As filed with the Securities and Exchange Commission on October 3, 2008

Registration No. 333-150580

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

AMENDMENT NO. 1
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 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:
Anthony O. Pergola, Esq.
Lowenstein Sandler PC
65 Livingston Avenue
Roseland, New Jersey 07068
Telephone: (973) 597-2500

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. x

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 x

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)(2)	Proposed Maximum Offering Price Per Share(3)	Proposed Maximum Aggregate Offering Price(3)	Amount of Registration Fee
Common Stock, par value $0.001 per share	33,928,571	$ 0.13	$ 4,410,715	$ 174(4)

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended, this registration statement also covers such indeterminate number of shares of common stock as may be required to prevent dilution resulting from stock splits, stock dividends or similar events.

(2) Includes (i) 26,785,714 shares of common stock issuable upon exercise of a put right and (ii) 7,142,857 shares of common stock issuable upon exercise of an outstanding warrant.

(3) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(c) under the Securities Act of 1933, as amended, based upon the average of the high and low sales prices of the registrant’s common stock on April 28, 2008, as reported on the Over the Counter Bulletin Board.

(4) The registration fee has been paid previously.

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 October 3, 2008**

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 are issuable upon exercise of the selling securityholder's right to put all or a portion of the selling securityholder's equity interest in a limited partnership of which we and the selling securityholder are partners and (ii) 7,142,857 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 all or a portion of the selling securityholder's equity interest in the limited partnership. 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 September 30, 2008, the last reported sales price for our common stock on the Over the Counter Bulletin Board was $0.09 per share.

These securities involve a high degree of risk. See "Risk Factors" beginning on page 7 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 _____, 2008.

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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 7 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 clinical stage specialty pharmaceutical company focused on developing and commercializing innovative pharmaceutical therapies 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.

We currently have four product candidates in development: Hedrin™, a novel, non-insecticide treatment for pediculosis (head lice); Topical PTH (1-34) for the treatment of psoriasis; Altoderm™ (topical cromolyn sodium) for the treatment of pruritus associated with dermatologic conditions including atopic dermatitis; and Altolyn™ (oral tablet cromolyn sodium) for the treatment of mastocytosis. We have not received regulatory approval for, or generated commercial revenues from marketing or selling any drugs. Hedrin is being developed through a joint venture between us and Nordic Biotech Venture Fund II K/S.

Recent Developments

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 Hedrin 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 at 50%. 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 will be required to contribute to the Hedrin JV an additional $1.25 million in cash, $0.5 million of which will be distributed to us and equity in the Hedrin JV will be distributed to each of us and Nordic sufficient to maintain our respective ownership interests at 50%. Upon classification by the FDA of Hedrin as a Class II or Class III medical device, the Hedrin JV will have received a total of $1.5 million cash to be applied toward the development and commercialization of Hedrin in North America. If classification of Hedrin by the FDA as a Class II or Class III medical device is not received by June 30, 2009, then Nordic will not be obligated to make the final milestone payment of $1.25 million, the Hedrin JV will return to Nordic $250,000 of the $1.5 million Nordic contributed in June 2008 and Nordic will receive an additional 20% ownership of the joint venture and enhanced control over the joint venture's operations and other important decision-making powers.

The Hedrin JV will be 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 will engage us to provide management services to the Hedrin JV in exchange for an annualized management fee, which for 2008, on an annualized basis, is $527,000. 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 we each currently hold 50%, 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 million if all of the milestones described above are met and $3.5 million if they are not met) 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. In the event that the final payment milestone described above is not achieved by March 30, 2009, then the Hedrin JV 's board of directors will increase to five members, two appointed by us and three appointed by Nordic.

Pursuant to the joint venture agreement, Nordic has the right to put all or a portion of its interest in the Hedrin JV 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 all or a portion of Nordic's equity interest in the Hedrin JV in exchange for such number of shares of our common stock equal to the portion of Nordic's investment in the Hedrin JV that we call by the dollar amount of Nordic's investment as of such date in the Hedrin JV, divided by $0.14, as 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, all or a portion of Nordic's equity interest in the Hedrin JV, the amount of Nordic's investment is currently $3,750,000; provided, that if, by June 30, 2009, the FDA either does not formally classify Hedrin as a Class II or Class III medical device or formally designates Hedrin as a drug and refers regulation thereof to the FDA Center for Drug Evaluation and Research, the amount of Nordic's investment will be reduced to $3,500,000 and if by June 30, 2009, the FDA formally classifies Hedrin as a Class II or Class III medical device then upon Nordic's payment of the final milestone payment, Nordic's investment will be increased to $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 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 all or any portion of its put right and we issued the warrant to Nordic.

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. 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 all or a portion of Nordic's equity interest in the Hedrin JV, 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 in the case of the registration statement of which this prospectus forms a part, by October 17, 2008 or if we receive comments from the SEC with respect to such registration statement, November 17, 2008, 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.

September 2008 Promissory Note and Warrant Issuance

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 are payable in cash on March 10, 2009 unless paid earlier by us. 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. 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.

American Stock Exchange

In September 2007, we received notice from the staff of The American Stock Exchange, or AMEX, indicating that we were not in compliance with certain continued listing standards set forth in the AMEX Company Guide. Specifically, AMEX notice cited our failure to comply, as of June 30, 2007, with section 1003(a)(ii) of the AMEX Company Guide as we 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 us to maintain $6,000,000 of stockholders’ equity if we have experienced losses from continuing operations and /or net losses in its five most recent fiscal years.

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

Under the terms of our joint venture agreement with Nordic, 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 our total outstanding shares and would be issued at a price below the greater of book or market value. As a result, under AMEX regulations, we 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. We estimated that obtaining stockholder approval to comply with AMEX regulations would take a minimum of 45 days to complete. We discussed the financial viability exception with AMEX for several weeks and had neither received the exception nor been denied the exception. We determined that our financial condition required us to complete the transaction immediately, and that our financial viability depended on our completion of the transaction without further delay.

Accordingly, to maintain our financial viability, on February 28, 2008, we announced that we had formally notified AMEX that we intended to voluntarily delist our common stock from AMEX. The delisting became effective on March 26, 2008.

Our common stock now trades on the Over the Counter Bulletin Board under the symbol "MHAN". We intend to maintain corporate governance, disclosure and reporting procedures consistent with applicable law.

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. Through the merger, we acquired Tarpan's primary product candidate, Topical PTH (1-34) for the treatment of psoriasis. In consideration for their shares of Tarpan's capital stock, the stockholders of Tarpan received an aggregate of approximately 10,731,000 shares of our common stock, representing approximately 20% of our then outstanding common shares. This transaction was accounted for as a purchase of Tarpan by us.

Principal Executive Offices

Our executive offices are located at 48 Wall Street, New York, NY 10005 USA. 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 as of September 15, 2008(2):	70,624,232 shares
Common Stock Issued and Outstanding after this Offering (3):	104,552,803 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 all or a portion of the selling securityholder's equity interest in Hedrin Pharmaceuticals K/S, a Danish limited partnership of which we and the selling securityholder are partners. We also will receive the proceeds of any cash exercise of the warrant.
Over the Counter Bulletin Board Symbol:	MHAN

(1) Includes (i) 26,785,714 shares of our common stock which are issuable upon exercise of the selling securityholder’s right to put all or a portion of the selling securityholder’s equity interest in Hedrin Pharmaceuticals K/S and (ii) 7,142,857 shares of our common stock issuable upon exercise of an outstanding warrant held by the selling securityholder.

(2) Excludes approximately 19,590,189 shares of our common stock issuable upon exercise of outstanding warrants and options to purchase shares of our common stock and up to 42,857,143 shares issuable, or which may become issuable, upon exercise of the selling securityholder's right to put, and our right to call, all or a portion of the selling securityholder’s equity interest in Hedrin Pharmaceuticals K/S and the warrant held by the selling securityholder.

(3) Based on the number of shares of our common stock outstanding as of September 15, 2008. Excludes approximately 19,590,189 shares issuable upon exercise of outstanding warrants and options to purchase shares of our common stock.

Summary Financial Information

The summary financial information for the fiscal years ended December 31, 2007 and 2006 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 for the six months ended June 30, 2008 and 2007 and for the cumulative period from August 6, 2001 to June 30, 2008 was derived from our unaudited financial data but, in the opinion of management, reflects all adjustments necessary for a fair presentation of the results for such periods. The summary financial information presented below should be read in conjunction with our audited 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, 2007 and 2006 and for the six months ended June 30, 2008 and 2007.

	Year Ended December 31,		Six Months Ended June 30,		Cumulative period from August 6, 2001 (inception) to June 30,
	2007	2006	2008	2007	2008
			(unaudited)		(unaudited)
Statements of Operations Data:					
Revenue	$ 0	$ 0	$ 0	$ 0	$ 0
Research and development expense	$ 8,535,687	$ 6,172,845	$ 1,365,799	$ 5,551,082	$ 27,854,842
General and administrative expense	$ 3,608,270	$ 3,827,482	$ 1,715,598	$ 1,967,098	$ 15,567,961
Stock-based compensation	$ 1,440,956	$ 1,675,499	$ 295,664	$ 706,549	$ 3,660,647
Net loss attributable to common shares	$ (12,032,252)	$ (9,695,123)	$ (3,001,561)	$ (7,458,657)	$ (58,000,631)
Net loss per common share	$ (0.18)	$ (0.16)	$ (0.04)	$ (0.11)	N/A
Statements of Cash Flows Data:					
Net cash used in operating activities	$ (10,229,711)	$ (7,750,738)	(2,903,970)	(6,090,775)	$ (37,064,526)
Net cash provided by (used in) financing activities	$ 7,859,413	$ (15,257)	$ 2,853,230	$ 7,861,381	$ 37,284,199
Cash dividends declared	$ 0	$ 0	$ 0	$ 0	$ 0

	At December 31, 2007	At June 30, 2008
		(unaudited)
Balance Sheets Data:		
Total assets	$ 980,577	$ 973,340
Total liabilities	$ 1,871,662	$ 4,420,322
Total stockholders' deficiency	$ (891,085)	$ (3,446,982)

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 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 drug development programs.

We have generated no product revenues to date and will not generate product revenues unless and until we receive approval from the U.S. Food and Drug Administration, or the FDA, and other regulatory authorities for our 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, 2007 and June 30, 2008, we had $0.6 million and $0.6 million, respectively, of cash and cash equivalents. We will have to raise funds immediately to maintain operations. 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.

Additional financing may not be available on acceptable terms, if at all. If adequate funds are not available, we will be required to delay, scale back or eliminate one or more of our product 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.

We are not currently profitable 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 six months ended June 30, 2008, for the year ended December 31, 2007 and for the period from August 6, 2001 (inception) through June 30, 2008, we incurred net losses applicable to common shares of $3,001,561, $12,032,252 and $58,000,631 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 auditors have included an explanatory paragraph in our financial statements for the fiscal years ended December 31, 2007 and 2006, 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 auditors 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 revenues grow slower than we anticipate, 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 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 drug 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 drug product candidates to market and, accordingly, cannot estimate the time when development of these product candidates will be completed. When the clinical testing for our drug product candidates is complete, we will submit to the FDA an Investigational New Drug Application, or 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 development, testing, production and marketing of medical devices also is subject to regulation by the FDA. Before a new medical device, or a new use of, or claim for, an existing product can be marketed in the United States, it must first receive either 510(k) clearance or pre-market approval from the FDA, unless an exemption applies. Either process can be expensive and lengthy. The FDA's 510(k) clearance process usually takes several months, but it can take longer and is unpredictable. The process of obtaining pre-market approval is much more costly and uncertain than the 510(k) clearance process and it can take much longer. Testing, preparation of necessary applications and the processing of those applications by the FDA is expensive and time consuming. We do not know if the FDA will act favorably or quickly in making such reviews, and significant difficulties or costs may be encountered by us in our efforts to obtain FDA clearance and approval. The FDA may also place conditions on clearance and approvals that could restrict commercial applications of such products. Product approvals may be withdrawn if compliance with regulatory standards is not maintained or if problems occur following initial marketing.

The FDA has substantial discretion in the drug and medical device 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 one or more of our applications. 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 products. 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 drug 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 other applications 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 or other applications 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 products;
- 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 drug and device-development programs depend upon third-party researchers who are outside our control.

We currently are collaborating with several third-party researchers, for the development of our drug and device product candidates. Accordingly, the successful development of our drug and device 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 and device development programs, or if their performance is substandard, the approval of our FDA applications, if any, and our introduction of new drugs and devices, 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 drug and device product candidates.

We have no experience in drug and device product 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 drug and device product candidates. We intend to contract with one or more manufacturers to manufacture, supply, store and distribute product supplies for our clinical trials. If any of our drug or device product candidates receive FDA approval, we will rely on one or more third-party contractors to manufacture our products. 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 products 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.

- Manufacturers of drug and medical devices 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 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 products 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.

We currently do not directly own the rights to any issued patents. We license the exclusive rights to a total of four issued patents relating to our current product candidates, which expire from 2013 to 2022. 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 and 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 products sell for inadequate prices or patients are unable to obtain adequate levels of reimbursement.

Our ability to commercialize our products, 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.

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.

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.

Risks Related to Our Securities

Our current officers, directors and principal stockholders have substantial control over us and may such control over all corporate actions requiring stockholder approval, irrespective of how our other stockholders including purchasers in this offering may vote.

Our directors, executive officers and principal stockholders beneficially own 55,421,093 shares, or approximately 50.03%, of our outstanding voting stock as of September 15, 2008, including 4,801,933 shares underlying outstanding options, 8,566,576 shares underlying outstanding warrants and 26,785,714 shares underlying Nordic's put right or, subject to the satisfaction of certain conditions and certain exceptions, our call right, pursuant to our joint venture agreement with Nordic Biotech Venture Fund II K/S. In addition, Nordic alone beneficially owns 33,928,571 shares, or approximately 32.5%, of our outstanding voting stock as of June 30, 2008, including 7,142,857 shares underlying its warrant and 26,785,714 shares underlying Nordic's put right or, subject to the satisfaction of certain conditions and certain exceptions, our call right, pursuant to our joint venture agreement with Nordic Biotech Venture Fund II K/S and excluding an additional 8,928,572 shares underlying the put or call right pursuant to the joint venture agreement that remain subject to the satisfaction of certain conditions. Accordingly, these persons and their respective affiliates will have the ability to exert substantial influence over the election of our Board of Directors and the outcome of issues submitted to our stockholders.

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 $0.08 in the third quarter of 2008 to a high of $1.64 in the first quarter of 2006. 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:

- 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.

Because our common stock has been delisted from the American Stock Exchange, you may not be able to resell your shares at or above the price at which you purchased your shares, or at all.

As a result of our common stock having been delisted from the American Stock Exchange, the liquidity of our common stock may be reduced, 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. This may result in lower prices for our common stock than might otherwise be obtained and could also result in a larger spread between the bid and asked prices for our common stock.

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 receive 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.

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. These statements relate to future events or our future financial performance and 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 all or a portion of the selling securityholder’s equity interest in the Hedrin Pharmaceuticals K/S. 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

Our common stock traded on the American Stock Exchange “AMEX” under the symbol “MHA” during the years ended December 31, 2006 and 2007 and for the period from January 1, 2008 to March 26, 2008. 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
2006		
First Quarter	$ 1.640	$ 1.160
Second Quarter	$ 1.360	$ 0.075
Third Quarter	$ 0.880	$ 0.620
Fourth Quarter	$ 0.920	$ 0.620
2007		
First Quarter	$ 0.960	$ 0.700
Second Quarter	$ 1.100	$ 0.690
Third Quarter	$ 0.780	$ 0.220
Fourth Quarter	$ 0.230	$ 0.090
2008		
First Quarter	$ 0.230	$ 0.110
Second Quarter	$ 0.180	$ 0.100
Third Quarter (through August 28, 2008)	$ 0.200	$ 0.100

The number of holders of record of our common stock as of August 1, 2008 was 453.

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, 2007 and 2006 and for the cumulative period from August 6, 2001 to December 31, 2007 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 for the six months ended June 30, 2008 and 2007 was derived from our unaudited financial data but, which in the opinion of management, reflects all adjustments necessary for a fair presentation of the results for such periods. The selected financial information presented below should be read in conjunction with our audited 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, 2007 and 2006 and for the six months ended June 30, 2008 and 2007.

	Year Ended December 31,		Six Months Ended June 30,		Cumulative period from August 6, 2001 (inception) to December 31, August 6, 2001 (inception) to June 30,
	2007	2006	2008	2007	2008
			(unaudited)		(unaudited)
Statements of Operations Data:					
Revenue	$ 0	$ 0	$ 0	$ 0	$ 0
Research and development expense	$ 8,535,687	$ 6,172,845	$ 1,365,799	$ 5,551,082	$ 27,854,842
General and administrative expense	$ 3,608,270	$ 3,827,482	$ 1,715,598	$ 1,967,098	$ 15,567,961
Stock-based compensation	$ 1,440,956	$ 1,675,499	$ 295,664	$ 706,549	$ 3,660,647
Net loss attributable to common shares	$ (12,032,252)	$ (9,695,123)	$ (3,001,561)	$ (7,458,657)	$ (58,000,631)
Net loss per common share	$ (0.18)	$ (0.16)	$ (0.04)	$ (0.11)	N/A
Statements of Cash Flows Data:					
Net cash used in operating activities	$ (10,229,711)	$ (7,750,738)	(2,903,970)	(6,090,775)	$ (37,064,526)
Net cash provided by (used in) financing activities	$ 7,859,413	$ (15,257)	$ 2,853,230	$ 7,861,381	$ 37,284,199
Cash dividends declared	$ 0	$ 0	$ 0	$ 0	$ 0

	At December 31, 2007	At June 30, 2008
		(unaudited)
Balance Sheets Data:		
Total assets	$ 980,577	$ 973,340
Total liabilities	$ 1,871,662	$ 4,420,322
Total stockholders' deficiency	$ (891,085)	$ (3,446,982)

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.

During 2005, we merged with Tarpan Therapeutics, Inc. (“Tarpan”). Tarpan was a privately held New York based biopharmaceutical company developing dermatological therapeutics. Through the merger, we acquired Tarpan’s primary product candidate, topical PTH (1-34) for the treatment of psoriasis. In consideration for their shares of Tarpan’s capital stock, the stockholders of Tarpan received an aggregate of approximately 20% of our then outstanding common shares. This transaction was accounted for as a purchase of Tarpan by us.

We are a development stage biopharmaceutical company focused on developing and commercializing innovative pharmaceutical therapies 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. We currently have four product candidates in development:

- Topical PTH (1-34) for the treatment of psoriasis;
- Altoderm, a proprietary formulation of topical cromolyn sodium for the treatment of atopic dermatitis;
- Hedrin, a novel, non-insecticide treatment for head lice, through Hedrin Pharmaceuticals K/S, a joint venture between the Company Nordic Biotech Fund II K/S; and
- Altolyn, a proprietary site specific tablet formulation of oral cromolyn sodium for the treatment of mastocytosis.

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

We announced in July 2007 that we are discontinuing development of two product candidates, oral Oleoyl-estrone (“OE”) and Propofol Lingual Spray.

You should read the following discussion of our results of operations and financial condition in conjunction with the consolidated 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.

Results of Operations

Six-Month Period Ended June 30, 2008 vs. Six-Month Period Ended June 30, 2007

	Six Months ended June 30,		Increase	% Increase
	2008	2007	(decrease)	(decrease)
COSTS AND EXPENSES				
Research and development				
Share-based compensation	$ 80,000	$ 224,000	$ (144,000)	(64)%
Other research and development expense	$ 1,286,000	$ 5,327,000	$ (4,041,000)	(76)%
Total research and development expense	$ 1,366,000	$ 5,551,000	$ (4,185,000)	(75)%
General and administrative				
Share-based compensation	$ 215,000	$ 482,000	$ (267,000)	(55)%
Other general and administrative expense	$ 1,500,000	$ 1,485,000	$ 15,000	1%
Total general and administrative expense	$ 1,715,000	$ 1,967,000	$ (252,000)	(13)%
Other income	$ 79,000	$ 59,000	$ 20,000	34%
NET LOSS	$ (3,002,000)	$ (7,459,000)	$ (4,457,000)	(60)%

During each of the six months ended June 30, 2008 and 2007, we did not recognize any revenues. We are considered a development stage company, and do not expect to have revenues relating to our technologies prior to June 30, 2009, if at all.

For the six months ended June 30, 2008, total research and development expense was $1,366,000 as compared to $5,551,000 for the six months ended June 30, 2007. The decrease of $4,185,000, or 75%, is attributable to decreases of $2,511,000 in development projects discontinued during 2007 (OE and propofol), of $860,000 for Hedrin, $595,000 for Altoderm and $490,000 for Altolyn offset by an increase in development costs for PTH (1-34) of $271,000. There were no development costs in the six months ended June 30, 2008 for OE or propofol. During the six months ended June 30, 2007 the majority of the development costs incurred for Altoderm, Altolyn and Hedrin relate to in-licensing costs. The increase in development costs for PTH (1-34) is due to the costs of the ongoing Phase 2a clinical study.

For the six months ended June 30, 2008, total general and administrative expense was $1,715,000 as compared to $1,967,000 for the six months ended June 30, 2007. The decrease of $252,000, or 13%, is primarily attributable to a decrease of $267,000 in stock-based compensation.

For the six months ended June 30, 2008, other income was $79,000 as compared to $59,000 for the six months ended June 30, 2007. The increase of $20,000, or 34%, is due primarily to $183,000 of management fees received in accordance with the services agreement from the Nordic JV, offset by the equity in loss of the Hedrin JV of $108,000 and a decrease in interest income which resulted from lower average balances in interest bearing cash and short-term investment accounts.

Net loss for the six months ended June 30, 2008, was $3,002,000 as compared to $7,459,000 for the six months ended June 30, 2007. The decrease of $4,457,000, or 60%, in net loss is principally attributable to decreases in research and development expense of $4,185,000 and in general and administrative expense of $252,000 and an increase in other income of $20,000.

Three-Month Period Ended June 30, 2008 vs. Three-Month Period Ended June 30, 2007

	Three Months ended June 30,		Increase	% Increase
	2008	2007	(decrease)	(decrease)
COSTS AND EXPENSES				
Research and development				
Share-based compensation	$ 27,000	$ 122,000	$ (95,000)	(77)%
Other research and development expense	$ 539,000	$ 3,750,000	$ (3,211,000)	(86)%
Total research and development expense	$ 566,000	$ 3,872,000	$ (3,306,000)	(85)%
General and administrative				
Share-based compensation	$ 75,000	$ 250,000	$ (175,000)	(70)%
Other general and administrative expense	$ 826,000	$ 803,000	$ 23,000	3%
Total general and administrative expense	$ 901,000	$ 1,053,000	$ (152,000)	(14)%
Other income	$ 45,000	$ 30,000	$ 15,000	50%
NET LOSS	$ (1,442,000)	$ (4,895,000)	$ (3,473,000)	(71)%

During each of the quarters ended June 30, 2008 and 2007 we did not recognize any revenues. We are considered a development stage company, and do not expect to have revenues relating to our technologies prior to June 30, 2009, if at all.

For the quarter ended June 30, 2008, total research and development expense was $566,000 as compared to $3,872,000 for the quarter ended June 30, 2007. The decrease of $3,306,000, or 85%, is attributable to decreases of $1,075,000 in development projects discontinued during 2007 (OE and propofol), of $869,000 for Hedrin, $674,000 for Altoderm, $523,000 for Altolyn and$165,000 for PTH (1-34). There were no development costs in the three months ended June 30, 2008 for OE or propofol. During the three months ended June 30, 2007 the majority of the development costs incurred for Altoderm, Altolyn and Hedrin relate to in-licensing costs.

For the quarter ended June 30, 2008, total general and administrative expense was $901,000 as compared to $1,053,000 for the quarter ended June 30, 2007. The decrease of $152,000, or 14%, is primarily attributable to a decrease of $175,000 in stock-based compensation.

For the quarter ended June 30, 2008, other income was $45,000 as compared to $30,000 for the quarter ended June 30, 2007. The increase of $15,000, or 50%, is due primarily to $132,000 of management fees received in accordance with the services agreement from the Nordic JV, offset by the equity in loss of the Hedrin JV of $88,000 and a $29,000 decrease in interest income which resulted from lower average balances in interest bearing cash and short-term investment accounts.

Net loss for the quarter ended June 30, 2008 was $1,442,000 as compared to $4,895,000 for the quarter ended June 30, 2007. The decrease of $3,473,000, or 71%, in net loss is principally attributable to a decreases in research and development expense of $3,306,000 and $152,000 in general and administrative expense offset by an increase in other income of $15,000.

Fiscal Year ended December 31, 2007 versus Fiscal Year Ended December 31, 2006

During each of the years ended December 31, 2007 and 2006, 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, 2008.

	Years ended December 31,		Increase	% Increase
	2007	2006	(decrease)	(decrease)
Costs and expenses				
Research and development				
Share-based compensation	$ 539,000	$ 529,000	$ 10,000	1.89%
In-license, milestone and related fees	2,245,000	250,000	1,995,000	798.00%
Other research and development expenses	5,752,000	5,394,000	358,000	6.64%
Total research and development expenses	8,536,000	6,173,000	2,363,000	38.28%
General and administrative				
Share-based compensation	902,000	1,147,000	(245,000)	(21.36)%
Other general and administrative expenses	2,706,000	2,680,000	26,000	0.97%
Total general and administrative expenses	3,608,000	3,827,000	(219,000)	(5.72)%
Other income	112,000	305,000	(193,000)	(63.28)%
Net loss	$ 12,032,000	$ 9,695,000	$ 2,337,000	24.11%

For the year ended December 31, 2007, research and development expense was $8,536,000 as compared to $6,173,000 for the year ended December 31, 2006. This increase of $2,363,000, or 38.3%, is primarily comprised of an increase in in-license, milestone and related fees of $1,995,000, an increase in other research and development expenses of $358,000 and an increase in stock based compensation of $10,000.

For the year ended December 31, 2007, general and administrative expense was $3,608,000 as compared to $3,827,000 for the year ended December 31, 2006. This decrease of $219,000, or 5.7%, is primarily comprised of a decrease in stock based compensation of $245,000 partially offset by an increase in other general and administrative expense of $26,000.

For the year ended December 31, 2007, other income was $112,000 as compared to $305,000 for the year ended December 31, 2006. This decrease of $193,000, or 63.3%, is primarily due to a decrease in interest income which resulted from lower average balances in interest bearing and short-term investment accounts.

Net loss for the year ended December 31, 2007 was $12,032,000 as compared to $9,695,000 for the year ended December 31, 2006. This increase of $2,337,000, or 24.11%, is primarily due to an increase in in-license, milestone and related fees of $1,995,000, an increase in other research and development expenses of $358,000 and a decrease of $193,000 in other income partially offset by a decrease in stock based compensation of $235,000.

Liquidity and Capital Resources

From inception to June 30, 2008, we incurred a deficit during the development stage of $58 million primarily as a result of our net losses and preferred stock dividends. We expect to continue to incur additional losses through at least June 30, 2009 and for the foreseeable future thereafter. 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. Management believes that we have an immediate need for capital in order to sustain our operations into the fourth quarter of 2008 and will need additional equity or debt financing or will need to generate revenues through licensing of our products or entering into strategic alliances to be able to sustain its operations through 2008.

We have financed our operations since inception primarily through equity financing. During the six months ended June 30, 2008, we had a net decrease in cash and cash equivalents of $73,000. This decrease resulted principally from the net proceeds from the Hedrin JV Agreement of $2.8 million, partially offset by net cash used in operating activities of $2.9 million. Total liquid resources as of June 30, 2008 were $0.5 million compared to $0.6 million at December 31, 2007.

Liquidity

As of June 30, 2008, we had a working capital deficit of $755,000 as compared to a working capital deficit of $1,006,000 at December 31, 2007. This $251,000 reduction in the working capital deficit is primarily due to a decrease in accounts payable and accrued expenses of $404,000 offset decreases in cash of $73,000 and prepaid expenses and other current assets of $80,000.

March 2007 Private Placement

On March 30, 2007, we 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 our common stock for net proceeds of approximately $7.9 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 a director of our 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, we also issued to the investors 5-year warrants to purchase an aggregate of 3,564,897 shares of our common stock at an exercise price of $1.00 per share. The warrants are exercisable during the period commencing June 30, 2008 and ending March 30, 2012.

Pursuant to these subscription agreements, we filed a registration statement 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.

We engaged Paramount BioCapital, Inc. (“Paramount”), a related party, as its placement agent in connection with the private placement. In consideration for its services, we 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.

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 the joint venture agreement, in February 2008, (i) Nordic contributed cash in the amount of $2.5 million to Hedrin 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 at 50%. 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 will be required to contribute to the Hedrin JV an additional $1.25 million in cash, $0.5 million of which will be distributed to us and equity in the Hedrin JV will be distributed to each of us and Nordic sufficient to maintain our respective ownership interests at 50%. Upon classification by the FDA of Hedrin as a Class II or Class III medical device, the Hedrin JV will have received a total of $1.5 million cash to be applied toward the development and commercialization of Hedrin in North America. If classification of Hedrin by the FDA as a Class II or Class III medical device is not received by June 30, 2009, then Nordic will not be obligated to make the final milestone payment of $1.25 million, the Hedrin JV will return to Nordic $250,000 of the $1.5 million Nordic contributed in June 2008 and Nordic will receive an additional 20% ownership of the joint venture and enhanced control over the joint venture's operations and other important decision-making powers.

The Hedrin JV will be 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 will engage us to provide management services to the Hedrin JV in exchange for an annualized management fee, which for 2008, on an annualized basis, is $527,000. As of June 30, 2008, we had recognized $183,266 of other income from management fees earned from the Hedrin JV.

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 50%, 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 million if all of the milestones described above are met and $3.5 million if they are not met) 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. In the event that the final payment milestone described above is not achieved by March 30, 2009, then the Hedrin JV 's board of directors will increase to five members, two appointed by us and three appointed by Nordic.

Pursuant to the joint venture agreement, Nordic has the right to put all or a portion of its interest in the Hedrin JV 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 all or a portion of Nordic's equity interest in the Hedrin JV in exchange for such number of shares of our common stock equal to the portion of Nordic's investment in the Hedrin JV that we call by the dollar amount of Nordic's investment as of such date in the Hedrin JV, divided by $0.14, as 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, all or a portion of Nordic’s equity interest in the Hedrin JV, the amount of Nordic’s investment is currently $3,750,000; provided, that if, by June 30, 2009, the FDA either does not formally classify Hedrin as a Class II or Class III medical device or formally designates Hedrin as a drug and refers regulation thereof to the FDA Center for Drug Evaluation and Research, the amount of Nordic’s investment will be reduced to $3,500,000 and if by June 30, 2009, the FDA formally classifies Hedrin as a Class II or Class III medical device then upon Nordic’s payment of the final milestone payment, Nordic’s investment will be increased to $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 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. The per share exercise price of the warrant was based on the volume weighted average price of our common stock for the period prior to the signing of the Hedrin JV Agreement. As of April 30, 2008, Nordic had not exercised all or any portion of its put right and we issued the warrant to Nordic.

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. 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 all or a portion of Nordic's equity interest in the Hedrin JV, 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 in the case of the registration statement of which this prospectus forms a part, by October 17, 2008 or if we receive comments from the SEC with respect to such registration statement, November 17, 2008, 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.

September 2008 Promissory Note and Warrant Issuance

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 are payable in cash on March 10, 2009 unless paid earlier by us. 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. 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.

American Stock Exchange

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

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

Under the terms of our joint venture agreement with Nordic, 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 our total outstanding shares and would be issued at a price below the greater of book or market value. As a result, under AMEX regulations, we 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. We estimated that obtaining stockholder approval to comply with AMEX regulations would take a minimum of 45 days to complete. We discussed the financial viability exception with AMEX for several weeks and had neither received the exception nor been denied the exception. We determined that our financial condition required us to complete the transaction immediately, and that our financial viability depended on our completion of the transaction without further delay.

Accordingly, to maintain our financial viability, on February 28, 2008, we announced that we had formally notified AMEX that we intended to voluntarily delist our common stock from AMEX. The delisting became effective on March 26, 2008.

Our common stock now trades on the Over the Counter Bulletin Board under the symbol "MHAN". We intend to maintain corporate governance, disclosure and reporting procedures consistent with applicable law.

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.

During 2007, we entered into an agreement with Therapeutics, Inc. for the conduct of a Phase 2a clinical trial of Topical PTH (1-34). The amount of the agreement is approximately $845,000. The remaining financial commitment at June 30, 2008 related to the conduct of the clinical trial is approximately $100,000. This clinical trial is expected to conclude in the second quarter of 2008.

Swiss Pharma Contract LTD, or Swiss Pharma, a clinical site that we used in one of its obesity trials, gave notice to us that Swiss Pharma believes it is entitled to receive an additional payment of $322,776 for services in connection with that clinical trial. While the contract between us and Swiss Pharma provides for additional payments if certain conditions are met, Swiss Parma has not specified which conditions they believe have been achieved and we do not believe that Swiss Pharma is entitled to additional payments and has not accrued any of these costs as of December 31, 2007. The contract between us and Swiss Pharma provides for arbitration in the event of a dispute, such as this claim for an additional payment. On March 10, 2008, Swiss Pharma filed for arbitration with the Swiss Chamber of Commerce. As we do not believe that Swiss Pharma is entitled to additional payments, we intend to defend our position in arbitration. On April 2, 2008, we filed our statement of defense and counterclaim for recovery of costs incurred by us as a result of Swiss Pharma's failure to meet agreed upon deadlines under our contract. On June 3, 2008, a hearing was held before the arbitrator. On September 5, 2008, the arbitrator rendered an award in favor of Swiss Pharma, awarding to Swiss Pharma a total of $646,000 which amount includes a $323,000 contract penalty, a final services invoice of $48,000, reimbursement of certain of Swiss Pharma's legal and other expenses incurred in the arbitration process of $245,000, reimbursement of arbitration costs of $13,000 and interest through September 5, 2008 of $17,000. Further, the arbitrator ruled that we must pay interest at the rate of 5% per annum on $371,000, the sum of the $323,000 contract penalty and the final services invoice of $48,000, from October 12, 2007 until paid. We previously recognized a liability to Swiss Pharma in the amount of $104,000 for the final services invoice and therefore, will recognize expense for the difference between the award of $646,000 and the previously recognized liability of $104,000, or $542,000, in the quarter ending September 30, 2008. We will also continue to accrue interest at the rate of 5% per annum on the $371,000. We disagree with the result of the arbitration and are exploring our post-award options, including potential appellate remedies in Switzerland, and defense of any actions which may be taken to enforce the arbitration award. We do not have sufficient cash or other current assets to satisfy the arbitrator's award.

In February 2007, a former employee of our company alleged an ownership interest in two of our provisional patent applications covering our discontinued product development program for Oleoyl-estrone. Also, without articulating precise legal claims, the former employee contends that we wrongfully characterized the former employee's separation from employment as a resignation instead of a dismissal in an effort to harm the former employee's immigration sponsorship efforts, and, further, to wrongfully deprive the former employee of the former employee's alleged rights in two of our provisional patent applications. The former employee is seeking an unspecified amount in damages. We refute the former employee's contentions and intend to vigorously defend ourself should the former employee file claims against us. There have been no further developments with respect to these contentions.

Development Commitments

Hedrin

On June 26, 2007, we entered into an exclusive license agreement for Hedrin with Thornton & Ross Ltd, or T&R, and Kerris, S.A., or Kerris. Pursuant to the Hedrin license agreement, we acquired an exclusive North American license to certain patent rights and other intellectual property relating to Hedrin™ a non-insecticide product candidate for the treatment of pediculosis (head lice). In addition, on June 26, 2007, we entered into a supply agreement with T&R pursuant to which T&R will be our exclusive supplier of Hedrin product.

In consideration for the license, we issued to T&R and Kerris of 150,000 shares of our common stock valued at $120,000. In addition, we also made a cash payment to the T&R and Kerris of $600,000. These amounts are included in research and development expense.

Further, we agreed to make future milestone payments to T&R and Kerris comprised of various combinations of cash and common stock in respective aggregate amounts of $2,500,000 upon the achievement of various clinical and regulatory milestones as follows: $250,000 upon acceptance by the U. S. Food and Drug Administration, or the FDA, of an Investigational New Drug application, or an IND; $1,000,000 upon the achievement of a successful outcome of a Phase 3 clinical trial; $700,000 upon the final approval of an NDA by the FDA; $300,000 upon the issuance of a U.S. patent on Hedrin: and $250,000 upon receipt of marketing authorization in Canada.

We also agreed to pay royalties of 8% (or, under certain circumstances, 4%) on net sales of licensed products. Our 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. We may sublicense our rights under the Hedrin license agreement with the consent of T&R and Kerris and the proceeds resulting from such sublicenses will be shared with T&R and Kerris.

In February 2008, we entered into the Hedrin joint venture agreement. The Hedrin JV is now responsible for all obligations to T&R under the Hedrin license and supply agreements. As of the date of the Hedrin joint venture agreement, none of the milestones had been reached and sales had not commenced, therefore, we have no obligations to T&R for any such milestones or royalties.

Pursuant to the Hedrin supply agreement, we have agreed that we and our 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 product in accordance with the terms and conditions of the Hedrin supply agreement, we may obtain products from an alternative supplier subject to certain conditions. The term of the Hedrin supply agreement ends upon termination of the Hedrin license agreement.

Topical PTH (1-34)

Through our April 2005 acquisition of Tarpan Therapeutics, Inc., or Tarpan, we acquired a sublicense agreement with IGI, Inc. dated April 14, 2004. Under the IGI sublicense agreement we hold the exclusive, world-wide, royalty bearing sublicense to develop and commercialize the licensed technology. Under the terms of the IGI sublicense agreement, we are responsible for the cost of the nonclinical and clinical development of the project, including research and development, manufacturing, laboratory and clinical testing and trials and marketing of licensed products.

The IGI sublicense agreement requires us 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, we are obligated to pay IGI, Inc. an annual royalty of 6% on annual net sales up to $200,000,000. In any calendar year in which net sales exceed $200,000,000, we are obligated to pay IGI, Inc. an annual royalty of 9% on such excess. Through June 30, 2008, sales have not commenced, therefore, we have not paid any such royalties.

IGI, Inc. may terminate the agreement (i) upon 60 days' notice if we fail to make any required milestone or royalty payments, or (ii) if we become bankrupt or if a petition in bankruptcy is filed, or if we are placed in the hands of a receiver or trustee for the benefit of creditors. IGI, Inc. may terminate the agreement upon 60 days' written notice and an opportunity to cure in the event we commit a material breach or default. Eighteen months from the date of the IGI sublicense agreement, we may terminate the agreement in whole or as to any portion of the PTH patent rights upon 90 days' notice to IGI, Inc.

In July 2008, we announced top-line results from its Phase 2a clinical study of topical PTH (1-34) for the treatment of psoriasis. This multi-center, randomized, double-blind, vehicle-controlled, parallel group study was designed to assess the safety and preliminary efficacy of two dose levels of topical PTH (1-34) for the treatment of mild to moderate plaque psoriasis. While the study did achieve the primary safety objective, the data did not demonstrate a statistically significant improvement in the overall disease severity of treatment lesions or signs and symptoms of psoriasis (redness, scaling, plaque thickness, and itch) as compared to the vehicle (placebo) gel. Topical PTH (1-34) appeared to be well tolerated with no serious adverse events reported. We intend to further analyze and assess these data in order to determine appropriate next steps for the program.

Altoderm

On April 3, 2007, we entered into a license agreement for "Altoderm," with T&R. Pursuant to the Altoderm license agreement, we acquired an exclusive North American license to certain patent rights and other intellectual property relating to Altoderm, a topical skin lotion product candidate with the active ingredient cromolyn sodium (also known as sodium cromoglicate) for the treatment of atopic dermatitis. In accordance with the terms of the Altoderm license agreement, we issued 125,000 shares of our common stock, valued at $112,500, and made a cash payment of $475,000 to T&R upon the execution of the agreement. These amounts have been included in research and development expense.

Further, we agreed to make future milestone payments to T&R comprised of various combinations of cash and common stock in respective aggregate amounts of $5,675,000 and 875,000 shares of our common stock upon the achievement of various clinical and regulatory milestones as follows: $450,000 upon acceptance by the FDA of an IND; 125,000 shares of our common stock upon the first dosing of a patient in the first Phase 2 clinical trial; 250,000 shares of our common stock and $625,000 upon the first dosing of a patient in the first Phase 3 clinical trial; $1,000,000 upon the achievement of a successful outcome of a Phase 3 clinical trial; $1,100,000 upon the acceptance for filing of an NDA application by the FDA; 500,000 shares of our common stock and $2,000,000 upon the final approval of an NDA by the FDA; and $500,000 upon receipt of marketing authorization in Canada.

In addition, we are obligated to pay T&R an annual royalty of 10% on annual net sales of up to $100,000,000; 15% of the amount of annual net sales in excess of $100,000,000 and 20% of annual net sales in excess of $200,000,000. There is a minimum royalty of $1,000,000 per year. There is a one-time success fee of $10,000,000 upon the achievement of cumulative net sales of $100,000,000. Through June 30, 2008, none of the milestones have been reached and sales have not commenced, therefore, we have not paid any such milestones or royalties.

Altolyn

On April 3, 2007, we and T&R also entered into a license agreement for Altolyn. Pursuant to the Altolyn license agreement, we acquired an exclusive North American license to certain patent rights and other intellectual property relating to Altolyn, an oral formulation product candidate using cromolyn sodium for the treatment of mastocytosis, food allergies, and inflammatory bowel disorder. In accordance with the terms of the Altolyn license agreement, we made a cash payment of $475,000 to T&R upon the execution of the agreement. This amount is included in research and development expense.

Further, we agreed to make future milestone payments to T&R comprised of various combinations of cash and common stock in respective aggregate amounts of $5,675,000 upon the achievement of various clinical and regulatory milestones. as follows: $450,000 upon acceptance for filing by the FDA of an IND; $625,000 upon the first dosing of a patient in the first Phase 3 clinical trial; $1,000,000 upon the achievement of a successful outcome of a Phase 3 clinical trial; $1,100,000 upon the acceptance for filing of an NDA application by the FDA; $2,000,000 upon the final approval of an NDA by the FDA; and $500,000 upon receipt of marketing authorization in Canada.

In addition, we are obligated to pay T&R an annual royalty of 10% on annual net sales of up to $100,000,000; 15% of the amount of annual net sales in excess of $100,000,000 and 20% of annual net sales in excess of $200,000,000. There is a minimum royalty of $1,000,000 per year. There is a one-time success fee of $10,000,000 upon the achievement of cumulative net sales of $100,000,000.

Through June 30, 2008, none of the milestones have been reached and sales have not commenced, therefore, we have not paid any such milestones or royalties.

Summary of Contractual Commitments

Employment Agreements

We have employment agreements with two employees for the payment of aggregate annual base salaries of $675,000 as well as performance based bonuses. These agreements have a remaining term of one year for one of the employees, and 9 months for the second employee, and have a total remaining obligation under these agreements of $589,469 as of June 30, 2008.

Capital Resources

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 pre-clinical 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, competing technological and market developments, changes in our existing collaborative and licensing relationships, the resources that we devote to 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 June 30, 2008, substantially all of our financing has been through private placements of common stock, preferred stock and warrants to purchase common stock. Until 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. Management believes 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 June 30, 2008, management believes that we have an immediate need for capital in order to sustain our operations and will need additional equity or debt financing or will need to generate revenues through licensing of our products or entering into strategic alliances to be able to sustain its operations through 2008. Furthermore, we will need additional financing thereafter until we can achieve profitability, if ever.

We currently do not have sufficient capital to fund our anticipated expenditures beyond September 30, 2008 and need to raise additional capital immediately, and we will need to raise additional capital in order to complete the anticipated development programs for each of our research and development projects. If we are unable to raise such additional capital, we may have to sublicense our rights to a third party as a means of continuing development, or, although less likely, we may be required to abandon further development efforts altogether, either of which would have a material adverse effect on the prospects of our business.

Research and Development Projects

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.

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 United Kingdom. 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 United Kingdom 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.

In February 2008, we entered into the Hedrin joint venture agreement. The Hedrin JV is now responsible for all obligations to T&R and Kerris under the Hedrin license and supply agreements. In the United States, the Hedrin JV is pursuing the development of Hedrin as a medical device. We expect that the FDA will require at least one clinical trial for the approval of this product candidate.

As of June 30, 2008, we have incurred $1,083,000 of project costs for the development of Hedrin. $12,000 of such costs were incurred during the six months ended June 30, 2008. We do not expect to incur any other costs for the development of Hedrin as the Hedrin JV is now responsible for the development of Hedrin.

The Hedrin JV has been engaged in an ongoing dialogue with the U.S. Food and Drug Administration ("FDA") regarding the regulatory process for Hedrin. In June 2008, the FDA directed Hedrin to the Center for Devices and Radiological Health (CDRH) division of the FDA for review as a device. Subsequent to that the Hedrin JV submitted additional materials to CDRH, including information on the clinical trials completed on Hedrin to date, and is engaged in discussions with CDRH to determine the final device regulatory pathway as well as the sufficiency of the submitted clinical data.

Topical PTH (1-34).

We are developing Topical PTH (1-34) as a topical treatment for psoriasis. In August 2003, researchers, led by Michael Holick, Ph.D., MD, Professor of Medicine, Physiology, and Biophysics at Boston University Medical Center, reported positive results from a US Phase 1/2 clinical trial evaluating the safety and efficacy of Topical PTH (1-34) as a topical treatment for psoriasis. This double-blind, placebo controlled trial in 15 patients compared Topical PTH (1-34) formulated in the Novasome® Technology versus the Novasome® vehicle alone. Following 8 weeks of treatment, the topical application of Topical PTH (1-34) resulted in complete clearing of the treated lesion in 60% of patients and partial clearing in 85% of patients. Additionally, there was a statistically significant improvement in the global severity score. Ten patients continued into an open label extension study in which the Psoriasis Area and Severity Index, or PASI, was measured; PASI improvement across all 10 patients achieved statistically significant improvement compared to baseline. This study showed Topical PTH (1-34) to be a safe and effective treatment for plaque psoriasis with no patients experiencing any clinically significant adverse events.

