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

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): November 19, 2008

Manhattan Pharmaceuticals, Inc. (Exact name of registrant as specified in its charter)

001-32639

(Commission File Number)

36-3898269 (IRS Employer

Identification No.)

Delaware (State or other jurisdiction of incorporation)

> 48 Wall Street, Suite 1110 New York, New York 10005

(Address of principal executive offices) (Zip Code)

(212) 582-3950

(Registrant's telephone number, including area code)

Not applicable

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 Entry into a Material Definitive Agreement

Manhattan Pharmaceuticals, Inc. (the "<u>Company</u>") entered into a Securities Purchase Agreement (the "<u>Securities Purchase Agreement</u>"), dated as of November 19, 2008, among the Company and the investors set forth on Exhibit A-1 and Exhibit A-2 thereto (the "<u>Investors</u>"). The Securities Purchase Agreement provides for the sale by the Company of up to 500 units (each a "<u>Unit</u>" and collectively, the "<u>Units</u>") with each Unit consisting of (i) a 12% Senior Secured Note Promissory Note in the principal amount of \$5,000 (each a "<u>Note</u>", and collectively, the "<u>Notes</u>") and (ii) a warrant to purchase up to 166,667 shares of the Company's common stock ("<u>Common Stock</u>") at an exercise price of \$.09 per share which expire on December 31, 2013 (each a "<u>Warrant</u>" and collectively, the "<u>Warrants</u>"); provided, that if 500 Units are sold, the Company may sell up to an additional 200 Units (the "<u>Overallotment</u>"). On November 19, 2008, the Company completed the sale of 207 Units (the "<u>First Closing</u>"). The Company may sell up to an additional 293 Units (493 Units if the Overallotment is exercised) in subsequent closings.

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

In connection with the Securities Purchase Agreement, the Company, the placement agent acting in connection with the private placement (the "<u>Placement</u> <u>Agent</u>") and the Investors entered into a Registration Rights Agreement, dated as of November 19, 2008, and the Company agreed to file a registration statement to register the resale of the shares of Common Stock issuable upon exercise of the Warrants (the "<u>Warrant Shares</u>"), within 20 days of the final closing date and to cause the registration statement to be declared effective within 90 days (or 120 days upon full review by the SEC).

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

At the First Closing the Company also entered into (i) Amendment No. 2 to the Employment Agreement with Douglas Abel, its Chief Executive Officer (the "<u>Abel Amendment</u>") and (ii) Amendment No. 1 to the Employment Agreement with Michael McGuinness, its Chief Financial Officer (the "<u>McGuinness</u> <u>Amendment</u>"). The Abel Amendment and the McGuinness Amendment provide for a reduction of up to 1/3 of the salary payable to Messrs. Abel and McGuinness, respectively, until the Company shall have received at least \$2,500,000 of gross proceeds from the sale of the Units or other sales of securities or from other revenue received by the Company in the operation of its business or any combination of the foregoing.

In connection with the First Closing, the Company incurred expenses which included, without limitation, commissions to the Placement Agent, legal and accounting fees, and other miscellaneous expenses, of approximately \$245,000. In addition, the Company issued a warrant to purchase 5,175,010 shares of Common Stock at an exercise price of \$.09 per share to the Placement Agent (the "<u>Placement Agent Warrant</u>") as additional compensation for its services. Further, the Company granted the Placement Agent the right to nominate a member of the Board of Directors of the Company and such director shall receive all compensation and benefits provided to the other directors of the Company. Additionally, upon such director's appointment to the Board of Directors he shall be issued a warrant to purchase 1,000,000 shares of Common Stock at a per share exercise price equal to the greater of (i) the fair market value on the date of issuance or (ii) \$.09.

