Form of warrant issued by Manhattan Research Development, Inc., which automatically converted into warrants to purchase shares of the Registrant's common stock upon the merger transaction with such company (incorporated by reference to Exhibit 4.1 to the Registrant's Form 10-QSB for the quarter ended March 31, 2003).
4.3	Form of warrant issued to placement agents in connection with the Registrant's November 2003 private placement of Series A Convertible Preferred Stock and the Registrant's January 2004 private placement (incorporated by reference to Exhibit 4.18 to the Registrant's Registration Statement on Form SB-2 filed January 13, 2004 (File No. 333-111897)).
4.4	Form of warrant issued to investors in the Registrant's August 2005 private placement (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K filed September 1, 2005).
4.5	Form of warrant issued to placement agents in the Registrant's August 2005 private placement (incorporated by reference to Exhibit 4.2 of the Registrant's Form 8-K filed September 1, 2005).
4.6	Warrant, dated April 30, 2008, issued to Nordic Biotech Venture Fund II K/S (incorporated by reference to Exhibit 4.6 of the Registrant's Registration Statement on Form S-1 filed on May 1, 2008 (File No. 333-150580)).
4.7	Form of Warrant issued to Noteholders on September 11, 2008 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on September 15, 2008)

4.8	Form of Warrant issued to Noteholders on November 19, 2008 (incorporated by reference to Exhibit 10.6 to the Registrant's Current Report on Form 8-K filed on November 25, 2008)
4.9	Form of Warrant issued to investors in the March 2010 private placement (incorporated by reference to Exhibit 4.9 to the Registrant's Annual Report on Form 10-K filed on March 31, 2010)
4.10	Form of Warrant issued to placement agent in the March 2010 private placement (incorporated by reference to Exhibit 4.10 to the Registrant's Annual Report on Form 10-K filed on March 31, 2010)
5.1	Opinion of Lowenstein Sandler PC (incorporated by reference to Amendment No. 1 to the Registrant's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on October 3, 2008)
10.1	1995 Stock Option Plan, as amended (incorporated by reference to Exhibit 10.18 to the Registrant's Form 10-QSB for the quarter ended September 30, 1996).
10.2	Form of Notice of Stock Option Grant issued to employees of the Registrant from April 12, 2000 to February 21, 2003 (incorporated by reference to Exhibit 99.2 of the Registrant's Registration Statement non Form S-8 filed March 24, 1998 (File 333-48531)).
10.3	Schedule of Notices of Stock Option Grants, the form of which is attached hereto as Exhibit 4.2.
10.4	Form of Stock Option Agreement issued to employees of the Registrant from April 12, 2000 to February 21, 2003 (incorporated by reference to Exhibit 99.3 to the Registrant's Registration Statement on Form S-8 filed March 24, 1998 (File 333-48531)).
10.5	License Agreement dated on or about February 28, 2002 between Manhattan Research Development, Inc. (f/k/a Manhattan Pharmaceuticals, Inc.) and Oleoyl-Estrone Developments SL (incorporated by reference to Exhibit 10.6 to the Registrant's Amendment No. 2 to Form 10-QSB/A for the quarter ended March 31, 2003 filed on March 12, 2004).
10.6	License Agreement dated April 4, 2003 between the Registrant and NovaDel Pharma, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Amendment No. 1 to Form 10-QSB/A for the quarter ended June 30, 2003 filed on March 12, 2004).++
10.7	2003 Stock Option Plan (incorporated by reference to Exhibit 4.1 to Registrant's Registration Statement on Form S-8 filed February 17, 2004).
10.8	Employment Agreement dated April 1, 2005, between the Registrant and Douglas Abel (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K/A filed June 15, 2005).
10.9	Sublicense Agreement dated April 14, 2004 between Tarpan Therapeutics, Inc., the Registrant's wholly-owned subsidiary, and IGI, Inc. (incorporated by reference to Exhibit 10.109 to IGI Inc.'s Form 10-Q for the quarter ended March 31, 2004 (File No. 001-08568).
10.10	Form of subscription agreement between the Registrant and the investors in the Registrant's August 2005 private placement (incorporated by reference as Exhibit 10.1 to the Registrant's Form 8-K filed September 1, 2005).