Due to the high response rate seen in patients in the initial trial with Topical PTH (1-34) we believe that it may have an important clinical advantage over current topical psoriasis treatments. A follow on physician IND Phase 2a trial involving Topical PTH (1-34) was initiated in December 2005 under the auspices of Boston University. In April 2006, we reported a delay in its planned Phase 2a clinical study of Topical PTH (1-34) due to a formulation issue. We believe that we have resolved this issue through a new gel formulation of Topical PTH (1-34) and have filed new patent applications in the U.S. for this new proprietary formulation.

In September 2007, the U.S. FDA accepted our corporate 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 is desiged to evaluate safety and preliminary efficacy of Topical PTH (1-34) for the treatment of psoriasis. 61 subjects have been enrolled and randomized to receive one of two dose levels of Topical PTH (1-34), or vehicle, for an 8 week treatment period. In this study the vehicle is the topical formulation without the active ingredient, PTH (1-34).

As of June 30, 2008, we have incurred $6,354,000 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. During the six months ended June 30, 2008, we incurred $1,232,000 of these costs.

As with the development of our other product candidates, we do not currently have sufficient capital to fund our planned development activities of Topical PTH (1-34) beyond the ongoing phase 2a trial. We will, therefore, need to raise additional capital in order to complete our planned R&D activities for Topical PTH (1-34) . To the extent additional capital is not available when we need it, we may be forced to sublicense our rights to Topical PTH (1-34) or abandon our development efforts altogether, either of which would have a material adverse effect on the prospects of our business.

Since PTH (1-34) is already available in the injectable form, we should be able to utilize much of the data that is publicly available in planning our future studies. However, since PTH (1-34) will be used topically, bridging studies will need to be performed and we are not able to realistically predict the size and the design of those studies at this time.

In July 2008, we announced top-line results from its Phase 2a clinical study of topical PTH (1-34) for the treatment of psoriasis. This multi-center, randomized, double-blind, vehicle-controlled, parallel group study was designed to assess the safety and preliminary efficacy of two dose levels of topical PTH (1-34) for the treatment of mild to moderate plaque psoriasis. While the study did achieve the primary safety objective, the data did not demonstrate a statistically significant improvement in the overall disease severity of treatment lesions or signs and symptoms of psoriasis (redness, scaling, plaque thickness, and itch) as compared to the vehicle (placebo) gel. Topical PTH (1-34) appeared to be well tolerated with no serious adverse events reported. We intend to further analyze and assess these data in order to determine appropriate next steps for the program.

Altoderm

We are developing Altoderm for the pruritis (itch) associated with dermatologic conditions including atopic dermatitis. In a Phase 3, randomized, double-blind, placebo-controlled, parallel-group, clinical study (conducted in Europe by T&R.) the compound was administered for 12 weeks to 114 subjects with moderately severe atopic dermatitis. The placebo (vehicle) used in this study was the Altoderm product without the active ingredient. In the study results, published in the British Journal of Dermatology in February 2005, Altoderm demonstrated a statistically significant reduction (36%) in atopic dermatitis symptoms. During the study, subjects were permitted to continue with their existing treatment, in most cases this consisted of emollients and topical steroids. A positive secondary outcome of the study was a 35% reduction in the use of topical steroids for the Altoderm treated subjects. Further analysis of the clinical data, performed by us showed that Altoderm treated subjects also experienced a 57% reduction in pruritus.

Altoderm is currently being tested in a second, ongoing Phase 3, randomized, double-blind, vehicle-controlled clinical study (also conducted in Europe by T&R). Analysis of the preliminary data from the initial 12 week, blinded portion of this clinical trial has been completed. The vehicle used in this study was the Altoderm product without the active ingredient, cromolyn sodium. The preliminary data indicate 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. We believe these outcomes were due to suboptimal study design where subjects were unrestricted in their use of concomitant therapies such as topical steroids and immunomodulators. The placebo (vehicle) used in this study was the Altoderm product without the active ingredient, cromolyn sodium. Analysis of the preliminary open label data beginning at week 13 of the study, show vehicle treated subjects demonstrating further improvement when switched to Altoderm. Given the promising clinical data obtained from the first European Phase 3 study, and the symptom improvements reported in the ongoing European Phase 3 study, both we and T&R believe there is significant potential for Altoderm and will continue development of this product candidate.

On March 6, 2008, we announced we had successfully completed a pre-IND meeting with the FDA. Based on a review of the submitted package for Altoderm, including data from the two previously reported Phase 3 clinical studies, the FDA determined that following completion of certain nonclinical studies, and the acceptance of an IND, Phase 2 clinical studies may be initiated in the U.S. The FDA also concurred that the proposed indication of pruritus associated with dermatologic conditions including atopic dermatitis can be pursued. We do not currently have sufficient funding for further development of Altoderm and are in discussions with T&R regarding next steps.

As of June 30, 2008, we have incurred $1,098,000 for the development of Altoderm. We incurred $86,000 of such costs during the six months ended June 30, 2008.

Altolyn

We are developing Altolyn for the treatment of mastocystosis. On March 6, 2008, we announced we had successfully completed a pre-IND meeting with the FDA. Based on a review of the submitted package for Altolyn, the FDA concurred that the proposed indication of mastocytosis can be pursued and that the 505(b)(2) NDA would be an acceptable approach provided a clinical bridge is established between Altolyn and Gastrocrom®, the oral liquid formulation of cromolyn sodium currently approved in the U.S. to treat mastocytosis. The FDA also affirmed that a single, Phase 3 study demonstrating the efficacy of Altolyn over placebo, may be sufficient to support a product approval in the U.S. In addition, the FDA also concurs that no additional nonclinical studies will be required to support an IND application. We are working with T&R and the current United Kingdom manufacturer of Altolyn to develop a GMP compliant manufacturing process.

Early clinical experience with Altolyn in the United Kingdom. suggests promising activity in patients with various allergic disorders, including food allergy and inflammatory bowel conditions. We may pursue these as additional indications. We do not currently have sufficient funding for further development of Altolyn and are in discussions with T&R regarding next steps.

As of June 30, 2008, we have incurred $826,000 for the development of Altolyn. We incurred $36,000 of such costs during the six months ended June 30, 2008.

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 us 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 help ensure that research and development costs are expensed as incurred, we 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.

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 under the recognition and measurement provisions of Accounting Principles Board ("APB") Opinion No.25, "Accounting for Stock Issued to Employees" and related interpretations, as permitted by Statement of Financial Accounting Standards ("SFAS" or "Statement") No. 123, "Accounting for Stock-Based Compensation."

Effective January 1, 2006, we adopted SFAS No. 123(R), "Share-Based Payment," ("Statement 123(R)") for employee options using the modified prospective transition method. Statement 123(R) revised Statement 123 to eliminate 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 for the years ended December 31,2007 and 2006 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 of Statement 123; 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 Statement 123(R). In accordance with the modified prospective method, we have not restated prior period results.

New Accounting Pronouncements

In September 2006, the FASB issued SFAS No. 157, "Fair Value Measurements" ("SFAS 157"), which defines fair value, establishes a framework for measuring fair value in accordance with generally accepted accounting principles ("GAAP") in the United States of America, and expands disclosures about fair value measurements. SFAS 157 does not require any new fair value measurements under GAAP and is effective for fiscal years beginning after November 15, 2007. We will adopt SFAS 157 as of January 1, 2008. The effects of adoption will be determined by the types of instruments carried at fair value in our financial statements at the time of adoption, as well as the method utilized to determine their fair values prior to adoption. Based on our current use of fair value measurements, SFAS 157 is not expected to have a material effect on its results of operations or financial position.

In February 2007, the FASB issued SFAS No. 159, “The Fair Value Option for Financial Assets and Financial Liabilities,” (“SFAS 159”), which provides companies with an option to report selected financial assets and liabilities at fair value. SFAS 159 establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities and highlights the effect of a company’s choice to use fair value on its earnings. It also requires a company to display the fair value of those assets and liabilities for which it has chosen to use fair value on the face of the balance sheet. SFAS 159 will be effective beginning January 1, 2008 and is not expected to have a material impact on our consolidated financial statements.

In June 2007, the FASB issued EITF No. 07-3, “Accounting for Nonrefundable Advance Payments for Goods or Services Received for use in Future Research and Development Activities” (“EITF No. 07-3”). EITF No. 07-3 states that nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities should be deferred and capitalized. Such amounts should be recognized as an expense as the related goods are delivered or the related services are performed. Entities should continue to evaluate whether they expect the goods to be delivered or services to be rendered. If an entity does not expect the goods to be delivered or services to be rendered, the capitalized advance payment should be charged to expense. The provisions of EITF No. 07-3 will be effective for us on a prospective basis beginning January 1, 2008, evaluated on a contract by contract basis and is not expected to have a material impact on our consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141(R), a revised version of SFAS No. 141, “Business Combinations.” The revision is intended to simplify existing guidance and converge rulemaking under U.S. generally accepted accounting principles with international accounting standards. This statement applies prospectively to business combinations where the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. An entity may not apply it before that date. We currently are evaluating the impact of the provisions of the revision on its consolidated results of operations and financial condition.

In December 2007, the FASB issued SFAS No. 160,“Noncontrolling Interests in Consolidated Financial Statements” (SFAS 160), which will require noncontrolling interests (previously referred to as minority interests) to be treated as a separate component of equity, not as a liability or other item outside of permanent equity. This statement applies to the accounting for noncontrolling interests and transactions with noncontrolling interest holders in consolidated financial statements. SFAS 160 will be applied prospectively to all noncontrolling interests, including any that arose before the effective date except that comparative period information must be recast to classify noncontrolling interests in equity, attribute net income and other comprehensive income to noncontrolling interests, and provide other disclosures required by Statement 160. SFAS 160 is effective for periods beginning on or after December 15, 2008. We are currently evaluating the impact that SFAS 160 will have on our consolidated financial statements.

The FASB and the SEC had issued certain other accounting pronouncements as of December 31, 2007 that will become effective in subsequent periods; however, we do not believe that any of those pronouncements would have significantly affected its financial accounting measures or disclosures had they been in effect during the years ended December 31, 2007 and 2006 and for the period from August 6, 2001 (inception) to December 31, 2007 or that will have a significant effect at the time they become effective.

In March 2008, the FASB issued SFAS No. 161 "Disclosures About Derivative Instruments and Hedging Activities - an amendment of FASB Statement No. 133" ("SFAS 161"). SFAS 161 amends SFAS 133 by requiring expanded disclosures about an entity's derivative instruments and hedging activities. SFAS 161 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. SFAS 161 is effective for us as of January 1, 2009. We do not believe that SFAS 161 will have any impact on its consolidated financial statements.

BUSINESS

Overview

We are a clinical stage specialty pharmaceutical company focused on developing and commercializing innovative pharmaceutical therapies 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. We currently have four product candidates in development: Hedrin™, a novel, non-insecticide treatment for pediculosis (head lice); Topical PTH (1-34) for the treatment of psoriasis; Altoderm™ (topical cromolyn sodium) for the treatment of pruritus associated with dermatologic conditions including atopic dermatitis; and Altolyn™ (oral tablet cromolyn sodium) for the treatment of mastocytosis. We have not received regulatory approval for, or generated commercial revenues from marketing or selling any drugs.

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

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. Through the merger, we acquired Tarpan’s primary product candidate, Topical PTH (1-34) for the treatment of psoriasis. In consideration for their shares of Tarpan’s capital stock, the stockholders of Tarpan received an aggregate of approximately 10,731,000 shares of our common stock, representing approximately 20% of our then outstanding common shares. This transaction was accounted for as a purchase of Tarpan by us.

Our Research and Development Programs

Hedrin™

In June 2007, we entered into an exclusive license agreement with Thornton & Ross Ltd., or T&R, and Kerris, S.A., or Kerris, for a product candidate called Hedrin. We acquired an exclusive North American license to certain patent rights and other intellectual property relating to Hedrin, a non-insecticide product candidate for the treatment of head lice. 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.

In February 2008, we entered into a joint venture agreement with Nordic Venture Fund II K/S, or Nordic, to develop and commercialize Hedrin, which agreement was amended in February and June 2008. A 50/50 joint venture entity was formed that now owns, will develop and will secure a commercialization partner for the Hedrin product in North America, which we refer to in this prospectus as the Hedrin JV. We will manage the day-to-day operations of the Hedrin JV. The Hedrin JV has been independently funded and will be responsible for all costs associated with developing the Hedrin product, including any necessary U.S. clinical trials, patent costs, and future milestones owed to the original licensor, T&R.

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. According to our internal analysis, a majority of the currently available prescription and over-the-counter, or OTC, head lice treatments are chemical insecticides.

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 and by asphyxiation (smothering), rather than by acting on the central nervous system, the insects have not 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. Manhattan Pharmaceuticals believes there is significant market potential for convenient, non-insecticide treatment alternatives. Both silicones in this proprietary formulation of Hedrin are used extensively in cosmetics and toiletries.

Clinical Development

To date, Hedrin has been clinically studied in 326 subjects and is currently marketed as a medical device in Western Europe and as a pharmaceutical in the United Kingdom.

In a randomized, controlled, equivalence, clinical study (conducted in Europe), 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 United Kingdom 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 United Kingdom 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, and 97% of Hedrin treated subjects stated they were significantly more inclined to use the product again versus 31% of those using malathion.

In the U.S., we, through the Hedrin JV, are pursuing the development of Hedrin as a medical device and have submitted an initial regulatory package to the FDA, Center for Devices and Radiological Health. We expect that the Hedron JV will be required to complete at least one clinical trial with this product candidate.

Market and Competition

In Europe, Hedrin has been launched in 21 countries and has achieved annual sales through its licensees of approximately $45 million at in-market public prices, and is the market leader in the United Kingdom with $11 million in sales (23% market share) and France with a 21% market share. These figures do not include sales in Germany, Spain and Greece where Hedrin was launched in mid-late 2007.

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.

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 Kwell (lindane) and Ovide (malathion), and the most frequently purchased OTC brands are Rid (pyrethrin), Nix (permethrin), and Pronto (pyrethrin). Lindane has been banned in 52 countries worldwide and has now been banned in the state of California due to its toxicity. European formulations of Malathion have experienced widespread resistance. Resistance to U.S. formulations of malathion have not been widely reported, but given the European experience, we believe it may eventually develop with continued use. Head lice resistance to pyrethrin 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.”

Topical PTH (1-34)

As a result of our merger with Tarpan Therapeutics in 2005, we hold 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. Topical PTH (1-34) has been tested in a Phase 1/2 clinical study conducted under a physician investigational new drug application, or P-IND.

In July 2008, we announced top-line results from its Phase 2a clinical study of topical PTH (1-34) for the treatment of psoriasis. This multi-center, randomized, double-blind, vehicle-controlled, parallel group study was designed to assess the safety and preliminary efficacy of two dose levels of topical PTH (1-34) for the treatment of mild to moderate plaque psoriasis. While the study did achieve the primary safety objective, the data did not demonstrate a statistically significant improvement in the overall disease severity of treatment lesions or signs and symptoms of psoriasis (redness, scaling, plaque thickness, and itch) as compared to the vehicle (placebo) gel. Topical PTH (1-34) appeared to be well tolerated with no serious adverse events reported. The Company intends to further analyze and assess these data in order to determine appropriate next steps for the program.

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 skin irritation and disability.

Mechanism of Action

It is believed that Topical PTH (1-34) is an agonist that mimics a natural protein responsible for regulating the growth of skin cells. The presence of this natural protein, PTHrp, is significantly reduced in the skin of psoriasis patients leading to skin cell hyperproliferation, poor differentiation of skin cells, and ultimately, the accumulation of dry thick patches of skin (plaques). Acting in place of the absent PTHrp, it is also believed that Topical PTH (1-34) is able to help restore skin cells' normal rate of development, migration and turnover, reducing cell accumulation and the formation of plaques.

Clinical Development

In 2003, researchers, led by Michael Holick, MD, PhD, Professor of Medicine, Physiology, and Biophysics at Boston University Medical Center, reported positive results from a US Phase 1 and 2 clinical trial conducted under a P-IND evaluating the safety and efficacy of Topical PTH (1-34) as a topical treatment for psoriasis. This double-blind, placebo controlled trial in 15 patients compared Topical PTH (1-34) formulated in the Novasome® Technology versus the Novasome® vehicle alone. Following 8 weeks of treatment, the topical application of Topical PTH (1-34) resulted in complete clearing of the treated lesion in 60% of patients and partial clearing in 85% of patients. Additionally, there was a statistically significant improvement in the global severity score. Ten patients continued receiving Topical PTH (1-34) in an open label extension study in which the Psoriasis Area and Severity Index (PASI) was measured; PASI improvement across all 10 patients achieved statistically significant improvement compared to baseline. This study showed Topical PTH (1-34) to be well tolerated and efficacious for the treatment of plaque psoriasis with no patients experiencing any clinically significant adverse events.

Due to the high response rate seen in patients in the initial trial with Topical PTH (1-34), we believed that it may have an important clinical advantage over current topical psoriasis treatments. A Phase 2a clinical study testing Topical PTH (1-34) under a P-IND was initiated in December 2005 under the auspices of Boston University. In April 2006, and prior to dosing subjects, we reported a delay in our Phase 2a clinical study of Topical PTH (1-34) due to a formulation issue. We believe we have resolved this issue through a new gel formulation of Topical PTH (1-34) and have filed new patent applications in the U.S. for this new proprietary formulation.

In September 2007, the U.S. FDA accepted our corporate 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 is designed to evaluate safety and preliminary efficacy of Topical PTH (1-34) for the treatment of psoriasis. 61 subjects have been enrolled and randomized to receive one of two dose levels of Topical PTH (1-34), or vehicle, for an 8 week treatment period. In this study the vehicle is the topical formulation without the active ingredient, PTH (1-34). In July 2008, we announced top-line results from its Phase 2a clinical study of topical PTH (1-34) for the treatment of psoriasis, as described above.

Market and Competition

According to the National Psoriasis Foundation nearly 2% of the worldwide population, including approximately 4.5 million Americans, suffers from psoriasis. In the U.S. psoriasis patients are responsible for nearly 2.4 million visits to dermatologists each year at an annual cost of nearly $3 billion. We estimate the U.S. topical psoriasis therapeutics market to be approximately $400-500 million, with the market throughout the rest of the world in the same range.

The efficacy and safety profile of Topical PTH (1-34) potentially make it an attractive alternative to existing topical treatments, photo therapies and systemic treatments such as methotrexate and biologics for the treatment of psoriasis. We are developing Topical PTH (1-34) as a monotherapy and for use in combination with currently available therapies. Some of Topical PTH (1-34)'s competitors would include, but are not limited to over-the-counter, or "OTC," prescription topical treatments, and laser treatment. Treatments such as phototherapy, methotrexate, cyclosporine, Remicade® (Johnson & Johnson), Enbrel® (Amgen), Amiveve® (Astellas), and Raptiva® (Genentech) are generally used for more severe patients due to their harsh side effect profiles.

There are a number of treatments available today for psoriasis, including topicals and steroids. Topical treatments include numerous OTC ointments that help to reduce inflammation, soothe skin and enhance the efficacy of other therapies. Steroids are also prescribed as an adjunct therapy for pain and anti-inflammation. One of the most frequently prescribed topical treatments is Dovonex® (calcipotriene), which is an active vitamin D3 analogue. Approximately 60% of patients show some response to Dovonex® in the first few months of treatment, however, 60% of these patients become resistant to treatment in 6-12 months. Dovonex® sales in the US in 2006 were $147 million.

See also “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources - Research and Development Projects – Topical PTH (1-34).”

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).

Atopic Dermatitis (Eczema)

Atopic dermatitis, also know as eczema, is a chronic disease of the skin that is believed to be caused by a combination of hereditary and environmental factors. The main symptoms of atopic dermatitis include dry, itchy skin leading to rashes on the face, hands, feet, along with inside the elbows and behind the knees. Scratching results in redness, swelling, cracking, “weeping” clear fluid, and crusting or scaling.

Mechanism of Action

Altoderm is a topical formulation of cromolyn sodium, a non-steroidal, anti-inflammatory agent that is categorized as a mast cell stabilizer. Cromolyn sodium has been shown to block allergic reactions by inhibiting the release of inflammatory mediators, including histamine and leukotrienes. Elevated levels of these agents result in local and systemic inflammation that, in turn, leads to conditions such as atopic dermatitis. By reducing the release of inflammatory agents by mast cells, we believe that Altoderm may effectively treat patients suffering from pruritus associated with atopic dermatitis, and possibly other dermatologic conditions. Cromolyn sodium has been used worldwide for over 35 years to treat a number of allergic conditions includin asthma, allergic rhinitis (nasal allergies), allergic conjunctivitis (eye allergies), and internal allergic conditions such as mastocytosis.

Clinical Development

In a Phase 3, randomized, double-blind, placebo-controlled, parallel-group, clinical study (conducted in Europe by T&R.) the compound was administered for 12 weeks to 114 subjects with moderately severe atopic dermatitis. The placebo (vehicle) used in this study was the Altoderm product without the active ingredient. In the study results, published in the British Journal of Dermatology in February 2005, Altoderm demonstrated a statistically significant reduction (36%) in atopic dermatitis symptoms. During the study, subjects were permitted to continue with their existing treatment, in most cases this consisted of emollients and topical steroids. A positive secondary outcome of the study was a 35% reduction in the use of topical steroids for the Altoderm treated subjects. Further analysis of the clinical data, performed by us, showed that Altoderm treated subjects also experienced a 57% reduction in pruritus.

Altoderm is currently being tested in a second, ongoing Phase 3, randomized, double-blind, vehicle-controlled clinical study (also conducted in Europe by T&R). Analysis of the preliminary data from the initial 12 week, blinded portion of this clinical trial has been completed. The vehicle used in this study was the Altoderm product without the active ingredient, cromolyn sodium. The preliminary data indicate 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. We believe these outcomes were due to suboptimal study design where subjects were unrestricted in their use of concomitant therapies such as topical steroids and immunomodulators. In this study, subjects treated with vehicle alone in the blinded portion of the study were switched to Altoderm for the open label portion of the study. Analysis of the preliminary open label data beginning at week 13 of the study, show vehicle treated subjects demonstrating further improvement when switched to Altoderm. Given the promising clinical data obtained from the first European Phase 3 study, and the symptom improvements reported in the ongoing European Phase 3 study, both we and T&R believe there is significant potential for Altoderm and will continue development of this product candidate.

On March 6, 2008, we announced that we completed a pre-IND meeting with the FDA. Based on a review of the submitted package for Altoderm, including data from the two previously reported Phase 3 clinical studies, the FDA determined that following completion of certain nonclinical studies, and the acceptance of an IND, Phase 2 clinical studies may be initiated in the U.S. The FDA also concurred that the proposed indication of pruritus associated with dermatologic conditions including atopic dermatitis can be pursued.

Market and Competition

According to the National Institutes of Health, an estimated 10-20% of all infants and young children and 1-3% of adults have atopic dermatitis (eczema). This translates to approximately 15 million Americans suffering from the disease. Insurance companies spend more than $1 billion annually on the condition.

Topical steroids, topical immunomodulators, systemic antihistamines, and moisturizing agents are currently the primary pharmaceutical treatments for atopic dermatitis. However, these products are not meeting the needs of patients due to unwanted side effects including skin thinning, acne, hypopigmentation, and secondary infection, among others, and limited evidence to support their long term safety. Based on these limitations of current atopic dermatitis treatments, there is a significant market opportunity for new, effective therapies.

See also “Management’s Discussion and Analysis of Financial Condition and Results of Operations- Liquidity and Capital Resources- Research and Development Projects- Altoderm.”

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.

Mastocytosis

Mastocytosis is a rare disorder that occurs in both children and adults. It is caused by the presence of too many mast cells in the body. Mast cells are found in skin, linings of the stomach and intestine, and connective tissue (such as cartilage and tendons). Mast cells play an important role in helping the immune systems defend these tissues from disease. They release chemical “alarms” such as histamine and cytokines to attract other key players of the immune defense system to sites in the body where they might be needed. People with mastocytosis experience abdominal discomfort, nausea and vomiting, ulcers, diarrhea, and skin lesions.

Mechanism of Action

Altolyn is a novel oral tablet formulation of cromolyn sodium that has been formulated using site specific drug delivery technology. This unique formulation targets release of the drug in the upper region of the small intestine. Cromolyn sodium, which has been used for more than 35 years to treat a variety of allergic conditions, is a mast cell stabilizer that reduces mast cell activation and decreases the release of inflammatory mediators.

Nonclinical Development

On March 6, 2008, we announced we had completed a pre-IND meeting with the FDA. Based on a review of the submitted package for Altolyn, the FDA concurred that the proposed indication of mastocytosis can be pursued and that the 505(b)(2) NDA would be an acceptable approach provided a clinical bridge is established between Altolyn and Gastrocrom®, the oral liquid formulation of cromolyn sodium currently approved in the U.S. to treat mastocytosis. Section 505(b)(2) of the Food, Drug and Cosmetic Act 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.The FDA also affirmed that a single, Phase 3 study demonstrating the efficacy of Altolyn over placebo, may be sufficient to support a product approval in the U.S. In addition, the FDA also concurs that no additional nonclinical studies will be required to support an IND application. We are working with T&R and the current United Kingdom manufacturer of Altolyn to develop a Good Manufacturing Process ("cGMP") compliant manufacturing process.

Early clinical experience with Altolyn in the United Kingdom suggests promising activity in patients with various allergic disorders, including food allergy and inflammatory bowel conditions. We may pursue these as additional indications.

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

Oleoyl-estrone

On July 9, 2007, we announced the results of our two Phase 2a clinical trials of oral Oleoyl-estrone ("OE"). The results of both randomized, double-blind, placebo controlled studies, one in common obesity and the other in morbid obesity, demonstrated no statistically or clinically meaningful placebo adjusted weight loss for any of the treatment arms evaluated. Based on these results, we discontinued its OE programs in both common obesity and morbid obesity.

Propofol Lingual Spray

On July 9, 2007, we announced that it discontinued development of Propofol Lingual Spray for pre-procedural sedation.

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.

We currently do not directly own the rights to any issued patents. We license the exclusive rights to a total of four issued patents relating to our current product candidates, which expire from 2013 to 2022. Altoderm™ and Altolyn™ are the trademarks for our topical cromolyn sodium and for our oral cromolyn sodium product candidates, both of which trademarks we license from T&R, from which we have licensed all of our rights to Altoderm and Altolyn. T&R has applied for registration for the Altoderm and Altolyn trademarks. All other trademarks and tradenames mentioned in this prospectus are the property of their respective owners.

Hedrin

On June 26, 2007, we entered into an exclusive license the Hedrin agreement with T&R and Kerris. Pursuant to our license agreement with T&R and Kerris, we acquired an exclusive North American license to certain patent rights and other intellectual property relating to Hedrin™, 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 Sep. 14, 2000. This application has not yet issued as a patent. Any patent that issues will expire on September14, 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.

In addition, on June 26, 2007, we entered into the Hedrin supply agreement with T&R pursuant to which T&R will be our exclusive supplier of the Hedrin product.

In consideration for the license, we issued to T&R and Kerris, whom we refer to jointly herein as the Licensor, a combined total of 150,000 shares of its common stock valued at $120,000. In addition, we also made a cash payment of $600,000 to the Licensor. Further, we agreed to make future milestone payments to the Licensor comprised of various combinations of cash and common stock in respective aggregate amounts of $2,500,000 upon the achievement of various clinical and regulatory milestones as follows: $250,000 upon acceptance by the FDA of an IND; $1,000,000 upon the achievement of a successful outcome of a Phase 3 clinical trial; $700,000 upon the final approval of a New Drug Application (NDA), or its equivalent, by the FDA; $300,000 upon the issuance of a U.S. patent on Hedrin: and $250,000 upon receipt of marketing authorization in Canada.

Through June 30, 2008, none of the milestones have been reached and sales have not commenced, therefore, we have not paid any such milestones or royalties.

We also agreed to pay royalties to the Licensor of 8% (or, under certain circumstances, 4%) on net sales of licensed products. Our exclusivity under the Hedrin 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. We may sublicense our 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 our Hedrin supply agreement, we have 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, we may obtain product from an alternative supplier subject to certain conditions. The term of the Supply Agreement ends upon termination of the Hedrin Agreement.

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 our Hedrin license agreement and our Hedrin supply agreement.

Topical PTH (1-34) License Agreement.

In connection with our April 2005 acquisition of Tarpan Therapeutics, Inc., we acquired Tarpan's rights under an April 2004 sublicense agreement with IGI, Inc. Pursuant to this agreement we now have worldwide, exclusive license rights to the U.S. and foreign patents and patent applications for all topical uses of Topical PTH(1-34) for the treatment of hyperproliferative skin disorders including psoriasis:

1. U.S. Patent No. 5,527,772, entitled "Regulation of cell proliferation and differentiation using peptides." M.F. Holick, Inventor. Application filed July, 28, 1994. Patent issued June 18, 1996. This patent expires June 18, 2013.

2. U.S. Patent No. 5,840,690, entitled "Regulation of cell proliferation and differentation using peptides." M.F. Holick, Inventor. Application filed June 6, 1995. Patent issued November 24, 1998. This patent expires June 18, 2013.

3. U.S. Provisional application No. US60/940,509, entitled "Topical Compositions comprising a macromolecule and methods of using same." Application was filed on May 29, 2007.

These patents have numerous, detailed and specific claims relating to the topical use of Topical PTH (1-34)

The IGI sublicense agreement requires us 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, 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 a 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, we are obligated to pay IGI, Inc. an annual royalty of 6% on annual net sales up to $200,000,000. In any calendar year in which net sales exceed $200,000,000, we are obligated to pay IGI, Inc. an annual royalty of 9% annual net sales. Through December 31, 2007 sales have not commenced, therefore we have not paid any such royalties.

IGI, Inc. may terminate the agreement (i) upon 60 days' notice if we fail to make any required milestone or royalty payments, or (ii) if we become bankrupt or if a petition in bankruptcy is filed, or if we are placed in the hands of a receiver or trustee for the benefit of creditors. IGI, Inc. may terminate the agreement upon 60 days' written notice and an opportunity to cure in the event we commit a material breach or default. We may terminate the agreement in whole or as to any portion of the PTH patent rights upon 90 days' notice to IGI, Inc.

Altoderm

On April 3, 2007, we entered into a license agreement for Altoderm with T&R. Pursuant to the Altoderm license agreement, we acquired an exclusive North American license to certain patent rights and other intellectual property relating to Altoderm, a topical skin lotion product candidate with the active ingredient cromolyn sodium (also known as sodium cromoglicate) for the treatment of pruritis (itch) associated with dermatologic conditions including atopic dermatitis:

1. U.S. Patent No. 7,109,246, entitled "Pharmaceutical compositions comprising an amphoteric surfactant an alkoxylated cetyl alcohol and a polar drug." Brian Hawtin, Inventor. Application filed May 20, 1999. Patent issued September 19, 2006. This patent expires on May 20, 2019.

2. U.S. Application Publication No. 2007/0036860, entitled “Treatment of allergic conditions.” Alexander James Wigmore, Inventor. Any patent that issues will expire on November 9, 2019. This patent covers both Altoderm and Altolyn.

These patents have numerous, detailed and specific claims related to the use of Altoderm (composition of topically administered cromolyn sodium) for treating atopic dermatitis (eczema).

In accordance with the terms of our Altoderm license agreement, we issued 125,000 shares of our common stock, valued at $112,500, and made a cash payment of $475,000 to T&R upon the execution of the agreement. Further, we agreed to make future milestone payments to T&R comprised of various combinations of cash and common stock in respective aggregate amounts of $5,675,000 and 875,000 shares of our common stock upon the achievement of various clinical and regulatory milestones. as follows: $450,000 upon acceptance by FDA of an IND; 125,000 shares of our common stock upon the first dosing of a patient in the first Phase 2 clinical trial; 250,000 shares of our common stock and $625,000 upon the first dosing of a patient in the first Phase 3 clinical trial; $1,000,000 upon the achievement of a successful outcome of a Phase 3 clinical trial; $1,100,000 upon the acceptance for filing of a NDA application by the FDA; 500,000 shares of our common stock and $2,000,000 upon the final approval of an NDA by the FDA; and $500,000 upon receipt of marketing authorization in Canada.

In addition, we are obligated to pay T&R an annual royalty of 10% on annual net sales of up to $100,000,000; 15% of the amount of annual net sales in excess of $100,000,000 and 20% of annual net sales in excess of $200,000,000. There is a minimum royalty of $1,000,000 per year. There is a one-time success fee of $10,000,000 upon the achievement of cumulative net sales of $100,000,000. Through December 31, 2007, none of the milestones have been reached and sales have not commenced, therefore, we have not paid any such milestones or royalties.

Altolyn

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

1. U.S. Patent No. 7,258,872, entitled “Chromone enteric release formulation.” Alexander James Wigmore, Inventor. Application filed November 9, 1999, claiming the benefit of a GB application filed November 11, 1998. Patent issued August 21, 2007. The expected date of expiration, which was November 9, 2019, has been extended by 793 days (expiration date Jan 10, 2022).

2. U.S. Application Publication No. 2007/0036860, entitled “Treatment of allergic conditions.” Alexander James Wigmore, Inventor. Application filed October 13, 2006, claiming the benefit of a prior U.S. application, which claimed the benefit of a PCT application filed November 9, 1999. This application has not yet issued as a patent. Any patent that issues is expected to expire on November 9, 2019. This patent covers both Altoderm and Altolyn.

These patents have numerous, detailed and specific claims related to Altolyn (as an oral tablet drug delivery composition), and the pending application discloses and may be used to claim the use of Altolyn (composition of orally administered sodium cromolyn) for the treatment of allergic conditions, specifically food allergies.

In accordance with the terms of the Altolyn license agreement, we made a cash payment of $475,000 to T&R upon the execution of the agreement. Further, we agreed to make future milestone payments to T&R comprised of various combinations of cash and common stock in respective aggregate amounts of $5,675,000 upon the achievement of various clinical and regulatory milestones. as follows: $450,000 upon acceptance filing by the FDA of an IND; $625,000 upon the first dosing of a patient in the first Phase 3 clinical trial; $1,000,000 upon the achievement of a successful outcome of a Phase 3 clinical trial; $1,100,000 upon the acceptance for filing of a NDA application by the FDA; $2,000,000 upon the final approval of an NDA by the FDA; and $500,000 upon receipt of marketing authorization in Canada.

In addition, we are obligated to pay T&R an annual royalty of 10% on annual net sales of up to $100,000,000; 15% of the amount of annual net sales in excess of $100,000,000 and 20% of annual net sales in excess of $200,000,000. There is a minimum royalty of $1,000,000 per year. There is a one-time success fee of $10,000,000 upon the achievement of cumulative net sales of $100,000,000. Through December 31, 2007, none of the milestones have been reached and sales have not commenced, therefore, we have not paid any such milestones or royalties.

Oleoyl-estrone

On July 9, 2007, we announced the results of our two Phase 2a clinical trials of oral OE. T he results of both randomized, double-blind, placebo controlled studies, one in common obesity and the other in morbid obesity, demonstrated no statistically or clinically meaningful placebo adjusted weight loss for any of the treatment arms evaluated. Based on these results, we discontinued its OE programs in both common obesity and morbid obesity.

Propofol Lingual Spray

On July 9, 2007, we announced that we discontinued development of Propofol Lingual Spray for pre-procedural sedation.

Manufacturing

We do not have any manufacturing capabilities. We are in contact with several contract cGMP manufacturers for the supply of Topical PTH(1-34), Hedrin, Altoderm and Altolyn that will be necessary to conduct human clinical trials.

Government Regulation

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 IND 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 an NDA,
- 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.

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, which must become effective before human clinical trials may begin. An IND 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. In such a case, the IND 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 will result in the FDA allowing clinical trials to begin.

Clinical trials involve the administration of the investigational drug 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.

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 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 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 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 Altolyn.

Before approving an NDA, 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 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. 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 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 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, including withdrawal of the product from the market.

Orphan Drug. The FDA may grant orphan drug designation to drugs intended to treat a "rare disease or condition," which generally is a disease or condition that affects fewer than 200,000 individuals in the United States. Orphan drug designation must be requested before submitting an NDA. If the FDA grants orphan drug designation, which it may not, the identity of the therapeutic agent and its potential orphan use are publicly disclosed by the FDA. Orphan drug designation does not convey an advantage in, or shorten the duration of, the review and approval process. If a product that has an orphan drug designation subsequently receives the first FDA approval for the indication for which it has such designation, the product is entitled to orphan exclusivity, meaning that the FDA may not approve any other applications to market the same drug for the same indication, except in certain very limited circumstances, for a period of seven years. Orphan drug designation does not prevent competitors from developing or marketing different drugs for that indication.

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") members 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.

Device Approval Process. The medical devices that we develop or market are subject to regulation by the FDA's Center for Devices and Radiological Health (CDRH). These medical devices must comply with applicable laws and regulations governing the development, testing, manufacturing, labeling, marketing and distribution of medical devices. The most comprehensive regulatory controls require that a clinical evaluation program be conducted before a device receives approval for commercial distribution. CDRH reviews and evaluates medical device pre-market approval (PMA) applications, product development protocols (PDPs), exemption requests for investigational devices (IDEs), and premarket notifications, or 510(k)s. In the U.S., permission to distribute a new device generally can be met in one of three ways.

The first process requires that a pre-market notification (510(k) Submission) be made to the FDA to demonstrate that the device is as safe and effective as, or substantially equivalent to, a legally marketed device that is not subject to PMA (i.e., the "predicate" device). An appropriate predicate device for a pre-market notification is one that (i) was legally marketed prior to May 28, 1976, (ii) was approved under a PMA but then subsequently reclassified from class III to class II or I, or (iii) has been found to be substantially equivalent and cleared for commercial distribution under a 510(k) Submission. Applicants must submit descriptive data and, when necessary, performance data to establish that the device is substantially equivalent to a predicate device. In some instances, data from human clinical trials must also be submitted in support of a 510(k) Submission. If so, these data must be collected in a manner that conforms to the applicable Investigational Device Exemption (IDE) regulations. The FDA must issue an order finding substantial equivalence before commercial distribution can occur. Changes to existing devices covered by a 510(k) Submission that do not raise new questions of safety or effectiveness can generally be made without additional 510(k) Submissions. More significant changes, such as new designs or materials, may require a separate 510(k) with data to support that the modified device remains substantially equivalent. First, the FDA determines that the proposed medical device can be marketed in the United States because it is substantially equivalent to an existing medical device already in the United States market and issues what is known as a 510(k) pre-market notification clearance. Second, the FDA may require that the new device satisfy a more in depth approval process, known as pre-market approval, or PMA. Both the 510(k) clearance and the PMA processes may require the presentation of a substantial volume of clinical data, as well as a substantial review, thereby delaying the introduction of the new device into the market. Moreover, the PMA process requires extensive clinical studies, manufacturing information (including demonstration of compliance with quality systems requirements), and possible review by a panel of experts outside the FDA.

The second process requires the submission of an application for PMA to the FDA to demonstrate that the device is safe and effective for its intended use as manufactured. This approval process applies to certain class III devices. In this case, two steps of FDA approval are generally required before marketing in the U.S. can begin. First, we must comply with the applicable IDE regulations in connection with any human clinical investigation of the device in the U.S. Second, the FDA must review our PMA application, which contains, among other things, clinical information acquired under the IDE. The FDA will approve the PMA application if it finds that there is a reasonable assurance that the device is safe and effective for its intended purpose. FDA review of a PMA application could take significantly longer than that for a 510(k) application, thereby further delaying the introduction of the new medical device into the market. Finally, even if the FDA approves the new device, it may impose restrictions on our ability to market the device.

The third process requires that an application for a Humanitarian Device Exemption (HDE) be made to the FDA for the use of a Humanitarian Use Device (HUD). A HUD is intended to benefit patients by treating or diagnosing a disease or condition that affects, or is manifested in, fewer than 4,000 individuals in the U.S. per year. The application submitted to the FDA for an HDE is similar in both form and content to a PMA application, but is exempt from the effectiveness requirements of a PMA. This approval process demonstrates there is no comparable device available to treat or diagnose the condition, the device will not expose patients to unreasonable or significant risk, and the benefits to health from use outweigh the risks. The HUD provision of the regulation provides an incentive for the development of devices for use in the treatment or diagnosis of diseases affecting small patient populations.

The FDA can ban certain medical devices; detain or seize adulterated or misbranded medical devices; order repair, replacement or refund of these devices; and require notification of health professionals and others with regard to medical devices that present unreasonable risks of substantial harm to the public health. The FDA may also enjoin and restrain certain violations of the Food, Drug and Cosmetic Act and the Safe Medical Devices Act pertaining to medical devices, or initiate action for criminal prosecution of such violations.

Post-Approval Requirements. Medical device manufacturers are subject to periodic inspections by the FDA and state agencies. If the FDA believes that a company is not in compliance with applicable laws or regulations, it can take any of the following actions: issue a warning or other letter notifying the particular manufacturer of improper conduct; impose civil penalties; detain or seize products; issue a recall; ask a court to seize products; enjoin future violations; withdraw clearances or approvals; or assess civil and criminal penalties against us, our officers or our employees.

In addition, regulations regarding the development, manufacture and sale of medical devices are subject to future change. We cannot predict what impact, if any, those changes might have on our business. Failure to comply with regulatory requirements could have a material adverse effect on our business, financial condition and results of operations. Later discovery of previously unknown problems with a product or manufacturer could result in fines, delays or suspensions of regulatory clearances, seizures or recalls of products, operating restrictions and/or criminal prosecution. The failure to receive product approval clearance on a timely basis, suspensions of regulatory clearances, seizures or recalls of products or the withdrawal of product approval by the FDA could have a material adverse effect on our business, financial condition or results of operations.

Medical device manufacturers are required to register with the FDA and are subject to periodic inspection by the FDA for compliance with the FDA's Quality System Regulation (QSR) requirements, which require manufacturers of medical devices to adhere to certain regulations, including testing, quality control and documentation procedures. In addition, the federal Medical Device Reporting regulations require medical device manufacturers to provide information to the FDA whenever there is evidence that reasonably suggests that a device may have caused or contributed to a death or serious injury or, if a malfunction were to occur, could cause or contribute to a death or serious injury. Compliance with applicable regulatory requirements is subject to continual review and is rigorously monitored through periodic inspections by the FDA. In the European Community, medical device manufactures are required to maintain certain ISO certifications in order to sell our products and must undergo periodic inspections by notified bodies to obtain and maintain these certifications.

Non-United States Regulation. International sales of medical devices manufactured in the U.S. that are not approved by the FDA for use in the U.S., or are banned or deviate from lawful performance standards, are subject to FDA export requirements. Exported devices are subject to the regulatory requirements of each country to which the device is exported. Some countries do not have medical device regulations, but in most foreign countries, medical devices are regulated. Frequently, regulatory approval may first be obtained in a foreign country prior to application in the U.S. to take advantage of differing regulatory requirements. Most countries outside of the U.S. require that product approvals be recertified on a regular basis, generally every five years. The recertification process requires that we evaluate any device changes and any new regulations or standards relevant to the device and conduct appropriate testing to document continued compliance. Where recertification applications are required, they must be approved in order to continue selling our products in those countries.

In the European Union, we are required to comply with the Medical Devices Directive and obtain CE Mark certification in order to market medical devices. The CE Mark certification, granted following approval from an independent notified body, is an international symbol of adherence to quality assurance standards and compliance with applicable European Medical Devices Directives. We are also required to comply with other foreign regulations such as the requirement that we obtain Ministry of Health, Labor and Welfare approval before we can launch new products in Japan. The time required to obtain these foreign approvals to market our products may vary from U.S. approvals, and requirements for these approvals may differ from those required by the FDA.

We cannot assure you that we will or our collaborators will be able to meet the FDA's requirements or receive FDA clearance for our products. Moreover, even if we are exempt from approval or even if we receive clearance, the FDA may impose restrictions on our marketing efforts. Finally, delays in the approval process may cause us to introduce our products into the market later than anticipated. Any failure to obtain regulatory approval, restrictions on our ability to market our products, or delay in the introduction of our products to the market could have a serious adverse effect on our business, financial condition and results of operations.

Medical device laws and regulations are also in effect in many of the countries in which we may do business outside the United States. These laws and regulations range from comprehensive device approval requirements for our medical device product to requests for product data or certifications. The number and scope of these requirements are increasing. We may not be able to obtain regulatory approvals in such countries and we may be required to incur significant costs in obtaining or maintaining our foreign regulatory approvals. In addition, the export of certain of our products which have not yet been cleared for domestic commercial distribution may be subject to FDA export restrictions. Any failure to obtain product approvals in a timely fashion or to comply with state or foreign medical device laws and regulations may have a serious adverse effect on our business, financial condition or results of operations.

Employees

As of September 15, 2008, we had 1 part time and 3 full time employees, all of whom are devoted to business development, administration and finance, including our senior management. None of our employees is covered by a collective bargaining unit. We believe our relationship with our employees is 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, 2009 under which we pay rent of approximately $7,000 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. Except for the proceedings described below, 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.