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

The description of the private placement described in this Current Report on Form 8-K does not purport to be complete and is qualified in its entirety by reference to the Securities Purchase Agreement filed as <u>Exhibit 10.1</u> hereto, the Registration Rights Agreement filed as <u>Exhibit 10.2</u> hereto, the Security Agreement filed as <u>Exhibit 10.3</u> hereto, the Default Agreement filed as <u>Exhibit 10.4</u> hereto, the form of Note filed as <u>Exhibit 10.5</u> hereto, the form of Warrant filed as <u>Exhibit 10.6</u> hereto, the Abel Amendment filed as <u>Exhibit 10.7</u> hereto, the McGuinness Amendment filed as <u>Exhibit 10.8</u> hereto and the form of Placement Agent Warrant files as <u>Exhibit 10.9</u> (collectively, the "<u>Transaction Documents</u>"), all of which are incorporated herein by reference. The forms of the Transaction Documents have been included to provide investors and security holders with information regarding their terms. They are not intended to provide any other factual information about the Company. The Transaction Documents contain certain representations and warranties, as well as indemnification with respect to a breach of such representations or warranties. Investors and security holders should not rely on the representations and warranties as characterizations of the actual state of facts because they were made only as of the respective dates of the Transaction Documents, and such subsequent information may not be fully reflected in the Company's public disclosures. A copy of issued by the Company in connection with the private placement is filed as <u>Exhibit 99.1</u> hereto.

Forward Looking Statements

This Current Report on Form 8-K contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements typically are identified by use of terms such as "may," "will," "should," "plan," "expect," "anticipate," "estimate" and similar words, although some forward-looking statements are expressed differently. Forward-looking statements represent our management's judgment regarding future events. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, the Company can give no assurance that such expectations will prove to be correct. All statements other than statements of historical fact included in this Current Report on Form 8-K are forward-looking statements. The Company cannot guarantee the accuracy of the forward-looking statements, and you should be aware that the Company's actual results could differ materially from those contained in the forward-looking statements due to a number of factors, including the statements under "Risk Factors" contained in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007 filed with the Securities and Exchange Commission.

Item 3.02 Unregistered Sales of Equity Securities

The information set forth under Item 1.01 of this Current Report on Form 8-K is incorporated by reference in response to this Item 3.02.

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers

The information set forth under Item 1.01 of this Current Report on Form 8-K is incorporated by reference in response to this Item 5.02.

Item 9.01. Financial Statements and Exhibits.

- (d) Exhibits
 - 10.1 Securities Purchase Agreement, dated November 19, 2008, by and among the Company and the investors listed on Exhibit A-1 and A-2 thereto.
 - 10.2 Registration Rights Agreement, dated November 19, 2008, by and among the Company, the Placement Agent and the investors listed on Exhibit A thereto.

- 10.3 Security Agreement, dated November 19, 2008, by and among the Company and each person named on Exhibit A-1 and A-2 of the Securities Purchase Agreement.
- 10.4 Default Agreement, dated November 19, 2008, by and among the Company and the persons and entities listed on Schedule A thereto.
- 10.5 Form of 12% Senior Secured Promissory Note
- 10.6 Form of Warrant
- 10.7 Amendment No. 2 to the Employment Agreement between the Company and Douglas Abel, dated November 19, 2008.
- 10.8 Amendment No. 1 to the Employment Agreement between the Company and Michael McGuinness, dated November 19, 2008.
- 10.9 Form of Placement Agent Warrant
- 99.1 Press release issued by the Company on November 25, 2008

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

MANHATTAN PHARMACEUTICALS, INC.

Date: November 25, 2008

By: /s/ Michael G. McGuinness

Michael G. McGuinness Chief Financial Officer

SECURITIES PURCHASE AGREEMENT

This SECURITIES PURCHASE AGREEMENT (this "**Agreement**") is made and entered into as of November 19, 2008, by and between Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "**Company**") and the investors (each, an "**Investor**" and, collectively, the "**Investors**"), set forth on <u>Exhibit A-1</u> and <u>Exhibit A-2</u>.