10.11	Separation Agreement between the Registrant and Alan G. Harris December 21, 2007 (incorporated by reference to Exhibit 10.11 to the Registrant’s Form 10-K filed March 31, 2008.)
10.12	Employment Agreement dated July 7, 2006 between the Registrant and Michael G. McGuinness (incorporated by reference to Exhibit 10.1 of the Registrant’s Form 8-K filed July 12, 2006.)
10.13	Summary terms of compensation plan for Registrant’s non-employee directors (incorporated by reference to Exhibit 10.1 of Registrant’s Form 8-K filed February 5, 2007).
10.14	Form of Stock Option Agreement issued under the Registrant’s 2003 Stock Option Plan (Incorporated by reference to Exhibit 10.15 to the Registrant’s Form 10-KSB filed April 2, 2007.)
10.15	Exclusive License Agreement for “Altoderm” between Thornton & Ross Ltd. and Manhattan Pharmaceuticals, Inc. dates April 3, 2007. (Incorporated by reference to Exhibit 10.3 of the registrant’s form 10-Q for the quarter ended June 30, 2007 filed on August 14, 2007.)
10.16	Exclusive License Agreement for “Altolyn” between Thornton &Ross Ltd. and Manhattan Pharmaceuticals, Inc. dated April 3, 2007. (Incorporated by reference to Exhibit 10.4 of the registrant’s form 10-Q for the quarter ended June 30, 2007 filed on August 14, 2007.)
10.17	Exclusive License Agreement for “Hedrin” between Thornton &Ross Ltd. , Kerris, S.A. and Manhattan Pharmaceuticals, Inc. dated June 26, 2007. (Incorporated by reference to Exhibit 10.5 of the registrant’s form 10-Q for the quarter ended June 30, 2007 filed on August 14, 2007.)
10.18	Supply Agreement for “Hedrin” between Thornton & Ross Ltd. and Manhattan Pharmaceuticals, Inc. dated June 26, 2007. (Incorporated by reference to Exhibit 10.6 of the registrant’s form 10-Q for the quarter ended June 30, 2007 filed on August 14, 2007.)
10.19	Joint Venture Agreement between Nordic Biotech Fund II K/S and Manhattan Pharmaceuticals, Inc. to develop and commercialize “Hedrin” dated January 31, 2008.
10.20	Amendment No. 1, dated February 25, 2008, to the Joint Venture Agreement between Nordic Biotech Fund II K/S and Manhattan Pharmaceuticals, Inc. to develop and commercialize “Hedrin” dated January 31, 2008 (Incorporated by reference to Exhibit 10.20 to the Registrant’s Form 10-K filed March 31, 2008).
10.21	Omnibus Amendment to Joint Venture Agreement and Additional Agreements, dated June 9, 2008, among Manhattan Pharmaceuticals, Inc., Hedrin Pharmaceuticals K/S, Hedrin Pharmaceuticals General Partner ApS and Nordic Biotech Venture Fund II K/S. (Incorporated by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed on June 13, 2008.)
10.22	Assignment and Contribution Agreement between Hedrin Pharmaceuticals K/S and Manhattan Pharmaceuticals, Inc. dated February 25, 2008. (Incorporated by reference to Exhibit 10.21 to the Registrant’s Form 10-K filed March 31, 2008.)
10.23	Registration Rights Agreement between Nordic Biotech Venture Fund II K/S and Manhattan Pharmaceuticals, Inc. dated February 25, 2008. (Incorporated by reference to Exhibit 10.22 to the Registrant’s Form 10-K filed March 31, 2008.)