Swiss Pharma Contract LTD, or Swiss Pharma, a clinical site that we used in one of its obesity trials, gave notice to us that Swiss Pharma believes it is entitled to receive an additional payment of $322,776 for services in connection with that clinical trial. We do not believe that Swiss Pharma is entitled to additional payments and have not accrued any of these costs as of March 31, 2008. The contract between us and Swiss Pharma provides for arbitration in the event of a dispute, such as this claim for an additional payment. On March 10, 2008, Swiss Pharma filed for arbitration with the Swiss Chamber of Commerce. As we do not believe that Swiss Pharma is entitled to additional payments, we intend to defend our position in arbitration. On April 2, 2008, we filed our statement of defense and counterclaim for recovery of costs incurred by us as a result of Swiss Pharma’s failure to meet agreed upon deadlines under our contract. On June 3, 2008, a hearing was held before the arbitrator. On September 5, 2008, the arbitrator rendered an award in favor of Swiss Pharma, awarding to Swiss Pharma a total of $646,000 which amount includes a $323,000 contract penalty, a final services invoice of $48,000, reimbursement of certain of Swiss Pharma’s legal and other expenses incurred in the arbitration process of $245,000, reimbursement of arbitration costs of $13,000 and interest through September 5, 2008 of $17,000. Further, the arbitrator ruled that we must pay interest at the rate of 5% per annum on $371,000, the sum of the $323,000 contract penalty and the final services invoice of $48,000, from October 12, 2007 until paid. We previously recognized a liability to Swiss Pharma in the amount of $104,000 for the final services invoice and therefore, will recognize expense for the difference between the award of $646,000 and the previously recognized liability of $104,000, or $542,000, in the quarter ending September 30, 2008. We will also continue to accrue interest at the rate of 5% per annum on the $371,000. We disagree with the result of the arbitration and are exploring our post-award options, including potential appellate remedies in Switzerland, and defense of any actions which may be taken to enforce the arbitration award. We do not have sufficient cash or other current assets to satisfy the arbitrator's award.

In February 2007, a former employee of ours alleged an ownership interest in two of our provisional patent applications covering our discontinued product development program for Oleoyl-estrone. Also, without articulating precise legal claims, the former employee contends that we wrongfully characterized the former employee's separation from employment as a resignation instead of a dismissal in an effort to harm the former employee's immigration sponsorship efforts, and, further, to wrongfully deprive the former employee of the former employee's alleged rights in two of our provisional patent applications. The former employee is seeking an unspecified amount in damages. We refute the former employee's contentions and intend to vigorously defend ourselves should the former employee file claims against us. There have been no further developments with respect to these contentions.

Directors

The name and age of each of our six directors as of September 15, 2008, 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.

Name	Age	Position(s) Held	Director Since
Douglas Abel	47	President, Chief Executive Officer and Director	2005
Neil Herskowitz	51	Director	2004
Malcolm Hoenlein	64	Director	2004
Timothy McInerney	47	Director	2004
Richard I. Steinhart	51	Director	2004
Michael Weiser, M.D.	45	Director	2003

Douglas Abel has been our President and Chief Executive Officer and a director of our company since April 2005. 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.

Neil Herskowitz was appointed to our Board of Directors in 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.

Malcolm Hoenlein was appointed to our Board of Directors in July 2004. Since January 2001, he is also a director of Keryx Biopharmaceuticals, Inc. (Nasdaq: KERX). Mr. Hoenlein currently serves as the Executive Vice Chairman of the Conference of Presidents of Major American Jewish Organizations, a position he has held since 1986. He also serves as a director of Bank Leumi. Mr. Hoenlein received his B.A. from Temple University and his M.A. from the University of Pennsylvania.

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.

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.

Michael Weiser, M.D., Ph.D., has served as a director of our company since February 2003. Dr. Weiser currently serves as founder and co-chairman of Actin Biomed, a position he has held since December 2006. Previously, he served as Director of Research of Paramount BioSciences, Inc. Dr. Weiser completed his Ph.D. in Molecular Neurobiology at Cornell University Medical College and received his M.D. from New York University School of Medicine, where he also completed a Postdoctoral Fellowship in the Department of Physiology and Neuroscience. Dr. Weiser currently serves on the boards of directors of Hana Biosciences, Inc. (NASDAQ: HNAB), Chelsea Therapeutics International Ltd. (NASDAQ: CHTP), Emisphere Technologies Inc. (NASDAQ: EMIS), ZIOPHARM Oncology Inc. (NASDAQ: ZIOP), and VioQuest Pharmaceuticals Inc. (OTCBB: VQPH), as well as several other privately held biotechnology 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 President and Chief Executive Officer.

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, Hoenlein and Steinhart (Chair)
Compensation	Messrs. Herskowitz, Hoenlein, Steinhart and Weiser (Chair)
Nominating and Governance	Messrs. Herskowitz, Hoenlein and Steinhart (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, except for Dr. Weiser who serves as Chair 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 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 September 15, 2008. All directors hold office until the next annual meeting of stockholders or until their respective successors are elected and qualified.

Name	Age	Position
Douglas Abel	47	President & Chief Executive Officer and Director
Michael G. McGuinness	54	Chief Operating and Financial Officer & Secretary

The biographies of our executive officers are set forth below.

Douglas Abel has been President and Chief Executive Officer and a director of our company since April 2005. His complete biography is set forth above under the caption "Management - Directors."

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. Prior to joining Manhattan, 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.

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, 2007 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								
Chief Executive	2007	$ 345,000	$ 180,000[3]	$ 910,224[5]	$ 0	$ 0	$ 42,333[4]	$ 1,477,557
Officer and	2006	$ 325,000	$ 150,000	$ 1,156,065	$ 0	$ 0	$ 116,776	$ 1,748,841
President								
Alan G. Harris [1]								
Chief Medical	2007	$ 288,333	$ 0	$ 292,530[5]	$ 0	$ 0	$ 9,000[6]	$ 589,863
Officer	2006	$ 252,083	$ 107,500	$ 98,837	$ 0	$ 0	$ 8,800	$ 467,220
Michael McGuinness[2]								
Chief Operating	2007	$ 238,333	$ 100,000[3]	$ 95,528[5]	$ 0	$ 0	$ 9,000[6]	$ 442,861
and Financial	2006	$ 98,229	$ 60,000	$ 23,622	$ 0	$ 0	$ 0	$ 181,851
Officer, Secretary								

(1) Dr. Harris was appointed our Chief Medical Officer on February 1, 2006. Dr. Harris' employment with us ended effective December 31, 2007.

(2) Mr. McGuinness was appointed our Chief Financial Officer on July 10, 2006 and Chief Operating Officer on April 1, 2008.

(3) The Company has accrued for such bonuses but has not paid such bonuses. Payment of such bonuses are contingent upon our raising additional financing and shall be paid as follows: (i) 50% will be paid when we have consummated a financing transaction with gross proceeds (net of commissions) to the Company of at least $1,000,000 and (ii) the remaining 50% will be paid when we have consummated a financing transaction with gross proceeds (net of commissions) to us of at least $2.5 million (cumulative, including the $1 million financing transaction referred to above).

(4) For 2007 represents a payment in the amount of $33,333, which represents the approximate amount of additional expense incurred by Mr. Abel relating to his commuting between Boston and New York and a tax "gross up" to cover the additional tax liability to Mr. Abel from such payment, and a matching contributions by us pursuant to our company's 401(k) retirement plan of $9,000. For 2006 represents a payment in the amount of $83,333, which represents the approximate amount of additional expense incurred by Mr. Abel relating to his commuting between Boston and New York and a tax "gross up" to cover the additional tax liability to Mr. Abel from such payment, reimbursement of certain commuting expenses of $24,643 and a matching contributions by us pursuant to our company's 401(k) retirement plan of $8,800.

(5) Represents the amount of share-based costs recognized by us during 2007 under SFAS No. 123(R). See Note 3 to our Consolidated Financial Statements included in our annual report for 2007 on Form 10-K and for 2006 on Form 10-KSB for the assumptions made in the valuation.

(6) 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, 2007.

	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	2,923,900	0	$ 1.50	04/01/2015
	0	250,000	$ 0.95	04/25/2017
Alan Harris	300,000	0	$ 1.35	12/31/2009
	100,000	0	$ 0.95	12/31/2009
Michael McGuinness	73,333	146,667	$ 0.70	07/10/2016
	20,000	40,000	$ 1.35	07/10/2016
	0	320,000	$ 0.95	04/25/2017

Employment Agreements

Douglas Abel. We entered into an employment agreement and an extension to that employment agreement with Mr. Abel dated April 1, 2005, whereby Mr. Abel agreed to serve as our President and Chief Executive Officer for a period of four years in exchange 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. The employment agreement contains 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.

Alan G. Harris. We entered into an employment agreement with Dr. Harris dated January 26, 2006, whereby Dr. Harris agreed to serve as our Chief Medical Officer for a period of three years commencing on February 1, 2006. Mr. Harris' employment with Company ended on December 31, 2007. The employment agreement provided that, in exchange for his services, Dr. Harris would receive (i) an annual base salary of $275,000; (ii) a guaranteed cash bonus of $50,000; (iii) an annual milestone bonus on each anniversary of the employment agreement during the term of the agreement in an amount up to 30% of his annual base salary, at the discretion of our chief executive officer and the Board; and (iv) an option to purchase 300,000 shares of our common stock at an exercise price equal to the last closing sale price of our common stock on February 1, 2006, such options to vest in equal amounts over three years and be exercisable for a 10-year term. In the event Dr. Harris' employment is terminated by us upon a change of control and the fair market value of our common stock, as determined in the good faith discretion of the Board, is less than $40,000,000 on the date of the change of control, Dr. Harris shall continue to receive his base salary and benefits for a period of three months from the date of termination. In the event such termination is for a reason other than for cause or pursuant to a change of control, Dr. Harris shall be entitled to receive his base salary for a period of six months from the date of termination.

Dr. Harris executed a Separation and Release Agreement (the "Separation Agreement") with us which provides for, among other things, (i) the termination of Dr. Harris's employment effective December 31, 2007; (ii) continuation of his base salary through February 29, 2008 in accordance with our standard payroll practices; (iii) the amendment of certain outstanding option grants to provide for the immediate vesting of the unvested portion of the grant issued on February 1, 2006 and the immediate vesting of one-third of the options granted on April 25, 2007 and to extend the expiration date of such option grants; and (iv) the waiver of our right to enforce the covenants against competition contained in Section 6(a) of his employment agreement. The Separation Agreement further provides for mutual general releases.

Michael G. McGuinness. Mr. McGuinness' employment with us is governed by an employment agreement dated July 7, 2006. The agreement provides 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 is 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 is 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.

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 provides 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 will 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.

The following table shows the compensation earned by each of our non-employee directors for the year ended December 31, 2007:

Name	Fees Earned or Paid in Cash	Option Awards [1]	All Other Compensation	Total
Neil Herskowitz	$ 27,500	$ 7,948[3]	$ 0	$ 35,448
Malcolm Hoenlein	$ 25,000	$ 7,948[4]	$ 0	$ 32,948
Timothy McInerney	$ 24,000	$ 7,948[5]	$ 0	$ 31,948
Joan Pons Gimbert [2]	$ 12,000	$ 7,948[6]	$ 0	$ 19,948
Richard I. Steinhart	$ 27,000	$ 7,948[7]	$ 0	$ 34,948
Michael Weiser	$ 24,500	$ 7,948[8]	$ 0	$ 32,448

(1) Represents the amount of share-based costs recognized by us during 2006 under SFAS No. 123(R). See Note 3 to our Consolidated Financial Statements included in our annual report for 2006 on Form 10-KSB for the assumptions made in the valuation.

(2) Joan Pons Gimbert resigned from the Board in July 2007.

(3) As of September 15, 2008, Mr. Herskowitz had options to purchase an aggregate of 216,010 shares of our common stock.

(4) As of September 15, 2008, Mr. Hoenlein had options to purchase an aggregate of 216,010 shares of our common stock.

(5) As of September 15, 2008, Mr. McInerney had options to purchase an aggregate of 236,010 shares of our common stock.

(6) As of September 15, 2008, Mr. Pons Gimbert had options to purchase an aggregate of 133,334 shares of our common stock.

(7) As of September 15, 2008, Mr. Steinhart had options to purchase an aggregate of 216,010 shares of our common stock.

(8) As of September 15, 2008, Mr. Weiser had options to purchase an aggregate of 230,000 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 September 15, 2008:

- 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 September 15, 2008 was based on 70,624,232 shares outstanding. Unless otherwise indicated, the address of each beneficial owner is c/o Manhattan Pharmaceuticals, Inc., 48 Wall Street, New York, New York 10005.

Name of Beneficial Owners, Officers and Directors	Number of Shares Beneficially Owned (#)	Percentage Beneficially Owned (%)
Douglas Abel [1]	3,519,566	4.8
Michael McGuinness [2]	694,000	1.0
Michael Weiser [3]	2,562,651	3.6
Timothy McInerney [4]	990,857	1.4
Neil Herskowitz [5]	347,128	*
Richard I. Steinhart [6]	154,967	*
Malcolm Hoenlien [7]	150,525	*
All directors and officers as a group [8](7 persons)	8,419,694	11.1
Lester Lipschutz [9] 1650 Arch Street, Philadelphia, PA 19103	8,941,873	12.7
Lindsay Rosenwald [10] 787 Seventh Avenue New York, NY 10019	4,224,268	5.9
Nordic Biotech Venture Fund II K/S[11] Ostergrade 5, 3rd floor, DK-1100 Copenhagen K, Denmark	33,928,571	32.5

* Less than 1.0%

(1) Includes 3,440,566 shares issuable upon exercise of vested portions of options and 24,000 shares issuable upon exercise of warrants.

(2) Includes 660,000 shares issuable upon exercise of vested portions of options and 24,000 shares issuable upon exercise of warrants.

(3) Includes 163,334 shares issuable upon the exercise of vested portions of options, and 151,754 shares issuable upon exercise of warrants.

(4) Includes 183,334 shares issuable upon exercise of vested portions of options; and 139,863 shares issuable upon exercise of warrants.

(5) Includes 149,344 shares issuable upon exercise of vested portions of options, and 43,444 shares issuance upon exercise of warrants; 77,288 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.

(6) Includes 149,344 shares issuable upon exercise of vested portions of options.

(7) Includes 149,344 shares issuable upon exercise of vested portions of options.

(8) Includes 4,895,246 shares issuable upon exercise of vested portions of options; 383,061 shares issuable upon the exercise of warrants; 77,288 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.

(9) Includes 8,941,873 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

(10) Includes 3,183,497 shares held directly by Dr. Rosenwald, 1,040,658 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, and 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. The foregoing information is derived from a Schedule 13G/A filed on behalf of the reporting person on February 13, 2008.

(11) Includes (i) 26,785,714 shares issuable upon exercise of Nordic's right to put all or a portion of Nordic Biotech Venture Fund II K/S' equity interest in Hedrin Pharmaceuticals K/S, a Danish limited partnership, of which we and Nordic are partners and (ii) 7,142,857 shares issuable upon exercise of an outstanding warrant held by Nordic. Does not include (i) 26,785,714 shares issuable upon exercise of our right to call all or a portion of Nordic’s equity interest in Hedrin Pharmaceuticals K/S to the extent such shares are not issued upon exercise of Nordic’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 Nordic's right to refuse such call upon payment of cash or forfeiture of equity interests in Hedrin Pharmaceuticals K/S, or (ii) 8,928,572 additional shares which may become issuable upon exercise of Nordic's right to put, or subject to the satisfaction of certain conditions and to certain exceptions discussed above, our right to call, all or a portion of selling securityholder's equity interest in Hedrin Pharmaceuticals K/S upon classification of Hedrin by the FDA, as a Class II or Class III medical device and selling securityholder's investment of an additional $1.25 million in Hedrin Pharmaceuticals K/S. Florian Schonharting and Christian Hansen have voting and investment control over such securities.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Oleoylestrone Developments, SL

Pursuant to the terms of a license agreement dated February 15, 2002 between us and Oleoylestrone Developments, SL, or OED, which was terminated in November 2007, we had an exclusive, worldwide license to U.S. and foreign patents and patent applications relating to certain technologies. Although we were not obligated to pay royalties to OED, the license agreement required us to make certain performance-based milestone payments. As of April 15, 2008, OED held approximately 5.6% of our outstanding common stock. Additionally, Mr. Pons, a member of our board of directors, is the chief executive officer of OED.

We also entered into a consulting agreement with OED, which became effective in February 2002 and was terminated along with the termination of the license agreement in November 2007. Pursuant to our consulting agreement, we paid OED a fee of $6,250 per month The fees associated with the consulting agreement were expensed as incurred. Pursuant the consulting agreement, OED agreed to appoint a member to serve as a member of our Scientific Advisory Board and to render consulting and advisory services to us. Such services included research, development and clinical testing of our technology as well as the reporting of the findings of such tests, assistance in the filing of patent applications and oversight and direction of efforts in regards to personnel for clinical development. For the periods ended December 31, 2007 and 2006 and from inception, fees paid to OED were $68,750, $325,000 and $931,250, respectively.

Paramount BioCapital, Inc.

In February 2007, we engaged Paramount BioCapital, Inc., as our placement agent in connection with the private placement. In consideration for its services, we 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. At the time of the engagement, Timothy McInerney was an employee of Paramount BioCapital, Inc. or one of its affiliates. The sole shareholder of Paramount BioCapital, Inc. is Lindsay A. Rosenwald, M.D. Dr. Rosenwald beneficially owns more than 5 percent of our common stock. On March 30, 2007, we 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 our 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 Manhattan, at a per share price of $0.90, the closing sale price of our common stock on March 29, 2007. Pursuant to the subscription agreements, we also issued to the investors 5-year warrants to purchase an aggregate of 3,564,897 shares of our 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.

Private Placement

As described above, on March 30, 2007, we issued and sold in a private placement transaction an aggregate of 10,185,502 shares of our common stock. 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 Manhattan, at a per share price of $0.90, the closing sale price of our common stock on March 29, 2007. In addition to the shares of common stock, we also issued to the investors 5-year warrants to purchase an aggregate of 3,564,897 shares of our 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. Accordingly, we received net proceeds of $7.9 million from the sale of these shares and warrants. We engaged Paramount BioCapital, Inc., as our placement agent in connection with the private placement, as discussed above.

The Hedrin JV

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 Hedrin 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 at 50%. Pursuant to the joint venture agreement, upon the classification by the FDA of Hedrin as a Class II or Class III medical device, Nordic will be required to contribute to the Hedrin JV an additional $1.25 million in cash, $0.5 million of which will be distributed to us and equity in the Hedrin JV will be distributed to each of us and Nordic sufficient to maintain our respective ownership interests at 50%. Upon classification by the FDA of Hedrin as a Class II or Class III medical device, the Hedrin JV will have received a total of $1.5 million cash to be applied toward the development and commercialization of Hedrin in North America. If classification of Hedrin by the FDA as a Class II or Class III medical device is not received by June 30, 2009, then Nordic will not be obligated to make the final payment of $1.25 million and Nordic will receive an additional 20% ownership of the joint venture and enhanced control over the joint venture's operations and other important decision-making.

The Hedrin JV will be 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 will engage us to provide management services to the Hedrin JV in exchange for an annualized management fee, which for 2008, on an annualized basis, is $527,000. 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 we each currently hold 50%, 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 million if all of the milestones described above are met and $3.5 million if they are not met) 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. In the event that the final payment milestone described above is not achieved by March 30, 2009, then the Hedrin JV 's board of directors will increase to five members, two appointed by us and three appointed by Nordic.

Pursuant to the joint venture agreement, Nordic has the right to put all or a portion of its interest in the Hedrin JV 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 all or a portion of Nordic's equity interest in the Hedrin JV in exchange for such number of shares of our common stock equal to the portion of Nordic's investment in the Hedrin JV that we call by the dollar amount of Nordic's investment as of such date in the Hedrin JV, divided by $0.14, as 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, all or a portion of Nordic’s equity interest in the Hedrin JV, the amount of Nordic’s investment is currently $3,750,000; provided, that if, by June 30, 2009, the FDA either does not formally classify Hedrin as a Class II or Class III medical device or formally designates Hedrin as a drug and refers regulation thereof to the FDA Center for Drug Evaluation and Research, the amount of Nordic’s investment will be reduced to $3,500,000 and if by June 30, 2009, the FDA formally classifies Hedrin as a Class II or Class III medical device then upon Nordic’s payment of the final milestone payment, Nordic’s investment will be increased to $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 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 all or any portion of its put right and we issued the warrant to Nordic.

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 President and Chief Executive Officer and a director of our company; Michael Weiser, a director of our company; Timothy McInerny, a director of our company; Neil Herskowitz, a director of our company, and Michael McGuiness, our Chief Financial Officer and Chief Operating Officer. Principal and interest on the notes are 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.

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 150,000,000 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 certification of incorporation to increase the total number of shares of our common stock authorized to be issued to 300,000,000.

As of August 28, 2008, there were 70,624,232 shares of our common stock and no shares of preferred stock issued and outstanding. As of such date, warrants to purchase up to 15,826,710 shares of our common stock and options to purchase up to 10,766,336 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 all or a portion of its interest in the Hedrin JV 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 all or a portion of Nordic's equity interest in the Hedrin JV in exchange for such number of shares of our common stock equal to the portion of Nordic's investment in the Hedrin JV that we call by the dollar amount of Nordic's investment as of such date in the Hedrin JV, divided by $0.14, as 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.

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, 3008. As of April 30, 2008, Nordic had not exercised all or 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 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 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.

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. 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 all or a portion of Nordic's equity interest in the Hedrin JV, 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 in the case of the registration statement of which this prospectus forms a part, by October 17, 2008 or if we receive comments from the SEC with respect to such registration statement, November 17, 2008, 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.

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 30, 2008, 70,624,232 shares of our common stock were outstanding. 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 30, 2008, all of the outstanding 3,141,387 shares of common stock that are held by our officers and directors (excluding shares issuable upon exercise of outstanding options 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 706,242 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. 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 Hedrin 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 at 50%. Pursuant to the joint venture agreement, upon the classification by the FDA of Hedrin as a Class II or Class III medical device, Nordic will be required to contribute to the Hedrin JV an additional $1.25 million in cash, $0.5 million of which will be distributed to us and equity in the Hedrin JV will be distributed to each of us and Nordic sufficient to maintain our respective ownership interests at 50%. Upon classification by the FDA of Hedrin as a Class II or Class III medical device, the Hedrin JV will have received a total of $1.5 million cash to be applied toward the development and commercialization of Hedrin in North America. If classification of Hedrin by the FDA as a Class II or Class III medical device is not received by June 30, 2009, then Nordic will not be obligated to make the final payment of $1.25 million and Nordic will receive an additional 20% ownership of the joint venture and enhanced control over the joint venture's operations and other important decision-making.

The Hedrin JV will be 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 will engage us to provide management services to the Hedrin JV in exchange for an annualized management fee, which for 2008, on an annualized basis, is $527,000. 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 we each currently hold 50%, 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 million if all of the milestones described above are met and $3.5 million if they are not met) 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. In the event that the final payment milestone described above is not achieved by March 30, 2009, then the Hedrin JV 's board of directors will increase to five members, two appointed by us and three appointed by Nordic.

Pursuant to the joint venture agreement, Nordic has the right to put all or a portion of its interest in the Hedrin JV 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 all or a portion of Nordic's equity interest in the Hedrin JV in exchange for such number of shares of our common stock equal to the portion of Nordic's investment in the Hedrin JV that we call by the dollar amount of Nordic's investment as of such date in the Hedrin JV, divided by $0.14, as 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, all or a portion of Nordic's equity interest in the Hedrin JV, the amount of Nordic's investment is currently $3,750,000; provided, that if, by June 30, 2009, the FDA either does not formally classify Hedrin as a Class II or Class III medical device or formally designates Hedrin as a drug and refers regulation thereof to the FDA Center for Drug Evaluation and Research, the amount of Nordic's investment will be reduced to $3,500,000 and if by June 30, 2009, the FDA formally classifies Hedrin as a Class II or Class III medical device then upon Nordic's payment of the final milestone payment, Nordic's investment will be increased to $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 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 all or any portion of its put right and we issued the warrant to Nordic.

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. 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 all or a portion of Nordic's equity interest in the Hedrin JV, 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 in the case of the registration statement of which this prospectus forms a part, by October 17, 2008 or if we receive comments from the SEC with respect to such registration statement, November 17, 2008, 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.

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.

The following table lists the selling securityholder and presents certain information regarding 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. This table is prepared based on information supplied to us by the selling securityholder and the Schedule 13D filed by the selling securityholder with the SEC on March 5, 2008, and reflects holdings as of August 28, 2008. As of August 28, 2008, 70,624,232 shares of our common stock were issued and outstanding. As used in this prospectus, the term "selling securityholder" includes the entity listed below and 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.

	Number of Shares of Common Stock Beneficially Owned Prior to the Offering	Shares Being Offered	Common Stock Beneficially Owned After this Offering	
Selling Securityholder			**Number of Shares Outstanding**	**Percent of Shares Outstanding**
Nordic Biotech Venture Fund II K/S	33,928,571(1)	33,928,571(1)	0	0

(1) Includes (i) 26,785,714 shares issuable upon exercise of the selling securityholder's right to put all or a portion of the selling securityholder's equity interest in Hedrin Pharmaceuticals K/S, a Danish limited partnership, of which we and the selling securityholder are partners and (ii) 7,142,857 shares issuable upon exercise of an outstanding warrant held by the selling securityholder. Does not include (i) 26,785,714 shares issuable upon exercise of our right to call all or a portion of the selling securityholder's equity interest in Hedrin Pharmaceuticals K/S 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 Hedrin Pharmaceuticals K/S, or (ii) 8,928,572 additional shares which may become issuable upon exercise of the selling securityholder's right to put, or subject to the satisfaction of certain conditions and to certain exceptions discussed above, our right to call, all or a portion of selling securityholder's equity interest in Hedrin Pharmaceuticals K/S upon classification of Hedrin by the FDA, as a Class II or Class III medical device and selling securityholder's investment of an additional $1.25 million in Hedrin Pharmaceuticals K/S. 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, 2007 and 2006 and for the years then ended, 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 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.

Index to Consolidated Financial Statements

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

	June 30, 2008	December 31, 2007
	(Unaudited)	(See Note 1)
Assets		
Current assets:		
Cash and cash equivalents	$ 576,354	$ 649,686
Prepaid expenses and other current assets	135,540	215,852
Total current assets	711,894	865,538
Investment in Hedrin JV	142,408	-
Property and equipment, net	34,912	44,533
Other assets	84,126	70,506
Total assets	$ 973,340	$ 980,577
Liabilities and Stockholders' Deficiency		
Current liabilities:		
Accounts payable	$ 617,346	$ 1,279,485
Accrued expenses	849,746	592,177
Total current liabilities	1,467,092	1,871,662
Exchange obligation	2,953,230	-
Total liabilities	4,420,322	1,871,662
Commitments and contingencies		
Stockholders' deficiency:		
Preferred stock, $.001 par value. Authorized 1,500,000 shares; no shares issued and outstanding at June 30, 2008 and December 31, 2007		
Common stock, $.001 par value. Authorized 300,000,000 shares; 70,624,232 shares issued and outstanding at June 30, 2008 and December 31, 2007	70,624	70,624
Additional paid-in capital	54,483,025	54,037,361
Deficit accumulated during the development stage	(58,000,631)	(54,999,070)
Total stockholders' deficiency	(3,446,982)	(891,085)
Total liabilities and stockholders' deficiency	$ 973,340	$ 980,577

See accompanying notes to condensed consolidated financial statements.

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

	Three months ended June 30,		Six months ended June 30,		Cumulative period from August 6, 2001 (inception) to June 30
	2008	2007	2008	2007	2008
Costs and expenses:					
Research and development	$ 565,728	$ 3,871,634	$ 1,365,799	$ 5,551,082	$ 27,854,842
General and administrative	901,538	1,052,374	1,715,598	1,967,098	15,567,961
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	1,467,266	4,924,008	3,081,397	7,518,180	57,772,718
Operating loss	(1,467,266)	(4,924,008)	(3,081,397)	(7,518,180)	(57,772,718)
Other (income) expense:					
Equity in loss of Hedrin JV	87,718	—	107,593	—	107,593
Interest and other income	(132,772)	(29,608)	(187,429)	(59,998)	(1,009,327)
Interest expense	—	—	—	475	26,034
Realized gain on sale of marketable equity securities	—	—	—	—	(76,032)
Total other income	(45,054)	(29,608)	(79,836)	(59,523)	(951,731)
Net loss	(1,422,212)	(4,894,400)	(3,001,561)	(7,458,657)	(56,820,987)
Preferred stock dividends (including imputed amounts)	—	—	—	—	(1,179,644)
Net loss applicable to common shares	$ (1,422,212)	$ (4,894,400)	$ (3,001,561)	$ (7,458,657)	$ (58,000,631)
Net loss per common share:					
Basic and diluted	$ (0.02)	$ (0.07)	$ (0.04)	$ (0.11)	
Weighted average shares of common stock outstanding:					
Basic and diluted	70,624,232	70,463,543	70,624,232	65,377,865	

See accompanying notes to unaudited condensed consolidated financial statements.

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

	Series A convertible preferred stock	Series A convertible preferred stock	Common stock	Common stock	Additional paid-in capital	Subscription receivable	Deficit accumulated during development stage	Dividends payable in Series A preferred stock	Accumulated other comprehensive income (loss)	Unearned consulting services	Total stockholders' equity (deficiency)
	Shares	Amount	Shares	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
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)	(4,000)	(56,796)	—	—	—	(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	1,000,000	1,000	—	—	9,045,176	—	—	—	—	—	9,046,176
Imputed preferred stock dividend					418,182	—	(418,182)	—			—
Net loss	—	—	—	—	—	—	(5,960,907)	—	—	—	(5,960,907)
Balance at December 31, 2003	1,000,000	1,000	23,362,396	23,362	14,289,535	—	(7,473,205)	—	(7,760)	—	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	24,901	25	—	—	281,073	—	—	(282,388)	—	—	(1,290)
Conversion of preferred stock to common stock at $1.10 per share	(170,528)	(171)	1,550,239	1,551	(1,380)	—	—	—	—	—	—
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	854,373	854	28,309,187	28,309	18,083,208	—	(13,955,035)	303,411	13,237	(20,168)	4,453,816

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

	Series A convertible preferred stock	Series A convertible preferred stock	Common stock	Common stock	Additional paid-in capital	Subscription receivable	Deficit accumulated during development stage	Dividends payable in Series A preferred stock	Accumulated other comprehensive income (loss)	Unearned consulting services	Total stockholders' equity (deficiency)
	Shares	Amount	Shares	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
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	41,781	42	—	—	477,736	—	—	(479,074)	—	—	(1,296)
Conversion of preferred stock to common stock at $1.10 per share	(896,154)	(896)	8,146,858	8,147	(7,251)	—	—	—	—	—	—
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
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	—	—	—	—	295,664	—	—	—	—	—	295,664
Net loss	—	—	—	—	-	—	(3,001,561)	—	—	—	(3,001,561)
Balance at June 30, 2008	—	$ —	70,624,232	$ 70,624	$ 54,483,025	$ —	$ (58,000,631))	$ —	$ —	$ —	$ (3,446,982)

See accompanying notes to condensed consolidated financial statements.

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

	Six months ended June 30,		Cumulative period from August 6, 2001 (inception) to
	2008	2007	June 30, 2008
Cash flows from operating activities:			
Net loss	$ (3,001,561)	$ (7,458,657)	$ (56,820,987)
Adjustments to reconcile net loss to net cash used in operating activities:			
Equity in loss of Hedrin JV	107,593	—	107,593
Share-based compensation	295,664	706,549	3,660,647
Shares issued in connection with in-licensing agreement	—	112,500	232,500
Warrants issued to consultant	—	—	83,670
Amortization of intangible assets	—	—	145,162
Gain on sale of marketable equity securities	—		(76,032)
Depreciation	15,631	29,974	211,456
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	2,962	—	8,552
Changes in operating assets and liabilities, net of acquisitions:			
(Increase)/decrease in prepaid expenses and other current assets	80,311	(88,071)	(77,296)
Increase in other assets	—	-	(70,506)
Increase /(decrease) in accounts payable	(662,139)	(371,447)	1,037,559
Increase in accrued expenses	257,569	978,377	309,425
Net cash used in operating activities	(2,903,970)	(6,090,775)	(37,064,526)
Cash flows from investing activities:			
Purchase of property and equipment	(8,972)	(9,135)	(239,607)
Cash paid in connection with acquisitions	—	—	(26,031)
Net cash provided from the purchase and sale of short-term investments, net	—	—	435,938
Proceeds from the sale of license	—	—	200,001
Investment in Hedrin JV's general partner	(13,620)	—	(13,620)
Net cash (used in) provided by investing activities	(22,592)	(9,135)	356,681
Cash flows from financing activities:			
Repayments of notes payable to stockholders	—	—	(884,902)
Proceeds related to sale of common stock, net	—	7,854,153	25,896,262
Proceeds from sale of preferred stock, net	—	—	9,046,176
Proceeds from exercise of warrants and stock options	—	7,228	138,219
Proceeds from the Hedrin JV Agreement, net	2,703,230	—	2,703,230
Sale of warrant	150,000	—	150,000
Other, net	—	—	235,214
Net cash provided by financing activities	2,853,230	7,861,381	37,284,199
Net (decrease) increase in cash and cash equivalents	(73,332)	1,761,471	576,354
Cash and cash equivalents at beginning of period	649,686	3,029,118	—
Cash and cash equivalents at end of period	$ 576,354	$ 4,790,589	$ 576,354
Supplemental disclosure of cash flow information:			
Interest paid	$ —	$ 475	$ 26,033
Supplemental disclosure of noncash investing and financing activities:			
Common stock issued in satisfaction of accounts payable	$ —	$ 20,000	$ 750,000
Imputed preferred stock dividend	—	—	418,182
Preferred stock dividends accrued	—	—	761,462
Preferred stock dividends paid by issuance of shares	—	—	9,046,176
Conversion of preferred stock to common stock	—	—	759,134
Issuance of common stock for acquisitions	—	—	13,389,226
Issuance of common stock in connection with in-licensing agreement	—	112,500	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)
Investment in Hedrin JV	250,000	—	250,000
Cashless exercise of warrants	—	6	33

See accompanying notes to condensed consolidated financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of Manhattan Pharmaceuticals, Inc. and its 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, 2008 or for any other interim period. These unaudited condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements as of and for the year ended December 31, 2007, which are included in the Company's Annual Report on Form 10-K for such year. The condensed balance sheet as of December 31, 2007 has been derived from the audited financial statements included in the Form 10-K for that year.

As of December 31, 2006 all of the Company's subsidiaries had either been dissolved or merged into Manhattan. As a result, the Company had no subsidiaries during the six month periods ended June 30, 2008 and 2007.

As of June 30, 2008, the Company has not generated any revenues from the development of its products and is therefore considered to be a development stage company.

Segment Reporting

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

Income Taxes

Effective January 1, 2007, the Company adopted the provisions of Financial Accounting Standards Board ("FASB") Interpretation No. 48 ("FIN 48"), "Accounting for Uncertainty in Income Taxes – an interpretation of FASB No. 109". The implementation of FIN 48 had no impact on the Company's consolidated financial statements as the Company has no unrecognized tax benefits. The Company's policy is to recognize interest and penalties related to income tax matters in income tax expense.

Equity in Joint Venture

The Company accounts for its investment in joint venture (See Note 8) 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 December 2007, the FASB issued SFAS No. 141(R), a revised version of SFAS No. 141, “Business Combinations” (“SFAS 141R”). The revision is intended to simplify existing guidance and converge rulemaking under U.S. generally accepted accounting principles with international accounting standards. SFAS 141R applies prospectively to business combinations where the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. An entity may not apply it before that date. The Company is currently evaluating the impact of the provisions of the revision on its consolidated results of operations and financial condition.

In March 2008, the FASB issued SFAS No. 161 "Disclosures About Derivative Instruments and Hedging Activities - an amendment of FASB Statement No. 133" ("SFAS 161"). SFAS 161 amends SFAS 133 by requiring expanded disclosures about an entity's derivative instruments and hedging activities. SFAS 161 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. SFAS 161 is effective for the Company as of January 1, 2009. The Company does not believe that SFAS 161 will have any impact on its consolidated financial statements.

2. LIQUIDITY

The Company incurred a net loss of $3,001,561 and negative cash flows from operating activities of $2,903,970 for the six month period ended June 30, 2008. The net loss applicable to common shares from date of inception, August 6, 2001, to June 30, 2008 amounts to $58,000,631.

The Company received approximately $7.9 million net of expenses from a private placement of common stock and warrants in March 2007. This private placement is more fully described in Note 6.

The Company received approximately $2.0 million in February 2008 and approximately $1.0 million in June 2008 from a joint venture agreement. This joint venture agreement is more fully described in Note 8.

Management believes that the Company will continue to incur net losses through at least June 30, 2009 and for the foreseeable future thereafter. Based on the resources of the Company available at June 30, 2008 and the net proceeds received from the February 2008 joint venture agreement, management does not believe that the Company has sufficient capital to fund its operations into the fourth quarter of 2008. Management believes that the Company has an immediate need for capital in order to sustain its operations and will need additional equity or debt financing or will need to generate revenues through licensing of its products or entering into strategic alliances to be able to sustain its operations through 2008. 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 the Company’s ability to continue as a going concern. The accompanying condensed consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

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.

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 the assumed exercise of 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 of diluted net loss per share were 19,450,189 and 18,634,521 as of June 30, 2008 and 2007, respectively. These amounts do not include the shares issuable in connection with the Hedrin JV (see Note 8); the 17,857,143 shares of common stock issuable upon exercise of the put or call rights; the up to 17,857,143 additional shares which may become issuable upon exercise of a conditionally issuable put or call rights and the 7,142,857 shares of common stock issuable upon exercise of a conditionally issuable warrant.

4. SHARE-BASED COMPENSATION

Effective January 1, 2006, the Company adopted Statement of Financial Accounting Standards No. 123(R), "Share-Based Payment," ("Statement 123(R)") for employee options using the modified prospective transition method. Statement 123(R) revised Statement 123 "Accounting for Stock-based Compensation" to eliminate 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 six month periods ending June 30, 2008 and 2007 based on the grant date fair value estimated in accordance with Statement 123(R). This 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 of Statement 123; and (b) period compensation cost related to share-based payments granted on or after January 1, 2006. 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. The Company recognized share-based compensation cost of $102,810 and $371,339 for the three month periods ended June 30, 2008 and 2007 respectively, and $295,664 and $706,549 for the six month periods ended June 30, 2008 and 2007, respectively, in accordance with Statement 123(R), in accordance with Statement 123(R). The Company did not capitalize any share-based compensation cost.

Options granted to consultants and other non-employees are accounted for in accordance with Emerging Issues Task Force ("EITF") No. 96-18 "Accounting for Equity Instruments That Are Issued to Other than Employees for Acquiring, or in Conjunction with Selling, Goods or Services", and Financial Accounting Standards Board Interpretation No 28 "Accounting for Stock Appreciation Rights and Other Variable Option or Award Plans". 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, the Company recognized share-based compensation (credit) / cost of $(287) and $259, respectively, for the three-and six months ended June 30, 2008 and $185 and $3,556, respectively for the three-and six months ended June 30, 2007.

The Company has allocated share-based compensation costs and credits to general and administrative and research and development expenses as follows:

	Three months ended June 30,		Six months ended June 30,	
	2008	2007	2008	2007
General and administrative expense:				
Share-based employee compensation cost	$ 75,362	$ 249,623	$ 215,405	$ 471,544
Share-based consultant and non-employee (credit) cost	—	—	—	10,550
	$ 75,362	$ 249,623	$ 215,405	$ 482,094
Research and development expense:				
Share-based employee compensation cost	$ 27,735	$ 121,531	$ 80,000	$ 231,449
Share-based consultant and non-employee (credit) cost	(287)	185	259	(6,994)
	$ 27,448	$ 121,716	$ 80,259	$ 224,455
Total share-based cost	$ 102,810	$ 371,339	$ 295,664	$ 706,549

To compute compensation expense in 2008 and 2007, 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 data related to its common stock for the application of Statement 123(R). 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 as permitted by the Securities and Exchange Commission's Staff Accounting Bulletin No. 107 and 110. The expected forfeiture rates are based on the historical 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 2008 and 2007:

	Three months ended June 30,		Six months ended June 30,	
	2008	**2007**	**2008**	**2007**
Expected Volatility	92.3%	79.7 - 93.2%	92.3%	79.7 - 93.2%
Dividend yield	-	-	-	-
Expected term (in years)	6	6 - 8	6	6 - 8
Risk-free interest rate	2.81%	4.56% - 4.96%	2.81%	4.56% - 4.96%

The Company has shareholder-approved stock incentive 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 common stock. The Company increased the number of shares of common stock reserved for issuance under the 2003 Plan in August 2005 by 2,000,000 shares and in May 2007 by 3,000,000 shares. At June 30, 2008, under the 2003 Plan, 10,400,000 shares of common stock were authorized for issuance. At June 30, 2008, under the 2003 Plan, options to purchase 9,629,096 shares of common stock were outstanding. At June 30, 2008, there were 770,904 shares reserved for future grants under the 2003 Plan. The options have a maximum term of 10 years and vest over a period determined by the Company’s Board of Directors (generally three 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. Under the 2003 Plan, the Company granted options to purchase an aggregate of 2,967,500 shares of common stock during the six months ended June 30, 2008 at an exercise price of $0.17 per share. In addition, 27,776 shares of common stock were issued during 2007 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 shares reserved for stock option grants. In June 2005, the 1995 Plan expired and no further options can be granted. As of June 30, 2008, options to purchase 1,137,240 shares were outstanding under the 1995 Plan and no shares were reserved for future stock option grants.

A summary of the status of the Company's outstanding stock options as of June 30, 2008 and changes during the six months then ended is presented below:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at December 31, 2007	8,033,808	$ 1.25		
Granted:				
Officers	2,400,000			
Directors	375,000			
Employees	192,500			
Total granted	2,967,500	0.17		
Exercised	-			
Cancelled	(224,972)	0.17		
Outstanding at June 30, 2008	10,766,336	$ 0.93	7.46	$ -
Exercisable at June 30, 2008	8,004,692	$ 1.12	6.80	
Weighted average fair value of options granted during the six months ended June 30, 2008	$ 0.13			

As of June 30, 2008, the total compensation cost related to non-vested option awards not yet recognized is $628,515. The weighted average period over which it is expected to be recognized is approximately 1.7 years.

5. COMMITMENTS AND CONTINGENCIES

Swiss Pharma

Swiss Pharma Contract LTD, or Swiss Pharma, a clinical site that the Company used in one of its obesity trials, gave notice to the Company that Swiss Pharma believes it is entitled to receive an additional payment of $322,776 for services in connection with that clinical trial. While the contract between the Company and Swiss Pharma provides for additional payments if certain conditions are met, Swiss Parma has not specified which conditions they believe have been achieved and the Company does not believe that Swiss Pharma is entitled to additional payments and has not accrued any of these costs as of June 30, 2008 and December 31, 2007. The contract between the Company and Swiss Pharma provides for arbitration in the event of a dispute, such as this claim for an additional payment. On March 10, 2008, Swiss Pharma filed for arbitration with the Swiss Chamber of Commerce. As the Company does not believe that Swiss Pharma is entitled to additional payments, the Company intends to defend its position in arbitration. On April 2, 2008, the Company filed its statement of defense and counterclaim for recovery of costs incurred by the Company as a result of Swiss Pharma's failure to meet agreed upon deadlines under the contract. On June 3, 2008 a hearing was held before the arbitrator. The arbitrator's decision is expected in late August or early September.

Therapeutics, Inc.

During 2007, we entered into an agreement with Therapeutics, Inc. for the conduct of a Phase 2a clinical trial of PTH (1-34). The amount of the agreement is approximately $845,000. The remaining financial commitment at June 30, 2008 related to the conduct of the clinical trial is approximately $100,000. This clinical trial concluded in the beginning of the third quarter of 2008.

Contentions of a Former Employee

In February 2007, a former employee of the Company alleged an ownership interest in two of the Company's provisional patent applications covering our discontinued product development program for Oleoyl-estrone. Also, without articulating precise legal claims, the former employee contends that the Company wrongfully characterized the former employee's separation from employment as a resignation instead of a dismissal in an effort to harm the former employee's immigration sponsorship efforts, and, further, to wrongfully deprive the former employee of the former employee's alleged rights in two of the Company's provisional patent applications. The former employee is seeking an unspecified amount in damages. The Company refutes the former employee's contentions and intends to vigorously defend itself should the former employee file claims against the Company. There have been no further developments with respect to these contentions.

Employment Agreements

The Company has employment agreements with two employees for the payment of aggregate annual base salaries of $675,000 as well as performance based bonuses. These agreements have a remaining term of nine months for one of the employees, and one year for the second employee, and have a total remaining obligation under these agreements of $589,469 as of June 30, 2008.

6. PRIVATE PLACEMENT OF COMMON SHARES

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 June 30, 2008 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 BioCapital, Inc. ("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.

7. IN-LICENSING TRANSACTIONS

Altoderm License Agreement

On April 3, 2007, the Company entered into a license agreement for "Altoderm" (the "Altoderm Agreement") with Thornton & Ross LTD ("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 accordance with the terms of the Altoderm Agreement, the Company issued 125,000 shares of its common stock, valued at $112,500, and made a cash payment of $475,000 to T&R upon the execution of the agreement. These amounts have been included in research and development expense. Further, the Company agreed to make future milestone payments to T&R comprised of various combinations of cash and common stock in respective aggregate amounts of $5,675,000 and 875,000 shares of common stock upon the achievement of various clinical and regulatory milestones. The Company also agreed to pay royalties on net sales of products using the licensed patent rights at rates ranging from 10% to 20%, depending on the level of annual net sales, and subject to an annual minimum royalty payment of $1 million in each year following the first commercial sale of Altoderm. The Company may sublicense the patent rights. The Company agreed to pay T&R 30% of the royalties received by the Company under such sublicense agreements.

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 accordance with the terms of the Altolyn Agreement, the Company made a cash payment of $475,000 to T&R upon the execution of the agreement. This amount is included in research and development expense. Further, the Company agreed to make future cash milestone payments to T&R in an aggregate amount of $5,675,000 upon the achievement of various clinical and regulatory milestones. The Company also agreed to pay royalties on net sales of products using the licensed patent rights at rates ranging from 10% to 20%, depending on the level of annual net sales, and subject to an annual minimum royalty payment of $1 million in each year following the first commercial sale of Altolyn. The Company may sublicense the patent rights. The Company agreed to pay T&R 30% of the royalties received by the Company under such sublicense agreements.