- A. WHEREAS, the Investors wish to purchase from the Company, and the Company wishes to sell and issue to the Investors, upon the terms and conditions stated in this Agreement, a minimum of 200 units (the "Minimum Amount") and a maximum of 500 units (the "Maximum Amount"); provided, however, there shall be an overallotment option to purchase an additional 200 units (the "Overallotment Amount"), at a purchase price of \$5,000 per unit (each, a "Unit"), each Unit consisting of:
 - (a) a twelve (12%) percent senior secured promissory note (each a "**Note**," and, collectively, the "**Notes**") of the Company in the aggregate principal amount of \$5,000 in the form annexed hereto as <u>Exhibit B</u>; and
 - (b) a warrant (each a "**Warrant**," and, collectively, the "**Warrants**") to purchase up to 166,667 shares (the "**Warrant Shares**") of the Company's common stock, par value \$0.001 per share (together with any securities into which such shares may be reclassified, the "**Common Stock**"), at an exercise price of \$0.09 per share (subject to adjustment as set forth in the Warrants), which Warrants shall be substantially in the form attached hereto as <u>Exhibit C</u>, upon the terms and conditions set forth in this Agreement;
- B. **WHEREAS**, the Units, Notes, Warrants and Warrant Shares issued pursuant to this Agreement are collectively referred to herein as the "Securities," and
- C. **WHEREAS,** contemporaneous with the sale of the Units, the parties hereto will execute and deliver a Registration Rights Agreement, substantially in the form attached hereto as <u>Exhibit D</u> (the "**Registration Rights Agreement**"), pursuant to which the Company will agree to provide certain registration rights with respect to the Warrant Shares under the Securities Act and the rules and regulations promulgated thereunder, and applicable state securities laws.

NOW, THEREFORE, in consideration of the mutual terms, conditions and other agreements set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound hereby, the parties hereto hereby agree to the sale and purchase of the Units as set forth herein.

1. **DEFINITIONS**

For purposes of this Agreement, the terms set forth below shall have the corresponding meanings provided below.

- (a) "Affiliate" means, with respect to any specified Person:
 - (i) if such Person is an individual, the spouse of that Person and, if deceased or disabled, his heirs, executors, or legal representatives, if applicable, or any trusts for the benefit of such individual or such individual's spouse and/or lineal descendants, or

- (ii) otherwise, another Person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with, the Person specified. As used in this definition, "control" shall mean the possession, directly or indirectly, of the power to cause the direction of the management and policies of a Person, whether through the ownership of voting securities or by contract or other written instrument.
- (b) "Business Day" means any day on which banks located in New York City are not required or authorized by law to remain closed.
- (c) **"Closing**" and **"Closing Date**" as defined in <u>Section 2.2(c)</u>.
- (d) **"Common Stock**" as defined in the recitals above.
- (e) **"Company Financial Statements**" as defined in <u>Section 6.5</u> hereto.
- (f) **"Company's knowledge**" means the information and/or other items that the Executives of the Company have actual knowledge of after due inquiry.
- (g) **"Default Agreement**" means the Default Agreement, dated the date of the First Closing, by and among each Investor and the Company, the form of which is annexed hereto has <u>Exhibit E</u>.
- (h) **"Deposit Account Agreement**" means the Deposit Agreement, dated October 21, 2008, by and among the Company, the Placement Agent and the Escrow Agent.
- (i) **"ERISA**" as defined in <u>Section 6.18</u> hereto.
- (j) **"Environmental Laws**" as defined in <u>Section 6.12</u> hereto.
- (k) "Escrow Agent" means Signature Bank, a New York commercial bank.
- (l) **"Escrow Agreement**" means the Amended and Restated Escrow Deposit Agreement, dated October 16, 2008, by and among the Company, the Placement Agent and the Escrow Agent.
- (m) **"Exchange Act**" means the Securities Exchange Act of 1934, as amended.
- (n) "Executives" means Douglas Abel and Michael McGuinness.
- (o) **"Executive Agreements**" as defined in <u>Section 8.5</u>.
- (p) "First Closing" and "First Closing Date" as defined in <u>Section 2.2(a)</u>.
- (q) **"Intellectual Property**" means the Company's patents, patent applications, provisional patents, trademarks, service marks, trade names, trademark registrations, service mark registrations, copyrights, licenses, formulae, mask works, customer lists, internet domain names, know-how and other intellectual property, including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems, procedures or registrations or applications relating to the same.