10.24	Letter Agreement, dated September 17, 2008, between Nordic Biotech Venture Fund II K/S and Manhattan Pharmaceuticals, Inc.
10.25	Amendment to Employment Agreement by and between Manhattan Pharmaceuticals, Inc. and Douglas Abel (Incorporated by reference to Exhibit 10.23 to the Registrant's Form 10-K filed March 31, 2008.)
10.26	Form of Secured Promissory Note, dated September 11, 2008 (Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on September 15, 2008)
10.27	Securities Purchase Agreement, dated November 19, 2008, by and among the Registrant and the investors listed on Exhibit A-1 and A-2 thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on November 25, 2008)
10.28	Registration Rights Agreement, dated November 19, 2008, by and among the Registrant, the Placement Agent and the investors listed on Exhibit A thereto (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on November 25, 2008)
10.29	Security Agreement, dated November 19, 2008, by and among the Registrant and each person named on Exhibit A-1 and A-2 of the Securities Purchase Agreement (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on November 25, 2008)
10.30	Default Agreement, dated November 19, 2008, by and among the Registrant and the persons and entities listed on Schedule A thereto (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on November 25, 2008)
10.31	Form of 12% Senior Secured Promissory Note (incorporated by reference to Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed on November 25, 2008)
10.32	Amendment No. 2 to the Employment Agreement between the Registrant and Douglas Abel, dated November 19, 2008 (incorporated by reference to Exhibit 10.7 to the Registrant's Current Report on Form 8-K filed on November 25, 2008)
10.33	Amendment No. 1 to the Employment Agreement between the Registrant and Michael McGuinness, dated November 19, 2008 (incorporated by reference to Exhibit 10.8 to the Registrant's Current Report on Form 8-K filed on November 25, 2008)
10.34	Form of Placement Agent Warrant (incorporated by reference to Exhibit 10.9 to the Registrant's Current Report on Form 8-K filed on November 25, 2008)
10.35	Form of Subscription Agreement by and among Manhattan Pharmaceuticals, Inc., the Placement Agent and certain investors listed therein in connection with the March 2010 private placement (Incorporated by reference to Exhibit 10.35 to the Registrant's Annual Report on Form 10-K filed March 31, 2010.)
10.36	Placement Agency Agreement dated December 28, 2009 by and between National Securities Corporation and Manhattan Pharmaceuticals, Inc. in connection with the March 2010 private placement (Incorporated by reference to Exhibit 10.36 to the Registrant's Annual Report on Form 10-K filed March 31, 2010.)
10.37	Registration Rights Agreement dated March 2, 2010 by and among Manhattan Pharmaceuticals, Inc., the Placement Agent and certain investors listed therein in connection with the March 2010 private placement (Incorporated by reference to Exhibit 10.37 to the Registrant's Annual Report on Form 10-K filed March 31, 2010.)

23.1	Consent of J.H. Cohn LLP.
23.2	Consent of Lowenstein Sandler PC (incorporated by reference to Exhibit 5.1)
24.1	Powers of Attorney (Included in Signature Page of this Registration Statement)

++ Confidential treatment has been granted as to certain portions of this exhibit pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

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

provided, however, that subparagraphs (i) and (ii) above do not apply if the information required to be included in a post-effective amendment by these subparagraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, as amended, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, as amended, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers, and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Post Effective Amendment No. 2 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of New York, State of New York, on the 24th day of June 2010.

Manhattan Pharmaceuticals, Inc.

By: /s/ Michael G. McGuinness
Michael G. McGuinness
Chief Operating and Financial Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Michael G. McGuinness as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for the undersigned and in his or her name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) to this Registration Statement and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, the following persons in the capacities and on the dates indicated have signed this Post-Effective Amendment No. 2 to Registration Statement below.

/s/ Douglas Abel Douglas Abel	Director and Chairman of the Board	June 24, 2010
/s/ Michael G. McGuinness Michael G. McGuinness	Chief Operating and Financial Officer & Director (principal executive, financial and accounting officer)	June 24, 2010
/s/ Neil Herskowitz Neil Herskowitz	Director	June 24, 2010
/s/ Timothy McInerney Timothy McInerney	Director	June 24, 2010
/s/ Malcolm Morville Malcolm Morville	Director	June 24, 2010
/s/ David Shimko David Shimko	Director	June 24, 2010
/s/ Richard Steinhart Richard Steinhart	Director	June 24, 2010

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the inclusion in this Post-Effective Amendment No. 2 to Registration Statement on Form S-1 of our report, which includes an explanatory paragraph relating to Manhattan Pharmaceuticals, Inc.'s ability to continue as a going concern, dated March 31, 2010, on our audits of the financial statements of Manhattan Pharmaceuticals, Inc. as of December 31, 2009 and 2008, and for the years then ended and for the period from August 6, 2001 (inception) to December 31, 2009. We also consent to the reference to our Firm under the captions "Summary Financial Information", "Selected Financial Information" and "Experts."

/s/ J.H. Cohn LLP

Roseland, New Jersey

June 24, 2010