Hedrin License Agreement

On June 26, 2007, the Company entered into an exclusive license agreement for “Hedrin” (the “Hedrin License Agreement”) with 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 License Agreement with the consent of Licensor and the proceeds resulting from such sublicenses will be shared with the Licensor.

Pursuant to the Hedrin 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 Hedrin Supply Agreement, the Company may obtain products from an alternative supplier subject to certain conditions. The term of the Hedrin Supply Agreement ends upon termination of the Hedrin License Agreement.

8. 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 $2,058,683. 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%. Under the amended terms, upon classification of Hedrin by the FDA as a Class II or Class III medical device Nordic is obligated to invest an additional $1.25 million, for a total investment of $5 million, into the Hedrin JV, the Hedrin JV is obligated to pay an additional $0.5 million, for a total of $3.5 million, to the Company and the Hedrin JV is 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. The Company's exchange obligation increased by $894,546 as a result of the June 2008 closing. The $894,546 represents the gross amount paid in June 2008 by the Hedrin JV to the Company of $1,000,000 offset by the costs of the Hedrin JV Agreement transaction recognized by the Company subsequent to the February closing.

During the six months ended June 30, 2008 the Company recognized $107,593 of equity in the loss of the Hedrin JV. At June 30, 2008, the Company's investment in the Hedrin JV is $142,408 and the Company's exchange obligation is $2,953,230.

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 $0.14, 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 $0.14. 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, which for 2008, on an annualized basis, is $527,000. As of June 30, 2008, the Company has recognized $183,266 of other income from management fees earned from the Hedrin JV which is included in the Company's Condensed Consolidated Statement of Operations for the six months ended june 30, 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 7.1 million shares of the Company's common stock, exercisable for $0.14 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 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.

The Hedrin JV's Board consists of 4 members, 2 appointed by the Company and 2 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.

After the closing, at Nordic's request, the Company will nominate a person identified by Nordic to serve on 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 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 registration statement to be declared effective by the Securities and Exchange Commission ("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. As of the date of the filing of this Quarterly Report on Form 10-Q, the Company is negotiating an extension to the Effective Date, which has already passed, to reflect the time it has taken Nordic and the Company to resolve certain SEC comments concerning the current registrability of the shares underlying the put and call rights held by Nordic (which rights have not yet been exercised).

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 5% 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 10% 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 if the payment milestone described above is met, $2.5 million if it is not met) plus 10% per year, less the cumulative distributions received by Nordic from the Hedrin JV. Further, in no event shall Nordic's distribution in liquidation be greater than assets available for distribution in liquidation.

Due to the complexity of the accounting for the Hedrin JV transaction, the Company has requested and received guidance from the SEC on the appropriate accounting for this transaction. The accounting as disclosed in this Form 10Q for the quarterly period ended June 30, 2008 takes into consideration this guidance. As a result of this guidance the Company's Form 10Q for the quarter period ended March 31, 2008 will need to be amended. The net effect of applying this guidance and amending the March 31, 2008 financial statements is an increase in assets of $230,000 (Investment in Hedrin JV), an increase liabilities of $2,059,000 (Exchange obligation), a decrease in Additional paid-in capital of $1,809,000 and an increase in net loss of $20,000 (Equity in loss of Hedrin JV).

9. 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 estimate 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.

10. SUBSEQUENT EVENT

In July 2008, the Company announced top-line results from its Phase 2a clinical study of topical PTH (1-34) for the treatment of psoriasis. This multi-center, randomized, double-blind, vehicle-controlled, parallel group study was designed to assess the safety and preliminary efficacy of two dose levels of topical PTH (1-34) for the treatment of mild to moderate plaque psoriasis. While the study did achieve the primary safety objective, the data did not demonstrate a statistically significant improvement in the overall disease severity of treatment lesions or signs and symptoms of psoriasis (redness, scaling, plaque thickness, and itch) as compared to the vehicle (placebo) gel. Topical PTH (1-34) appeared to be well tolerated with no serious adverse events reported. The Company intends to further analyze and assess these data in order to determine appropriate next steps for the program.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders
Manhattan Pharmaceuticals, Inc.

We have audited the accompanying consolidated balance sheets of Manhattan Pharmaceuticals, Inc. and Subsidiaries (a development stage company) as of December 31, 2007 and 2006, and the related consolidated 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, 2007. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated 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 consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Manhattan Pharmaceuticals, Inc. and Subsidiaries as of December 31, 2007 and 2006, and their consolidated 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, 2007, in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has incurred net losses and negative cash flows from operating activities from its inception through December 31, 2007 and has an accumulated deficit and negative working capital as of December 31, 2007. These matters raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plan regarding these matters are also described in Note 2. The accompanying consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

As discussed in Note 3 to the consolidated financial statements, the Company changed the manner in which it accounts for share-based compensation in fiscal 2006.

/s/ J.H. Cohn LLP

Roseland, New Jersey
March 28, 2008

MANHATTAN PHARMACEUTICALS, INC. and SUBSIDIARIES
(A Development Stage Company)

Consolidated Balance Sheets

	December 31, 2007	December 31, 2006
Assets		
Current assets:		
Cash and cash equivalents	$ 649,686	$ 3,029,118
Prepaid expenses	215,852	264,586
Total current assets	865,538	3,293,704
Property and equipment, net	44,533	83,743
Other assets	70,506	70,506
Total assets	$ 980,577	$ 3,447,953
Liabilities and Stockholders' Equity (Deficiency)		
Current liabilities:		
Accounts payable	$ 1,279,485	$ 1,393,296
Accrued expenses	592,177	550,029
Total liabilities	1,871,662	1,943,325
Commitments and contingencies		
Stockholders' equity (deficiency):		
Preferred stock, $.001 par value. Authorized 1,500,000 shares; no shares issued and outstanding at December 31, 2007 and 2006		
Common stock, $.001 par value. Authorized 150,000,000 shares; 70,624,232 and 60,120,038 shares issued and outstanding at December 31, 2007 and December 31, 2006, respectively	70,624	60,120
Additional paid-in capital	54,037,361	44,411,326
Deficit accumulated during the development stage	(54,999,070)	(42,966,818)
Total stockholders' equity (deficiency)	(891,085)	1,504,628
Total liabilities and stockholders' equity (deficiency)	$ 980,577	$ 3,447,953

See accompanying notes to consolidated financial statements.

MANHATTAN PHARMACEUTICALS, INC. and SUBSIDIARIES
(A Development Stage Company)

Consolidated Statements of Operations

	Years ended December 31,		Cumulative period from August 6, 2001 (inception) to December 31,
	2007	**2006**	**2007**
Revenue	$ —	$ —	$ —
Costs and expenses:			
Research and development	8,535,687	6,172,845	26,489,043
General and administrative	3,608,270	3,827,482	13,852,363
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	12,143,957	10,000,327	54,691,321
Operating loss	(12,143,957)	(10,000,327)	(54,691,321)
Other (income) expense:			
Interest and other income	(112,181)	(307,871)	(821,897)
Interest expense	476	1,665	26,034
Realized (gain)/loss on sale of marketable equity securities	—	1,002	(76,032)
Total other income	(111,705)	(305,204)	(871,895)
Net loss	(12,032,252)	(9,695,123)	(53,819,426)
Preferred stock dividends (including imputed amounts)	—	—	(1,179,644)
Net loss applicable to common shares	$ (12,032,252)	$ (9,695,123)	$ (54,999,070)
Net loss per common share:			
Basic and diluted	$ (0.18)	$ (0.16)	
Weighted average shares of common stock outstanding:			
Basic and diluted	68,015,075	60,112,333	

See accompanying notes to consolidated financial statements.

MANHATTAN PHARMACEUTICALS, INC. and SUBSIDIARIES
(A Development Stage Company)

Consolidated Statement of Stockholders' Equity (Deficiency)

	Series A convertible preferred stock	Series A convertible preferred stock	Common stock	Common stock	Additional paid-in capital	Subscription receivable	Deficit accumulated during development stage	Dividends payable in Series A preferred stock	Accumulated other comprehensive income (loss)	Unearned consulting services	Total stockholders' equity (deficiency)
	Shares	Amount	Shares	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
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)	(4,000)	(56,796)	—	—	—	(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	1,000,000	1,000	—	—	9,045,176	—	—	—	—	—	9,046,176
Imputed preferred stock dividend					418,182	—	(418,182)	—			—
Net loss	—	—	—	—	—	—	(5,960,907)	—	—	—	(5,960,907)
Balance at December 31, 2003	1,000,000	1,000	23,362,396	23,362	14,289,535	—	(7,473,205)	—	(7,760)	—	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	24,901	25	—	—	281,073	—	—	(282,388)	—	—	(1,290)
Conversion of preferred stock to common stock at $1.10 per share	(170,528)	(171)	1,550,239	1,551	(1,380)	—	—	—	—	—	—
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	854,373	854	28,309,187	28,309	18,083,208	—	(13,955,035)	303,411	13,237	(20,168)	4,453,816

MANHATTAN PHARMACEUTICALS, INC. and SUBSIDIARIES
(A Development Stage Company)

Consolidated Statement of Stockholders' Equity (Deficiency)

	Series A convertible preferred stock	Series A convertible preferred stock	Common stock	Common stock	Additional paid-in capital	Subscription receivable	Deficit accumulated during development stage	Dividends payable in Series A preferred stock	Accumulated other comprehensive income (loss)	Unearned consulting services	Total stockholders' equity (deficiency)
	Shares	Amount	Shares	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
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	41,781	42	—	—	477,736	—	—	(479,074)	—	—	(1,296)
Conversion of preferred stock to common stock at $1.10 per share	(896,154)	(896)	8,146,858	8,147	(7,251)	—	—	—	—	—	—
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
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)

See accompanying notes to consolidated financial statements.

MANHATTAN PHARMACEUTICALS, INC. and SUBSIDIARIES
(A Development Stage Company)

Consolidated Statements of Cash Flows

	Years ended December 31,		Cumulative period from August 6, 2001 (inception) to December 31,
	2007	**2006**	**2007**
Cash flows from operating activities:			
Net loss	$ (12,032,252)	$ (9,695,123)	$ (53,819,426)
Adjustments to reconcile net loss to net cash used in operating activities:			
Share-based compensation	1,440,956	1,675,499	3,364,983
Shares issued in connection with in-licensing agreement	232,500	—	232,500
Warrants issued to consultant	83,670	—	83,670
Amortization of intangible assets	—	—	145,162
(Gain)/loss on sale of marketable equity securities	—	1,002	(76,032)
Depreciation	48,345	60,186	195,825
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	—	—	5,590
Changes in operating assets and liabilities, net of acquisitions:			
Decrease (increase) in prepaid expenses and other current assets	48,734	(69,810)	(157,607)
Increase in other assets	—	—	(70,506)
Increase (decrease) in accounts payable	(93,812)	(224,193)	1,699,698
Increase in accrued expenses	42,148	501,701	51,856
Net cash used in operating activities	(10,229,711)	(7,750,738)	(34,160,556)
Cash flows from investing activities:			
Purchase of property and equipment	(9,134)	(37,052)	(230,635)
Cash paid in connection with acquisitions	—	—	(26,031)
Net cash provided from the purchase and sale of short-term investments	—	1,005,829	435,938
Proceeds from sale of license	—	—	200,001
Net cash (used in) provided by investing activities	(9,134)	968,777	379,273
Cash flows from financing activities:			
Repayments of notes payable to stockholders	—	—	(884,902)
Proceeds (costs) related to sale of common stock, net	7,852,185	(15,257)	25,896,262
Proceeds from sale of preferred stock, net	—	—	9,046,176
Proceeds from exercise of warrants and stock options	7,228	—	138,219
Other, net	—	—	235,214
Net cash provided by (used in) financing activities	7,859,413	(15,257)	34,430,969
Net (decrease) increase in cash and cash equivalents	(2,379,432)	(6,797,218)	649,686
Cash and cash equivalents at beginning of period	3,029,118	9,826,336	—
Cash and cash equivalents at end of period	$ 649,686	$ 3,029,118	$ 649,686
Supplemental disclosure of cash flow information:			
Interest paid	$ 475	$ 1,665	$ 26,033
Supplemental disclosure of noncash investing and financing activities:			
Common stock issued in satisfaction of accounts payable	$ 20,000	$ —	$ 770,000
Imputed preferred stock dividend	—	—	418,182
Preferred stock dividends accrued	—	—	761,462
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		232,500
Marketable equity securities received in connection with sale of license	—	—	359,907
Warrants issued to consultant	83,670	—	83,670
Net liabilities assumed over assets acquired in business combination	—	—	(675,416)
Cashless exercise of warrants	6	27	33

See accompanying notes to consolidated 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 clinical stage 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 four product candidates in development: Hedrin™, a novel, non-insecticide treatment of pediculitis (head lice); Topical PTH (1-34) for the treatment of psoriasis; Altoderm™ (topical cromolyn sodium) for the treatment of pruritus associated with dermatologic conditions including atopic dermatitis; and Altolyn™ (oral tablet cromolyn sodium) for the treatment of mastocytosis. During 2007, the Company discontinued development of Oleoyl-estrone and Propofol Lingual Spray.

Acquisition of Tarpan Therapeutics, Inc.

On April 1, 2005, the Company entered into an Agreement and Plan of Merger (the "Agreement") with Tarpan Therapeutics, Inc., a Delaware corporation ("Tarpan"), and Tarpan Acquisition Corp., a Delaware corporation and wholly-owned subsidiary of the Company ("TAC"). Under the Agreement TAC merged with and into Tarpan, with Tarpan remaining as the surviving corporation and a wholly-owned subsidiary of the Company (the "Merger"). The Merger was completed April 1, 2005. In consideration for their shares of Tarpan capital stock and in accordance with the Agreement, the stockholders of Tarpan received 10,731,052 shares of the Company's common stock such that, upon the effective time of the Merger, the Tarpan stockholders collectively received approximately 20 percent of the Company's then outstanding common stock on a fully-diluted basis. Based on the five day average price of the Company's common stock of $1.03 per share, the value of the shares issued totaled $11,052,984. In addition, there were $166,184 of acquisition costs. At the time of the Merger, Tarpan had outstanding indebtedness of $651,000 (inclusive of 5% accrued interest) resulting from a series of promissory notes issued to Paramount BioCapital Investments, LLC and Horizon BioMedical Ventures, LLC, both of which are owned or controlled by Dr. Lindsay Rosenwald. The notes were repaid in full by the Company in two installments on April 15, 2005 and September 6, 2005.

The acquisition of Tarpan has been accounted for by the Company under the purchase method of accounting in accordance with Statement of Financial Accounting Standards ("SFAS") No. 141 "Business Combinations". 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.

Several of Tarpan's former stockholders were directors or significant stockholders of the Company at the time of the transaction. Dr. Rosenwald and various trusts established for the benefit of Dr. Rosenwald and members of his immediate family collectively beneficially owned approximately 46 percent of Tarpan's common stock and beneficially owned approximately 26 percent of the Company's common stock at the time of the transaction. In addition, Joshua Kazam, David Tanen, Dr. Michael Weiser and Timothy McInerney, all of whom were members of the Company's board of directors at the time of the transaction, collectively owned approximately 13.4 percent of Tarpan's outstanding common stock. At the time of the transaction, Dr. Weiser and Mr. McInerney were employed by Paramount BioCapital, Inc., an entity owned and controlled by Dr. Rosenwald. As a result of such relationships between the Company and Tarpan, the Company's board of directors established a special committee to consider and approve the Agreement. The members of the special committee did not have any prior relationship with Tarpan.

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 Financial Accounting Standards Board ("FASB") Interpretation No. 4, "Applicability of FASB Statement No. 2 to Business combinations Accounted for by the Purchase Method" ("FIN 4"), 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. Tarpan was a biopharmaceutical company engaged in the development of the Phase II pharmaceutical product candidate, PTH (1-34).

(2) Liquidity and Basis of Presentation

Liquidity

The Company incurred a net loss of $12,032,252 and negative cash flows from operating activities of $10,229,711 for the year ended December 31, 2007 and a net loss of $9,695,123 and negative cash flows from operating activities of $7,750,738 for the year ended December 31, 2006. The net loss applicable to common shares from date of inception, August 6, 2001, to December 31, 2007 amounts to $54,999,070.

The Company received approximately $7.9 million net from a private placement of common stock and warrants in March 2007. This private placement is more fully described in Note 5.

The Company received approximately $2.0 million from a joint venture agreement in February 2008. This joint venture agreement is more fully described in Note 12.

Management believes that the Company will continue to incur net losses through at least December 31, 2008 and for the foreseeable future thereafter. Based on the resources of the Company available at December 31, 2007 and the net proceeds received from the February 2008 joint venture agreement management does not believe that the Company has sufficient capital to fund its operations through 2008. Management believes that the Company will need additional equity or debt financing or will need to generate revenues through licensing of its products or entering into strategic alliances to be able to sustain its operations through 2008. 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 the Company's ability to continue as a going concern. The accompanying consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

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.

(3) Summary of Significant Accounting Policies

Basis of Presentation

The Company has not generated any revenue from its operations and, accordingly, the consolidated financial statements have been prepared in accordance with the provisions of SFAS No. 7, "Accounting and Reporting by Development Stage Enterprises."

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation. All of the Company's subsidiaries were dissolved as of December 31, 2006.

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.

Acquired in-process research and development

Costs to acquire in-process research and development projects and technologies which have no alternative future use at the date of acquisition are 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 16,903,292 and 13,383,229 shares at December 31, 2007 and 2006, respectively.

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 under the recognition and measurement provisions of Accounting Principles Board (“APB”) Opinion No. 25, “Accounting for Stock Issued to Employees” and related interpretations, as permitted by Statement of Financial Accounting Standards (“SFAS” or “Statement”) No. 123, “Accounting for Stock-Based Compensation.”

Effective January 1, 2006, the Company adopted SFAS No. 123(R), “Share-Based Payment,” (“Statement 123(R)”) for employee options using the modified prospective transition method. Statement 123(R) revised Statement 123 to eliminate 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, 2007 and 2006 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 of Statement 123; 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 Statement 123(R). 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, 2007 and 2006, the Company recognized share-based employee compensation cost of $1,447,560 and $1,670,661, respectively, in accordance with Statement 123(R). $890,124 of the $1,447,560 of expense recognized in 2007 resulted from the grant of stock options to officers, directors, and employees of the Company on or prior to December 31, 2005. $1,500,690 of the $1,670,661 of the expense recognized in 2006 resulted from the grants of stock options to officers, directors and employees of the Company on or prior to December 31, 2005. The balances for the years ended December 31, 2007 and 2006 of $557,436 and $169,971, respectively, relate to the granting of stock options to employees and officers on or after January 1, 2006. The Company did not capitalize any share-based compensation cost.

Options granted to consultants and other non-employees are accounted for in accordance with EITF No. 96-18 "Accounting for Equity Instruments That Are Issued to Other than Employees for Acquiring, or in Conjunction with Selling, Goods or Services". 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 December 31, 2007 and 2006 respectively, net of amortization, the Company recognized an increase to general and administrative and research and development expenses of $6,604 for the year ended December 31, 2007 and a reduction to general and administrative and research and development expenses of $4,838 for the year ended December 31, 2006.

The Company has allocated share-based compensation costs to general and administrative and research and development expenses as follows:

	2007	2006
General and administrative expense:		
Share-based employee compensation cost	$ 891,897	$ 1,176,618
Share-based consultant and non-employee cost	10,550	(29,842)
	$ 902,447	$ 1,146,776
Research and development expense		
Share-based employee compensation cost	$ 555,663	$ 494,043
Share-based consultant and non-employee cost	(17,154)	34,680
	$ 538,509	$ 528,723
Total share-based cost	$ 1,440,956	$ 1,675,499

As a result of adopting Statement 123(R), net loss for the year ended December 31, 2006 was greater than if the Company had continued to account for share-based compensation under APB 25 by approximately $1,671,000. The effect of adopting Statement 123(R) on basic and diluted earnings per share for the year ended December 31, 2006 was $0.03 per share.

To compute compensation expense in 2007 and 2006 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 for the application of Statement 123 (R). 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 as prescribed in Staff Accounting Bulletin No. 107. 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 2007 and 2006:

	2007	2006
Expected volatility	93%	84% - 98%
Dividend yield	—	—
Expected term (in years)	5 - 10	5 - 10
Risk-free interest rate	3.6% - 4.9%	4.45% - 5.1%
Forfeiture rate	7%	4%

Financial Instruments

At December 31, 2007 and 2006, the fair values of cash and cash equivalents and accounts payable approximate their carrying values due to the short-term nature of these instruments.

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.

Short-term Investments

Short-term investments are carried at market value since they are marketable and considered available-for-sale. The Company did not have any short-term investments at December 31, 2007 or 2006.

New Accounting Pronouncements

In September 2006, the FASB issued SFAS No. 157, “Fair Value Measurements” (“SFAS 157”), which defines fair value, establishes a framework for measuring fair value in accordance with generally accepted accounting principles (“GAAP”) in the United States of America, and expands disclosures about fair value measurements. SFAS 157 does not require any new fair value measurements under GAAP and is effective for fiscal years beginning after November 15, 2007. The Company will adopt SFAS 157 as of January 1, 2008. The effects of adoption will be determined by the types of instruments carried at fair value in our financial statements at the time of adoption, as well as the method utilized to determine their fair values prior to adoption. Based on the Company’s current use of fair value measurements, SFAS 157 is not expected to have a material effect on its results of operations or financial position.

In February 2007, the FASB issued SFAS No. 159, “The Fair Value Option for Financial Assets and Financial Liabilities,” (SFAS 159), which provides companies with an option to report selected financial assets and liabilities at fair value. SFAS 159 establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities and highlights the effect of a company’s choice to use fair value on its earnings. It also requires a company to display the fair value of those assets and liabilities for which it has chosen to use fair value on the face of the balance sheet. SFAS 159 will be effective beginning January 1, 2008 and is not expected to have a material impact on the Company’s consolidated financial statements.

In June 2007, the FASB issued EITF No. 07-3, “Accounting for Nonrefundable Advance Payments for Goods or Services Received for use in Future Research and Development Activities” (“EITF No. 07-3”). EITF No. 07-3 states that nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities should be deferred and capitalized. Such amounts should be recognized as an expense as the related goods are delivered or the related services are performed. Entities should continue to evaluate whether they expect the goods to be delivered or services to be rendered. If an entity does not expect the goods to be delivered or services to be rendered, the capitalized advance payment should be charged to expense. The provisions of EITF No. 07-3 will be effective for the Company on a prospective basis beginning January 1, 2008, evaluated on a contract by contract basis and is not expected to have a material impact on the Company’s consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141(R), a revised version of SFAS No. 141,“Business Combinations.” The revision is intended to simplify existing guidance and converge rulemaking under U.S. generally accepted accounting principles with international accounting standards. This statement applies prospectively to business combinations where the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. An entity may not apply it before that date. The Company is currently evaluating the impact of the provisions of the revision on its consolidated results of operations and financial condition.

In December 2007, the FASB issued SFAS No. 160, “Noncontrolling Interests in Consolidated Financial Statements” (“SFAS 160”), which will require noncontrolling interests (previously referred to as minority interests) to be treated as a separate component of equity, not as a liability or other item outside of permanent equity. This statement applies to the accounting for noncontrolling interests and transactions with noncontrolling interest holders in consolidated financial statements. SFAS 160 will be applied prospectively to all noncontrolling interests, including any that arose before the effective date except that comparative period information must be recast to classify noncontrolling interests in equity, attribute net income and other comprehensive income to noncontrolling interests, and provide other disclosures required by SFAS 160. SFAS 160 is effective for periods beginning on or after December 15, 2008. We are currently evaluating the impact that SFAS 160 will have on our consolidated financial statements.

The FASB and the Securities and Exchange Commission had issued certain other accounting pronouncements as of December 31, 2007 that will become effective in subsequent periods; however, the Company does not believe that any of those pronouncements would have significantly affected its financial accounting measures or disclosures had they been in effect during the years ended December 31, 2007 and 2006 and for the period from August 6, 2001 (inception) to December 31, 2007 or that will have a significant effect at the time they become effective.

(4) Property and Equipment

Property and equipment consists of the following at December 31:

	2007	2006
Property and equipment	$ 226,010	$ 244,040
Less accumulated depreciation	(181,477)	(160,297)
Net property and equipment	$ 44,533	$ 83,743

(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 consolidated 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"), as more fully described in Note 8. 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 warrant 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.

(6) Stock Options

2003 Stock Option Plan

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. At December 31, 2006, 7,400,000 shares were authorized for issuance. In May 2007, the Company increased the number of shares of common stock reserves for issuance under the 2003 Plan by 3,000,000 shares. At December 31, 2007, 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. Under the 2003 Plan, the Company granted employees options to purchase an aggregate of 870,000 shares of common stock at an exercise price of $0.95, 75,000 shares of common stock at an exercise price of $0.82 and 397,500 shares of common stock at an exercise price of $0.72 during the year ended December 31, 2007. In addition, 27,776 shares of common stock were issued during 2007 under the 2003 Plan.

At December 31, 2007 there were 3,475,626 shares reserved for future grants under the 2003 Plan.

1995 Stock Option 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 shares reserved for stock option grants. In June 2005 the 1995 Plan expired and no further options can be granted. At December 31, 2007 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 December 31, 2007 and changes during the year then ended is presented below:

	2007			
	Shares	**Weighted average exercise price**	**Weighted Average Remaining Contractual Term (years)**	**Aggregate Intrinsic Value**
Outstanding at beginning of year	7,000,504	$ 1.310		
Granted	1,342,500	$ 0.875		
Exercised	-			
Cancelled	(309,166)	$ 0.336		
Outstanding at end of year	8,033,838	$ 1.253	6.887	$
Options exercisable at year-end	5,601,714	$ 1.263	6.625	$
Weighted-average fair value of options granted during the year	$ 0.63			

As of December 31, 2007 and 2006, the total compensation cost related to non-vested option awards not yet recognized is $539,046 and $1,365,581, respectively. The weighted average period over which it is expected to be recognized is approximately 0.5 and 0.9 years, respectively.

The following table summarizes the information about stock options outstanding at December 31, 2007:

Exercise Price	Number of Options Outstanding	Remaining Contractual Life (years)	Number of Options Exercisable
$ 0.40	876,090	5.16	876,090
0.43	400	5.15	400
0.70	220,000	8.53	73,333
0.72	365,000	9.09	32,500
0.82	75,000	9.08	-
0.89	16,667	8.38	16,667
0.95	670,000	9.32	100,000
0.97	440,000	6.75	440,000
1.00	65,000	4.24	65,000
1.00	290,698	7.04	290,698
1.25	12,000	4.08	12,000
1.25	163,750	4.14	163,750
1.35	108,333	8.08	64,999
1.35	300,000	8.09	300,000
1.35	60,000	8.53	20,000
1.50	2,923,900	7.25	1,949,277
1.50	250,000	2.58	25,000
1.60	100,000	7.46	75,000
1.65	1,077,000	6.08	1,077,000
4.38	10,000	3.14	10,000
20.94	10,000	2.28	10,000
Total	8,033,838		5,601,714

(7) Stock Warrants

The following table summarizes the information about warrants to purchase shares of our common stock outstanding at December 31, 2007:

Exercise price	Number of Warrants outstanding	Remaining contractual life (years)	Number of warrants exercisable
$ 0.28	150,000	4.64	150,000
0.78	10,000	1.98	10,000
1.00	3,564,897	4.25	3,564,897
1.00	509,275	4.25	509,275
1.10	909,090	.85	909,090
1.10	326,499	1.04	326,499
1.44	2,161,767	2.65	2,161,767
1.44	540,449	2.65	540,449
1.44	135,135	2.65	135,135
1.49	221,741	2.67	221,741
1.49	55,000	2.67	55,000
1.90	10,000	1.21	10,000
1.90	90,000	1.21	90,000
6.69	185,601	.10	185,601
Total	8,869,454		8,869,454

(8) Related-Party Transactions

Oleoylestrone Developments, SL

The Company entered into a consulting agreement with OED. The agreement became effective in February 2002, at a fee of $6,250 per month. The agreement was terminated in November 2007. The fees associated with the consulting agreement are expensed as incurred. OED currently owns approximately 5.7 percent of the Company's outstanding common stock. Additionally, Mr. Pons, chief executive officer of OED, was a member of the Company's board of directors until his resignation in July 2007.

Total milestone payments under the license agreement of $0, $250,000 and $675,000 and consulting fees of $68,750, $75,000 and $431,250 are included in the accompanying consolidated statements of operations for the years ended December 31, 2007, 2006 and for the cumulative period from August 6, 2001 to December 31, 2007.

Paramount BioCapital, Inc.

One member of the Company's board of directors, Timothy McInerney, was an employee of Paramount or one of its affiliates until April 2007. Another member of the Company's board of directors, Michael Weiser, was an employee of Paramount until December 2006. In addition, two former members of the Company's board of directors, Joshua Kazam and David Tanen, were employed by Paramount through August 2004 and were directors of the Company until September 2005. The sole shareholder of Paramount is Lindsay A. Rosenwald, M.D. Dr. Rosenwald beneficially owns more than 5 percent of the Company's common stock as of December 31, 2007 and various trusts established for Dr. Rosenwald's or his family's benefit, held in excess of 12% of the Company's common stock as of December 31, 2007. In November 2003, the Company paid to Paramount approximately $460,000 as commissions earned in consideration for placement agent services rendered in connection with the private placement of the Company's Series A Convertible Preferred Stock, which amount represented 7 percent of the value of the shares sold by Paramount in the offering. In addition, in January 2004, the Company paid approximately $260,000 as commissions earned in consideration for placement agent services rendered by Paramount in connection with a private placement of the Company's common stock, which amount represented 7 percent of the value of the shares sold by Paramount in the private placement. In connection with both private placements and as a result of their employment with Paramount, Mr. Kazam, Mr. McInerney and Dr. Weiser were allocated 5-year placement agent warrants to purchase 60,174, 58,642 and 103,655 shares of the Company's common stock, respectively, at a price of $1.10 per share.

Paramount also served as the Company's placement agent in connection with the August 2005 private placement. As placement agent, the Company paid to Paramount total cash commissions of $839,816 relating to the August 26, 2005 closing, of which $121,625 was paid to certain selected dealers engaged by Paramount in connection with the private placement and issued five-year warrants to purchase an aggregate of 540,449 shares of common stock exercisable at a price of $1.44 per share, of which Paramount received warrants to purchase 462,184 common shares. In connection with the August 30 closing, the Company paid cash commissions to Paramount of $88,550 and issued an additional five-year warrant to purchase 55,000 common shares exercisable at a price of $1.49 per share.

Paramount also served as the Company's placement agent in connection with the March 2007 private placement. As placement agent, the Company paid to Paramount aggregate cash commissions of approximately $600,000 and issued to Paramount a 5-year warrant to purchase an aggregate of 509,275 shares of common stock at an exercise price of $1.00 per share.

(9) Income Taxes

There was no current or deferred tax expense for the years ended December 31, 2007 or 2006 because of the Company's operating losses.

The components of deferred tax assets as of December 31, 2007 and 2006 are as follows:

	2007	2006
Deferred tax assets:		
Tax loss carryforwards	$ 22,513,000	$ 18,265,000
Research and development credit	1,769,000	1,374,000
In-process research and development charge	4,850,000	4,850,000
Stock based compensation	1,270,000	682,000
Other	85,000	29,000
Gross deferred tax assets	30,487,000	25,200,000
Less valuation allowance	(30,487,000)	(25,200,000)
Net deferred tax assets	$ —	$ —

The reasons for the difference between actual income tax benefit for the years ended December 31, 2007 and 2006 and the amount computed by applying the statutory federal income tax rate to losses before income tax benefit are as follows:

	2007		2006	
	Amount	% of pretax loss	Amount	% of pretax loss
Federal income tax benefit at statutory rate	$ (4,102,000)	(34.0)%	$ (3,296,000)	(34.0)%
State income taxes, net of federal tax	(820,000)	(6.8)%	(659,000)	(6.8)%
Research and development credits	(366,000)	(3.0)%	(200,000)	(1.7)%
Other	1,000	0.0%	(166,000)	(2.1)%
Change in valuation allowance	5,287,000	43.8%	4,321,000	44.6%
	—	—%	—	—%

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, 2007 and 2006 was an increase of $5,287,000 and $4,321,000, 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, 2007, the Company had unused federal and state net operating loss carryforwards of approximately $56,963,000 and $46,261,000, respectively. The net operating loss carryforwards expire in various amounts through 2027 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, 2007, the Company also had research and development credit carryforwards of approximately $1,769,000 for federal income tax purposes which expire in various amounts through 2027.

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 2004. The Company adopted the provisions of FIN 48, "Accounting for Uncertainty in Income Taxes – an interpretation of FASB Statement No. 109" on January 1, 2007 with no material impact to the consolidated financial statements. The Company had no unrecognized tax benefits during 2007 that would affect the annual effective tax rate and no unrecognized tax benefits as of January 1, 2007 and December 31, 2007. 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.

(10) 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 is 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 requires 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. At December 31, 2007 this $300,000 liability is reflected in accounts payable.

In addition, the Company is 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 is obligated to pay IGI, Inc. an annual royalty of 9% annual net sales. Through December 31, 2007, the Company has not paid any such royalties.

IGI, Inc. may terminate the agreement (i) upon 60 days' notice if the Company fails to make any required milestone or royalty payments, or (ii) if the Company becomes bankrupt or if a petition in bankruptcy is filed, or if the Company is placed in the hands of a receiver or trustee for the benefit of creditors. IGI, Inc. may terminate the agreement upon 60 days' written notice and an opportunity to cure in the event the Company commits a material breach or default. Eighteen months from the date of the IGI Agreement, the Company may terminate the agreement in whole or as to any portion of the PTH patent rights upon 90 days' notice to IGI, Inc.

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 joint venture, see note 12- Subsequent Events, Joint Venture with Nordic.

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 accordance with the terms of the Altoderm Agreement, the Company issued 125,000 shares of its common stock, valued at $112,500, and made a cash payment of $475,000 to T&R upon the execution of the agreement. These amounts have been included in research and development expense. Further, the Company agreed to make future milestone payments to T&R comprised of various combinations of cash and common stock in respective aggregate amounts of $5,675,000 and 875,000 shares of common stock upon the achievement of various clinical and regulatory milestones. The Company also agreed to pay royalties on net sales of products using the licensed patent rights at rates ranging from 10% to 20%, depending on the level of annual net sales, and subject to an annual minimum royalty payment of $1 million in each year following the first commercial sale of Altoderm. The Company may sublicense the patent rights. The Company agreed to pay T&R 30% of the royalties received by the Company under such sublicense agreements.

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 accordance with the terms of the Altolyn Agreement, the Company made a cash payment of $475,000 to T&R upon the execution of the agreement. This amount is included in research and development expense. Further, the Company agreed to make future cash milestone payments to T&R in an aggregate amount of $5,675,000 upon the achievement of various clinical and regulatory milestones. The Company also agreed to pay royalties on net sales of products using the licensed patent rights at rates ranging from 10% to 20%, depending on the level of annual net sales, and subject to an annual minimum royalty payment of $1 million in each year following the first commercial sale of Altolyn. The Company may sublicense the patent rights. The Company agreed to pay T&R 30% of the royalties received by the Company under such sublicense agreements.

OED License Agreement for Oleoyl-estrone
On February 15, 2002, the Company entered into a License Agreement (the "License Agreement") with OED. Under the terms of the License Agreement, OED granted to the Company a world-wide license to make, use, lease and sell the products incorporating the licensed technology (see Note 1). OED also granted to the Company the right to sublicense to third parties the licensed technology or aspects of the licensed technology with the prior written consent of OED. OED retains an irrevocable, nonexclusive, royalty-free right to use the licensed technology solely for its internal, noncommercial use. The License Agreement shall terminate automatically upon the date of the last to expire patent contained in the licensed technology or upon the Company's bankruptcy. OED may terminate the License Agreement in the event of a material breach by the Company that is not cured within the notice period. The Company may terminate the License Agreement for any reason upon 60 days notice. The Company terminated this agreement in November 2007.

In addition to the License Agreement, the Company entered into a consulting agreement with OED. The agreement became effective in February 2002, at a fee of $6,250 per month, and terminated when the License Agreement terminated. The fees associated with the consulting agreement are expensed as incurred.

Under the License Agreement, the Company agreed to pay to OED certain licensing fees which are being expensed as they are incurred. The Company paid $175,000 in up front licensing fees which is included in 2002 research and development expense. In addition, pursuant to the License Agreement, the Company issued 1,000,000 shares of its common stock to OED. The Company valued these shares at their then estimated fair value of $1,000.

In connection with the License Agreement, the Company has agreed to milestone payments to OED as follows:

(i) $250,000 upon the treatment of the first patient in a Phase I clinical trial under a Company-sponsored investigational new drug application ("IND"), which was paid in 2005; (ii) $250,000 upon the treatment of the first patient in a Phase II clinical trial under a Company-sponsored IND, which was paid in 2006; (iii) $750,000 upon the first successful completion of a Company-sponsored Phase II clinical trial under a Company-sponsored IND; (iv) $2,000,000 upon the first successful completion of a Company-sponsored Phase III clinical trial under a Company sponsored IND; and (v) $6,000,000 upon the first final approval of the first new drug application for the first licensed product by the United States Food and Drug Administration (“FDA”). Through December 31, 2007, the Company paid a total of $675,000 in licensing fees and milestone payments. The Company has no further financial liability or commitment to OED under the License Agreement.

NovaDel Agreement for Propofol Lingual Spray
In April 2003, the Company entered into a license and development agreement with NovaDel, under which the Company received certain worldwide, exclusive rights to develop and commercialize products related to NovaDel’s proprietary lingual spray technology for delivering propofol for pre-procedural sedation. Under the terms of this agreement, the Company agreed to use its commercially reasonable efforts to develop and commercialize the licensed products, to obtain necessary regulatory approvals and to thereafter exploit the licensed products. The agreement also provides that NovaDel will undertake to perform, at the Company’s expense, a substantial portion of the development activities, including, without limitation, preparation and filing of various applications with applicable regulatory authorities.

In consideration for the Company’s rights under the NovaDel license agreement, the Company paid NovaDel an initial license fee of $500,000 in 2003. In addition, the license agreement requires the Company to make certain milestone payments as follows: $1,000,000 payable following the date that the first NDA for lingual spray propofol is accepted for review by the FDA; $1,000,000 following the date that the first European Marketing Application is accepted for review by any European Union country; $2,000,000 following the date when the first filed NDA for lingual spray propofol is approved by the FDA; $2,000,000 following the date when the first filed European Marketing Application for lingual spray propofol is accepted for review; $1,000,000 following the date on which an application for commercial approval of lingual spray propofol is approved by the appropriate regulatory authority in each of Australia, Canada, Japan and South Africa; and $50,000 following the date on which an application for commercial approval for lingual spray propofol is approved in any other country (other than the U.S., a member of the European Union, Australia, Canada, Japan or South Africa).

In addition, the Company is obligated to pay to NovaDel an annual royalty based on a fixed rate of net sales of licensed products, or if greater, the annual royalty is based on the Company’s net profits from the sale of licensed products at a rate that is twice the net sales rate. In the event the Company sublicenses the licensed product to a third party, the Company is obligated to pay royalties based on a fixed rate of fees or royalties received from the sublicensee until such time as the Company recovers its out-of-pocket costs, and thereafter the royalty rate doubles. Because of the continuing development efforts required of NovaDel under the agreement, the royalty rates are substantially higher than customary for the industry. Through December 31, 2007, the Company has incurred, and paid a total of $500,000 under the NovaDel license agreement, the initial license fee paid in 2003. The Company terminated this agreement during 2007 and has no continuing obligations under this agreement.

(11) Commitments and Contingencies

Swiss Pharma
Swiss Pharma Contract LTD ("Swiss Pharma"), a clinical site that the Company used in one of its obesity trials, gave notice to the Company that Swiss Pharma believes it is entitled to receive an additional payment of $322,776 for services in connection with that clinical trial. While the contract between the Company and Swiss Pharma provides for additional payments if certain conditions are met, Swiss Parma has not specified which conditions they believe have been achieved and the Company does not believe that Swiss Pharma is entitled to additional payments and has not accrued any of these costs as of December 31, 2007. The contract between the Company and Swiss Pharma provides for arbitration in the event of a dispute, such as this claim for an additional payment. Swiss Pharma has filed a demand for arbitration. As the Company does not believe that Swiss Pharma is entitled to additional payments, it intends to defend its position in arbitration. The arbitration is currently in its initial stages.

Therapeutics, Inc.
During 2007, we entered into an agreement with Therapeutics, Inc. for the conduct of a Phase 2a clinical trial of PTH (1-34). The amount of the agreement is approximately $845,000. At December 31, 2007, we recognized research and development expense of $483,000 related to the conduct of this clinical trial. At December 31, 2007, we recognized prepaid expense of $19,000 related to this clinical trial. The remaining financial commitment related to the conduct of the clinical trial is approximately $340,000. This clinical trial is expected to conclude in the second quarter of 2008.

Contentions of a Former Employee
In February 2007, a former employee of the Company alleged an ownership interest in two of the Company's provisional patent applications. Also, without articulating precise legal claims, the former employee contends that the Company wrongfully characterized the former employee's separation from employment as a resignation instead of a dismissal in an effort to harm the former employee's immigration sponsorship efforts, and, further, to wrongfully deprive the former employee of the former employee's alleged rights in two of the Company's provisional patent applications. The former employee is seeking an unspecified amount in damages. The Company refutes the former employee's contentions and intends to vigorously defend itself should the former employee file claims against the Company. There have been no further developments with respect to these contentions.

Employment Agreement
The Company has employment agreements with two employees for the payment of aggregate annual base salary of $530,000 as well as performance based bonuses. These agreements have three year terms and have a remaining obligation of $394,000 as of December 31, 2007.

Leases
The Company leases office space under a non-cancellable lease terminating in September 2008. Rent expense was $141,012 for each of the years ended December 31, 2007 and 2006.

Future minimum rental payments subsequent to December 31, 2007 under an operating lease for the Company's office facility are as follows:

Years Ending December 31,	Commitment
2008	$ 100,000
2009 and subsequent	$ 0

12. Subsequent events

Joint Venture with Nordic

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”) 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 (the "Hedrin JV") and provided it with initial funding of $2.5 million. The Company assigned and transfered its North American rights in Hedrin to the Hedrin JV in return for a $2.0 million cash payment and equity in the Hedrin JV representing 50% of the nominal equity interests in the Hedrin JV .

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 to the Company an additional $2.5 million in equity in the Hedrin JV, thereby maintaining the Company’s 50% ownership interest in the Hedrin JV.

The Hedrin JV will be 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 will engage the Company to provide management services to the Limited Partnership in exchange for an annualized management fee, which for 2008, on an annualized basis, is $527,000.

Nordic paid to the Company a non-refundable fee of $150,000 at the closing for the right to receive a warrant covering 7.1 million shares of the Company’s common stock, exercisable for $0.14 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 per share exercise price of the warrant was 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.

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 p that Nordic decides to put to the Company multiplied by the dollar amount of Nordic’s investment in Limited Partnership divided by $0.14, 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 $0.14. 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 's Board will consist of 4 members, 2 appointed by the Company and 2 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. In the event that the payment milestone described above is not achieved by June 30, 2008, then the Hedrin JV 's Board will increase to 5 members, 2 appointed by the Company and 3 appointed by Nordic.

After the closing, at Nordic's request, the Company will nominate a person identified by Nordic to serve on the Company's Board of Directors.

The Company will grant Nordic registration rights for the shares to be issued upon exercise of the warrant, the put or the call. The Company is required to file an initial registration statement within 10 calendar days of filing its Form 10-K for the year ended December 31, 2007. 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 registration statement to be declared effective by the Securities and Exchange Commission ("SEC") within 105 calendar days from the filing 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 Limited Partnership, which are currently 50% to each, except that Nordic will get a minimum guaranteed return from the Hedrin JV equal to 5% 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 10% 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 if the payment milestone described above is met, $2.5 million if it is not met) plus 10% per year, less the cumulative distributions received by Nordic from the Hedrin JV. Further, in no event shall Nordic's distribution in liquidation be greater than assets available for distribution in liquidation.

American Stock Exchange

In September 2007, we received notice from the staff of AMEX, indicating that we were not in compliance with certain continued listing standards set forth in the American Stock Exchange Company guide. Specifically, the American Stock Exchange notice cited our failure to comply, as of June 30, 2007, with section 1003(a)(ii) of the AMEX Company Guide as we 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 us to maintain $6,000,000 of stockholders' equity if we have experienced losses from continuing operations and /or net losses in its five most recent fiscal years.

In order to maintain our AMEX listing, we were required to submit a plan to AMEX advising the exchange of the actions we have taken, or will take, that would bring us into compliance with all the continued listing standards by April 16, 2008. We submitted such a plan in October 2007. If we are not in compliance with the continued listing standards at the end of the plan period, or if we do not make progress consistent with the plan during the period, AMEX staff may initiate delisting proceedings.

Under the terms of the Joint Venture Agreement, the number of potentially issuable shares represented by the put and call features of the Hedrin agreement, and the warrant issuable to Nordic, would exceed 19.9% of our total outstanding shares and would be issued at a price below the greater of book or market value. As a result, under AMEX regulations, we would not be 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. We estimate that obtaining stockholder approval to comply with AMEX regulations would take a minimum of 45 days to complete. We have discussed the financial viability exception with AMEX for several weeks and have neither received the exception nor been denied the exception. We determined that our financial condition required us to complete the transaction immediately, and that the Company's financial viability depends on its completion of the transaction without further delay.

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

Our common stock now trades on the Over the Counter Bulletin Board ("OCTBB") under the symbol "MHAN". We intend to maintain corporate governance, disclosure and reporting procedures consistent with applicable law.