- (r) "Indebtedness" of any Person means all obligations of such Person (i) for borrowed money, (ii) evidenced by notes, bonds, debentures or similar instruments, (iii) for the deferred purchase price of goods or services (other than trade payables or accruals incurred in the ordinary course of business), (iv) under capital leases, and (v) in the nature of guarantees of the obligations described in clauses (i) through (iv) above of any other Person.
- (s) "Investor" means any person who purchases Units in the Offering pursuant to this Agreement.
- (t) "Lien(s)" means any interest in Property securing an obligation owed to a Person whether such interest is based on the common law, statute or contract, and including but not limited to a security interest arising from a mortgage, lien, title claim, assignment, encumbrance, adverse claim, contract of sale, pledge, conditional sale or trust receipt or a lease, consignment or bailment for security purposes. The term "Lien" includes but is not limited to mechanics', materialmens', warehousemens' and carriers' liens and other similar encumbrances. For the purposes hereof, a Person shall be deemed to be the owner of Property which it has acquired or holds subject to a conditional sale agreement or other arrangement pursuant to which title to the Property has been retained by or vested in some other Person for security purposes.
- (u) "Material Adverse Effect" means a material adverse effect on, and a "Material Adverse Change" means a material adverse change in:
 - (i) the assets, liabilities, results of operations, condition (financial or otherwise), business, or prospects of the Company taken as a whole; or
 - (ii) the ability of the Company to perform its obligations under the Transaction Documents,

but, to the extent applicable, shall exclude any circumstance, change or effect to the extent resulting or arising from: (i) any change in general economic conditions in the industries or markets in which the Company and its Subsidiaries operates so long as the Company and its Subsidiaries are not disproportionately (in a material manner) affected by such changes; (ii) national or international political conditions, including any engagement in hostilities, whether or not pursuant to the declaration of a national emergency or war, or the occurrence of any military or terrorist attack so long as the Company and its Subsidiaries are not disproportionately (in a material manner) affected by such changes; (iii) changes in United States generally accepted accounting principles, or the interpretation thereof; or (iv) the entry into or announcement of this Agreement, actions contemplated by this Agreement, or the consummation of the transactions contemplated hereby.

- (v) **"Maximum Amount**" as defined in the recitals above.
- (w) "Minimum Amount" as defined in the recitals above.
- (x) **"Note(s)"** as defined in the recitals above.

- (y) "OTCBB" shall mean the Over-the-Counter Bulletin Board system.
- (z) "Overallotment Amount" as defined in the recitals above.
- (aa) "Offering" shall mean the offering and sale of the Units pursuant to this Agreement and the Private Placement Memorandum.
- (bb) "**Person**" shall mean an individual, entity, corporation, partnership, association, limited liability company, limited liability partnership, joint-stock company, trust or unincorporated organization.
- (cc) "Placement Agent" shall mean [1].
- (dd) **"Private Placement Memorandum**" means the Company's Confidential Private Placement Memorandum, dated October 22, 2008, together with any and all amendments and/or supplements thereto.
- (ee) "Property" means any interest in any kind of property or asset, whether real, personal or mixed, or tangible or intangible.
- (ff) **"Public Information Failure**" as defined in <u>Section 6.25</u> hereto.
- (gg) **"Public Information Failure Payments**" as defined in <u>Section 6.25</u> hereto.
- (hh) "Purchase Price" shall mean up to \$3,500,000 (which amount includes the \$1,000,000 Overallotment Amount).
- (ii) "Registration Rights Agreement" shall have the meaning set forth in the recitals.
- (jj) **"Regulation D**" as defined in <u>Section 4.11</u> hereto.
- (kk) "**Rule 144**" as defined in <u>Section 4.10(c)</u> hereto.
- (ll) "SEC" means the United States Securities and Exchange Commission.
- (mm) "SEC Documents" as defined in <u>Section 6.5</u> hereto.
- (nn) "Securities" as defined in the recitals above.
- (oo) "Securities Act" means the Securities Act of 1933, as amended.
- (pp) **"Security Agreement"** means the Security Agreement by and among each Investor and the Company, the form of which is annexed hereto has Exhibit F.
- (qq) "Subsequent Closing" and "Subsequent Closing Date" as defined in <u>Section 2.2(b)</u>.
- (rr) "Subsidiaries" shall mean any corporation or other entity or organization, whether incorporated or unincorporated, in which the Company owns, directly or indirectly, any controlling equity or other controlling ownership interest or otherwise controls through contract or otherwise.