33,928,571 Shares
of Common Stock

Manhattan Pharmaceuticals, Inc.

Prospectus

_____ __, 2008

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	$	175.00
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	$	23,175.00

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.***

In connection with the Registrant's merger of its wholly-owned subsidiary Tarpan Acquisition Corp., with Tarpan Therapeutics, Inc. ("Tarpan"), effective as of April 1, 2005, it issued an aggregate of 10,731,052 shares of its common stock to the former stockholders of Tarpan in exchange for their shares of Tarpan common stock. The Registrant relied on the exemption from federal registration under Section 4(2) of the Securities Act, based on its belief that the issuance of such securities did not involve a public offering, as there were fewer than 35 "non-accredited" investors, all of whom, either alone or through a purchaser representative, had such knowledge and experience in financial and business matters so that each was capable of evaluating the risks of the investment.

In August 2005, the Registrant sold in a private placement offering to accredited investors units of its securities consisting of shares of common stock and warrants to purchase additional shares of common stock. The private placement was completed in two separate closings held on August 26, 2005 and August 30, 2005. In the August 26 closing, the Registrant sold a total of 10,763,926 shares of common stock and five-year warrants to purchase 2,152,758 shares for total gross proceeds of approximately $11.95 million. The warrants issued at the August 26 closing are exercisable at a price of $1.44 per share, which represented approximately 110% of the average closing price of the Registrant's common stock during the five trading days preceding such closing date. On August 30, 2005, the Registrant sold an additional 1,108,709 shares of common stock and five-year warrants to purchase 221,741 shares of common stock, which resulted in gross proceeds of approximately $1.28 million. The warrants issued in connection with the August 30 closing are exercisable at a price of $1.49 per share, which represented approximately 110% of the average closing price of the Company's common stock during the five trading days preceding such closing date. The total gross proceeds resulting from this offering was approximately $13.22 million, before deducting selling commissions and expenses. The Registrant paid total cash commissions of approximately $925,000 to selling agents engaged in connection with the offering and issued 5-year warrants to purchase an aggregate of 593,196 shares of common stock, of which warrants to purchase 538,196 shares are exercisable at a price of $1.44 per share and the remaining are exercisable at a price of $1.49 per share. In connection with this offering, the Registrant relied on the exemption from federal registration under Section 4(2) of the Securities Act and/or Rule 506 promulgated thereunder, based on its belief that the offer and sale of the shares and warrants did not involve a public offering as each investor was "accredited" and no general solicitation was involved in the offering.

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 Manhattan, 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 Hedrin 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 at 50%. 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 will be required to contribute to the Hedrin JV an additional $1.25 million in cash, $0.5 million of which will be distributed to us and equity in the Hedrin JV will be distributed to each of us and Nordic sufficient to maintain our respective ownership interests at 50%. Upon classification by the FDA of Hedrin as a Class II or Class III medical device, the Hedrin JV will have received a total of $1.5 million cash to be applied toward the development and commercialization of Hedrin in North America. If classification of Hedrin by the FDA as a Class II or Class III medical device is not received by June 30, 2009, then Nordic will not be obligated to make the final payment of $1.25 million and Nordic will receive an additional 20% ownership of the joint venture and enhanced control over the joint venture's operations and other important decision-making. 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.

Pursuant to the Joint Venture Agreement, Nordic has the right to put all or a portion of its interest in the Hedrin JV in exchange for such number of shares of 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 the Registrant has provided Nordic notice thereof). Pursuant to the Joint Venture Agreement, the Registrant has the right to call all or a portion of Nordic's equity interest in the Hedrin JV in exchange for such number of shares of common stock equal to the portion of Nordic's investment in the Hedrin JV that the Registrant calls by the dollar amount of Nordic's investment as of such date in the Hedrin JV, divided by $0.14, as 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.

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, 3008. As of April 30, 2008, Nordic had not exercised all or any portion of its put right and the Registrant issued the warrant to Nordic.

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 (the “Note Holders”) for aggregate of $70,000. Principal and interest on the notes shall be paid in cash on March 10, 2009 unless paid earlier by the Registrant. 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.

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).
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 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 Current Report on Form 8-K filed on September 15, 2008)
5.1	Opinion of Lowenstein Sandler PC
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, 2078.)
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.
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 Current Report on Form 8-K filed on September 15, 2008)
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;

p*rovided, 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 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 3rd day of October 2008.

Manhattan Pharmaceuticals, Inc.

By: /s/ Michael G. McGuinness
Mr. 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 Douglas Abel and Michael G. McGuinness, and each of them, 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 Registration Statement below.

/s/ Douglas Abel Douglas Abel	Chief Executive Officer, President and Director (principal executive officer)	October 3, 2008
/s/ Michael G. McGuinness Michael G. McGuinness	Chief Operating and Financial Officer & Secretary (principal financial and accounting and officer)	October 3, 2008
/s/ Neil Herskowitz Neil Herskowitz	Director	October 3, 2008
/s/ Malcolm Hoenlein Malcolm Hoenlein	Director	October 3, 2008
/s/ Timothy McInerney Timothy McInerney	Director	October 3, 2008
/s/ Richard Steinhart Richard Steinhart	Director	October 3, 2008
/s/ Michael Weiser Michael Weiser	Director	October 3, 2008

October 3, 2008

Manhattan Pharmaceuticals, Inc.
48 Wall Street
New York, NY 10005

Dear Sirs:

We have acted as special counsel to Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "Company"), in connection with its preparation and filing with the Securities and Exchange Commission of a Registration Statement on Form S-1 (the "Registration Statement"), under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement covers the resale of an aggregate of 33,928,571 shares (the "Shares") of common stock, par value $0.001 per share, of the Company (the "Common Stock"), including: (i) 26,785,714 shares of Common Stock (the "Put Shares"), which are issuable upon exercise of the right of Nordic Biotech Venture Fund II K/S ("Nordic") to put all or a portion of Nordic's equity interest in a limited partnership of which the Company and Nordic are partners, in accordance with and subject to the terms and conditions of the Joint Venture Agreement, dated as of January 31, 2008, between the Company and Nordic, as amended on February 25, 2008 and on June 9, 2008 (the "Joint Venture Agreement"); and (ii) 7,142,857 shares of the Common Stock (the "Warrant Shares") issuable upon exercise of a currently outstanding warrant (the "Warrant").

In connection with this opinion, we have examined the Registration Statement. We have also examined such corporate records, certificates and other documents and such questions of law as we have considered necessary or appropriate for the purpose of this opinion. We have assumed: (A) the genuineness and authenticity of all documents submitted to us as originals and (B) the conformity to originals of all documents submitted to us as copies thereof. As to certain factual matters, we have relied upon certificates of officers of the Company and have not sought independently to verify such matters.

Based upon the foregoing, it is our opinion that:

(1) the Put Shares have been duly authorized and, when issued in accordance with the terms and conditions of the Joint Venture Agreement (including the due payment of any consideration therefor specified in the Joint Venture Agreement), will be validly issued, fully paid and non-assessable; and

(2) the Warrant Shares have been duly authorized and, when issued in accordance with the terms and conditions of the Warrant (including the due payment of any exercise price therefor specified in the Warrant), will be validly issued, fully paid and non-assessable.

Our opinion herein is expressed solely with respect to the federal laws of the United States and the laws of the State of Delaware. Our opinion is based on these laws as in effect on the date hereof.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the references to this firm under the heading "Legal Matters" in the prospectus, which is part of the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act.

Very truly yours,

/s/ Lowenstein Sandler PC

Lowenstein Sandler PC

JOINT VENTURE AGREEMENT

THIS JOINT VENTURE AGREEMENT (this "Agreement") is entered into as of January 31, 2008 by and between Manhattan Pharmaceuticals, Inc., a Delaware corporation ("MHA") and Nordic Biotech Venture Fund II K/S, a Danish limited liability partnership ("Nordic").

WITNESSETH:

WHEREAS, MHA and Nordic wish to enter into a joint venture arrangement by which Nordic contributes capital to a newly formed limited partnership known as Hedrin Pharmaceuticals K/S or such other name as is selected by MHA and Nordic ("Newco"), and MHA assigns and contributes the Assets (as defined below) to Newco;

WHEREAS, upon the consummation of the transactions contemplated by the Contribution Agreement (as defined below), and the execution and delivery by each of MHA and Nordic of the Partnership Agreement, MHA will own 50% of the partnership shares of Newco and Nordic will own 50% of the partnership shares of Newco (as such interest may be constituted from time to time, including as reduced pursuant to the terms hereof, the "Nordic Interest");

WHEREAS, MHA desires to grant to Nordic a put option with respect to the Nordic Interest, and Nordic desires to grant to MHA a call option with respect to the Nordic Interest, each in accordance with the terms and conditions of this Agreement, which shall be effective as of the Closing Date (as defined below); and

WHEREAS, in consideration of the execution and delivery of this Agreement and the consummation of the transactions contemplated hereby, MHA will (i) grant a warrant to purchase the Warrant Shares (as defined below) to Nordic and (ii) nominate a Nordic representative to MHA's board of directors.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto hereby agree as follows:

1. Definitions. The following terms shall have the following meanings given to them:

"Additional Agreements" means the Contribution Agreement, the Partnership Agreement, the Services Agreement, the Warrant, the Registration Rights Agreement and any officer's certificate delivered at the Closing.

"Adjusted Transaction Price" means the Transaction Price as adjusted in accordance with Section 5 hereof.

"Assets" means that term as defined in the Contribution Agreement.

"Business Day" means any day except Saturday, Sunday and any day that is a federal legal holiday or a day on which banking institutions in the state of New York are authorized or required by law or other governmental action to close.

"Call Closing" shall have the meaning set forth in Section 4.3 of this Agreement.

"Call Closing Date" shall have the meaning set forth in Section 4.3 of this Agreement.

"Call Consideration" means a number of shares of Common Stock determined in accordance with the following formula:

$$\frac{\text{(Investment Amount)*(1 - Call Reduction Factor)}}{\text{(Adjusted Transaction Price)}}$$

"Call Event" means the occurrence of thirty consecutive business days on which the closing sale price of the Common Stock as reported on the Trading Market exceeds seven and a half times the Transaction Price (the "Threshold Price").

"Call Notice" shall have the meaning set forth in Section 4.1 of this Agreement.

"Call Option" shall have the meaning set forth in Section 4.1 of this Agreement.

"Call Reduction Factor" shall have the meaning set forth in Section 4.3 of this Agreement.

"Common Stock" means the common stock of MHA, par value $0.001 per share, and any other class of securities into which such securities may hereafter be reclassified or changed into.

"Common Stock Equivalents" means any securities of MHA which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

"Contribution Agreement" means that certain Assignment and Contribution Agreement to be entered into by and between MHA and Nordic in the form attached hereto as Exhibit A.

"Conversion Factor" means (i) 1.00 at such time as Nordic Distributions are less than the Investment Amount, (ii) 1.25 at such time as Nordic Distributions are less than two times the Investment Amount but greater than or equal to the Investment Amount, (iii) 1.50 at such time as Nordic Distributions are less than three times the Investment Amount but greater than or equal to two times the Investment Amount, (iv) 2.00 at such time as Nordic Distributions are less than four times the Investment Amount but greater than or equal to three times the Investment Amount, and (v) 3.00 at such time as Nordic Distributions are greater than or equal to four times the Investment Amount.

"Conversion Percentage" means the percentage of the Nordic Interest that Nordic chooses to put pursuant to the Put Option set forth in Section 3.1.

"Conversion Shares" means the shares of Common Stock issuable upon exercise of the Warrants, the Put Option and the Call Option.

"Disclosure Schedules" means the Disclosure Schedules of MHA delivered concurrently herewith.

"Exempt Issuance" means the issuance of (a) shares of Common Stock or options to employees, officers or directors of MHA pursuant to any stock or option plan in effect on the date hereof or hereafter duly adopted for such purpose by a majority of the non-employee members of the Board of Directors of MHA or a majority of the members of a committee of non-employee directors, (b) securities upon the exercise or exchange of or conversion of any securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date hereof, provided that such securities have not been amended since the date hereof to increase the number of such securities or to decrease the exercise, exchange or conversion price of such securities, (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of MHA, but shall not include a transaction in which MHA is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities, and (d) less than 50,000 shares of Common Stock (subject to adjustment for stock splits, stock combinations, and the like), in the aggregate, which do not otherwise meet the conditions of clauses (a), (b) or (c) of this definition.

"General Partner" means a Danish private limited company that is the general partner of Newco.

"Investment Amount" means $2,500,000 if the Milestone Payment has not occurred, and $5,000,000 if the Milestone Payment has occurred.

"Maximum Return Date" means the later to occur of (i) the date that is thirty days after the date that Nordic Distributions exceed five times the Investment Amount, and (ii) the date that is ten days after the Nordic Distributions exceed five times the Investment Amount and MHA has provided written notice thereof to Nordic.

"Milestone Payment" means the payment by Nordic of an additional $2,500,000 to Newco after the satisfaction of the Payment Milestone (as defined in the Contribution Agreement).

"Nordic Distributions" means aggregate dividends or distributions from Newco actually received by Nordic.

"Partnership Agreement" means the Limited Partnership Agreement to be entered into by Nordic, MHA and the General Partner in the form attached hereto as Exhibit B.

"Person" means any individual, corporation, general or limited partnership, limited liability company, joint venture, estate, trust, association, organization, labor union, or other entity or governmental body.

"Proceeding" means any action, claim, suit, investigation or proceeding (including, without limitation, an investigation or partial proceeding, such as a deposition), whether commenced or threatened.

"Put Consideration" means a number of shares of Common Stock determined in accordance with the following formula:

$$\frac{\text{(Investment Amount)*(Conversion Percentage)}}{\text{(Adjusted Transaction Price)*(Conversion Factor)}}$$

"Put Closing" shall have the meaning set forth in Section 3.2 of this Agreement.

"Put Closing Date" shall have the meaning set forth in Section 3.2 of this Agreement.

"Put Notice" shall have the meaning set forth in Section 3.1 of this Agreement.

"Put Option" shall have the meaning set forth in Section 3.1 of this Agreement.

"Registration Rights Agreement" means that certain Registration Rights Agreement to be entered into by and between MHA and Nordic in the form attached hereto as Exhibit C.

"Representative" means with respect to a particular Person, any director, officer, employee, agent, consultant, advisor, or other representative of such Person, including legal counsel, accountants, and financial advisors.

"Securities" means, collectively, the Warrant and the Put Option.

"Securities Act" means the Securities Act of 1933, as amended.

"Trading Day" means any day on which the principal national securities exchange on which the Common Stock is admitted to trading or listed is open for trading, or if there is no such exchange or market, then any day except Saturdays, Sundays or federal holidays.

"Trading Market" means whichever of the New York Stock Exchange, the American Stock Exchange, the Nasdaq Global Market, the Nasdaq Global Select Market, the Nasdaq Capital Market or the OTC Bulletin Board on which the Common Stock is listed or quoted on the date in question.

"Transaction Price" means $0.14, as adjusted for stock dividends, combinations, stock splits, recapitalizations and reorganizations.

"Warrant Shares" means 7,142,857 shares of Common Stock.

2. Joint Venture Closing.

2.1 Closing Mechanics. The closing shall be held on February 18, 2008, or such earlier date as MHA and Nordic agree following the satisfaction or waiver of the closing conditions set forth in Section 2.3 hereof (the "Closing Date"). The Closing shall occur at the offices of MHA.

2.2 Deliveries.

(a) Upon satisfaction or waiver of all conditions of Nordic to the Closing, Nordic shall:

(i) execute and deliver the Partnership Agreement and capitalize Newco in accordance with the terms thereof;

(ii) execute and deliver the Shareholders Agreement attached hereto as Exhibit D and capitalize the General Partner in accordance with the terms thereof;

(iii) cause Newco to execute, deliver and perform under the Contribution Agreement;

(iv) cause Newco to execute and deliver the Services Agreement, in the form attached hereto as Exhibit E (the "Services Agreement");

(v) execute and deliver the Registration Rights Agreement; and

(vi) pay US$150,000 to MHA in consideration of the right to the issuance of the Warrant in the form attached hereto as Exhibit F for the Warrant Shares (the "Warrant") pursuant to Section 3.3.

(b) Upon satisfaction or waiver of all conditions of MHA to the Closing, MHA shall:

(i) execute and deliver the Partnership Agreement and capitalize Newco in accordance with the terms thereof;

(ii) execute and deliver the Shareholders Agreement attached hereto as Exhibit C and capitalize the General Partner in accordance with the terms thereof;

(iii) execute, deliver and perform under the Contribution Agreement;

(iv) execute and deliver the Services Agreement; and

(v) execute and deliver the Registration Rights Agreement.

2.2 Closing Conditions.

(a) MHA's obligations in connection with the Closing hereunder are subject to the fulfillment on or prior to the Closing of the following conditions, which conditions may be waived at the option of MHA to the extent permitted by law:

(i) Representations and Warranties Correct. The representations and warranties made by Nordic in Section 7 hereof shall be true and correct when made, and shall be true and correct in all material respects (if not qualified by materiality) and all respects (if qualified by materiality) on and as of the Closing Date (except for any representation or warranty that speaks as of a specific date, which shall be true and correct as of such date).

(ii) Covenants. All covenants, agreements and conditions contained in this Agreement to be performed by Nordic on or prior to the Closing Date shall have been performed or complied with in all material respects.

(iii) Closing Certificate. MHA shall have received a certificate executed by an officer of Nordic certifying that each of the conditions described in Sections 2.2(a)(i) and (ii) of this Agreement have been satisfied as of the Closing Date.

(iv) No Legal Order Pending. There shall not then be in effect any legal or other order enjoining or restraining the transactions contemplated by this Agreement.

(b) Nordic's obligations in connection with the Closing hereunder are subject to the fulfillment on or prior to the Closing of the following conditions, which conditions may be waived at the option of each Nordic to the extent permitted by law:

(i) Representations and Warranties Correct. The representations and warranties made by MHA in Section 8 hereof shall be true and correct when made, and shall be true and correct in all material respects (if not qualified by materiality) and all respects (if qualified by materiality) on and as of the Closing Date (except for any representation or warranty that speaks as of a specific date, which shall be true and correct as of such date).

(ii) Covenants. All covenants, agreements and conditions contained in this Agreement to be performed by MHA on or prior to the Closing Date shall have been performed or complied with in all material respects.

(iii) Closing Certificate. Nordic shall have received a certificate executed by the chief executive officer or chief financial officer of MHA certifying that each of the conditions described in Sections 2.2(b)(i) and (ii) of this Agreement have been satisfied as of the Closing Date.

(iv) No Legal Order Pending. There shall not then be in effect any legal or other order enjoining or restraining the transactions contemplated by this Agreement.

(v) Legal Opinion. Nordic shall have received an opinion of counsel to MHA in a form reasonably acceptable to Nordic that contains the opinions set forth in Exhibit G.

(vi) Consent of Third Parties. MHA shall have received all requisite consents and approvals of all third parties whose consent or approval is required in order for each of MHA and Nordic to consummate the transactions contemplated by this Agreement.

(vii) Approval of MHA's Board of Directors and Stockholders. MHA's Board of Directors, and if necessary, MHA's stockholders, shall have approved the transactions contemplated by this Agreement.

(viii) Due Diligence. The results of Nordic's financial, technical and legal due diligence of MHA, the Securities and the Assets shall be satisfactory to Nordic in its commercially reasonable discretion.

(ix) Material Adverse Effect. There shall be no Material Adverse Effect, and since the date of this Agreement, there shall have been no Material Adverse Effect.

(x) Registration Rights. Any outstanding registration rights relating to MHA securities shall have been subordinated to the rights of Nordic under the Registration Rights Agreement.

(xi) Shareholder Notice. MHA shall have satisfied all of the requirements of Section 710(b) of the Amex Company Guide of the American Stock Exchange, if applicable, including the submission of the written application to the Exchange's Listing Qualifications Department, the notice to MHA's shareholders and the public announcement of the transaction.

3. Put Option.

3.1 At any time or times after the Closing Date and prior to the earlier of the Maximum Return Date and the tenth anniversary of the Closing Date, Nordic may, by written notice to MHA (the "Put Notice"), elect to sell to MHA (and MHA hereby agrees to purchase from Nordic) all or a part of the Nordic Interest, as specified in the Put Notice, for the Put Consideration (the "Put Option").

3.2 The closing of the Put Option (the "Put Closing") shall take place simultaneously with the receipt by MHA of the Put Notice together with certificates evidencing the portion of the Nordic Interest being put, together with assignments, duly executed in blank, in proper form to transfer such portion of the Nordic Interest. MHA will, no later than three Trading Days following the Put Closing, deliver or cause to be delivered to Nordic a certificate representing the Put Consideration to Nordic. If such shares do not require a legend in accordance with this Agreement, the certificates representing the Put Consideration shall be transmitted by the transfer agent of MHA to Nordic by crediting the account of Nordic's prime broker with the Depository Trust Company System.

3.3 In the event that Nordic achieves its Put Option milestone by not exercising its Put Option, in whole or in part, on or before April 30, 2008, MHA shall within five (5) Business Days thereafter issue and deliver the Warrant to Nordic.

4. Call Option.

4.1 Upon the occurrence of a Call Event and prior to the fifth anniversary of the Closing Date, MHA may, by written notice to Nordic (the "Call Notice"), elect to purchase from Nordic (and Nordic hereby agrees to sell to MHA) portions of the Nordic Interest for the Call Consideration at the following rate (the "Call Option"):

(a) during the first thirty-day period following the occurrence of a Call Event, MHA may purchase up to 25% of the Nordic Interest;

(b) during the second thirty-day period following the occurrence of a Call Event, MHA may purchase up to 50% of the Nordic Interest less that portion of the Nordic Interest previously purchased by MHA pursuant to Section 4.1(a);

(c) during the third thirty-day period following the occurrence of a Call Event, MHA may purchase up to 75% of the Nordic Interest less that portion of the Nordic Interest previously purchased by MHA pursuant to Section 4.1(a) or (b); and

(d) during the fourth thirty-day period following the occurrence of a Call Event, MHA may purchase up to 100% of the Nordic Interest less that portion of the Nordic Interest previously purchased by MHA pursuant to Section 4.1(a), (b) or (c).

4.2 Notwithstanding anything to the contrary contained herein, in order to exercise the Call Option, the closing sale price of the Common Stock as reported on the Trading Market must exceed the Threshold Price on each consecutive trading day from the date of occurrence of the Call Event until the date of delivery of the Call Notice.

4.3 Notwithstanding Section 4.1, Nordic may elect to reduce by a percentage specified by Nordic (the "Call Reduction Factor") the amount of the Nordic Interest that may be called pursuant to the Call Option, by delivering to MHA, within fifteen days after receipt of the Call Notice, a written notice indicating the Call Reduction Factor and agreeing to one of the following: (i) that the amount of the Nordic Interest that may be put by Nordic shall be reduced by the same factor (i.e., the Call Reduction Factor), or (ii) that Nordic shall pay an amount, within fifteen days of the date of such notice, to MHA equal to $2,000,000 times the Call Reduction Factor.

4.4 The closing of the Call Option (the "Call Closing") shall take place at the offices of MHA at 10:00 a.m. (Eastern Standard Time) on the date that is thirty (30) days from the date of the delivery of the Call Notice, or such earlier date as MHA and Nordic may agree (the "Call Closing Date"). At the Call Closing, Nordic will deliver to MHA any certificates evidencing the portion of the Nordic Interest being called, together with assignments, duly executed in blank, in proper form to transfer such portion of the Nordic Interest, and MHA shall provide certificates representing the Call Consideration to Nordic.

5. Adjustments to Transaction Price.

5.1 If MHA, at any time while either of the Put Option or the Call Option remains outstanding, shall sell or grant any option, warrant or right to purchase, or sell or grant any right to reprice its securities, or otherwise dispose of or issue (or announce any offer, sale, grant or any option to purchase or other disposition) any Common Stock or Common Stock Equivalents entitling any Person to acquire shares of Common Stock, at an effective price per share less than the Transaction Price (such lower price, the "Base Share Price" and such issuances collectively, a "Dilutive Issuance") (if the holder of the Common Stock or Common Stock Equivalents so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share which is less than the Transaction Price, such issuance shall be deemed to have occurred for less than the Transaction Price on such date of the Dilutive Issuance), then the Transaction Price shall be reduced and only reduced to equal the Base Share Price. If shares of Common Stock or Common Stock Equivalents are issued or sold together with other stock or securities or other assets of MHA 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 be reasonably determined in good faith by the Board of Directors, to be allocable to such Common Stock or Common Stock Equivalents. Such adjustment shall be made whenever such Common Stock or Common Stock Equivalents are issued. Notwithstanding the foregoing, no adjustments shall be made, paid or issued hereunder in respect of an Exempt Issuance.

5.2 MHA shall notify Nordic in writing, no later than the day following the issuance of any Common Stock or Common Stock Equivalents subject to this Section, indicating therein the applicable issuance price, or applicable reset price, exchange price, conversion price and other pricing terms (such notice the "Dilutive Issuance Notice"). For purposes of clarification, whether or not MHA provides a Dilutive Issuance Notice pursuant to this Section, upon the occurrence of any Dilutive Issuance, after the date of such Dilutive Issuance the Transaction Price shall equal the Base Share Price regardless of whether Nordic accurately refers to the Base Share Price in the Put Notice or MHA accurately refers to the Base Share Price in the Call Notice.

6. Board Representation.

6.1 For so long as Nordic continues to have beneficial ownership of at least ten percent (10%) of the outstanding Common Stock of MHA (including shares of Common Stock issuable upon exercise of the Put Option, the Call Option and/or the Warrant), MHA shall provide Nordic written notice of any shareholder solicitation or action relating to the election of directors thirty (30) days prior to providing notice of any shareholder meeting or any written consent to MHA's stockholders. After receipt of such notice, Nordic may, by written notice sent to MHA within ten (10) days of receipt of such notice, request that MHA nominate, and MHA shall nominate, for election to MHA's Board of Directors (the "Board of Directors"), in connection with such shareholder solicitation or action, one candidate designated by Nordic (the "Nordic Designee"). In the event that Nordic shall desire to appoint a Nordic Designee otherwise than in connection with a shareholder solicitation or action relating to the election of directors, then as soon as practicable upon written notice from Nordic, MHA shall appoint a Nordic Designee to the Board of Directors. If MHA reasonably determines in good faith that any Nordic Designee fails to meet any of the criteria for service on the board of directors as set forth by applicable state law, the rules and regulations of the Securities and Exchange Commission or any exchange on which the securities of MHA are then listed, then MHA shall provide written notice of such determination (and the reasons therefor) to Nordic and provide Nordic the opportunity to either designate an alternative candidate or re-designate the original candidate if Nordic reasonably determines in good faith that MHA's reasons are invalid.

6.2 For purposes of this Agreement, all shares held by an affiliate (as defined in Rule 405 promulgated under the Securities Act) of Nordic will be deemed to be owned by Nordic.

6.3 MHA shall use its best efforts (a) to cause to be voted the shares for which MHA's management or the Board of Directors holds proxies or is otherwise entitled to vote in favor of the election of the Nordic Designee nominated pursuant to this Agreement; and (b) to cause the Board of Directors to recommend to its shareholders that they vote in favor of the Nordic Designee.

6.4 In the event that any Nordic Designee shall cease to serve as a director of MHA for any reason, the Board of Directors of MHA shall fill the vacancy resulting therefrom with another Nordic Designee, unless Nordic declines to designate a replacement Nordic Designee.

6.5 MHA shall provide the same compensation and rights and benefits of indemnity to the Nordic Designee as are provided to other non-employee directors.

6.6 MHA agrees that as of the Closing Date, the size of the Board of Directors shall be seven members, including the chief executive officer and the Nordic Designee (if a Nordic Designee shall have been appointed by such time).

7. Representations, Warranties and Covenants of Nordic.

Nordic hereby represents, warrants and covenants, now and as of the Closing Date, as the case may be, as follows:

7.1 Nordic has all requisite legal power and authority to enter into this Agreement, to consummate the transactions contemplated hereby and to carry out and perform its obligations under the terms of this Agreement.

7.2 This Agreement has been duly executed and delivered by Nordic and constitutes a legal, valid and binding obligation of Nordic enforceable against Nordic in accordance with its terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors and rules of law governing specific performance, injunctive relief or other equitable remedies, and to limitations of public policy. Neither the execution and delivery of this Agreement nor the consummation of the transactions contemplated hereby nor compliance with any of the provisions hereof will violate or conflict with the provisions of, or constitute a default under (or give rise to any right of termination, cancellation or acceleration under), any agreement, contract or other instrument to which Nordic is bound.

7.3 Neither the Securities nor the Conversion Shares have not been registered under the Securities Act, or any state securities laws, and, except as set forth in Registration Rights Agreement, MHA has no present or future obligation to register either the Securities or the Conversion Shares under the Securities Act or any state securities laws. Nordic understands that the offering and sale of the Securities hereunder is intended to be exempt from registration under the Securities Act, by virtue of Section 4(2) thereof and the provisions of Regulation D promulgated thereunder, or not subject to such requirement, by virtue of Regulation S promulgated under the Securities Act, based, in part, upon the representations, warranties and agreements of Nordic contained in this Agreement.

7.4 Nordic has had access to all SEC Reports (as defined below) and has received all other documents from MHA requested by Nordic. Nordic has carefully reviewed the SEC Reports and all such other documents and understands the information contained therein.

7.5 Nordic has had a reasonable opportunity to ask questions of and receive answers from a person or persons acting on behalf of MHA concerning the offering and sale of the Securities and the business, financial condition, results of operations and prospects of MHA, and all such questions have been answered to the full satisfaction of Nordic. Neither such inquiries nor any other investigation conducted by or on behalf of Nordic or its representatives or counsel shall modify, amend or affect Nordic's right to rely on the truth, accuracy and completeness of MHA's representations and warranties contained in this Agreement.

7.6 In evaluating the suitability of an investment in MHA, Nordic has not relied upon any representation or other information (oral or written) other than as stated in this Agreement.

7.7 No Securities were offered or sold to Nordic by means of any form of general solicitation or general advertising, and in connection therewith Nordic did not: (A) receive or review any advertisement, article, notice or other communication published in a newspaper or magazine or similar media or broadcast over television or radio whether closed circuit, or generally available; or (B) attend any seminar meeting or industry investor conference whose attendees were invited by any general solicitation or general advertising.

7.8 Nordic has taken no action which would give rise to any claim by any person for brokerage commissions, finders' fees or the like relating to this Agreement or the transactions contemplated hereby.

7.9 Nordic has such knowledge and experience in financial, tax, and business matters, and, in particular, investments in securities similar to the Securities so as to enable Nordic to utilize the information made available to it in connection with the transactions contemplated by this Agreement to evaluate the merits and risks of an investment in the Securities and MHA and to make an informed investment decision with respect thereto.

7.10 Nordic is not relying on MHA or any of its employees, officers or agents with respect to the legal, tax, economic and related considerations as to an investment in the Securities, and Nordic has relied on the advice of, or has consulted with, only his own advisors.

7.11 Nordic is acquiring the Securities solely for Nordic's own account for investment and not with a view to resale, assignment or distribution thereof, in whole or in part in violation of the Securities Act or any applicable state securities laws. Nordic has no agreement or arrangement, formal or informal, with any person to sell or transfer all or any part of the Securities in violation of the Securities Act or any state securities laws and Nordic has no plans to enter into any such agreement or arrangement. Nordic will not engage in hedging transactions with respect to the Securities unless in compliance with the registration requirements of the Securities Act.

7.12 Nordic must bear the substantial economic risks of the investment in the Securities indefinitely because none of the Securities may be sold, hypothecated or otherwise disposed of unless subsequently registered under the Securities Act and applicable state securities laws or an exemption from such registration is available. Subject to the terms hereunder, legends shall be placed on the Securities to the effect that they have not been registered under the Securities Act or applicable state securities laws and appropriate notations thereof will be made in MHA's stock books.

7.13 Nordic has adequate means of providing for its current financial needs and foreseeable contingencies and has no need for liquidity of the investment in the Securities for an indefinite period of time.

7.14 Nordic meets the requirements of the suitability standards for an "accredited investor" because Nordic is a corporation, partnership, limited liability company, limited liability partnership, other entity or similar business trust, not formed for the specific purpose of acquiring the Securities, with total assets excess of $5,000,000 or (ii) is a "non-US Person" that is a "qualified investor" as defined in the European Union Prospective Directive. Nordic further represents and warrants that it will notify and supply corrective information to MHA immediately upon the occurrence of any change occurring prior to MHA's issuance of the Securities that renders the representation made in the immediately preceding sentence. Nordic represents to MHA that any information which the undersigned has heretofore furnished under this Section 7.14 or furnishes to MHA pursuant to this Section 7.14 is complete and accurate and may be relied upon by MHA in determining the availability of an exemption from registration under Federal and state securities laws in connection with the offering and sale of the Securities.

7.15 Nordic is able to bear the economic risk of an investment in the Securities and, at the present time, has a sufficient net worth to sustain a complete loss of such investment in MHA in the event such a loss should occur. Nordic's overall commitment to investments which are not readily marketable is not excessive in view of its net worth and financial circumstances and the purchase of the Units will not cause such commitment to become excessive.

8. Representations and Warranties of MHA.

MHA hereby represents and warrants as of the date of this Agreement, and as of the Closing Date, as the case may be, as follows, subject to the disclosure provided in a written disclosure schedule provided to Nordic as of the date of this Agreement, if any:

8.1 Organization, Good Standing and Qualification. MHA is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has full corporate power and authority to conduct its business as currently conducted. MHA is duly qualified as a foreign corporation to do business and is in good standing in every jurisdiction in which the property owned or leased by it or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or in good standing would not reasonably be expected to have, individually or in the aggregate, a material adverse effect on the business, operations, conditions (financial or otherwise), properties, assets, liabilities, or results of operations of MHA (a **"**Material Adverse Effect**"**). Other than Newco, MHA has no Subsidiaries. For purposes of this Section, **"**Subsidiary**"** means any corporation, partnership, limited liability company, association, or other business entity in which MHA owns or controls, directly or indirectly, any interest, including, without limitation, any joint venture, partnership, or similar arrangement.

8.2 Capitalization. The authorized capital stock of MHA consists of 150,000,000 shares of Common Stock and 1,500,000 shares of preferred stock. As of January 29, 2008, there were 70,624,232 shares of Common Stock issued and outstanding, all of which are duly authorized, validly issued, fully paid and non-assessable, and no shares of preferred stock outstanding. In addition, as of such date, there are 8,233,838 shares of Common Stock reserved for issuance pursuant to outstanding options and 8,869,454 shares of Common Stock reserved for issuance pursuant to outstanding warrants. All of the securities issued by MHA have been issued in accordance with all applicable federal and state securities laws. Other than as set forth above, there are no other options, warrants, calls, rights, commitments or agreements of any character to which MHA is a party or by which MHA is bound or obligating MHA to issue, deliver, sell, repurchase or redeem, or cause to be issued, delivered, sold, repurchased or redeemed, any shares of the capital stock of MHA or obligating MHA to grant, extend or enter into any such option, warrant, call, right, commitment or agreement. There are no preemptive rights or rights of first refusal or similar rights which are binding on MHA permitting any Person to subscribe for or purchase from MHA shares of its capital stock pursuant to any provision of law, MHA's Certificate of Incorporation as in effect on the date hereof (the "Certificate of Incorporation") or MHA's By-laws, as in effect on the date hereof (the "By-laws") or by agreement or otherwise. There are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Securities as described in this Agreement.

8.3 Authorization; Enforceability. MHA has all corporate right, power and authority to enter into this Agreement and the Additional Agreements, to consummate the transactions contemplated hereby and to carry out and perform its obligations under the terms of this Agreement and the Additional Agreements. All corporate action on the part of MHA, its directors and stockholders necessary for the (a) authorization execution, delivery and performance of this Agreement and the Additional Agreements by MHA; and (b) authorization, sale, issuance and delivery of the Securities and the Conversion Shares contemplated hereby and the performance of MHA's obligations hereunder has been taken (or, with respect to the Additional Agreements, will have been taken prior to the Closing). This Agreement has been, and the Additional Agreements will be prior to Closing, duly executed and delivered by MHA, and this Agreement constitutes, and the Additional Agreements will constitute prior to Closing, legal, valid and binding obligations of MHA, enforceable against MHA in accordance with their terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors and rules of law governing specific performance, injunctive relief or other equitable remedies, and to limitations of public policy. The Securities, when issued and fully paid for in accordance with the terms of this Agreement, will be validly issued, fully paid and non-assessable. The Conversion Shares, when issued in accordance with the terms of the Warrant, the Put Option or the Call Option, as the case may be, will be validly issued, full paid and non-assessable. The issuance and sale of the Securities and the Conversion Shares contemplated hereby will not give rise to any preemptive rights or rights of first refusal on behalf of any person which have not been waived.

8.4 No Conflict; Governmental Consents.

(a) Except as would not reasonably be expected to have a Material Adverse Effect, the execution and delivery by MHA of this Agreement and the Additional Agreements, the consummation of the transactions contemplated hereby and the compliance with any of the provisions hereof will not result in the violation of any law, statute, rule, regulation, order, writ, injunction, judgment or decree of any court or governmental authority to or by which MHA is bound, or of any provision of the Certificate of Incorporation or By-Laws of MHA, and will not conflict with, or result in a breach or violation of, any of the terms or provisions of, or constitute (with due notice or lapse of time or both) a default under (or give rise to any right of termination, cancellation or acceleration under), any lease, loan agreement, mortgage, security agreement, trust indenture or other agreement or instrument to which MHA is a party or by which it is bound or to which any of its properties or assets is subject, nor result in the creation or imposition of any lien upon any of the properties or assets of MHA.

(b) Other than the approval of the American Stock Exchange, no consent, approval, authorization or other order of any governmental authority or other third party is required to be obtained by MHA in connection with the authorization, execution and delivery of this Agreement or with the authorization, issue and sale of the Securities and the Conversion Shares except such filings as may be required to be made with the SEC and with any state or foreign blue sky or securities regulatory authority relating to an exemption from registration thereunder.

8.5 Licenses. Except as would not reasonably be expected to have a Material Adverse Effect, MHA has sufficient licenses, permits and other governmental authorizations currently required for the conduct of its business or ownership of properties and is in all material respects complying therewith.

8.6 Litigation. There is no pending, or to MHA’s knowledge, threatened legal or governmental proceedings against MHA which (a) adversely questions the validity of this Agreement or any agreements related to the transactions contemplated hereby or the right of MHA to enter into any of such agreements, or to consummate the transactions contemplated hereby or thereby or (b) could, if there were an unfavorable decision, have a Material Adverse Effect. There is no action, suit, proceeding or investigation by MHA currently pending in any court or before any arbitrator or that MHA intends to initiate.

8.7 Investment Company. MHA is not an "investment company" within the meaning of such term under the Investment Company Act of 1940, as amended, and the rules and regulations of the SEC thereunder.

8.8 Financial Statements; SEC Reports. The financial statements of MHA included in the SEC Reports (as amended) (the "Financial Statements") fairly present in all material respects the financial condition and position of MHA at the dates and for the periods indicated, have been prepared in conformity with generally accepted accounting principles in the United States ("GAAP") consistently applied throughout the periods covered thereby, except as may be otherwise specified in such Financial Statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of MHA as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments. Since the date of the most recent balance sheet included as part of the Financial Statements and except as disclosed in the SEC Reports, there has not been: (i) any change in the business, conditions (financial or otherwise), properties, assets, liabilities, or results of operations of MHA from that reflected in the Financial Statements, other than changes in the ordinary course of business, none of which individually or in the aggregate would reasonably be expected to have a Material Adverse Effect; or (ii) any other event or condition of any character that, either individually or cumulatively, would reasonably be expected to have a Material Adverse Effect, except for the expenses incurred in connection with the transactions contemplated by this Agreement. MHA has filed all reports, schedules, forms, statements and other documents required to be filed by it under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, since February 1, 2006 (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "SEC Reports") on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act and the rules and regulations of the SEC promulgated thereunder, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

8.9 Title to Properties and Assets; Liens, Etc. MHA has good and marketable title to its properties and assets, including the properties and assets reflected in the most recent balance sheet included in the Financial Statements, and good title to its leasehold estates, in each case subject to no mortgage, pledge, lien, lease, encumbrance or charge, other than (a) those resulting from taxes which have not yet become delinquent; (b) liens and encumbrances which do not materially detract from the value of the property subject thereto or materially impair the operations of MHA; (c) those that have otherwise arisen in the ordinary course of business; and (d) those that would not reasonably be expected to have a Material Adverse Effect. MHA is in compliance with all material terms of each lease to which it is a party or is otherwise bound.

8.10 Compliance. MHA (a) neither is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by MHA under), nor has MHA received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (b) is not in violation of any order of any court, arbitrator or governmental body, and (c) is not and has not been in violation of any statute, rule or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws applicable to its business, except in the case of each of (a), (b), and (c) as could not have a Material Adverse Effect.

8.11 Obligations to Related Parties. There are no obligations of MHA to officers, directors, stockholders, or employees of MHA other than (a) for payment of salary or other compensation for services rendered, (b) reimbursement for reasonable expenses incurred on behalf of MHA, (c) standard indemnification provisions in the certificate of incorporation and by-laws, and (d) for other standard employee benefits made generally available to all employees (including stock option agreements outstanding under any stock option plan approved by the Board of Directors of MHA). Except as may be disclosed in the Financial Statements, MHA is not a guarantor or indemnitor of any indebtedness of any other person, firm or corporation.

8.12 Employee Relations; Employee Benefit Plans. MHA is not a party to any collective bargaining agreement or union contract. MHA believes that its relations with its employees are good. No executive officer (as defined in Rule 501(f) of the Securities Act) of MHA has notified MHA that such officer intends to leave MHA or otherwise terminate such officer's employment with MHA. MHA is in compliance with all federal, state, local and foreign laws and regulations respecting employment and employment practices, terms and conditions of employment and wages and hours, except where failure to be in compliance would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect. Except as disclosed in the Memorandum, MHA does not maintain any compensation or benefit plan, agreement, arrangement or commitment (including, but not limited to, "employee benefit plans", as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (**"**ERISA**"**) for any present or former employees, officers or directors of MHA or with respect to which MHA has liability or makes or has an obligation to make contributions, other than any such plans, agreements, arrangements or commitments made generally available to MHA's employees.

8.13 Environmental Laws. MHA (i) is in compliance with any and all Environmental Laws (as hereinafter defined), (ii) has received all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its business and (iii) is in compliance with all terms and conditions of any such permit, license or approval where, in each of the foregoing clauses (i), (ii) and (iii), the failure to so comply would reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. The term **"**Environmental Laws**"** means all federal, state, local or foreign laws relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata), including, without limitation, laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, **"**Hazardous Materials**"**) into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations issued, entered, promulgated or approved thereunder.

8.14 Tax Status. MHA (a) has made or filed all federal and state income and all other tax returns, reports and declarations required by any jurisdiction to which it is subject, (b) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations, except those being contested in good faith and (c) has set aside on its books provision reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of MHA know of no basis for any such claim.

8.15 Proprietary Rights. MHA owns or possesses adequate and enforceable rights to use all patents, patent applications, trademarks, trade names, corporate names, copyrights, trade secrets, licenses, inventions, formulations, technology and know-how and other intangible property used in the conduct of its business (the "Proprietary Rights"). MHA has not received any notice of, and there are no facts known to MHA that reasonably indicate the existence of (a) any infringement or misappropriation by any third party of any of the Proprietary Rights or (b) any claim by a third party contesting the validity of any of the Proprietary Rights. MHA has not received any notice of any infringement, misappropriation or violation by MHA or any of its employees of any Proprietary Rights of third parties.

8.16 Insurance. MHA is insured by insurers of recognized financial responsibility against such losses and risks, including, without limitation, products liability, and in such amounts as are prudent and customary in the businesses in which MHA is engaged, including, but not limited to, directors and officers insurance coverage at least equal to $5.0 million. To the best knowledge of MHA, such insurance contracts and policies are accurate and complete. MHA has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business on terms consistent with market for MHA's line of business.

8.17 Private Placement. Assuming the accuracy of Nordic's representations and warranties set forth in Section 7, no registration under the Securities Act is required for the offer and sale of the Securities and the Conversion Shares by MHA to Nordic as contemplated hereby. The issuance and sale of the Securities and the Conversion Shares hereunder does not contravene the rules and regulations of the Trading Market.

8.18 Registration Rights. Other than Nordic, no Person has any right to cause MHA to effect the registration under the Securities Act of any securities of MHA.

8.19 Solvency and Indebtedness. Based on the financial condition of MHA, (a) MHA's fair saleable value of its assets exceeds the amount that will be required to be paid on or in respect of MHA's existing debts and other liabilities (including known contingent liabilities) as they mature; (b) MHA's assets do not constitute unreasonably small capital to carry on its business for the current fiscal year as now conducted and as proposed to be conducted including its capital needs taking into account the particular capital requirements of the business conducted by MHA, and projected capital requirements and capital availability thereof; and (c) the current cash flow of MHA, together with the proceeds MHA would receive, were it to liquidate all of its assets, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its debt when such amounts are required to be paid. MHA does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). MHA has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction within one year from the Closing Date. MHA is being operated pursuant to a budget which has been provided to, and reviewed by Nordic. The SEC Reports set forth as of the dates thereof all outstanding secured and unsecured Indebtedness of MHA, or for which MHA has commitments. For the purposes of this Agreement, "Indebtedness" shall mean (a) any liabilities for borrowed money or amounts owed in excess of $50,000 (other than trade accounts payable incurred in the ordinary course of business), (b) all guaranties, endorsements and other contingent obligations in respect of Indebtedness of others, whether or not the same are or should be reflected in MHA's balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (c) the present value of any lease payments in excess of $50,000 due under leases required to be capitalized in accordance with GAAP. MHA is not in default with respect to any Indebtedness.

8.20 Clinical Studies. MHA has provided or will provide (i) all communications to the Food and Drug Administration (the "FDA") of any adverse events with respect to any clinical or pre-clinical studies, tests or research that are described in the SEC Reports or the results of which are referred to in the SEC Reports, and (ii) any notices or other correspondence from the FDA or any other foreign, federal, state or local governmental or regulatory authority with respect to any clinical or pre-clinical studies, tests or research that are described in the SEC Reports or the results of which are referred to in the SEC Reports which require the termination, suspension, delay or modification of such studies, tests or research, otherwise require MHA to engage in any remedial activities with respect to such studies, test or research, or threaten to impose or actually impose any fines or other disciplinary actions, in the case of each of (i) and (ii) as such communications, notices or other correspondence relate to the Assets.

8.21 Disclosure. The representations and warranties made by MHA herein (as modified by the Disclosure Schedule) are true and correct and do not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made herein, in light of the circumstances under which they were made, not misleading.

8.22 Absence of Certain Changes. Since September 30, 2007, there has been no material adverse change in the business, operations, conditions (financial or otherwise), prospects, assets or results of operations of MHA.

8.23 Other Representations and Warranties. The representations and warranties of MHA in the Additional Agreements will be true and correct when made.

9. Other Agreements of the Parties.

9.1Transfer Restrictions.

(a) The Securities and the Conversion Shares may only be disposed of in compliance with state and federal securities laws. In connection with any transfer of the Securities or the Conversion Shares other than pursuant to an effective registration statement or Rule 144, to MHA or to an affiliate of Nordic or in connection with a pledge as contemplated in Section 9.1(b), MHA may require the transferor thereof to provide to MHA an opinion of counsel selected by the transferor and reasonably acceptable to MHA, the form and substance of which opinion shall be reasonably satisfactory to MHA, to the effect that such transfer does not require registration of such transferred Securities or Conversion Shares under the Securities Act.

(b)Nordic agrees to the imprinting, so long as is required by this Section 9.1(b), of a legend on any of the Securities or Conversion Shares in the following form:

THESE SHARES HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO MHA. THESE SHARES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT WITH A REGISTERED BROKER-DEALER OR OTHER LOAN WITH A FINANCIAL INSTITUTION THAT IS AN "ACCREDITED INVESTOR" AS DEFINED IN RULE 501(a) UNDER THE SECURITIES ACT.

MHA acknowledges and agrees that Nordic may from time to time pledge or grant a security interest in some or all of the Securities or Conversion Shares to a financial institution that is an "accredited investor" as defined in Rule 501(a) under the Securities Act and who agrees to be bound by the provisions of this Agreement and the Registration Rights Agreement and, if required under the terms of such arrangement, Nordic may transfer pledged or secured Securities or Conversion Shares to the pledgees or secured parties. So long as it complies in all respects with applicable state and federal securities laws, such a pledge or transfer would not be subject to approval of MHA and no legal opinion of legal counsel of the pledgee, secured party or pledgor shall be required in connection therewith. Further, no notice shall be required of such pledge. At Nordic's expense, MHA will execute and deliver such reasonable documentation as a pledgee or secured party of Securities or Conversion Shares may reasonably request in connection with a pledge or transfer of the Securities or Conversion Shares, including, if the Securities or Conversion Shares are subject to registration pursuant to the Registration Rights Agreement, the preparation and filing of any required prospectus supplement under Rule 424(b)(3) under the Securities Act or other applicable provision of the Securities Act to appropriately amend the list of Selling Stockholders thereunder.

(c)Certificates evidencing the Securities and the Conversion Shares shall not contain any legend (including the legend set forth in Section 9.1(b)), (i) following the resale of the Securities or Conversion Shares pursuant to an effective registration statement covering the resale of such security under the Securities Act, or (ii) following any sale of such Securities or Conversion Shares pursuant to Rule 144 (assuming the transferor is not an Affiliate of MHA), or (iii) if such Securities or Conversion Shares are eligible for sale under Rule 144 without volume restrictions, or (iv) if such legend is not required under applicable requirements of the Securities Act and the rules and regulations promulgated thereunder (including judicial interpretations and pronouncements issued by the staff of the SEC). MHA agrees that at such time as such legend is no longer required under this Section 9.1(c), it will, no later than three Trading Days following the delivery by Nordic to MHA or MHA's transfer agent of a certificate representing Securities or Conversion Shares, as the case may be, issued with a restrictive legend, deliver or cause to be delivered to Nordic a certificate representing such shares that is free from all restrictive and other legends. MHA may not make any notation on its records or give instructions to any transfer agent of MHA that enlarge the restrictions on transfer set forth in this Section. Certificates for the Securities or Conversion Shares subject to legend removal hereunder shall be transmitted by the transfer agent of MHA to Nordic by crediting the account of Nordic's prime broker with the Depository Trust Company System.

9.2 Furnishing of Information.

(a)As long as Nordic owns Securities or Conversion Shares, MHA covenants as follows: (i) MHA shall timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by MHA after the date hereof pursuant to the Exchange Act, and (ii) all such reports filed by MHA after the date hereof pursuant to the Exchange Act shall comply in all material respects with the requirements of the Exchange Act and the rules and regulations of the SEC promulgated thereunder, and none of such reports, when filed, shall contain any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(b)As long as Nordic owns Securities or Conversion Shares, if MHA is not required to file reports pursuant to the Exchange Act, it will prepare and furnish to Nordic and make publicly available in accordance with Rule 144 such information as is required for Nordic to sell the Securities or Conversion Shares under Rule 144. MHA further covenants that it will take such further action as Nordic may reasonably request, all to the extent required from time to time to enable Nordic to sell Securities or Conversion Shares without registration under the Securities Act within the limitation of the exemptions provided by Rule 144.

9.3 Integration. MHA shall not sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Securities or the Conversion Shares in a manner that would require the registration under the Securities Act of the sale of the Securities or the Conversion Shares to Nordic or that would be integrated with the offer or sale of the Securities or the Conversion Shares for purposes of the rules and regulations of any Trading Market such that it would require stockholder approval of the sale of the Securities or the Conversion Shares to Nordic unless stockholder approval is obtained before the closing of such subsequent transaction.

9.4 Confidentiality; Required Disclosure.

(a) Each party agrees, and will cause its affiliates, to keep confidential and not to publish (by press release, press interview, or otherwise) or otherwise divulge or use for its own benefit or for the benefit of any third party any information of a confidential or proprietary nature furnished to it by the other party, or the existence and terms of this Agreement or the Additional Agreements or the existence or results of the parties' collaboration hereunder or thereunder, without the prior written approval of the other party, except to those of such party's employees and representatives as may need to know such information for purposes of the transactions contemplated by the parties' agreements, and except as required by applicable law or by obligations pursuant to any listing agreement with or rules of any Trading Market. In the event of any such required disclosure, including the filings described in Section 9.4(b) below, the disclosing party will (i) provide the other party with written notice of the required disclosure at least 48 hours in advance of such disclosure, and (ii) limit such disclosure to the minimum required under the applicable law or obligations, whether through a request for confidential treatment or otherwise. The confidentiality obligation described above shall not apply to information of the other party which: was already known by the recipient prior to the time of its disclosure by the disclosing party to the recipient; is publicly available or later becomes publicly available through no fault of the recipient; or is disclosed to the recipient by a third party having no similar confidentiality obligation. This obligation shall terminate three years after execution of this Agreement.

(b) MHA shall (i) timely file with the SEC a Current Report on Form 8-K with respect to the transactions contemplated by this Agreement and the Additional Agreements, and (ii) make such other filings and notices in the manner and time required by the SEC and the Trading Market, provided, in the case of a filing or notice described in clause (i) or (ii) above, that the information contained in such filing or notice is limited to the information necessary in order for MHA to comply with the Exchange Act and the regulations promulgated thereunder or the other applicable legal or Trading Market obligations.

9.5 Indemnification of Nordic. Subject to the provisions of this Section 9.5, MHA will indemnify and hold Nordic and its directors, officers, stockholders, members, partners, employees and agents (each, a "Purchaser Party") harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation that any such Purchaser Party may suffer or incur as a result of or relating to (a) any breach of any of the representations and warranties, when made, or the covenants or agreements made by MHA in this Agreement and the Additional Agreements or (b) any action instituted against Nordic or its Affiliates, or in which Nordic becomes involved in any capacity, by any stockholder of MHA who is not an Affiliate of Nordic, with respect to any of the transactions contemplated by the Agreement or the Additional Agreements (unless such action is based upon a breach of Nordic's representations, warranties or covenants under the Agreement or the Additional Agreements or any agreements or understandings Nordic may have with any such stockholder or any violations by Nordic of state or federal securities laws or any conduct by Nordic which constitutes fraud, gross negligence, willful misconduct or malfeasance). If any action shall be brought against any Purchaser Party in respect of which indemnity may be sought pursuant to this Agreement, such Purchaser Party shall promptly notify MHA in writing, and MHA shall have the right to assume the defense thereof with counsel of its own choosing. Any Purchaser Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Purchaser Party except to the extent that (a) the employment thereof has been specifically authorized by MHA in writing, (b) MHA has failed after a reasonable period of time to assume such defense and to employ counsel or (c) in such action there is, in the reasonable opinion of such separate counsel, a material conflict on any material issue between the position of MHA and the position of such Purchaser Party. MHA will not be liable to any Purchaser Party under this Agreement (i) for any settlement by a Purchaser Party effected without MHA's prior written consent, which shall not be unreasonably withheld or delayed; or (ii) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Purchaser Party's breach of any of the representations, warranties, covenants or agreements made by Nordic in this Agreement or in Additional Agreements. MHA shall not approve the settlement of any claims against a Purchaser Party without the written consent of the Purchaser Party, unless such settlement holds such Purchaser Party harmless and releases the Purchaser Party from all claims.

9.7 Reservation of Common Stock. MHA shall maintain a reserve, free of preemptive rights, from its duly authorized shares of Common Stock for issuance pursuant to the Agreement in such amount as may be required to fulfill its obligations under the Agreement in full, including the issuance of Conversion Shares.

9.8 Formation of Newco and General Partner. Prior to the Closing, MHA and Nordic shall cooperate in entering into such agreements and filing such certificates as are necessary to properly form Newco as a Danish limited partnership and the General Partner as a Danish private limited company, including, without limitation, by the filing of the Articles of Association of Newco, and the Articles of Association and Memorandum of Association of the General Partner, all in the form attached to the Partnership Agreement, with the Danish Commerce and Companies Agency.

10. Miscellaneous.

10.1 Termination. This Agreement may be terminated by Nordic by written notice to MHA, if the Closing has not been consummated on or before February 18, 2008.

10.2 Fees and Expenses. All fees and expenses incurred by MHA in connection with the transactions contemplated by this Agreement shall be borne by MHA. All fees and expenses incurred by Nordic in connection with the transactions contemplated by this Agreement shall be borne by MHA to the extent that such fees and expenses to do not exceed $125,000, and by Nordic thereafter. Nordic acknowledges that it has received $60,000 from MHA as an advance on fees and expenses. Nordic agrees to submit evidence of additional fees and expenses to MHA in order to request additional advances, and MHA agrees to make such advances for up to an additional $65,000. Nordic is under no obligation to return any portion of any advance made unless the Closing does not occur, in which case Nordic agrees to return to MHA the portion of advances made, if any, in excess of Nordic's actual fees and expenses.

10.3 Entire Agreement. The Agreement and the Additional Agreements, together with the exhibits and schedules thereto, contain the entire understanding of the parties with respect to the subject matter hereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules.

10.4 Notices. Any notice, demand, offer or other written instrument ("Notice") required or permitted to be given shall be in writing signed by the party giving such Notice and shall be hand delivered or sent, postage prepaid, by certified or registered mail, return receipt requested, or by overnight delivery such as Federal Express, addressed as follows:

If to MHA:	Manhattan Pharmaceuticals, Inc. 810 Seventh Avenue, 4th Floor New York, NY 10019 Fax: (212) 582-3957 Attn: Chief Financial Officer Email: mgmcguinness@manhattanpharma.com
with a copy to:	Lowenstein Sandler PC 65 Livingston Avenue Roseland, New Jersey 07068 Telephone: (973) 597-2500 Fax: (973) 597-2400 Attn: Anthony O. Pergola Email: apergola@lowenstein.com

If to Nordic:	Nordic Biotech Advisors Østergade 5, 3rd floor DK-1100 Copenhagen K Denmark Attn: Florian Schönharting Fax: (978) 448-3145 Email: fs@nordicbiotech.com With a copy to: John M. Barberich Email: jmb@nordicbiotech.com
with a copy to:	Nutter, McClennen & Fish LLP World Trade Center West 155 Seaport Boulevard Boston, MA 02210 Fax: (617) 310-9000 Attn: James E. Dawson, Esq. Email: jdawson@nutter.com

Any party shall have the right to change the place to which such Notice shall be sent or delivered by similar notice sent in like manner to all other parties hereto.

10.5 Amendments; Waivers. No provision of this Agreement may be waived or amended except in a written instrument signed, in the case of an amendment, by MHA and Nordic or, in the case of a waiver, by the party against whom enforcement of any such waiver is sought. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of either party to exercise any right hereunder in any manner impair the exercise of any such right.

10.6 Headings. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

10.7 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. MHA may not assign this Agreement or any rights or obligations hereunder without the prior written consent of Nordic.

10.8 No Third-Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except as otherwise set forth in Section 9.6.

10.9 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Agreement and the Additional Agreements shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof, except to the extent that the application of the General Corporation Law of the State of Delaware is mandatorily applicable. If either party shall commence an action or proceeding to enforce any provisions of the Transaction Documents, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding. Each party hereby irrevocably submits to the exclusive jurisdiction of the federal and state courts sitting in the state of New York in any action or proceeding arising out of or relating to this Agreement, the Additional Agreements or the transactions contemplated hereby or thereby. Each party hereby irrevocably agrees, on behalf of itself and on behalf of such party's successors and permitted assigns, that all claims in respect of such action or proceeding shall be heard and determined in any such court and irrevocably waives any objection such person may now or hereafter have as to the venue of any such suit, action or proceeding brought in such a court or that such court is an inconvenient forum.

10.10 Survival. The representations, warranties, agreements and covenants contained herein shall survive the Closing and the delivery of the Securities and Conversion Shares.

10.11 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile signature page were an original thereof.

10.12 Severability. If any provision of this Agreement is held to be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Agreement shall not in any way be affected or impaired thereby and the parties will attempt to agree upon a valid and enforceable provision that is a reasonable substitute therefore, and upon so agreeing, shall incorporate such substitute provision in this Agreement.

10.13 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, each of Nordic and MHA will be entitled to specific performance under this Agreement and the Additional Agreements. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations described in the foregoing sentence and hereby agrees to waive in any action for specific performance of any such obligation the defense that a remedy at law would be adequate.

10.14 Payment Set Aside. To the extent that MHA makes a payment or payments to Nordic pursuant to this Agreement or the Additional Agreements or Nordic enforces or exercises its rights thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to MHA, a trustee, receiver or any other person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

[Signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement under seal as of the day and year first above written.

MHA:

MANHATTAN PHARMACEUTICALS, INC.

By: /s/ Michael McGuinness
Name:
Title: CFO

NORDIC:

NORDIC BIOTECH VENTURE FUND II K/S

By: /s/ Florian Schonharting
Name:
Title: Partner

By: /s/ Christian Hansen
Name:
Title: Partner

Address: Østergade 5, 3rd floor
DK-1100 Copenhagen K
Denmark

DISCLOSURE SCHEDULES
DATE JANUARY 31, 2008
TO JOINT VENTURE AGREEMENT

Schedule 8.6 (Litigation)

Swiss Pharma Contract LTD (“Swiss Pharma”), a clinical site that MHA used in one of its obesity trials, gave notice to MHA that Swiss Pharma believes it is entitled to receive an additional payment of $322,776 for services in connection with that clinical trial. While the contract between MHA and Swiss Pharma provides for additional payments if certain conditions are met, Swiss Parma has not specified which conditions they believe have been achieved and MHA does not believe that Swiss Pharma is entitled to additional payments and has not accrued any of these costs as of September 30, 2007. The contract between MHA and Swiss Pharma provides for arbitration in the event of a dispute, such as this claim for an additional payment. Swiss Pharma has filed a demand for arbitration. As MHA does not believe that Swiss Pharma is entitled to additional payments, it intends to defend its position in arbitration.

Schedule 8.22 (Absence of Certain Changes)

MHA's cash balance as of January 31, 2008, is approximately $250,000.

Exhibit A

Form of Contribution Agreement

Note: The execution version of the Assignment and Contribution Agreement, dated February 25, 2008, is filed as Exhibit 10.21 to MHA's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2008 and incorporated herein by reference.

Exhibit B

Form of Partnership Agreement

Note: The execution version of the Limited Partnership Agreement, dated February 21, 2008 is attached hereto.

LIMITED PARTNERSHIP AGREEMENT

between

Nordic Biotech Venture Fund II K/S

and

Manhattan Pharmaceuticals, Inc.

and

Hedrin Pharmaceuticals General Partner ApS (under formation)

regarding

Hedrin Pharmaceuticals K/S

February 2008

CONTENTS

Nordic Biotech Venture Fund II K/S
Østergade 5 3
1100 Kopenhagen K
Denmark
Central Business Register No 29150397

(hereinafter referred to as "Nordic")

and

Manhattan Pharmaceuticals, Inc.
810 Seventh Avenue, 4th Floor
New York, NY 10019
United States of America

(hereinafter referred to as "MHA")

and

Hedrin Pharmaceuticals General Partner ApS (under formation)
Østergade 5 3
1100 Copenhagen K
Denmark

(hereinafter referred to as the "General Partner")

have entered into the following

LIMITED PARTNERSHIP AGREEMENT

1. **DEFINITIONS**

A. In this Agreement the following words and expressions shall have the following meanings, unless the context otherwise requires:

Agreement	This limited partnership agreement between MHA, Nordic and the General Partner as amended from time to time.
Assets	As defined in the Joint Venture Agreement.

Business Day	A day when banks are generally open for business in New York City, New York.
Call Option	As defined in the Joint Venture Agreement.
Closing	The date on which the Partnership is established by the signatures of the parties to this Agreement or if there be several dates the latest thereof.
Connected Transferee	Any entity holding Partnership Shares in consequence of a transfer of Partnership Shares pursuant to clause 12.3.
Contribution Agreement	As defined in the Joint Venture Agreement.
Joint Venture Agreement	The joint venture agreement between MHA and Nordic defined in clause 2.1.
License Agreement	As defined in Section 13.1.
License Payment	As defined in Section 22.1.
Limited Partner	Any holder of Partnership Shares.
MHA Partnership Shares	The Partnership shares owned by MHA.
Nordic Partnership Shares	The Partnership shares owned by Nordic.
Partnership	The Danish limited liability partnership Hedrin Pharmaceuticals K/S established and governed by this Agreement.
Partnership Shares	The partnership shares described in clause 3.1 as well as any additional partnership shares issued under clause 4 of the Agreement.
Parties	The General Partner and the Limited Partners
Payment Milestone	As defined in the Joint Venture Agreement.
Put Option	As defined in the Joint Venture Agreement.
Services Agreement	As defined in the Joint Venture Agreement.

Shareholders' Agreement	The shareholders' agreement between the holders' of Partnership Shares concerning their holdings of shares in the General Partner as amended from time to time (at Closing the shareholders' agreement attached hereto as Appendix 8.3).
Trade Sale	The sale of 100 percent of the Partnership Shares to a bona fide third party or related parties, or a sale or exclusive license of all or substantially all assets of the Partnership against consideration in stock or cash or similar.

2. **BACKGROUND AND PURPOSE**

B. As of January 31 2008 MHA and Nordic have entered into a joint venture agreement (the "Joint Venture Agreement") according to which Nordic shall contribute capital to a newly formed limited partnership (the "Partnership") and MHA shall assign and contribute the Assets to the Partnership.

C. The Partnership is founded as a Danish limited liability partnership by the Parties' signatures to this Agreement with the General Partner as general partner and the Limited Partners as limited partners.

D. It is the purpose of the Partnership to acquire, develop and commercialize the Assets and to perform all activities necessary and convenient to accomplish the foregoing purpose. The Partnership shall carry out no other activities.

E. The articles of association of the Partnership are attached hereto as Appendix 2.4. In the event that there is any discrepancy between the Agreement and the articles of association the provisions of the Agreement shall prevail in the internal relationship of the Parties.

3. **THE PARTNERSHIP SHARES**

F. The Partnership is established with a nominal share capital of DKK 1,000,000 divided into 1,000 Partnership Shares of nominally DKK 1,000.

G. At Closing the Partnership Shares are distributed among the Parties as follows (all amounts in DKK):

	Number of Partnership Shares
Nordic	500
MHA	500
General Partner	0
Total	1,000

The Partnership Shares owned by Nordic at Closing are referred to herein as the "Nordic Closing Partnership Shares" and the Partnership Shares owned by MHA at Closing are referred to herein as the "MHA Closing Partnership Shares." At or after the Closing, the General Partner is authorized and directed, if requested by a Limited Partner, to deliver a certificate, executed on behalf of the Partnership by the General Partner, to such Limited Partner evidencing such Limited Partner's Partnership Shares.

H. None of the Partnership Shares have been paid in to the Partnership at Closing.

I. The payment for the MHA Closing Partnership Shares shall be paid in to the Partnership at the Closing upon the Partnership's execution of the Contribution Agreement and MHA's consummation of the assignment of the Assets to the Partnership as contemplated thereunder. Thus, the value of the Assets exceeds the cash payments payable under the Contribution Agreement and the excess value is contributed to the Partnership in return for the MHA Partnership Shares.

J. The payment for the Nordic Closing Partnership Shares shall be paid in to the Partnership at the Closing upon the payment by Nordic to the Partnership of $2,500,000 by wire transfer to a bank account designated by the Partnership.

K. No later than 15 Business Days after satisfaction, if any, of the Payment Milestone, Nordic shall pay to the Partnership an additional $2,500,000 by wire transfer to a bank account designated by the Partnership as payment for an additional 500 Partnership Shares. The satisfaction of the Payment Milestone shall constitute payment by MHA for an additional 500 Partnership Shares. Accordingly, after satisfaction of the Payment Milestone, the Partnership Shares shall be distributed among the Parties as follows (all amounts in DKK):

	Number of Partnership Shares
Nordic	1,000
MHA	1,000
General Partner	0
Total	2,000

For the avoidance of doubt, if the Payment Milestone is not achieved Nordic shall not be obliged to make any payment to the Partnership pursuant to clause 3.6.

II. CAPITAL INCREASES

A. Except as provided herein, the number of Partnership Shares may not be increased without the express unanimous written consent of the Parties.

B. Notwithstanding Section 4.1, in the event that either Party determines, in its reasonable good faith discretion, that the Partnership requires additional capital for the proper and efficient conduct of its business and to avoid insolvency (other than additional capital obtained through indebtedness for borrowed money from a bank), such Party shall provide each Limited Partner with a written request for contribution of such Limited Partner's proportionate share of such requested additional capital amount (i.e., pro rata according to the Limited Partners' then respective equity ownership in the Partnership) in exchange for the Partnership's issuance of Partnership Shares in the Partnership to such Limited Partner so that, after giving effect to such issuance, each Limited Partner will continue to maintain its same proportionate equity interest in the Partnership (assuming all Limited Partners elect to so contribute their proportionate shares of such requested additional capital amount) as of the date of such request. The Limited Partners shall have fifteen (15) days to make such election to contribute all or part of their proportionate share of the requested additional capital amount by the delivery of written notice to the Partnership of such election and, if such written notice is timely delivered, fifteen (15) days after delivery of such written notice to contribute the requested additional capital amount to the Partnership. If a Limited Partner declines to so contribute, elects to so 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 Partners shall have the option, for a period of fifteen (15) days next following the expiration of the applicable fifteen (15) day period, to contribute the remaining balance of such requested additional capital amount on the terms and conditions set forth in the written notice, which option shall be exercised by the delivery of written notice to the Partnership within such fifteen (15) day period, and to receive in exchange therefor the Partnership Shares in the Partnership that otherwise would have been issuable to the Limited Partner so declining or failing to contribute, or contributing less than all of, its proportionate share of the requested additional capital amount. The General Partner shall determine the fair market value of the shares for purposes of determining how to allocate the number of Partnership Shares issuable to each Limited Partner in consideration for its contribution of capital. If the General Partner is unable to determine the fair market value of the shares (because, among other reasons, the members of the board of directors of the General Partner cannot agree on the fair market value of the shares, as that decision is not a decision over which the chairman of the board has a casting vote), the fair market value of the shares shall be equal to the amount determined in good faith by the contributing Limited Partner if such amount is equal to or greater than the most recent valuation of such Partnership Shares calculated by or on behalf of the Partnership (the "Most Recent Valuation"), or, if such amount is lower than the Most Recent Valuation, then the fair market value shall be fixed as the average of two valuations made by impartial valuators (the "Independent Valuation") appointed by the Institute of State-Authorised Public Accountants (in Danish: Foreningen af Statsautoriserede Revisorer). Both valuators shall be recommended experts in valuation of biotech companies. The Independent Valuation need not precede the contributions of capital, but shall in any case be initiated promptly following any contribution. Upon receipt of any additional capital from time to time contributed to it by a Limited Partner pursuant to this Section 4.2, the General Partner is authorized and directed, if requested by such Limited Partner, to deliver a certificate, executed on behalf of the Partnership by the General Partner, to such Limited Partner evidencing the Partnership Shares acquired by such Limited Partner hereunder.

4. **LIABILITY**

4.1 The liability of the General Partner shall be personal and unlimited.

C. The liability of each Limited Partner shall be limited to such Limited Partner's contribution to the Partnership. Thus, the liability of MHA in respect of the MHA Partnership Shares shall be limited to the contribution described in clause 3.4 and the liability of Nordic in respect of the Nordic Partnership Shares shall be limited to the contribution described in clause 3.5.

5. **ADMINISTRATION OF THE PARTNERSHIP**

D. The General Partner shall in its capacity as general partner be responsible for the management and administration of the Partnership. In particular the General Partner shall monitor and oversee the development and commercialization activities with respect to the Assets.

E. The Partnership shall delegate the execution of certain of the General Partner's obligations pursuant to this Agreement to MHA to the extent set out in the Services Agreement. For the avoidance of doubt, the General Partner shall retain final power and authority in respect of all decisions regarding the Assets, including in respect of final development, partnering and marketing decisions, and such authority shall not be limited by the previous sentence.

F. The General Partner shall at all times act in good faith and in the best interest of the Partnership, shall use its best endeavours to ensure the safekeeping of the Partnership's assets and shall provide such services and support to the Partnership as will ensure that the Partnership is in compliance with all applicable laws from time to time.

III. THE GENERAL PARTNER

A. The General Partner is a Danish limited liability company, which has been established prior to Closing with the articles of association attached hereto as Appendix 7.1.

B. At Closing the share capital of the General Partner is distributed between the Limited Partners as follows (all amounts in DKK):

	Number of shares in the General Partner
Nordic	62,500
MHA	62,500
Total	125,000

C. At Closing the rights and obligations of the Limited Partners regarding their holdings of shares in the General Partner are set out in the shareholders' agreement attached hereto as Appendix 7.3.

D. The share capital of the General Partner shall at all times be owned by the Limited Partners pro rata to their holdings of Partnership Shares. At any time that the relative ownership of Partnership Shares by MHA and Nordic changes, including, without limitation in accordance with the Put Option or the Call Option, the share capital of the General Partner shall be redistributed in accordance with the previous sentence. Each of Nordic and MHA agrees to deliver any certificates evidencing its share capital in the General Partner to the General Partner in furtherance of any such redistribution.

IV. MANAGEMENT FEE

A. In consideration of the services to be provided under this Agreement and the liability as a general partner of the Partnership, the General Partner shall receive a management fee of DKK 50,000 per year, payable in arrears in quarterly instalments beginning on March 31, 2008 (prorated for the period from the Closing through March 31, 2008).

B. If the General Partner undertakes any of the services described in the Services Agreement (as a result of termination of the Services Agreement), the management fee shall be renegotiated and fixed at an amount which covers the reasonable expenses of the General Partner related to the provision of its services to the Partnership after the termination of the Services Agreement plus a reasonable profit.

V. MEETINGS OF THE PARTNERSHIP

A. Every year the General Partner shall convene an ordinary general meeting in the Partnership.

B. Extraordinary general meeting shall be held when deemed appropriate by the General Partner. Furthermore an extraordinary general meeting shall be held when it is requested in writing by a Limited Partner for consideration of a specified proposal.

C. The notice convening general meetings shall be forwarded not earlier than 20 Business Days and not later than 5 Business Days before the general meeting and shall include the agenda for the general meeting.

D. At the general meeting resolutions may exclusively be passed as to matters which according to the Agreement or the articles of association of the Partnership are not under the purview of the General Partner.

E. The ordinary general meeting shall be held in time for the audited and approved annual report to be filed with the Danish Commerce and Companies Agency no later than 5 months after the expiry of each accounting year.

F. The agenda for the ordinary general meeting shall include:

(i) The General Partner's presentation of the Partnership's activities during the past year.

(ii) Presentation of the audited annual report for approval.

(iii) Proposals, if any, from the General Partner and/or the Limited Partners.

G. Each Partnership Share of DKK 1,000 confers one vote at the general meeting.

H. All matters being dealt with at the general meeting shall be decided by simple majority. However, any amendment of the articles of association of the Partnership can only be made with the consent of the General Partner. Resolutions may be passed or matters dealt with by written consent in lieu of votes taken at a meeting.

I. The General Partner shall elect the chairman of the general meeting. The chairman leads the discussions and decides on all questions relating to the procedure of the matters tried at the general meeting, the voting and its results.

J. The discussions at the general meeting shall be kept in a minute book signed by the chairman and the General Partner.

6. **POWER TO BIND THE PARTNERSHIP**

K. The Partnership shall be bound by the signature of the General Partner, such signature to include the signatures of one member of the board of directors of the General Partner appointed by Nordic, if any, and one member of the board of directors of the General Partner appointed by MHA, if any. No board member of the General Partner may refuse to sign anything authorized and directed by the board of directors of the General Partner, in accordance with the Shareholders Agreement, to be signed by the General Partner.

VI. LIQUIDATION AND TRADE SALE PREFERENCES

A. In the event of a dissolution of the Partnership whether in the form of a liquidation, bankruptcy or any other form of dissolution of the Partnership the following shall apply as regards the respective rights of the Limited Partners to receive distribution of proceeds:

(i) Before any distribution is made to Limited Partners other than the holder(s) of the Nordic Partnership Shares, an amount corresponding to (a) the total amount contributed to the Partnership by Nordic pursuant to clauses 3.5 and 3.6 with the addition of a compounded return calculated at the rate of 10 percent per annum as from the time each such capital contribution to the Partnership has been made through the date of payment of distribution, minus (b) distributions or payments received by the holder(s) of the Nordic Partnership Shares pursuant to clauses 13.1 and 13.2 hereof, shall be made to the holders of the Nordic Partnership Shares.

(ii) From any amount available for distribution in excess of the amount referred to under sub-clause 11.1 (i) the holder(s) of the MHA Partnership Shares shall before any distribution is made to other Limited Partners be entitled to receive an amount corresponding to the proceeds distributed to the holders of the Nordic Partnership Shares under sub-clause 11.1 (i).

(iii) Any amount available for distribution in excess of the amounts referred to under sub-clauses 11.1 (i) and (ii) shall be distributed among Limited Partners on a pro rata basis according to their respective nominal holdings of Partnership Shares.

B. In the event of a Trade Sale based on a sale of 100 percent of the Partnership Shares the proceeds from such Trade Sale shall be distributed among the Limited Partners in accordance with clause 11.1. In the event of a Trade Sale based on the sale or license of all or substantially all assets of the Partnership, each Limited Partner shall be entitled to require that the Partnership be liquidated and the proceeds from such liquidation be distributed among the Limited Partners in accordance with clause 11.1.

C. Except as set forth in clause 11.2, the Partnership shall not be liquidated, dissolved or wound up without the unanimous consent of the Limited Partners and the General Partner. The proceeds from any liquidation, dissolution, winding up or sale of all Partnership Shares shall be distributed pursuant to clause 11.1.

VII. PLEDGE AND ASSIGNMENT OF PARTNERSHIP SHARES

A. A Party may not pledge or otherwise create or suffer the creation of any encumbrance or lien over all or any part of its Partnership Shares, without the prior written consent of the General Partner.

B. Except for a conversion of Partnership Shares taking place by exercise of the Call Option and/or the Put Option as described in the Joint Venture Agreement, a Party may not sell, assign, issue put- or call-options, transfer or otherwise dispose of all or any part of its Partnership Shares without observing the rules set out in clauses 12.3-12.5

C. Permitted Transfers

1. The transfer or other transmission of the Partnership Shares is subject to the rules set out in clauses 12.4-12.5, provided that the Limited Partners shall be allowed to transfer their Partnership Shares without observing these rules in the following situations:

(i) Each Limited Partner shall be entitled to transfer its Partnership Shares wholly or partly to an entity which is 100 percent owned and controlled by such Limited Partner, provided that the original Limited Partner shall remain liable for the assignee's performance of all of the original Limited Partner's obligations under this Agreement and that the original Limited Partner shall maintain a 100 percent direct ownership and control of such company as long as it owns Partnership Shares.

(ii) Nordic shall be entitled to transfer its Partnership Shares to another investment entity advised by its management company, Nordic Biotech Advisors ApS (company registration No 26123925), as well as to one or more of the limited partners in Nordic.

D. Rights of First Refusal

1. Upon any transfer of a Limited Partner's (referred to as the "Proposing Transferor") Partnership Shares or any part thereof (referred to as the "Sale Shares"), whether by sale, gift, enforcement by creditors or division of an estate, the other Limited Partner(s) shall have a pre-emptive right to the Sale Shares offered for sale by the Proposing Transferor – failing amicable agreement as to the price and conditions for the transfer of such shares – at the price and on the conditions at which the Proposing Transferor proposes to sell the Sale Shares to a independent third party (referred to as the "Proposing Transferee"). The Proposing Transferee may not whether directly or indirectly have any community of interests with the Proposing Transferor.

2. The Proposing Transferor that wishes to dispose of Sale Shares in accordance with clause 12.4.1 must offer such shares to the other Limited Partner(s) by giving written notice (referred to as the "Transfer Notice") to the General Partner, who shall without undue delay and in any event within 5 Business Days pass on the Transfer Notice to the other Limited Partner(s). The Transfer Notice shall include information as to the identity of the Proposing Transferee and must be accompanied by the offer from the Proposing Transferee, including documentation to the effect that the Proposing Transferee is able to pay the purchase price and fulfil any other conditions of such offer.

3. In the event that the other Limited Partner(s) is(are) desirous of accepting the offer, such Limited Partner(s) shall submit its(their) acceptance in writing addressed to the General Partner and such acceptance must reach the General Partner within 10 Business Days after the General Partner having submitted the Transfer Notice to the other Limited Partner(s).

4. In the event that an offer made in pursuance hereof is accepted by several other Limited Partners in respect of a total share amount exceeding the share amount comprised in the Transfer Notice, the General Partner shall allot shares to each such Limited Partners in proportion as nearly as may be to the number of shares already held by the respective participating Limited Partner. Not later than 5 Business Days after the expiry of the above-mentioned 10 Business Days time limit, the General Partner shall give notice to the Proposing Transferor stating whether the shares comprised in the Transfer Notice have been taken up by the other Limited Partner(s) having a pre-emptive right.

5. Failing the other Limited Partner's(s') acceptance to take up all of the Sale Shares proposed to be disposed of in the Transfer Notice, all the Sale Shares may be transferred to the Proposing Transferee at a price, which is not lower and on conditions not less strict than those offered to the other Limited Partner(s), provided that the transfer is executed within 40 Business Days following expiry of the period, in which the offer from the Proposing Transferor may be accepted by the other Limited Partner(s). After expiry of such 40 Business Days period, the Proposing Transferor may not sell such shares to the Proposing Transferee or any other third party without having offered such shares to the other Limited Partner(s) according to the provisions of this clause 12.4.

E. Tag-along Right

If in observance of the provisions of this clause 12, including the pre-emption right, Partnership Shares are transferred from one or more Limited Partners to a third party, whereby such third party obtains 50 percent or more of the Partnership Shares, the transfer may only be executed on condition that the said third party simultaneously offers to purchase the Partnership Shares held by the remaining Limited Partner(s) on the same terms and conditions.

F. General conditions

1. A transfer of Partnership Shares pursuant to clauses 12.3 or 12.4, including by way of enforcement by creditors or in any other way, as well as a transfer of Partnership Shares by exercise of part of the Call Option or Put Option, is conditional upon that simultaneously with such transfer the transferring party shall transfer such number of shares in the General Partner to the transferee(s) that subsequent to the transfer of Partnership Shares the share capital of the General Partner is owned by the holders of Partnership Shares pro rata to their holdings of Partnership Shares.

2. A transfer of Partnership Shares pursuant to clause 12.3 or 12.4, including by way of enforcement by creditors or in any other way, as well as a transfer of Partnership Shares by exercise of part of the Call Option or Put Option, is conditional upon the transferee(s) signing and adhering to this Agreement and the Shareholders' Agreement.

VIII. DIVIDENDS AND DISTRIBUTIONS

A. Minimum Distribution. Within 45 days of the end of each fiscal year of the Partnership, the General Partner shall determine the amount of available cash from operations to be distributed (the "Distributable Amount"). The General Partner shall authorize and distribute (1) a "Minimum Distribution" to Nordic equal to the greater of (i) 6% of Net Sales (as such term is defined in that certain Exclusive License Agreement for "Hedrin" among Thornton & Ross, Ltd., Kerris, S.A. and Manhattan Pharmaceuticals, Inc., dated June 26, 2007, as such Exclusive License Agreement may be amended and/or restated from time to time (the "License Agreement")) for such fiscal year, as such amount may be reduced in accordance with clause 13.3 (the "Nordic Royalty"), and (ii) Nordic's pro rata share of the Distributable Amount, and (2) an amount to MHA equal to the Distributable Amount minus the Minimum Distribution. To the extent Nordic has received one or more License Payments for such fiscal year, the Minimum Distribution shall be reduced by the amount of such License Payments.

B. In all events, the General Partner shall, to the extent not prohibited by law, authorize and distribute a distribution, allocated among the Limited Partners pro rata in accordance with their Partnership Shares, that will at least cover the tax liability of each Limited Partner arising from the net income of the Partnership.

C. To the extent Nordic's percentage ownership of Partnership Shares changes, the percentage set forth in clause 13.1(1)(i) shall be changed in the same proportion as the amount of the change of Nordic's percentage ownership. For the avoidance of doubt, if Nordic's percentage ownership of Partnership Shares decreases from 50% to 20%, the Nordic Royalty shall be reduced from 6% to 2.4% of Net Sales.

7. **AUDITOR**

D. The auditor of the Partnership shall be a Danish member of an internationally recognised accounting group.

E. The auditor is elected by the General Partner for 1 year at a time. Re-election may take place.

8. **NON-COMPETITION**

F. During the term of this Agreement none of the Limited Partners are entitled to start up, acquire, engage in, or in any other way directly or indirectly participate in any activity or business which competes fully or partly with the activities of the Partnership relating to the development or commercialization of the Assets within North America, in the field of treating lice infestations in human beings, unless written consent thereto is granted by the other Limited Partner(s).

9. **CONFIDENTIALITY**

9.1 The Parties shall keep as confidential any information they may obtain on the business and activities of the Partnership as a consequence of the Limited Partners' joint ownership of the Partnership and neither the conditions for any of the Limited Partners' investment in the Partnership nor the conditions included in this Agreement shall be disclosed publicly or privately, except (i) otherwise agreed between the Parties, (ii) where such disclosure is required to be given by law, a court of competent jurisdiction, a stock ex-change or any administrative, regulatory or governmental authority or body, (iii) where the information was available in the public at the time of disclosure, (iv) becomes available to the general public other than as a result of any non-compliance with this clause 16.1, (v) is provided to the disclosing Party by a third party who is lawfully in possession of such information and has a lawful right to disclose it, or (vi) was independently developed by the disclosing Party.

9.2 Notwithstanding clause 16.1, Nordic shall always be entitled to provide such information to its limited partners about the Partnership as required from time to time by Nordic under its limited partnership agreement.

IX. VALUE ADDED TAX - TAXES

A. All amounts payable pursuant to this Agreement shall, unless otherwise stated, be exclusive of any VAT.

B. The Partnership shall be responsible for any VAT and other taxes which may be payable on services acquired by the Partnership.

C. The Parties shall fully account for their own taxes and VAT (if any) arising out of distributions from the Partnership.

10. **EXCULPATION AND INDEMNITIES**

D. No director, officer, employee, agent, advisor or shareholder of the General Partner shall have any liability for any loss to the Partnership or to the Limited Partners arising in connection with services or duties performed or to be performed by the General Partner pursuant to or resulting from this Agreement, except in respect of any matter resulting from such person's gross negligence or willful misconduct towards any obligation or duty such person has or may have in relation to the services performed or to be performed by the General Partner pursuant to or resulting from this Agreement.

E. The Partnership shall indemnify any director, officer, employee, agent, advisor or shareholder of the General Partner against any claim raised by a third party in connection with services or duties performed or to be performed by the General Partner pursuant to or resulting from this Agreement, except in respect of any matter resulting from such person’s gross negligence or willful misconduct towards any obligation or duty such person has or may have in relation to the services performed or to be performed by the General Partner pursuant to or resulting from this Agreement.

X. AMENDMENT OF THE AGREEMENT

A. The Agreement can only be amended with the written consent of all Parties.

B. The Agreement is non-terminable, except as agreed to by all Parties.

XI. NOTICES

A. All notices between the Parties under this Agreement shall be sent by (i) registered mail, or (ii) email or fax to be confirmed by ordinary letter within 48 hours after transmission to the following addresses, email and fax numbers, unless these subsequently are changed to another address, email of fax with a notice of at least 3 Business Days:

Nordic:

Nordic Biotech Venture Fund II K/S
c/o Nordic Biotech Advisors ApS
Østergade 5, 3rd floor
DK-1100 Copenhagen K
Denmark
Fax +45 70 20 12 64
E-mail: fs@nordic-biotech.com
Attn.: Florian Schönharting
With a copy to: John M. Barberich
Email: jmb@nordicbiotech.com

MHA:

Manhattan Pharmaceuticals, Inc.
810 Seventh Avenue, 4th Floor
New York, NY 10019
Fax: (212) 582-3957
Attn: Chief Financial Officer
Email: mgmcguinness@manhattanpharma.com

General Partner:

Hedrin Pharmaceuticals General Partner ApS
Østergade 5, 3rd floor
DK-1100 Copenhagen K
Denmark
Fax +45 70 20 12 64
E-mail: fs@nordic-biotech.com

Attn.: Florian Schönharting

and

810 Seventh Avenue, 4th Floor
New York, NY 10019
Fax: (212) 582-3957
Attn: Chief Financial Officer
Email: mgmcguinness@manhattanpharma.com

11. **GOVERNING LAW AND JURISDICTION**

B. This Agreement shall be governed by and construed in accordance with Danish law.

C. Each Party hereby irrevocably submits to the exclusive jurisdiction of the federal and state courts sitting in the state of New York in any action or proceeding arising out of or relating to this Agreement. Each Party hereby irrevocably agrees, on behalf of itself and on behalf of such Party's successors and permitted assigns, that all claims in respect of such action or proceeding shall be heard and determined in any such court and irrevocably waives any objection such person may now or hereafter have as to the venue of any such suit, action or proceeding brought in such a court or that such court is an inconvenient forum.

XII. LICENSE

A. The General Partner and the Parties agree that any agreement entered into by the Partnership with respect to the Assets or the License Agreement, including, without limitation, a sublicense agreement or other agreement by which a third party (a "Licensee") contracts to sell or otherwise commercialize the Assets, shall include, at Nordic's option, a provision by which the Licensee agrees to pay a portion of the consideration payable by such Licensee equal to the Nordic Royalty directly to Nordic (the "License Payment"). Nordic shall agree in any such agreement to provide notice of changes to the Nordic Royalty to any Licensee promptly as they occur.

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21 /2 2008

For Nordic Biotech General Partner II ApS on behalf of Nordic Biotech Venture Fund II K/S:

/s/ Christian Hansen

Name: Christian Hansen
Title: Partner

/s/ Florian Schonharting

Name: Florian Schonharting
Title: Partner

21 /2 2008

For Manhattan Pharmaceuticals, Inc.:

/s/ Michael McGuinness

Name: Michael McGuinness
Title: CFO

21 / 2 2008

For Hedrin Pharmaceuticals General Partner ApS (under formation):

/s/ Christian Hansen

Name: Christian Hansen
Title: Partner

/s/ Florian Schonharting

Name: Florian Schonharting
Title: Partner

Appendix 2.4

Articles of Association of the Partnership

	VEDTÆGTER	**ARTICLES OF ASSOCIATION**
	for	**of**
	[Hedrin Pharmaceuticals K/S]	**[Hedrin Pharmaceuticals K/S]**
		(Translation of official Danish language version in left-hand column)
1.	SELSKABETS NAVN	NAME
1.1	Selskabets navn er [Hedrin Pharmaceuticals K/S].	The name of the company is [Hedrin Pharmaceuticals K/S].
2.	HJEMSTED	REGISTERED OFFICE
2.1	Selskabets hjemsted er Københavns Kommune.	The registered office of the company is in the municipality of Copenhagen.
3.	FORMÅL	OBJECTS
3.1	Det er selskabets formål at eje, udvikle og kommercialisere medicinske produkter.	The object of the company is to acquire, develop and commercialize medical products.
4	SELSKABETS KAPITAL	SHARE CAPITAL
4.1	Selskabets kapital udgør DKK 2.000.000 fordelt på 2.000 kommanditanparter a DKK 1.000.	The capital of the company is DKK 2,000,000 divided into 2,000 limited partnership shares of DKK 1,000.
4.2	Ved tegning eller anden erhvervelse af kommanditanparter skal enhver kommanditist underskrive eller på anden måde tiltræde den gældende kommanditselskabsaftale.	At subscription or any other acquisition of limited partnership shares any limited partner shall sign or in other ways accede to the applicable limited partnership agreement.
4.3	Selskabets kapital er ikke indbetalt ved stiftelsen, men skal under visse betingelser som nærmere beskrevet i kommanditselskabsaftalen indbetales af kommanditisterne. Indbetalingen kan foretages som kontantindskud og som apportindskud.	The share capital of the company has not been paid in at the foundation, but shall under certain conditions specified in the limited partnership agreement be paid in by the limited partners. The payment may take place in cash and by contribution in kind.
4.4	Komplementaren har ingen ejerandel i selskabet.	The general partner has no ownership share in the company.

5.	HÆFTELSE	LIABILITY
5.1	Komplementaren hæfter personligt og ubegrænset for selskabets forpligtelser.	The general partner is subject to personal and unlimited liability for all obligations of the company.
5.2	Selskabets øvrige deltagere er kommanditister, som hæfter indirekte og solidarisk for selskabets forpligtelser, dog således at den enkelte kommanditists hæftelse er begrænset til dennes til enhver tid værende indskud i selskabet.	The other participants of the company are limited partners, who shall have indirect, joint and several liability for the obligations of the company, however the liability of the individual limited partner shall be limited to such limited partner's contribution to the company at the time in question.
6.	GENERALFORSAMLINGER	GENERAL MEETINGS
6.1	Komplementaren skal hvert år indkalde til en ordinær generalforsamling i selskabet.	Every year the general partner shall convene an ordinary general meeting in the company.
6.2	Ekstraordinær generalforsamling skal afholdes, når komplementaren finder anledning hertil. Endvidere skal komplementaren indkalde til ekstraordinær generalforsamling, såfremt en af kommanditister fremsætter skriftlig anmodning herom med angivelse af de forslag, som de pågældende kommanditister ønsker behandlet.	Extraordinary general meeting shall be held when deemed appropriate by the general partner. Furthermore extraordinary general meeting shall be held when it is requested in writing by a limited partner for consideration of a specified proposal.
6.3	Skriftlig indkaldelse til såvel ekstraordinær som ordinær generalforsamling skal ske med mindst 5 hverdages og højst 20 hverdages varsel. Indkaldelsen skal indeholde dagsordenen for generalforsamlingen og en beskrivelse af dagsordenens væsentlige punkter.	The notice convening general meetings shall be forwarded not earlier than 20 business days and not later than 5 business days before the general meeting and shall include the agenda for the general meeting and particulars of important items on the agenda.
6.4	På generalforsamlingen kan alene træffes beslutning om forhold, som ikke ifølge den for selskabet gældende kommanditselskabsaftale eller selskabets vedtægter henhører under komplementaren.	At the general meeting resolutions may exclusively be passed as to matters which according to the applicable limited partnership agreement or the company’s articles of association are not under the purview of the general partner.
6.5	Den ordinære generalforsamling skal afholdes i så god tid, at selskabets reviderede og godkendte årsrapport kan indsendes til Erhvervs- og Selskabsstyrelsen, så den er modtaget i styrelsen inden 5 måneder efter udløbet af hvert regnskabsår.	The ordinary general meeting shall be held in time for the audited and approved annual accounts to be filed with the Danish Commerce and Companies Agency no later than 5 months after the expiry of each accounting year.

6.6	Dagsordenen for den ordinære generalforsamling skal omfatte: 1. Komplementarens beretning om selskabets virksomhed i det forløbne år. 2. Fremlæggelse af revideret årsrapport til godkendelse. 3. Eventuelle forslag fremsat af komplementaren og/eller kommanditisterne.	The agenda for the ordinary general meeting shall include: 1. The general partner's presentation of the company's activities during the past year. 2. Presentation of the audited annual accounts for approval. 3. Proposals, if any, from the general partner and/or the limited partners.
6.7	Ved afstemninger på generalforsamlingen giver hvert kommanditandel, én stemme.	Each Share confers one vote at the general meeting.
6.8	Alle beslutninger på generalforsamlingen vedtages med simpelt stemmeflertal, idet beslutning om ændring af selskabets vedtægter dog kun er gyldig, såfremt den tiltrædes af komplementaren.	All matters being dealt with at the general meeting shall be decided by simple majority. However, any amendment of the company's articles of association can only be made with the consent of the general partner.
6.9	Generalforsamlingen ledes af en dirigent valgt af komplementaren.	The general partner shall elect the chairman of the general meeting.
6.10	Dirigenten leder forhandlingerne og afgør alle spørgsmål vedrørende sagernes behandlingsmåde, stemmeafgivningen og dennes resultater.	The chairman leads the discussions and decides on all questions relating to the procedure of the matters tried at the general meeting, the voting and its results.
6.11	Over forhandlingerne på generalforsamlingen føres en protokol, der underskrives af dirigenten og komplementaren.	The discussions at the general meeting shall be kept in a minute book signed by the chairman and the general partner.
7.	ANPARTSOVERGANG	TRANSFER OF SHARES
7.1	Overdragelse og anden retsovergang af kommanditanparter er kun gyldig, når dette sker i overensstemmelse med kommanditselskabsaftalen, og når selskabet efter anmeldelse af ejerskiftet har bekræftet dets gyldighed.	Any transfer of limited partnership shares shall only be valid when such transfer takes place in accordance with the limited partnership agreement, and when the company after receipt of notification of the change of ownership has confirmed its validity.

8.	SELSKABETS LEDELSE	MANAGEMENT OF THE COMPANY
8.1	Selskabet ledes af komplementaren, der dog er berettiget til at lade tredjemand udføre drifts- og ledelsesmæssige opgaver på komplementarens vegne og på komplementarens ansvar, i det omfang dette er tilladt efter kommanditselskabsaftalen.	The company is managed by the general partner who shall, however, be entitled to appoint a third party to perform its operational and management tasks on behalf of the general partner and on the general partner's responsibility to the extent permitted by the limited partnership agreement.
	Som vederlag for de ydelser, som skal leveres i henhold til kommanditselskabsaftalen og hæftelsen som komplementar, skal komplementaren modtage et årligt management fee på 50.000 eller et sådant andet beløb, som måtte blive besluttet i henhold til kommanditselskabsaftalen.	In consideration of the services to be provided under the limited partnership agreement and the liability as a general partner of the company, the general partner shall receive a management fee of DKK 50,000 per year or such other amount as may be decided pursuant to the limited partnership agreement.
9.	FORDELING OG UDLODNING AF SELSKABETS RESULTAT	DISTRIBUTION AND ALLOCATION OF THE COMPANY'S RESULT
9.1	Fordeling og udlodning af selskabets resultat sker som bestemt i kommanditselskabsaftalen.	Distribution and allocation of the company's result shall take place as set out in the limited partnership agreement.
10.	TEGNINGSREGEL	POWER TO BIND THE COMPANY
10.1	Selskabet tegnes af komplementaren. Komplementarens tegningsregel skal kræve underskrift af mindst to medlemmer af komplementarens bestyrelse.	The company shall be bound by the signature of the general partner. The rules of signature of the general partner shall require signature by at least two members of the board of directors of the general partner.
11.	REVISOR	AUDITOR
11.1	Selskabets regnskaber revideres af en statsautoriseret revisor. Revisor vælges af komplementaren på den ordinære generalforsamling for ét år ad gangen med mulighed for genvalg.	The company's accounts shall be audited by a state-authorised public accountant. The auditor shall be elected by the general partner at the ordinary general meeting for 1 year at a time. Re-election may take place.

12.	REGNSKABSÅR	FINANCIAL YEAR
12.1	Selskabets regnskabsår løber fra 1. januar til 31. december.	The financial year of the company is 1 January to 31 December.
12.2	Selskabets første regnskabsår løber fra stiftelsen til den 31. december 2008.	The first accounting year of the company is from the foundation until 31 December 2008.

* * *

Således vedtaget ved selskabets stiftelse den 2008

* * *

As adopted at the foundation of the company on 2008

Appendix 7.1

Articles of Association of General Partner

	VEDTÆGTER	**ARTICLES OF ASSOCIATION**
	for	**of**
	[Hedrin Pharmaceuticals General Partner ApS]	**[Hedrin Pharmaceuticals General Partner ApS]**
		(Translation of official Danish language version in left-hand column)
1.	NAVN	NAME
1.1	Selskabets navn er [Hedrin Pharmaceuticals General Partner ApS].	The name of the company is [Hedrin Pharmaceuticals General Partner ApS].
2.	HJEMSTED	REGISTERED OFFICE
2.1	Selskabets hjemsted er i Københavns Kommune.	The registered office of the company is in the municipality of Copenhagen.
3.	FORMÅL	OBJECTS
3.1	Selskabets formål er at være komplementar i [Hedrin Pharmaceuticals K/S].	The object of the company is to be general partner of [Hedrin Pharmaceuticals K/S].
4.	ANPARTSKAPITAL	SHARE CAPITAL
4.1	Selskabets anpartskapital udgør DKK 125.000 fordelt på anparter à DKK 1.	The share capital of the company is DKK 125,000 divided into shares of DKK 1.
4.2	Anparterne er undergivet visse begrænsninger i den indgåede anpartshaveroverenskomst.	The shares are subject to and comprised by certain restrictions in the entered into shareholders' agreement.
5.	ANPARTSOVERGANG	TRANSFER OF SHARES
	Overdragelse og anden retsovergang af selskabets anparter kan alene ske i overensstemmelse med den indgåede anpartshaveroverenskomst.	Any transfer and other assignment of the company's shares may only take place be in accordance with the shareholders' agreement entered into.

6.	GENERALFORSAMLINGER	GENERAL MEETINGS
6.1	Generalforsamlingen har den højeste myndighed i alle selskabets anliggender inden for de i lovgivningen og nærværende vedtægter fastsatte grænser.	The general meeting of shareholders has the supreme authority in all matters pertaining to the company subject to the limitations established by law and these articles of association.
6.2	Selskabets generalforsamling skal afholdes på selskabets hjemsted eller andetsteds i Region Hovedstaden. Den ordinære generalforsamling skal afholdes hvert år i så god tid, at den reviderede og godkendte årsrapport kan indsendes til Erhvervs- og Selskabsstyrelsen, så den er modtaget i styrelsen inden 5 måneder efter udløbet af hvert regnskabsår.	General meetings shall be held at the registered office of the company or elsewhere in the Capital Region of Denmark. The annual general meeting shall be held in time for the audited and adopted annual report to be received by the Danish Commerce and Companies Agency (Erhvervs- og Selskabsstyrelsen) within five months after expiry of the financial year.
6.3	Dagsordenen for den ordinære generalforsamling skal omfatte: 1. Valg af dirigent. 2. Forelæggelse af årsrapport med revisionspåtegning til godkendelse. 3. Beslutning om anvendelse af overskud eller dækning af tab i henhold til den godkendte årsrapport 4. Eventuelle forslag fra bestyrelse eller anpartshavere.	The agenda for the ordinary general meeting shall include: 1. Election of chairman of the meeting. 2. Presentation of the annual report with the auditor's report for approval. 3. Decision on allocation of profit or the cover of losses according to the approved annual report. 4. Proposals, if any, from the board of directors or the shareholders.
6.4	På generalforsamlingen giver hver anpart én stemme.	Each share carries one vote at the general meeting.
7.	SELSKABETS LEDELSE	MANAGEMENT OF THE COMPANY
7.1	Selskabet ledes af en bestyrelse på én til fem medlemmer valgt af generalforsamlingen.	The board of directors shall consist of one to five directors appointed by the general meeting in accordance with the shareholders agreement.

7.2	Selskabet har ingen direktion.	The company has no board of management.
8.	TEGNINGSREGEL Selskabet tegnes af 2 bestyrelsesmedlemmer i forening.	POWER TO BIND THE COMPANY The company is bound by the joint signatures of 2 directors.
9.	REVISOR	AUDITOR
9.1	Selskabets regnskaber revideres af en af generalforsamlingen valgt statsautoriseret revisor.	The company’s accounts shall be audited by a state-authorised public accountant elected by the general meeting.
10.	REGNSKABSÅR	FINANCIAL YEAR
10.1	Selskabets regnskabsår løber fra 1. januar til 31. december.	The financial year of the company is 1 January to 31 December.
10.2	Selskabets første regnskabsår løber fra stiftelsen til den 31. december 2008.	The first accounting year of the company is from the foundation until 31 December 2008.
11.	BEMYNDIGELSE TIL EKSTRAORDINÆR UDBYTTEUDDELING	AUTHORIZATION FOR PAYMENT OF EXTRAORDINARY DIVIDENS
11.1	Bestyrelsen er bemyndiget til efter aflæggelsen af selskabets første årsrapport at træffe beslutning om uddeling af ekstraordinært udbytte, jf. anpartsselskabslovens § 44a. Bemyndigelsen er ikke tidsbegrænset.	The board of directors is authorized to pay extraordinary dividends after the submission of the company's first annual report, cf. Section 44a of the Danish Private Companies Act. The authorization is not limited in time.
	Således vedtaget i forbindelse med stiftelsen.	As adopted at the foundation.
	Dato: [*.] 2008	Date: [*] 2008

Appendix 7.3

Shareholder Agreement Regarding General Partner

Note: The execution version of the Shareholder Agreement regarding the General Partner is attached as Exhibit D to the Joint Venture Agreement filed as Exhibit 10.19 to Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-150580) filed with the SEC on October 3, 2008 and incorporated herein by reference.

Exhibit C

Registration Rights Agreement

Note: The execution version of the Registration Rights Agreement, dated February 25, 2008, is filed as Exhibit 10.22 to MHA's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2008 and incorporated herein by reference.

Exhibit D

Shareholder Agreement

Note: The execution version of the Shareholder Agreement, dated February 25, 2008, is attached hereto.

Appendix 7.3

SHAREHOLDERS' AGREEMENT

between

Nordic Biotech Venture Fund II K/S

and

Manhattan Pharmaceuticals, Inc.

regarding

Hedrin Pharmaceuticals General Partner ApS
(under formation)

February 2008

ATTORNEY JAKOB MOSEGAARD LARSEN, NIELSEN NØRAGER LAW FIRM
16 FREDERIKSBERGGADE – DK-1459 COPENHAGEN – DENMARK - PHONE +45 33 11 45 45 – FAX +45 33 11 80 81 – WWW.NNLAW.DK

CONTENTS

Nordic Biotech Venture Fund II K/S
Østergade 5 3
1100 Kopenhagen K
Denmark
Central Business Register No 29150397

(hereinafter referred to as "Nordic")

and

Manhattan Pharmaceuticals, Inc.
810 Seventh Avenue, 4th Floor
New York, NY 10019
United States of America

(hereinafter referred to as "MHA")

have entered into the following

SHAREHOLDERS' AGREEMENT

1. DEFINITIONS

1.1 In this Shareholders' Agreement the following words and expressions shall have the following meanings, unless the context otherwise requires:

Business Day	A day when banks are generally open for business in New York City, New York.
Company	Hedrin Pharmaceuticals General Partner ApS

	(under formation), Østergade 5 3, 1100 Copenhagen K, Denmark.
Nordic Partnership Shares	As defined in the Partnership Agreement.
Partnership	Hedrin Pharmaceuticals K/S (under formation), Østergade 5 3, 1100 Copenhagen K, Denmark.
Partnership Agreement	The limited partnership agreement between MHA, Nordic and the Company concerning the Partnership as amended from time to time.
Partnership Shares	As defined in the Partnership Agreement.
Party	Any holder of shares in the Company.
Payment Milestone	As defined in the Partnership Agreement.
Services Agreement	As defined in the Partnership Agreement.
Shareholders' Agreement	This shareholders' agreement between Nordic and MHA concerning the Company as amended from time to time.
Trade Sale	As defined in the Partnership Agreement.

2. PURPOSE AND BACKGROUND

2.1 The Company has been established as part of the establishment of the Partnership with the sole purpose of being a general partner in the

Partnership. Thus, the Company shall carry out no other activities than those required in order for the Company to fulfill its obligations as general partner under the Partnership Agreement and the Shareholders' Agreement.

3. THE COMPANY AND THE SHARE CAPITAL

3.1 The Company is a private limited liability company registered with the Danish Commerce and Companies Agency.

3.2 At the date hereof the share capital of the Company amounts to DKK 125,000 and is distributed between the Parties as follows (all amounts in DKK):

	Distribution of the share capital of the Company
Nordic	62,500
MHA	62,500
Total	125,000

3.3 The share capital of the Company shall at all times be owned by the holders of Partnership Shares pro rata to their holdings of Partnership Shares. At any time that the ownership of Partnership Shares by MHA and Nordic changes, including, without limitation in accordance with the Put Option or the Call Option (as such terms are defined in the Partnership Agreement), the share capital of the Company shall be redistributed in accordance with the previous sentence. Each of Nordic and MHA agrees to deliver any certificates evidencing its share capital in the Company to the Company in furtherance of any such redistribution.

3.4 The share capital of the Company may not be increased without the express unanimous written consent of all Parties.

4. BOARD OF DIRECTORS

4.1 The Company shall have as its single tier of management a board of directors, which shall be in charge of the overall and day-to-day business

and management of the Company and, through the Company, the Partnership in accordance with the Shareholders' Agreement and the Partnership Agreement (which agreements shall be available to all board members) as well as the guidelines set out by the Parties from time to time.

4.2 The board of directors shall consist of one to four members elected at the general meeting. Each of MHA and Nordic shall each be entitled to appoint two members of the board of directors for so long as such Party owns 10 percent or more of the Partnership Shares.

4.3 Irrespective of clause 4.2, if the Payment Milestone has not been achieved by 30 June 2008 Nordic shall – in addition to any board members appointed by Nordic pursuant to clause 4.2 and as long as Nordic is the owner of the Nordic Partnership Shares – immediately be entitled to appoint one additional board member, in which case the board of directors may consist of up to five members elected at the general meeting.

4.4 The members of the board of directors appointed by a Party shall be approved by the other Parties, such approval not to be unreasonably withheld.

4.5 At the date hereof the following members have been elected to the board of directors:

Christian Hansen (appointed by Nordic)
Florian Schönharting (appointed by Nordic)
Douglas Abel (appointed by MHA)
Michael McGuinness (appointed by MHA)

4.6 A Party may at any time remove and, subject to clause 4.4, replace the member(s) of the board of directors appointed by the Party.

4.7 The chairman of the board of directors shall be selected by the directors appointed by Nordic.

4.8 The board of directors adopts its resolutions by simple majority of votes. In case of parity of votes of the board of directors with respect to the decisions listed below, the chairman shall have a casting vote. With respect to other decisions of the board of directors not listed below, the chairman shall not have a casting vote, and the board of directors shall attempt to resolve disagreements in good faith.

The chairman's vote shall constitute the tie-breaking (casting) vote on any decision of the board of directors involving the approval of:

(i) Any debt or equity financing or borrowing from a party unrelated to the party that nominated the chairman;
(ii) Any Trade Sale of the Partnership and/or dissolution of the Partnership; provided that the Company shall not cause or allow the Partnership to execute any agreement with respect to a Trade Sale or other dissolution for 30 days following such decision of the board of directors during which time MHA may present a proposal to acquire Nordic's interest in the Partnership and the Company (the "MHA Proposal Right");
(iii) The hiring or firing of senior management of the Company;
(iv) Any license, sublicense or similar agreement with respect to the Assets (as defined in the Partnership Agreement) or any amendment or modification thereof;
(v) The terms of any agreements between the Partnership and MHA, and any subsequent amendments or modifications thereof; and
(vi) Any budget under the Services Agreement.

To the extent that Nordic has appointed an additional board member pursuant to Section 4.3 hereof, any decision by the board to approve a Trade Sale or other dissolution of the Partnership shall trigger the MHA Proposal Right.

4.9 Each Party shall remove a member of the board of directors at the request of the other Party(ies) if said board member has materially breached her/his

duties and obligations or in any other way has acted with serious misconduct in respect of the Company or the Partnership.

4.10 A member of the board of directors appointed by a Party may at any time make such disclosures to the Party having appointed the board member concerning the Company, the Partnership, and their affairs as the board member may in her/his reasonable discretion consider appropriate.

4.11 Unless the Parties agree otherwise, the board of directors shall meet on a quarterly basis in person or alternatively by telephone conference. The board may act by written consent in lieu of actions taken at a meeting.

4.12 The board of directors shall procure that the following documentation is received by all Parties:

(i) Agendas and minutes of the meetings of the board of directors.

(ii) Annual business and project plans, including budgets approved by the board of directors, regarding the Partnership not later than 20 Business Days prior to the beginning of each financial year.

(iii) Quarterly financial reports regarding the Partnership within 45 days following the end of a quarter, including management accounts, a profit and loss account, balance sheet and cash flow statement, a comparison of the profit and loss account, a balance sheet with the relevant budget and a statement of the cash position at the quarter end compared with the cash flow forecast. Further, the reports shall refer to any material matter occurring in or relevant to the period in question.

(iv) Annual audited financial information regarding the Partnership according to customary practice within four months of the expiry of the relevant financial year, including balance sheet as of the end of such financial year and statements of income and shareholders' equity and of cash flows of the Partnership of such financial year, setting

forth in each case in comparative form the corresponding figures for the preceding financial year, all duly certified by the Partnership's independent public auditor of recognised standing.

(v) Any written report submitted to the Company or the Partnership by the Company's and the Partnership's independent public auditor in connection with the annual or interim audits of the Company's or the Partnership's books.

4.13 The board of directors of the Company shall comply with the rules of procedure attached as Schedule 4.13. The rules of procedure may be changed by a majority of the board of directors.

5. POWER TO BIND THE COMPANY

5.1 The Company shall be bound by the signatures of two members of the board of directors, such signatures to be provided by one member of the board of directors appointed by Nordic, if any, and one member of the board of directors appointed by MHA, if any. No board member shall refuse to sign anything authorized and directed by the board of directors, in accordance with this Shareholders' Agreement, to be signed by the Company.

6. DIVIDENDS

6.1 It is not the intention of the Parties that the Company shall pay out any dividends.

7. AUDITOR

7.1 The auditor of the Company shall be a Danish member of an internationally recognised accounting group, selected by the board of directors.

7.2 To the extent possible the auditor of the Company shall be identical to the auditor of the Partnership as appointed from time to time.

8. PLEDGE AND TRANSFER OF SHARES

8.1 A Party may not pledge or otherwise create or suffer the creation of any encumbrance or lien over all or any part of its shares in the Company, without the prior written consent of the other Parties.

8.2 A Party may not sell, assign, issue put- or call-options, transfer or otherwise dispose of all or any part of its shares in the Company, except that a Party – simultaneously with any transfer by such Party of Partnership Shares – shall be entitled and obliged to transfer such number of shares in the Company that subsequent to the transfer of Partnership Shares the share capital of the Company shall be owned by the holders of Partnership Shares pro rata to their holdings of Partnership Shares.

8.3 Any transfer of shares in the Company pursuant to clause 8.2 shall take place at a price of DKK 1 per share of nominally DKK 1.

9. BINDING NATURE

9.1 The Parties undertake to adhere to the Shareholders' Agreement and cast their vote at general meetings in the Company so as to give full effect to the provisions hereof. In case of any discrepancy between the articles of association of the Company and the Shareholders' Agreement, the provisions of the Shareholders' Agreement shall prevail in the internal relationship of the Parties. It shall be entered into the Company's articles of association and register of shareholders that the Parties' shareholdings in the Company are subject to and comprised by the Shareholders' Agreement and that transfer of shares in the Company is subject to compliance with the Shareholders' Agreement.

10. AMENDMENT AND TERMINATION OF THE SHAREHOLDERS' AGREEMENT

10.1 The Shareholders' Agreement can only be amended or terminated with the written consent of all Parties.

11. CONFIDENTIALITY

11.1 The Parties shall keep as confidential any information they may obtain on the business and activities of the Company as a consequence of their joint ownership of the Company and neither the conditions for any of the Parties' investment in the Company nor the conditions included in this Shareholders' Agreement shall be disclosed publicly or privately, except (i) otherwise agreed between the Parties, (ii) where such disclosure is required to be given by law, a court of competent jurisdiction, a stock exchange or any administrative, regulatory or governmental authority or body, (iii) where the information was available in the public at the time of disclosure, (iv) becomes available to the general public other than as a result of any non-compliance with this clause 11.1, (v) is provided to the disclosing Party by a third party who is lawfully in possession of such information and has a lawful right to disclose it, or (vi) was independently developed by the disclosing Party.

11.2 Notwithstanding clause 11.1 Nordic shall always be entitled to provide such information to its limited partners about the Company as required from time to time by Nordic under its limited partnership agreement.

12. TAX

12.1 Any individual tax consequences of a Party caused by the Shareholders' Agreement or the holding of shares and securities in the Company shall be of no concern to the other Parties or the Company.

13. CONSENT BY THE COMPANY

13.1 By co-signing the Shareholders' Agreement, the Company hereby consents to the provisions of the Shareholders' Agreement and undertakes where relevant to be bound by and give effect to the provision included herein.

14. NOTICES

All notices between the Parties under the Shareholders' Agreement shall be sent by (i) registered mail, or (ii) e-mail or fax to be confirmed by ordinary letter within 48 hours after transmission to the following addresses, e-mail and fax numbers, unless these subsequently are changes to another address, e-mail of fax with a notice of at least 3 Business Days:

Nordic:
Nordic Biotech Venture Fund II K/S
c/o Nordic Biotech Advisors ApS
Østergade 5, 3rd floor
DK-1100 Copenhagen K
Denmark
Fax +45 70 20 12 64
E-mail: fs@nordic-biotech.com
Attn.: Florian Schönharting
With a copy to: John M. Barberich
Email: jmb@nordicbiotech.com

MHA:
Manhattan Pharmaceuticals, Inc.
810 Seventh Avenue, 4th Floor
New York, NY 10019
United States of America
Fax: (212) 582-3957
Attn: Chief Financial Officer
Email: mgmcguinness@manhattanpharma.com

15. GOVERNING LAW AND ARBITRATION

15.1 The Shareholders' Agreement shall be governed by and construed in accordance with Danish law.

15.2 Each Party hereby irrevocably submits to the exclusive jurisdiction of the federal and state courts sitting in the state of New York in any action or

proceeding arising out of or relating to this Shareholders' Agreement. Each Party hereby irrevocably agrees, on behalf of itself and on behalf of such Party's successors and permitted assigns, that all claims in respect of such action or proceeding shall be heard and determined in any such court and irrevocably waives any objection such person may now or hereafter have as to the venue of any such suit, action or proceeding brought in such a court or that such court is an inconvenient forum.

NIELSEN NØRAGER

617
510
9275

22 / 2 2008

For Nordic Biotech General Partner II ApS on behalf of Nordic Biotech Venture Fund II K/S:

Name:
Title:

Name:
Title:

22 / 2 2008

For Manhattan Pharmaceuticals, Inc.:

Name:
Title:

___ / ___ 2008

For Hedrin Pharmaceuticals General Partner ApS (under formation)

Name:
Title:

Name:
Title:

___ / ___ 2008

For Nordic Biotech General Partner II ApS on behalf of Nordic Biotech Venture Fund II K/S:

_____

Name:
Title:

_____

Name:
Title:

___ / ___ 2008

For Manhattan Pharmaceuticals, Inc.:

_____

Name: Michael G. McGuinness
Title: CFO

___ / ___ 2008

For Hedrin Pharmaceuticals General Partner ApS (under formation)

_____

Name:
Title:

_____

Name:
Title:

Schedule 4.13 to Shareholders' Agreement

RULES OF PROCEDURE

for the board of directors of

HEDRIN PHARMACEUTICALS GENERAL PARTNER APS

Contents

RULES OF PROCEDURE

for the board of directors (the "Board") of

HEDRIN PHARMACEUTICALS GENERAL PARTNER APS

(the "Company")

1. SCOPE

1.1 In its capacity as general partner the Company is responsible for the management and administration of Hedrin Pharmaceuticals K/S (the "Partnership"). These rules of procedure relate to the Board's responsibilities in respect of the Company as well as the Company's – and thereby the Board's – responsibilities in respect of the Partnership. If the terms of these Rules of Procedure conflict with the terms of the Shareholders' Agreement (as defined below), the terms of the Shareholders' Agreement shall control.

2. CONSTITUTION OF THE BOARD, ETC.

2.1 The general meeting shall elect the Board unless otherwise specified in the articles of association of the Company (the "Articles of Association"), the shareholders' agreement of the Company (the "Shareholders' Agreement") or the Danish Private Companies Act.

2.2 Prior to the election of the board members, the shareholders of the Company shall be informed of the nominees' management duties in other companies.

2.3 The Board shall convene immediately after the general meeting or such other forum at which it is elected. The Board shall constitute itself by electing a chairman.

2.4 The chairman shall represent the Board externally.

2.5 If new members have joined the Board, these members shall sign the original rules of procedure, which are kept at the office of the Company. Furthermore they shall each receive a copy of the rules of procedure as well as a copy of the Articles of Association, the Shareholders' Agreement, and the limited partnership agreement concerning the Partnership (the "Limited Partnership Agreement").

3. BOARD MEETINGS, ETC.

3.1 As far as possible, the Board shall hold a meeting quarterly or whenever this is deemed necessary by its chairman. Furthermore, the chairman shall convene board meetings whenever this is deemed necessary or if requested by a board member or by the auditor of the Company or the Partnership.

3.2 The chairman shall convene board meetings with at least one week's notice. However, the notice may be reduced by the chairman at his discretion if the issues to be discussed require a swift decision.

3.3 Prior to each board meeting, the chairman shall forward the agenda and, as far as possible, the documentation necessary for the Board's transaction of business.

3.4 Communication between the board members and meetings may be convened by giving notice by email or fax or by similar electronic communication or by letter.

3.5 A representative (the "Representative") from MHA or such other company to which one or more management duties relating to the Partnership have been delegated (the "Services Company") shall have the right and obligation to be present and make statements at the board meetings, unless in the individual case the Board decides otherwise. At board meetings, the Representative shall report on the operations of the Partnership since the previous board meeting.

3.6 The Company's and the Partnership's auditors shall have the right and obligation to be present at the board meeting dealing with the annual accounts of the Company and the Partnership, and shall, among others, comment on whether, in their opinion, the profit and loss accounts and the balance sheets contain the information necessary for the assessment of the financial position of the Company and the Partnership.

3.7 The chairman shall chair the board meetings. Board meetings shall be held at the Company's office. However, meetings may be held elsewhere or by telephone conference if, in the chairman's view, the subject of the meeting or other circumstances makes this expedient.

3.8 At the first meeting after the ordinary general meeting, the Board shall plan its work for the coming year.

4. BOARD MEETING PROCEDURES

4.1 The Board shall not make any decisions without all board members having had access, as far as possible, to participate in the discussion of the issue.

4.2 If the board meeting has been convened in accordance with the provisions of clause 3, the Board shall form a quorum when more than half of the board members are present.

4.3 A member of the Board can give another member of the Board authority (by proxy) to meet and vote on board meetings on his/her behalf.

4.4 The issues dealt with by the Board shall be decided in accordance with the Shareholders' Agreement. The Chairman has the decisive vote in the event of an equal division of votes to the extent set forth in the Shareholders Agreement.

5. MINUTE BOOK

5.1 The chairman shall ensure that minutes of board meetings and board decisions are entered into the minute book, either by himself or a person appointed by the Board. All minutes shall as a minimum contain the following information:

- The names of board members, or others, who participated,
- the agenda, with any supplements, discussed, and
- the decisions made according to the agenda

Any board member who is not in agreement with the Board's decision, shall have the right to have his opinion entered into the minute book.

5.2 The minutes shall be signed by all board members present at the meeting in question. If a board member did not participate in a given meeting, he shall review the minutes and sign these accordingly.

5.3 A copy of the minutes shall be forwarded to the board members as soon as possible after the meeting in question. Furthermore, every board member shall have access to the minute book and be entitled to order a copy thereof.

6. CONFIDENTIALITY

6.1 The board meetings shall be confidential.

6.2 Information and documents which the board members receive from the Company or the Partnership shall be considered confidential. The secrecy shall include trade and operation secrets as well as any occurrences at board meetings, unless it being issues which, according to the Board's decision or applicable law, must be disclosed. The secrecy also applies after the board members' resignation. The confidentiality shall be kept for 5 (five) years.

7. GENERAL OBLIGATIONS OF THE BOARD

7.1 The Board shall have the overall responsibility for the management of the Company, which in its capacity as general partner is responsible for the management and administration of the Partnership. The Board shall prepare objectives for the Partnership and a Partnership policy in accordance with the Partnership's overall objective as set out in the Limited Partnership Agreement and shall ensure that objectives and policy are complied with and that they are revised if and when developments so require.

7.2 The Board shall ensure the proper organisation of the Company's and the Partnership's activities. The Board shall also decide on the organisation of the Company and the Partnership as to accounting, internal control, IT organisation and budgeting.

7.3 The Board shall follow up on Company and Partnership plans, budgets and the like as well as make decisions on reports on Company and Partnership cash position, order books, important dispositions, financing, cash flow and special risks including currency risks.

7.4 The Board shall make decisions as to whether the capital adequacy of the Company and the Partnership at any time is sufficient in relation to the operation of the Company and the Partnership.

7.5 The Board shall decide on the insurance conditions of the Company and the Partnership. At least every second year, the Board shall receive a statement from the Services Company to the effect that the Partnership is covered in every respect by insurance as appropriate and customary. Any comments on the review shall be entered into the Board's minute book.

8. OBLIGATIONS OF THE BOARD WITH RESPECT TO MANAGEMENT

8.1 The Company is in its capacity as general partner responsible for the management and administration of the Partnership. The Board shall be responsi-

ble for the management of the Company in such way that the Company fulfils its obligations under the Shareholders' Agreement and the Limited Partnership Agreement.

8.2 The Board shall supervise the Partnership's activities and shall ensure that the services provided by the Services Company to the Partnership are proper and in accordance with the Services Agreement, the Danish Private Companies Act and any other legislation of relevance to the Partnership.

8.3 The Board shall exercise its supervision of the Services Company, among others, via the Representative's reporting on the Partnership's activities at each board meeting, cf. clause 3.5, via the Board's right to ask questions and request information from the Services Company, cf. clause 8.5, via the budget procedure and the Board's follow up on same, described in clause 10, as well as via the auditing to be ensured by the Board, cf. clause 11.

8.4 The Board shall, unless otherwise appears from the Shareholders' Agreement or the Limited Partnership Agreement, make decisions in all cases, which giving consideration to the conditions of the Company and the Partnership are unusual or of great importance.

8.5 The Board shall procure the information necessary for the fulfilment of its duties. At the board meetings, the Board shall have the right to request from the Services Company the information and documentation necessary for the fulfilment of its duties. If a board member requires more information than supplied at the board meetings, a request shall be submitted to the chairman.

9. TITLE TO COMPANY AND PARTNERSHIP SHARES

9.1 The Board shall ensure that a register of shareholders is kept in which each individual shareholder's name, position, address and possession of shares in the Company and the Partnership are registered.

10. BUDGETS AND ACCOUNTS

10.1 The Board shall ensure that the Services Company prepares budgets for the Partnership and the Company on an ongoing basis. The Board shall lay down the form of this budget reporting including detail rate with a view to operation, balance, cash and investment budgets.

10.2 The Board shall ensure that the Services Company prepares monthly accounts for the Partnership. Further, the Board shall ensure that the Services Company prepares quarterly financial reports for the Partnership within 45 days following the end of a quarter, including management accounts, a profit and loss account, balance sheet and cash flow statement, a comparison of the profit and loss account and balance sheet with the relevant budget and a statement of the cash position at the quarter end compared with the cash flow forecast. The quarterly report shall refer to any material matter occurring in or relevant to the period in question.

10.3 The Board shall ensure that the Services Company prepares a draft for the annual report of the Partnership.

10.4 The Board shall carefully examine the Services Company's submitted draft for the annual reports and ensure that this has been prepared in accordance with good accounting principles as regards the assessment of the items in the balance sheets as well as the specification of the accounts, layout and description of the items, and that the presentation of the accounts in the present form is in accordance with good accounting principles.

10.5 After the final preparation of the annual report of the Partnership and the Company, these shall be submitted to the auditors for approval. When such approval has been obtained, the draft for the annual reports, the draft auditors' reports and any comments on the reports shall be submitted to the full Board for approval.

10.6 The final annual reports shall be signed by the Board (as regard the annual report of the Partnership the signatures are provided on behalf of the Company in its capacity of general partner).

10.7 The annual reports shall be submitted to the Partnership's and the Company's ordinary general meetings for approval.

11. AUDITORS

11.1 The Board shall ensure that the bookkeeping and the asset management of the Company and the Partnership are supervised in a satisfactory way. The Board and the auditors shall enter into a written agreement on the scope of the audit and the auditors' responsibility.

11.2 The Board shall ensure the presence of the necessary information for the auditing including decision as to whether internal auditing is required. The Board shall be solely responsible for procuring all such information for the auditors as are deemed necessary for the auditors' carrying out of their duties.

11.3 The Company's and the Partnership's auditors shall be present at the board meeting(s) where the annual reports shall be approved. The auditors' records shall be available at all board meetings. If any entering into the auditors' records has been made since the last board meeting, copy of this should preferably be submitted to the Board prior to the meeting.

11.4 The Board shall consider the contents of the auditors' records prior to the Board's signature. The Board's signing of the records serves as evidence of the Board's knowledge of the contents of the records.

12. FILING OF THE ANNUAL REPORT AND MANDATORY REPORTING REQUIREMENTS

12.1 The Board shall ensure that the annual reports of the Company and the Partnership are submitted to Erhvervs- og Selskabsstyrelsen (the Danish Com-

merce and Companies Agency) as well as any other relevant authorities or institutions according to applicable law.

12.2 In case of amendments of the information forwarded to Erhvervs- og Selskabsstyrelsen (the Danish Commerce and Companies Agency), the Board shall ensure that this is reported in due time.

13. AMENDMENTS TO THE RULES OF PROCEDURE

13.1 Amendments of these present rules of procedure shall be made by a majority vote of the Board.

13.2 These present rules of procedure were adopted by the Board at the board meeting on 21 / 2 2008.

merce and Companies Agency) as well as any other relevant authorities or institutions according to applicable law.

12.2 In case of amendments of the information forwarded to Erhvervs- og Selskabsstyrelsen (the Danish Commerce and Companies Agency), the Board shall ensure that this is reported in due time.

13. AMENDMENTS TO THE RULES OF PROCEDURE

13.1 Amendments of these present rules of procedure shall be made by a majority vote of the Board.

13.2 These present rules of procedure were adopted by the Board at the board meeting on __ / ___ 2008.

***

Michael G. McGuinness
CFO
Manhattan Pharmaceuticals, Inc.

Exhibit E

Services Agreement

Note: The execution version of the Shareholder Agreement, dated February 25, 2008, is attached hereto.

Execution Version

SERVICES AGREEMENT

THIS SERVICES AGREEMENT (this "**Agreement**") is made and entered into effective as of February 25, 2008, by and between Manhattan Pharmaceuticals, Inc., a Delaware corporation ("**MHA**"), and Hedrin Pharmaceuticals K/S ("**Newco**").

WHEREAS, pursuant to that certain Joint Venture Agreement (the "**JV Agreement**") dated as of January 31, 2008 between MHA and Nordic Biotech Venture Fund II K/S ("**Nordic**"), MHA agreed to contribute the Assets (as that term is defined in the Assignment and Contribution Agreement, dated as of even date herewith, by and among Newco, MHA and Nordic Biotech Venture Fund II K/S (the "**Assignment and Contribution Agreement**")) to Newco, and Newco agreed to assume the Assumed Liabilities (as that term is defined in the Assignment and Contribution Agreement), and MHA has agreed to provide certain necessary administrative and management services (as further described herein, the "**Services**") to Newco, for the consideration described herein, all as more specifically provided herein.

NOW, THEREFORE, in consideration of the premises and the representations, warranties and covenants herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. ENGAGEMENT OF MHA; ACCEPTANCE.

Newco hereby engages MHA, as an independent contractor, to provide the Services during the Term (as defined below). MHA hereby accepts such engagement and agrees to perform the Services during the Term in accordance with the terms hereof for the compensation set forth below.

2. TERM.

The term of MHA's appointment hereunder shall (i) initially run for one (1) year from the date hereof and (ii) automatically renew for additional one (1) year periods until either party hereto delivers written notice of nonrenewal or cancellation to the other no later than ninety (90) days prior to the end of either the initial one-year period or any one-year renewal period (the initial one-year period, collectively with all renewal periods, the "*Term*"); provided, however, that either party (the "**Terminating Party**") may sooner terminate this Agreement in the event that (a) the other party (the "**Defaulting Party**") materially breaches its obligations under this Agreement and (b) the Defaulting Party fails to cure such breach within thirty days following written notice from the Terminating Party specifying the facts constituting the breach. Sections 5, and 7 through 13 hereof shall survive the termination or expiration of the Term.

3. THE SERVICES.

The Services shall consist of the following:

- managing the day-to-day business and affairs of Newco, including, without limitation, as Newco's agent, fulfilling Newco's duties under the Hedrin Agreements (as that term is defined in the Assignment and Contribution Agreement) and overseeing the commercialization efforts of the Hedrin Product (as that term is defined in the Assignment and Contribution Agreement), and pursuing the Hedrin Patent Rights (as that term is defined in the Assignment and Contribution Agreement) on behalf of Newco;

- administering the day-to-day accounting and record-keeping operations of Newco;

- maintaining Newco's books and records; and

- performing such other services as requested by, or as agreed to in advance in writing by, the Board of Directors of the general partner of Newco (the "**JV Board**") from time to time.

MHA shall devote such time, resources and attention to the provision of the Services as may be required to discharge fully its duties hereunder; provided, that nothing herein shall preclude MHA and its directors, officers and employees from pursuing MHA's other business and investment activities.

4. FEES AND EXPENSES.

In consideration of the Services, during the Term, Newco shall pay MHA in accordance with a budget, which budget must be approved in advance by the JV Board, detailing each of the Services to be provided and the amount budgeted therefor, including Services provided directly by MHA and Services outsourced by MHA to a third party, for the upcoming four fiscal quarters (the "**Budget**"). The Budget for the upcoming four fiscal quarters shall be submitted by MHA to the JV Board at least 30 days in advance of each upcoming fiscal quarter. MHA may request to update or amend the Budget at any time during the Term, but Newco shall not be responsible for fees and expenses resulting from such changes unless the JV Board has consented in advance. The Budget for 2008 is attached hereto as Exhibit A and the budgeted amounts for the first quarter of 2008 shall be reduced to the pro rata portion of those amounts corresponding to the portion of the first quarter that this Agreement is in effect. Newco shall pay amounts budgeted for MHA's Services on a monthly basis, in arrears, on the first day of each calendar month. All third-party costs and expenses incurred in connection with the performance of the Services shall be paid directly from Newco's funds to the applicable contractor or other provider of services or materials.

5. STANDARD OF CARE; LIMITATION OF LIABILITY.

In performing the Services hereunder, MHA shall use the same standard of care as it uses or would use in performing similar services and functions for its own account.

6. CONSULTATION.

MHA and Newco shall consult with each other in good faith from time to time concerning such matters as may be relevant to the performance of this Agreement in accordance with the intentions of the parties.

7. INDEPENDENCE OF THE PARTIES.

Notwithstanding its status as an equity owner of Newco, MHA is performing services hereunder as an independent contractor on behalf of Newco and neither it, nor its employees, agents, servants or representatives are to be considered employees of Newco for any purpose whatsoever.

8. BINDING AGREEMENT.

This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors, assigns, and legal representatives.

9. SEVERABILITY AND AMENDMENT.

If any part of this Agreement is found to be invalid, it will not affect the validity of any other parts of this Agreement. If it is ever held that any restriction in this Agreement is too broad to allow it to be enforced to its fullest extent, the parties hereto agree that a court may enforce the restriction to the maximum extent permitted by law. This Agreement may not be modified or amended and its provisions may not be waived (in whole or in part), except by a writing signed by both of the parties hereto.

10. NOTICES.

Any notice, demand, offer or other written instrument ("Notice") required or permitted to be given shall be in writing signed by the party giving such Notice and shall be hand delivered or sent, postage prepaid, by certified or registered mail, return receipt requested, or by overnight delivery such as Federal Express, addressed as follows (or at such other address as any party hereto shall hereafter specify by notice in writing to the other parties hereto):

Contact Information for Newco:

Nordic Biotech Advisors
Østergade 5, 3rd floor
DK-1100 Copenhagen K
Denmark
Attn: Florian Schönharting
Fax: (978) 448-3145

Contact Information for MHA:

Manhattan Pharmaceuticals, Inc.
810 Seventh Avenue, Fourth Floor
New York, NY 10019
Attn: Chief Financial Officer
Fax: (212) 582-3957

Email: fs@nordicbiotech.com
With a copy to: John M. Barberich
Email: jmb@nordicbiotech.com

11. GOVERNING LAW; JURISDICTION; VENUE.

This Agreement, and any disputes arising directly or indirectly from this Agreement, shall be governed by and construed and enforced in accordance with the laws of the state of New York, without regard to conflict-of-laws rules. The parties hereto hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the state courts located in the Borough of Manhattan in the State of New York (the "**NY Courts**"), and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the NY Courts for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) waive any objection to the laying of venue of any such action or proceeding in the NY Courts, and (iv) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the NY Courts has been brought in an improper or inconvenient forum.

12. ENTIRE AGREEMENT.

This Agreement constitutes the entire agreement among the parties with respect to the matters covered hereby and supersedes all previous written, oral or implied understandings among them with respect to such matters.

13. COUNTERPARTS.

This Agreement may be executed in counterparts, each of which shall be deemed an original agreement, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have caused this Services Agreement to be executed and delivered in their name and on their behalf as of the date first above written.

MANHATTAN PHARMACEUTICALS, INC.

By: _____

Print Name: Michael G. McGuinness

Title: CFO

HEDRIN PHARMACEUTICALS K/S

By: _____

Print Name: Michael G. McGuinness

Title: Director

By: _____

Print Name: _____

Title: _____

IN WITNESS WHEREOF, the parties have caused this Services Agreement to be executed and delivered in their name and on their behalf as of the date first above written.

MANHATTAN PHARMACEUTICALS, INC.

By: _____

Print Name: _____

Title: _____

HEDRIN PHARMACEUTICALS K/S

By: _____

Print Name: C. Hansen

Title: Director

By: _____

Print Name: _____

Title: _____

IN WITNESS WHEREOF, the parties have caused this Services Agreement to be executed and delivered in their name and on their behalf as of the date first above written.

MANHATTAN PHARMACEUTICALS, INC.

By: _____

Print Name: _____

Title: _____

HEDRIN PHARMACEUTICALS K/S

By: _____

Print Name: Florian Schuhbauer

Title: Partner

By: _____

Print Name: _____

Title: _____

EXHIBIT A

1710756.2

Hedrin/Newco Budget

510k

	Q1	Q2	Q3	Q4	2008
Management fee to MHA:					
R&D	72,757	72,757	72,757	72,757	291,029
G&A	59,013	59,013	59,013	59,013	236,050
Total Management Fee	131,770	131,770	131,770	131,770	527,079
Hedrin (510k) O/S costs	78,000	62,000	36,000	36,000	212,000
Total	209,770	193,770	167,770	167,770	739,079

PMA w/o clinicals

	Q1	Q2	Q3	Q4	2008
Management fee to MHA:					
R&D	72,757	72,757	72,757	72,757	291,029
G&A	59,013	59,013	59,013	59,013	236,050
Total Management Fee	131,770	131,770	131,770	131,770	527,079
Hedrin (PMA w/o clinicals)	100,000	82,000	62,000	36,000	280,000
Total	231,770	213,770	193,770	167,770	807,079

PMA w/ clinicals

	Q1	Q2	Q3	Q4	2008
Management fee to MHA:					
R&D	72,757	72,757	72,757	72,757	291,029
G&A	59,013	59,013	59,013	59,013	236,050
Total Management Fee	131,770	131,770	131,770	131,770	527,079
Hedrin (PMA w/ clinicals)	46,000	261,000	261,000	162,000	730,000
Total	177,770	392,770	392,770	293,770	1,257,079

Exhibit F

Warrant

Note: The execution version of the Warrant, dated April 30, 2008, is filed as Exhibit 4.6 to MHA's Registration Statement on Form S-1 (File No. 333-150580) filed with the Securities and Exchange Commission on May 1, 2008 and incorporated herein by reference.

Exhibit G

Opinion

February 25, 2008

Nordic Biotech Venture Fund II K/S
Østergade 5, 3rd floor
DK-1100 Copenhagen K
Denmark

Re: Joint Venture Agreement between Nordic Biotech Venture Fund II K/S and Manhattan Pharmaceuticals, Inc.

Ladies and Gentlemen:

We have acted as special New York counsel to Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), in connection with the transactions contemplated by that certain Joint Venture Agreement dated as of January 31, 2008, and amended on February 25, 2008 (as amended, the "**JV Agreement**") by and between the Company and Nordic Biotech Venture Fund II K/S ("**Nordic**"). We are furnishing this legal opinion letter to you pursuant to Section 2.2(b)(v) of the JV Agreement.

In connection with rendering this legal opinion letter, we have examined originals, copies or specimens, certified or otherwise identified to our satisfaction, of such corporate and public records, agreements, documents, certificates, opinions, memoranda and other instruments, and such matters of law, as we have deemed necessary or appropriate to render the opinions expressed below.

For purposes of rendering the opinions set forth below, we have examined the following documents:

(1) the JV Agreement;

(2) the Services Agreement (as that term is defined in the JV Agreement);

(3) the Contribution Agreement (as that term is defined in the JV Agreement);

(4) the Warrant (as that term is defined in the JV Agreement);

(5) the Registration Rights Agreement (as that term is defined in the JV Agreement);

(6) a certificate delivered to us by one or more officers of the Company for purposes of rendering this legal opinion letter (the "Officers' Certificate"; which Officers' Certificate is attached hereto as Exhibit A);

(7) the Certificate of Good Standing for the Company issued by the Secretary of State of the State of Delaware on February 21, 2008 (the "Good Standing Certificate"; which Good Standing Certificate is attached hereto as Exhibit B); and

(8) the Certificate issued on February 21, 2008, by the Department of State of the State of New York certifying that the Company is still authorized to do business in the State of New York (the "Foreign Qualification Certificate"; which Foreign Qualification Certificate is attached hereto as Exhibit C).

The documents set forth in (1) through (5) above are collectively referred to as the "**Transaction Documents**." Any capitalized term used herein and not otherwise defined shall have the meaning ascribed thereto in the JV Agreement.

In rendering the opinions set forth below, we have assumed, without independent verification, the genuineness of all signatures, the authenticity of all documents, agreements and instruments submitted to us as originals, the conformity to original documents, agreements and instruments of all documents, agreements and instruments submitted to us as copies or specimens, the authenticity of the originals of such documents, agreements and instruments submitted to us as copies or specimens, and the accuracy of the matters set forth in the documents, agreements and instruments we reviewed.

We have further assumed (i) that all documents, agreements and instruments executed by any party other than the Company have been duly authorized, executed and delivered by such parties, (ii) that each of such parties (that is not a natural person) is duly formed, validly existing and in good standing in the state of its formation and qualified to do business in each state where such qualification is necessary for the conduct of its business, (iii) that each of such parties had the power and legal right to execute and deliver all such documents, agreements and instruments, and (iv) that such documents, agreements and instruments are valid, binding and enforceable obligations of such parties. We have assumed that each certificate issued by a Secretary of State or Department of State or any other government official, office or agency concerning the property or status of a person or entity, such as a certificate of good standing, a certificate concerning tax status, a certificate concerning UCC filings or a certificate concerning title registration or ownership, and all official public records (including their proper indexing and filing) are current and complete through the date of each such certificate.

We also have assumed that (i) there has not been any mutual mistake of fact or misunderstanding, fraud, duress, coercion or undue influence that would prevent the enforcement of the Transaction Documents, (ii) there are no facts and circumstances relating to you or your business that might prevent you from enforcing any of the rights you possess under the Transaction Documents, and (iii) there are no oral or written agreements or understandings among the parties to the Transaction Documents that would limit, modify or otherwise alter the terms, provisions and conditions of, or relate to, the transactions contemplated by the Transaction Documents. Finally, we have assumed that all outstanding capital stock of the Company has been fully paid for and that adequate consideration was received therefor.

As to matters of fact relevant to the opinions expressed herein, we have relied upon, without independent investigation, and we have assumed to be true, correct and complete, the representations and warranties as to factual matters made by the Company in the Transaction Documents and by the officer(s) of the Company in the Officers' Certificate, and the certificates and statements of government officials.

Except to the extent expressly set forth herein, we have not undertaken any independent investigation to determine the existence or absence of any facts, and no inference as to our knowledge of the existence or absence of any such facts should be drawn from our representation of the Company or the rendering of the opinions set forth below. For the purposes of rendering the opinions expressed herein, we have not undertaken or reviewed any search of court dockets or records in any jurisdiction, any search with respect to the rights or assets of the Company or any UCC, suit, judgment, lien or other type of search or investigation. For the purposes of rendering the opinions expressed herein, we have not made any investigation of our files nor have we made any investigation of attorneys of this firm other than the attorneys who actively worked on the Transaction Documents, namely Anthony O. Pergola, Nicholas G. Mehler and Cheryl A. Cappiello.

Where statements in this opinion concerning the Company, or an effect on the Company, are qualified by the modifier "material" or "materially," we relied solely on the judgments and opinions of the Company and its officers as to the materiality or lack of materiality of any matter covered by such statement concerning the Company's business, assets, results of operations or financial condition.

This opinion letter is based upon the customary practice of lawyers who regularly give, and lawyers who regularly advise opinion recipients regarding, opinions of the kind rendered in this opinion letter, including customary practice as described in bar association reports.

Based on the foregoing, and subject to the exceptions contained herein, we are of the opinion that:

1. The Company is a corporation validly existing and in good standing under the laws of the State of Delaware. The Company is qualified to do business as a foreign corporation in good standing in the State of New York. The Company has the corporate power and authority required to own its properties and conduct its business as described in the Company's Annual Report on Form 10-K for its fiscal year ended December 31, 2006 (the "**Form 10-K**"). The Company has the requisite corporate power and corporate authority to execute, deliver and perform its obligations under the Transaction Documents, and to consummate the transactions contemplated thereby.

2. The Conversion Shares have been duly authorized, reserved for issuance, and when issued, delivered and paid for in accordance with the terms of the JV Agreement and the Warrant, as the case may be, will be validly issued, fully paid and nonassessable.

3. The Company has the corporate power to execute and deliver the JV Agreement and the other Transaction Documents and to issue, sell and deliver the Conversion Shares to Nordic under the terms of the JV Agreement.

4. The JV Agreement and the other Transaction Documents have been duly authorized by all necessary corporate action (including any requisite stockholder action) on the part of the Company, have been duly executed and delivered by the Company, and are valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms.

5. The execution and delivery by the Company of the JV Agreement and the other Transaction Documents, and the performance by it of its obligations thereunder, will not (i) violate its certificate of incorporation or by-laws, (ii) result in a breach or violation of, or constitute a default under, or give rise to any right of termination, cancellation or acceleration under, any agreement or instrument to which the Company is a party and listed as an exhibit to the Form 10-K or any Quarterly Report on Form 10-Q or Current Report on Form 8-K (collectively, the "**Reports**"), in each case filed by the Company subsequent to the filing of the Form 10-K (such agreements and instruments, the "**Selected Contracts**"), (iii) result in the creation or imposition of any lien, claim or encumbrance upon any properties or assets of the Company under any of the agreements or instruments referenced in (ii) above, or (iv) violate federal or New York law or the Delaware General Corporation Law (the "**DGCL**"), or any judgment, injunction, order or decree disclosed in the Reports.

6. No consent, approval, or exemption by, order or authorization of, or filing or registration with, any governmental authority is required to be obtained by the Company in connection with the Company's execution and delivery of the JV Agreement and the other Transaction Documents or the performance by it of its obligations thereunder (other than as may be required by federal or state securities laws or the rules and regulations of the American Stock Exchange).

7. Assuming that the representations and warranties of Nordic and the Company set forth in the JV Agreement are true and correct and subject to the timely filing by the Company of a Form D pursuant to Regulation D promulgated by the SEC under the Securities Act, the offer, sale and delivery of the Conversion Shares to Nordic, in the manner contemplated by the JV Agreement and the Warrant, does not need to be registered under the Securities Act, it being understood that no opinion is expressed as to the subsequent resale of the Conversion Shares.

8. The Company is not an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

The foregoing opinions are subject to the following exceptions, limitations, qualifications and exclusions:

A. We express no opinion concerning the laws of any jurisdiction other than the laws of the State of New York, the DGCL and the federal law of the United States of America, and, other than as expressly set forth in opinion paragraph 7 with respect to laws, rules and regulations concerning the offer and sale of securities, we express no opinion as to securities laws, environmental laws, antitrust laws or laws relating to unfair trade practices, banking laws, criminal laws or the laws of fiduciary duty. As used herein, the term "Applicable Law" means only those laws and the laws of only those jurisdictions for which we express opinions hereunder. We specifically disclaim any opinions with respect to Danish law, rules or regulations.

B. Our advice on each legal issue addressed in this opinion letter represents our opinion as to how that issue would be resolved were it to be considered by the highest court of the jurisdiction upon whose law our opinion on that issue is based. The manner in which any particular issue would be treated in any actual court case would depend in part on facts and circumstances particular to the case, and this letter is not intended to guarantee the outcome of any legal dispute.

C. The opinions expressed herein relate only to laws which, in our experience, are normally applicable to transactions of the type provided for in the Transaction Documents. We have not undertaken any research for purposes of determining whether any parties to any agreement or any of the transactions which may occur in connection with the Transaction Documents are subject to any law or other governmental requirement that is not generally applicable to transactions of the type provided for in the Transaction Documents.

D. To the extent any Transaction Document has designated the laws other than the laws of the State of New York or the DGCL as the laws governing such Transaction Document, our opinions are premised upon the result that would be obtained if a court in the State of New York were to apply the laws of the State of New York to the interpretation and enforcement of such Transaction Document, notwithstanding the designation of the laws of another jurisdiction as the governing law.

E. In rendering the opinion expressed in opinion paragraph 1 with respect to the good standing of the Company, our opinion is based solely and exclusively on the Good Standing Certificate and is given only as of the date of the Good Standing Certificate notwithstanding the date of this opinion letter.

F. In rendering the opinion expressed in opinion paragraph 1 with respect to the qualification of the Company to do business in the State of New York, our opinion is based solely and exclusively on the Foreign Qualification Certificate and is given only as of the date of the Foreign Qualification Certificate notwithstanding the date of this opinion letter.

G. In rendering the opinion expressed in opinion paragraph 7 with respect to default under the Selected Contracts, we have not reviewed any covenants in the Selected Contracts that contain financial ratios or other similar financial restrictions, and we express no opinion with respect thereto. In addition, we express no opinion with respect to any modification of the Selected Contracts that were not done in writing and otherwise not reviewed by us, nor do we express any opinion on any Selected Contracts that are subject to interpretation or construction by parole evidence.

H. In rendering the opinions expressed in opinion paragraph 7 with respect to the Conversion Shares, our opinions are based on the truth and accuracy of, and our reliance on, the representations made by you in the JV Agreement, the certifications in the Officers' Certificate and the Company's representations to us that the Company has made no offer to sell the Conversion Shares or the Warrant by means of any general solicitation or publication of any advertisement therefor. In addition, our opinions are also based on the assumption that the offer and sale of the Conversion Shares is not integrated with any future securities offering of the Company not otherwise contemplated in the JV Agreement.

I. In rendering the opinions expressed in opinion paragraph 2 with respect to the reservation and valid issuance of Conversion Shares, our opinions are limited to the circumstance of the exercise of the Warrant, and the exercise of the put and call rights contained in the JV Agreement, at the initially effective conversion rate as provided in the Warrant and the JV Agreement, and the number of Conversion Shares resulting therefrom (without regard to any anti-dilution adjustment provisions contained therein).

J. Our opinions are further qualified by, and we render no opinion with respect to, the effect of each of the following:

a. bankruptcy, insolvency, reorganization, moratorium and other similar laws relating to or affecting the relief of debtors or creditors' rights generally;

b. laws relating to fraudulent conveyances or preferential transfers, including, without limitation, U.S. Bankruptcy Code Section 548;

d. general principles of equity and public policy, including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing;

d. any United States federal law, New York law, Delaware law or equitable principle which provides that a court may refuse to enforce, or may limit the application of, a contract or any clause thereof which the court finds to have been unconscionable at the time it was made, unconscionable in performance or contrary to public policy;

e. any provision in a Transaction Document which provides (i) that rights or remedies are or are not exclusive, (ii) that rights or remedies may be exercised without notice, (iii) that every right or remedy is cumulative and may be exercised in addition to or with any other right or remedy, (iv) that the election of a particular remedy or remedies does not preclude recourse to one or more other remedies, (v) that liquidated damages are to be paid upon a breach or default, or (vi) that the failure to exercise, or any delay in exercising, any right or remedy will not operate as a waiver of any such right or remedy;

f. any provision in a Transaction Document which (i) provides for the recovery of attorneys' fees or other costs of collection, (ii) permits any party to exercise "self-help" remedies, (iii) provides for specific performance, injunctive relief, or other traditional equitable remedies, or (iv) provides rights to indemnification or contribution;

g. any provision of a Transaction Document purporting to provide that amendments to or waivers of obligations contained in such documents are not effective unless done in writing;

h. any provision in a Transaction Document purporting to (i) choose applicable law or exclude conflict or choice of law principles under any law, (ii) select certain courts as the venue, or establish a particular jurisdiction as the forum, for the adjudication of any controversy, (iii) select arbitration to resolve disputes, (iv) waive rights to trial by jury, service of process or objections to the selection of venue or forum, (v) change or waive the rules of evidence, make determinations conclusive or fix the method or quantum of proof, or (vi) waive the statute of limitations;

i. any provision of a Transaction Document concerning the voting of the Company's capital stock or equal board treatment;

j. statutes or public policy principles that limit waivers of broadly or vaguely stated rights, the benefits of statutory, regulatory or constitutional rights, unknown future defenses or rights to damages;

k. statutes or common law principles that may prohibit or restrict the payment of any dividends on, or redemption or purchase of, any capital stock of the Company (including, without limitation, Sections 160, 170 and 174 of the DGCL);

l. whether or not the members of the board of directors of the Company, the officers of the Company, or the principal shareholders of the Company have complied with their fiduciary duties in connection with the authorization and performance of the Transaction Documents;

m. whether or not the Transaction Documents and the transactions contemplated thereby were fair and reasonable to the Company at the time of their authorization by the Company's board of directors within the meaning of Section 144 of the DGCL;

n. arbitration provisions in certain employment situations or where the arbitration provision is included as a result of unequal bargaining power among the parties, is a contract of adhesion, is otherwise unconscionable, provides for judicial review of an arbitration award on the merits or otherwise purports to override or contravene a provision of any law on arbitration enacted primarily for a public purpose; and

o. judicial decisions that may permit the introduction of parole evidence to modify the terms or the interpretation of the Transaction Documents.

Our opinions are limited to the matters expressly set forth herein and no opinion is implied or to be inferred beyond matters expressly so stated. This opinion letter is effective as of the date hereof.

This legal opinion letter is furnished to you solely and exclusively for your benefit and may not be delivered to, relied upon, quoted in whole or in part, filed with or disclosed to any governmental agency or other person or entity without our prior written consent or unless required pursuant to regulation or judicial order.

The opinions expressed herein are limited to the facts known and the laws in effect on the date hereof only, and we assume no obligation to revise, update or supplement such opinions should any facts or laws upon which such opinions are based change after the date hereof, or should any facts or circumstances come to our attention after the date hereof.

Very truly yours,

LOWENSTEIN SANDLER PC

Exhibit 10.21

OMNIBUS AMENDMENT TO JOINT VENTURE AGREEMENT AND ADDITIONAL AGREEMENTS

THIS OMNIBUS AMENDMENT TO JOINT VENTURE AGREEMENT AND ADDITIONAL AGREEMENTS (this "**Amendment**") is entered into as of June 9, 2008 by and among Manhattan Pharmaceuticals, Inc., a Delaware corporation ("**MHA**"), Hedrin Pharmaceuticals K/S, a Danish limited liability partnership ("**Newco**"), Hedrin Pharmaceuticals General Partner ApS, a Danish private limited company ("**Hedrin GP**") and Nordic Biotech Venture Fund II K/S, a Danish limited liability partnership ("**Nordic**").

WITNESSETH:

WHEREAS, MHA and Nordic previously entered into that certain Joint Venture Agreement dated as of January 31, 2008 (as previously amended, the "**Joint Venture Agreement**"). Capitalized terms not otherwise defined herein shall have the meanings assigned to them in the Joint Venture Agreement;

WHEREAS**,** pursuant to the Joint Venture Agreement, (i) MHA agreed to assign certain assets to Newco in accordance with the terms of that certain Assignment and Contribution Agreement dated as of February 21, 2008 (as amended from time to time, the "**Contribution Agreement**"), (ii) MHA, Nordic and Hedrin GP entered into a Limited Partnership Agreement dated as of February 21, 2008 (as amended from time to time, the "**Partnership Agreement**"), and (iii) MHA and Nordic entered into a Shareholders Agreement dated as of February 21, 2008 (as amended from time to time, the "**Shareholders Agreement**") with respect to Hedrin GP; and

MHA, Newco, Hedrin GP and Nordic wish to recognize that substantial progress has been made toward achieving the Payment Milestone so as to justify a current partial Milestone Payment and that more specificity is appropriate in the definition of the Payment Milestone that will result in the payment of the remaining Milestone Payment, all in accordance with the terms hereof, and that the Joint Venture Agreement, Contribution Agreement, Partnership Agreement and Shareholders Agreement should be appropriately modified, in each case on the terms and conditions set forth in this Amendment.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto hereby agree as follows:

1. Amendments to Joint Venture Agreement.

(a) Section 1 of the Joint Venture Agreement is hereby amended by deleting the defined term "Milestone Payment" in its entirety and adding the following two new defined terms in alphabetical sequence in Section 1:

> "Initial Milestone Payment" means the payment by Nordic of an additional $1,250,000 to Newco after the satisfaction of the Initial Payment Milestone (as defined in the Contribution Agreement).

"Second Milestone Payment" means the payment by Nordic of an additional $1,250,000 to Newco after the satisfaction of the Second Payment Milestone (as defined in the Contribution Agreement).

(b) Section 1 of the Joint Venture Agreement is hereby amended by deleting the defined term "Investment Amount" in its entirety and replacing it with the following:

"Investment Amount" means (i) $2,500,000 if neither the Initial Milestone Payment nor the Second Milestone Payment has occurred, (ii) $3,750,000 if, prior to June 30, 2009, the Initial Milestone Payment has occurred but the Second Milestone Payment has not occurred, (iii) $3,500,000 if (A) on or after June 30, 2009, the Initial Milestone Payment has occurred but the Second Milestone Payment has not occurred, or (B) if prior to June 30, 2009, the U.S. Food and Drug Administration ("**FDA**") formally designates the Licensed Products (as defined in the Contribution Agreement) as a drug and refers regulation thereof to the FDA Center for Drug Evaluation and Research, and (iv) $5,000,000 if both the Initial Milestone Payment and the Second Milestone Payment have occurred.

2. Amendments to Contribution Agreement.

(a) Section 5.3 of the Contribution Agreement is hereby deleted in its entirety and replaced with the following:

"**5.3 Definition of Initial Payment Milestone and Second Payment Milestone**

For purposes of this Agreement, (i) the term "**Initial Payment Milestone**" shall mean a preliminary determination from the U.S. Food and Drug Administration received prior to September 30, 2008 that the Licensed Products will be regulated as a medical device, and (ii) the term "**Second Payment Milestone**" shall mean (A) a determination by the U.S. Food and Drug Administration ("**FDA**") that a Licensed Product is substantially equivalent to a predicate device in accordance with Section 513(f)(1) or 510(k) of the Federal Food, Drug, and Cosmetic Act (as amended, the "**FDC Act**") or any other marketing authorization of a Licensed Product by the FDA as a medical device, (B) the issuance of a "Classification Decision" as such term is used in Attachment 1 of the FDA Guidance for Industry and CDRH Staff titled "New Section 513(f)(2) - Evaluation of Automatic Class III Designation" issued by the FDA on February 19, 1998, with respect to a Licensed Product, or (C) the receipt of a formal response to a "Request for Designation" from the Office of Combination Products that designates a Licensed Product as a device, in each of cases (A) through (C) prior to June 30, 2009."

(b) Section 5.1(a)(ii) of the Contribution Agreement is hereby deleted in its entirety and replaced with two new subsections as follows:

"(ii) within 21 days after the achievement of the Initial Payment Milestone (as defined below): (A) pay to MHA an additional US$1,000,000.00 in cash (the "**Second Cash Payment**") and (B) if necessary to maintain MHA's 50% ownership of outstanding Partnership Shares, issue to MHA, and deliver a certificate representing, a number of additional Partnership Shares of Newco that will constitute, together with the Initial Equity Issuance, 50% of all outstanding Partnership Shares (the "**Second Equity Issuance**").

(iii) within 30 days after the achievement of the Second Payment Milestone (as defined below): (A) pay to MHA an additional US$500,000.00 in cash (the "**Third Cash Payment**" and together with the First Cash Payment and the Second Cash Payment, the "**Cash Payments**") and (B) if necessary to maintain MHA's 50% ownership of outstanding Partnership Shares, issue to MHA, and deliver a certificate representing, a number of additional Partnership Shares of Newco that will constitute, together with the Initial Equity Issuance and Second Equity Issuance, 50% of all outstanding Partnership Shares (the "**Third Equity Issuance**") and, together with the Initial Equity Issuance and Second Equity Issuance, the "**Equity Issuances**")."

(c) Section 5.1(c) of the Contribution Agreement is hereby deleted in its entirety and replaced with the following:

"Upon the Initial Equity Issuance, MHA shall own 50% of the outstanding Partnership Shares of Newco. Upon the Second Equity Issuance, MHA shall own 50% of the outstanding Partnership Shares of Newco (after giving effect to the issuance of additional Partnership Shares, if any, to Nordic pursuant to the Partnership Agreement). Upon the Third Equity Issuance, if any, MHA shall own 50% of the outstanding Partnership Shares of Newco (after giving effect to the issuance of additional Partnership Shares, if any, to Nordic pursuant to the Partnership Agreement)."

(d) Section 5.2(b) of the Contribution Agreement is hereby deleted in its entirety and replaced with the following:

"(b) (i) The authorized capital of Newco, immediately after the Second Equity Issuance, if any, consists of 2,000 Partnership Shares, 700 of which are owned, beneficially and of record, by Nordic, and 700 of which are owned, beneficially and of record by MHA, and (ii) the authorized capital of Newco, immediately after the Third Equity Issuance, if any, consists of 2,000 Partnership Shares, 1,000 of which are owned, beneficially and of record, by Nordic, and 1,000 of which are owned, beneficially and of record by MHA.

3. <u>Amendments to Partnership Agreement</u>.

(a) Section 1.1 of the Partnership Agreement is hereby amended by deleting the defined term "Payment Milestone" in its entirety and adding the following two new defined terms in alphabetical sequence in Section 1.1:

"Initial Payment Milestone" means such term as defined in the Contribution Agreement.

"Second Payment Milestone" means such term as defined in the Contribution Agreement.

(b) Section 3.6 of the Partnership Agreement is hereby deleted in its entirety and replaced with the following:

"(a) Not later than 21 days after satisfaction, if any, of the Initial Payment Milestone, Nordic shall pay to the Partnership an additional $1,250,000 by wire transfer to a bank account designated by the Partnership as payment for an additional 200 Partnership Shares. The satisfaction of the Initial Payment Milestone shall constitute payment by MHA for an additional 200 Partnership Shares, subject to subsection (c) below. Accordingly, after satisfaction of the Initial Payment Milestone, the Partnership Shares shall be distributed among the Parties as follows (all amounts in DKK):

	Number of Partnership Shares
Nordic	700
MHA	700
General Partner	0
Total	1,400

(b) Not later than 30 days after satisfaction, if any, of the Second Payment Milestone, Nordic shall pay to the Partnership an additional $1,250,000 by wire transfer to a bank account designated by the Partnership as payment for an additional 300 Partnership Shares. The satisfaction of the Second Payment Milestone shall constitute payment by MHA for an additional 300 Partnership Shares. Accordingly, after satisfaction of the Second Payment Milestone, the Partnership Shares shall be distributed among the Parties as follows (all amounts in DKK):

	Number of Partnership Shares
Nordic	1,000
MHA	1,000
General Partner	0
Total	2,000

(c) If the Second Payment Milestone is not achieved by June 30, 2009, or if prior to June 30, 2009, the U.S. Food and Drug Administration ("**FDA**") formally designates the Licensed Products (as defined in the Contribution Agreement) as a drug and refers regulation thereof to the FDA Center for Drug Evaluation and Research, (i) Nordic shall not be obliged to make any payment to the Partnership pursuant to clause 3.6(b), (ii) MHA shall forfeit to the Partnership 400 Partnership Shares, and (iii) Nordic shall be entitled to, and the Partnership shall make, a return of capital of $250,000, with no corresponding reduction in Nordic's Partnership Shares. Accordingly, after June 30, 2009, if the Second Payment Milestone has not been achieved, or if prior to June 30, 2009, the FDA formally designates the Licensed Products as a drug and refers regulation thereof to the FDA Center for Drug Evaluation and Research, the Partnership Shares shall be distributed among the Parties as follows (all amounts in DKK):

	Number of Partnership Shares
Nordic	700
MHA	300
General Partner	0
Total	1,000

(c) Section 11.1(ii) of the Partnership Agreement is hereby deleted in its entirety and replaced with the following:

From any amount available for distribution in excess of the amount referred to under sub-clause 11.1(i) the holder(s) of the MHA Partnership Shares shall before any distribution is made to other Limited Partners be entitled to receive an amount equal to the proceeds distributed to the holders of the Nordic Partnership Shares under sub-clause 11.1(i) multiplied by a fraction the numerator of which is MHA's number of Partnership Shares at the time of such distribution, and the denominator of which is the total number of outstanding Partnership Shares at the time of such distribution.

4. Amendments to Shareholders Agreement.

(a) Section 1.1 of the Shareholders Agreement is hereby amended by deleting the defined term "Payment Milestone" in its entirety and adding the following two new defined terms in alphabetical sequence in Section 1.1:

"Initial Payment Milestone" means such term as defined in the Contribution Agreement.

"Second Payment Milestone" means such term as defined in the Contribution Agreement.

(b) Section 4.3 of the Shareholders Agreement is hereby deleted in its entirety and replaced with the following:

"Irrespective of clause 4.2, if the Second Payment Milestone has not been achieved by 30 March 2009, Nordic shall - in addition to any board members appointed by Nordic pursuant to clause 4.2 and as long as Nordic is the owner of the Nordic Partnership Shares - immediately be entitled to appoint one additional board member, in which case the board of directors may consist of up to five members elected at the general meeting."

5. **Satisfaction of Initial Payment Milestone.** The parties hereto acknowledge and agree that the Initial Payment Milestone is deemed to be achieved as of the date of this Amendment and that payment of the Nordic capital contribution to Newco pursuant to Section 3.6(a) of the Partnership Agreement, as amended hereby, and payment by Newco of the Second Cash Payment pursuant to Section 5.1(a)(ii) of the Contribution Agreement, as amended hereby, will each occur on or before the twenty-first day after the date of this Amendment.

6. **Representations and Warranties; Ratification**.

(a) Each of MHA, Nordic, Newco and Hedrin GP represents and warrants to the other parties hereto that this Amendment has been duly executed and delivered by such party and constitutes a legal, valid and binding obligation of such party enforceable against it in accordance with its terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors and rules of law governing specific performance, injunctive relief or other equitable remedies, and to limitations of public policy.

(b) Each of Nordic, MHA, Newco and Hedrin GP represents and warrants to the others that each of the representations and warranties of such party in each of the Joint Venture Agreement and the Additional Agreements to which such company is a party is true and correct in all material respects on the effective date of this Amendment (except as set forth on Schedule A hereto and except for representations and warranties limited as to time or with respect to a specific event, which representations and warranties shall continue to be limited to such time or event).

(c) Except as hereby amended, the Joint Venture Agreement and each provision thereof, and each Additional Agreement (as the same may be amended in connection with this Amendment) and each provision thereof, are hereby ratified and confirmed in every respect and shall continue in full force and effect.

7. **Conditions Precedent**. The agreements set forth in this Amendment are conditional and this Amendment shall not be effective until receipt by each party of a fully-executed counterpart of this Amendment (which may be a facsimile or .pdf copy thereof).

8. **Miscellaneous.**

(a) Entire Agreement. This Amendment, the Joint Venture Agreement and the Additional Agreements, as amended hereby, contain the entire understanding of the parties hereto and supercedes all prior or contemporaneous negotiations, promises, covenants, agreements and representations of every nature whatsoever with respect to the matters referred to in this Amendment, the Joint Venture Agreement and the Additional Agreements.

(b) Headings. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

(c) Successors and Assigns. This Amendment shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns.

(d) Expenses. Notwithstanding any provision to the contrary in the Agreement or the Additional Agreements, MHA will reimburse Nordic for all legal, due diligence and advisory fees and expenses incurred by Nordic or its advisors in connection with this Amendment and the transactions contemplated by this Amendment, the Agreement and the Additional Agreements. MHA has made on or before the date of this Amendment, or shall make within five (5) days of the date of this Amendment, a payment to Nordic of $30,000, and thereafter shall make additional advances and payments to Nordic necessary to reimburse Nordic for its fees and expenses in excess of amounts previously advanced under this Section 8(d).

(e) Governing Law.

(i) All questions concerning the construction, validity, enforcement and interpretation of this Amendment, as it relates to the amendments to the Joint Venture Agreement and Contribution Agreement, shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof, except to the extent that the application of the General Corporation Law of the State of Delaware is mandatorily applicable.

(ii) All questions concerning the construction, validity, enforcement and interpretation of this Amendment, as it relates to the amendments to the Partnership Agreement and Shareholders Agreement, shall be governed by and construed and enforced in accordance with Danish law.

(iii) Each Party hereby irrevocably submits to the exclusive jurisdiction of the federal and state courts sitting in the state of New York in any action or proceeding arising out of or relating to this Amendment. Each Party hereby irrevocably agrees, on behalf of itself and on behalf of such Party's successors and permitted assigns, that all claims in respect of such action or proceeding shall be heard and determined in any such court and irrevocably waives any objection such person may now or hereafter have as to the venue of any such suit, action or proceeding brought in such a court or that such court is an inconvenient forum. If either party shall commence an action or proceeding to enforce any provision of this Amendment, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

(f) Counterparts. This Amendment may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile signature page were an original thereof.

(g) Severability. If any provision of this Amendment is held to be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Amendment shall not in any way be affected or impaired thereby and the parties will attempt to agree upon a valid and enforceable provision that is a reasonable substitute therefore, and upon so agreeing, shall incorporate such substitute provision in this Amendment.

[Signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment under seal as of the day and year first above written.

MHA:

MANHATTAN PHARMACEUTICALS, INC.

By: /s/ Douglas Abel
Name: /s/ Douglas Abel
Title: President and Chief Executive Officer

NORDIC:

NORDIC BIOTECH VENTURE FUND II K/S

By: /s/ Florian Schonharting
Florian Schonharting, Partner

By: /s/ Christian Hansen
Christian Hansen, Partner

HEDRIN PHARMACEUTICALS K/S:

BY: HEDRIN PHARMACEUTICALS GENERAL PARTNER APS

By: /s/ Florian Schonharting
Florian Schonharting, Director

By: /s/ Douglas Abel
Douglas Abel, Director

HEDRIN PHARMACEUTICALS GENERAL PARTNER APS:

By: Florian Schonharting
Florian Schonharting, Director

By: /s/ Douglas Abel
Douglas Abel, Director

SCHEDULE A
June 9, 2008

1. Update to Capitalization Representation and Warranty (Section 8.2).

As of May 31, 2008, there were 11,001,308 shares of Common Stock reserved for issuance pursuant to outstanding options and 8,683,853 shares of Common Stock reserved for issuance pursuant to outstanding warrants.

2. Update to Schedule 8.6.

Swiss Pharma Contract LTD, or Swiss Pharma, a clinical site that MHA used in one of its obesity trials, gave notice to MHA that Swiss Pharma believes it is entitled to receive an additional payment of $322,776 for services in connection with that clinical trial. While the contract between MHA and Swiss Pharma provides for additional payments if certain conditions are met, Swiss Parma did not specify which conditions they believed have been achieved and MHA does not believe that Swiss Pharma is entitled to additional payments and had not accrued any of these costs as of March 31, 2008 and December 31, 2007. The contract between MHA and Swiss Pharma provides for arbitration in the event of a dispute, such as this claim for an additional payment. On March 10, 2008, Swiss Pharma filed for arbitration with the Swiss Chamber of Commerce. On April 2, 2008, MHA filed its statement of defense and counterclaim for recovery of costs incurred by MHA as a result of Swiss Pharma’s failure to meet agreed upon deadlines under the contract. On June 3, 2008 an arbitration hearing was held. As MHA does not believe that Swiss Pharma is entitled to additional payments, MHA has defended its position in arbitration. The arbitrator expects to render his decision on or about August 31, 2008.

3. Update to Schedule 8.22.

MHA's cash balance as of May 31, 2008, was approximately $72,000; and its receivable from the Hedrin JV was $69,000.

Manhattan Pharmaceuticals, Inc.
810 Seventh Avenue, 4th Floor
New York, New York 10019

September 17, 2008

Nordic Biotech Venture Fund II K/S
Østergade 5, 3rd floor
DK-1100 Copenhagen K
Denmark
Attn: Florian Schönharting

Re: Registration Rights Agreement Issues

Gentlemen:

Manhattan Pharmaceuticals, Inc. ("Manhattan") and Nordic Biotech Venture Fund II K/S ("Nordic") are parties to that certain Joint Venture Agreement dated January 31, 2008, as amended (the "Joint Venture Agreement"), and the Registration Rights Agreement dated February 25, 2008 (the "Registration Rights Agreement"). For the purpose of clarifying with you certain issues that have arisen under the Registration Rights Agreement, we agree with you as follows:

Capitalized terms used and not otherwise defined herein that are defined in the Registration Rights Agreement or the Joint Venture Agreement are used herein with the meanings given such terms in the Registration Rights Agreement or Joint Venture Agreement, as the case may be.

Manhattan filed a Registration Statement on Form S-1 with the SEC (File No.: 333-150580) pursuant to the Registration Rights Agreement. Notwithstanding any other agreement to the contrary, Nordic and Manhattan agree that the Effectiveness Date for this Registration Statement shall be October 17, 2008, unless the SEC responds with additional comments to the first amendment to the Registration Statement that Manhattan soon intends to file, in which case the Effectiveness Date shall be November 17, 2008.

Within forty-five (45) days after the Second Payment Milestone Manhattan shall file an additional Registration Statement registering the additional shares of Common Stock that may be issued to Nordic as Put Consideration as a result of Nordic's additional investment of $1,250,000 in Newco under the terms of the Partnership Agreement, provided that Manhattan shall have no obligation to file such additional Registration Statement until Nordic makes the additional investment in Newco required under the terms of the Partnership Agreement as a result of the Second Payment Milestone.

Within sixteen (16) days after Manhattan provides a Call Notice to Nordic, Manhattan shall file an additional Registration Statement with the SEC registering the shares of Common Stock to be issued to Nordic as Call Consideration as a result of such Call Notice, provided that if the Call Consideration is reduced pursuant to Section 4.3 of the Joint Venture Agreement the shares of Common Stock to be registered shall be correspondingly reduced, and if such Call Consideration is reduced to zero Manhattan shall have no obligation to file such Registration Statement.

The term “Filing Date” shall mean with respect to any Registration Statement required to be filed in accordance with this letter agreement the date by which such Registration Statement is required to be filed in accordance with this letter agreement.

The Registration Rights Agreement shall be deemed to be modified to the extent necessary to give effect to this letter agreement. Except as hereby modified, the Registration Rights Agreement and each provision thereof is hereby ratified and confirmed in every respect and shall continue in full force and effect.

All questions concerning the construction, validity, enforcement and interpretation of this letter agreement shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof, except to the extent that the application of the General Corporation Law of the State of Delaware is mandatorily applicable.

Each party to this letter agreement hereby irrevocably submits to the exclusive jurisdiction of the federal and state courts sitting in the state of New York in any action or proceeding arising out of or relating to this letter agreement. Each party hereby irrevocably agrees, on behalf of itself and on behalf of such party’s successors and permitted assigns, that all claims in respect of such action or proceeding shall be heard and determined in any such court and irrevocably waives any objection such person may now or hereafter have as to the venue of any such suit, action or proceeding brought in such a court or that such court is an inconvenient forum. If either party shall commence an action or proceeding to enforce any provision of this letter agreement, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its reasonable attorneys’ fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

Please signify your agreement to the foregoing by signing a copy of this letter agreement in the space provided below and returning it to us.

Very truly yours,

MANHATTAN PHARMACEUTICALS, INC.

By: /s/ Michael McGuinness
Its: Chief Operating and Financial Officer

ACCEPTED AND AGREED TO:

NORDIC BIOTECH VENTURE FUND II K/S

By: /s/ Christian Hansen
Name: Christian Hansen
Title: Partner

By: /s/ Florian Schonharting
Name: Florian Schonharting
Title: Partner

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the use in the Amendment No. 1 to the Registration Statement (No. 333-150580) of Manhattan Pharmaceuticals, Inc. on Form S-1 (the "Registration Statement") to be filed with the Securities and Exchange Commission on October 3, 2008 of our report which includes an explanatory paragraph relating to Manhattan Pharmaceuticals, Inc.'s ability to continue as a going concern, dated March 28, 2008, appearing in the prospectus which is part of the Registration Statement. We also consent to the reference to us under the headings "Experts" in such prospectus.

/s/ J.H. Cohn LLP

Roseland, New Jersey
October 2, 2008

[Letterhead of Manhattan Pharmaceuticals, Inc.]

October 3, 2008

Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549
Attention: Jeffrey P. Riedler
Assistant Director

Re: Manhattan Pharmaceuticals, Inc.
Registration Statement on Form S-1
Filed on May 1, 2008
File No. 333-150580

Dear Mr. Riedler:

Accompanying this letter for filing pursuant to the Securities Act of 1933, as amended, is a conformed copy of Amendment No. 1 ("Amendment No. 1") to the above-captioned Registration Statement on Form S-1 (the “Registration Statement”) of Manhattan Pharmaceuticals, Inc. (the “Company”). Amendment No. 1 is being filed in response to the Staff's letter of comment, dated June 9, 2008 (the “Comment Letter”).

A memorandum in response to the Comment Letter also accompanies this letter. Manually executed signature pages and consents have been executed prior to the time of this electronic filing of Amendment No. 1.

Very truly yours,

/s/ Michael McGuinness

Michael McGuinnesss
Chief Financial Officer

Enclosures

cc: Jennifer Riegel
Michael Reedich
Anthony O. Pergola, Esq. - Lowenstein Sandler PC

Manhattan Pharmaceuticals, Inc.

Registration Statement on Form S-1

Memorandum in Response to SEC Letter of Comment, dated June 9, 2008

The following are responses to the Staff's letter of comment, dated June 9, 2008 (the "Comment Letter"), that have been authorized by Manhattan Pharmaceuticals, Inc. (the "Company"). To assist the Staff's review, the responses are numbered to correspond to the numbered paragraphs in the Staff's letter.

General

1. **It appears that you have not filed copies of all of the exhibits to the joint venture agreement. Please be aware that when you file an agreement pursuant to Item 601(b)(10) of Regulation S-K, you are required to file the entire agreement, including all exhibits, schedules, appendices and any document which is incorporated in the agreement. Please amend your registration statement to provide a copy of the full and complete joint venture agreement, including any exhibits, schedules and appendices which are included in the agreement. We may have further comments upon reviewing the full and complete agreement.**

   The Company advises the Staff that (i) the Company has refiled as Exhibit 10.19 to the Registration Statement a full and complete copy of the Joint Venture Agreement (the "Joint Venture Agreement"), dated January 31, 2008, between Nordic Biotech Fund II K/S ("Nordic") and the Company; (ii) a full and complete copy of the Amendment to the Joint Venture Agreement, dated February 18, 2008, between Nordic and the Company was filed as Exhibit 10.20 to the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2008 and incorporated by reference as Exhibit 10.20 to the Registration Statement; and (iii) the Company has filed as Exhibit 10.21 to the Registration Statement a full and complete copy of the Omnibus Amendment to Joint Venture Agreement and Additional Agreements, dated June 9, 2008, among the Company, Hedrin Pharmaceuticals K/S ("Hedrin K/S"), Hedrin Pharmaceuticals General Partner ApS ("Hedrin GP") and Nordic. Please note that where appropriate in the Joint Venture Agreement that was refiled as Exhibit 10.19 to the Registration Statement, the Company has identified and incorporated by reference final versions of certain exhibits to the Joint Venture Agreement that have been filed, or otherwise incorporated by reference, as exhibits to the Registration Statement.

2. **In connection with the put right, please revise your registration statement throughout to register only the resale of up to 17,857,143 shares underlying the put of Nordic's current investment in the joint venture which appears to be $2.5 million. Given the contingency regarding FDA approval occurring as to the second $2.5 million investment by Nordic in the joint venture, and that the put right as to those shares does not currently and may never actually exist, it is premature to register the resale of shares underlying that put right.**

The Company has revised the Registration Statement to register the resale of shares of common stock, par value $.001 per share, of the Company (the "Common Stock") underlying the put, and not the call, of the current investment of Nordic in Hedrin K/S, as more particularly described herein.

As previously disclosed in the Current Report on Form 8-K filed with the Securities and Exchange Commission on June 13, 2008, the Company, Hedrin K/S, Hedrin GP and Nordic entered into an Omnibus Amendment to Joint Venture Agreement and Additional Agreements, dated June 9, 2008 (the "Amendment"), pursuant to which, among other things, the Joint Venture Agreement, dated January 31, 2008 as amended in February 2008, was further amended. The Amendment provides, among other things, for the separation of the final tranche of cash and equity, which was originally due under the joint venture agreement upon a specific milestone related to the designation of Hedrin as a medical device, into two separate installments. The first installment of $1,250,000 was paid in cash on or around June 30, 2008, and the second installment of $1,250,000 is payable in cash upon device classification by the U.S. Food & Drug Administration ("FDA"). If devise classification by the FDA is not received by June 30, 2009, then Nordic will not be obligated to make the second installment payment.

As of June 30, 3008, Nordic had invested in Hedrin K/S an aggregate amount of $3,750,000, and as a result, as of the date hereof, 26,785,714 shares of Common Stock are issuable upon exercise of Noric's right to put all or a portion of its equity interests in Hedrin K/S. Accordingly, the Company has revised the Registration Statement to register for resale 26,785,714 shares of Common Stock, which represents the number of shares underlying Nordic's right to put all or a portion of its equity interests in Hedrin K/S as of the date hereof.

3. In connection with the call right, we note that Nordic has the right to refuse the call and pay a cash amount to you. Since the call right provides that Nordic has a decision to either pay cash or exchange its interest in the joint venture for shares of your common stock, it appears that the registration of the common shares underlying the call option is premature. Please amend your registration statement to remove these shares.

The Company has revised the Registration Statement to remove from registration the resale of all of the shares of Common Stock underlying the Company's right to call all or any portion of Nordic's equity interest in Hedrin K/S.