- (ss) "**Transaction Documents**" shall mean this Agreement, the Private Placement Memorandum, the Notes, the Security Agreement, the Default Agreement, the Executive Agreements, the Registration Rights Agreement, the Warrants, the Escrow Agreement and the Deposit Account Agreement.
- (tt) **"Transfer**" shall mean any sale, transfer, assignment, conveyance, charge, pledge, mortgage, encumbrance, hypothecation, security interest or other disposition, or to make or effect any of the above.
- (uu) **"Warrant Shares**" as defined in the recitals above.
- (vv) **"Warrants**" as defined in the recitals above.

2. SALE AND PURCHASE OF UNITS.

2.1 **Subscription for Units by Investors.** Subject to the terms and conditions of this Agreement, on the Closing Date, each of the Investors shall severally, and not jointly, purchase, and the Company shall sell and issue to each Investor, the number of Units specified by it on its respective signature page attached hereto in exchange for the Purchase Price.

2.2 Closings.

- (a) <u>First Closing</u>. Subject to the terms and conditions set forth in this Agreement, the Company shall issue and sell to each Investor listed on <u>Exhibit A-1</u>, and each such Investor shall, severally and not jointly, purchase from the Company on the First Closing Date, such number of Units set forth on the respective signature pages attached hereto, which will be reflected opposite such Investor's name on <u>Exhibit A-1</u> (the "**First Closing**"). The date of the First Closing is hereinafter referred to as the "**First Closing Date**". Units equal to at least the Minimum Amount are required to be sold at the First Closing within the time period set forth in the Private Placement Memorandum.
- (b) <u>Subsequent Closing(s)</u>. The Company agrees to issue and sell to each Investor listed on <u>Exhibit A-2</u> (the Subsequent Closing Schedule of Investors), and each such Investor agrees, severally and not jointly, to purchase from the Company on the date set forth on <u>Exhibit A-2</u> (each a "Subsequent Closing Date") such number of Units set forth on the signature pages attached hereto, which will be reflected opposite such Investor's name on <u>Exhibit A-2</u> (a "Subsequent Closing"). There may be more than one Subsequent Closing; <u>provided</u>, <u>however</u>, that the final Subsequent Closing shall take place within the time periods set forth in the Private Placement Memorandum. The date of any Subsequent Closing is hereinafter referred to as a "Subsequent Closing Date").
- (c) <u>Closing</u>. The First Closing and any applicable Subsequent Closings are each referred to in this Agreement as a "Closing". The First Closing Date and any Subsequent Closing Dates are sometimes referred to herein as a "Closing Date". All Closings shall occur within the time periods set forth in the Private Placement Memorandum at the offices of Gusrae, Kaplan, Bruno & Nusbaum PLLC, counsel to the Placement Agent, at 120 Wall Street, 11th Floor, New York, NY 10005 or remotely via the exchange of documents and signatures.

2.3 **Closing Deliveries**. At each Closing, the Company shall deliver to the Investors purchasing Units at such Closing, against delivery by the Investor of the Purchase Price (as provided below), the Notes and the Warrants. At each Closing, each Investor purchasing Units at such Closing shall deliver or cause to be delivered to the Company the Purchase Price set forth in its counterpart signature page annexed hereto by paying United States dollars via bank, certified or personal check which has cleared prior to the applicable Closing or in immediately available funds, by wire transfer to the following Escrow Account, pursuant to the Escrow Agreement:

| Acct. Name: | Signature Bank as Escrow Agent for Manhattan Pharmaceuticals, Inc. |
|--------------|--|
| ABA Number: | 026013576 |
| Acct Number: | 1501128178 |

- 2.4 **Terms of the Notes.** Each of the Notes shall have the terms and conditions and be in the form attached hereto as <u>Exhibit B</u>. The Company's obligations to the Investors under the Notes shall be secured by the assets of the Company as provided in the Security Agreement and in the Default Agreement. Upon an Event of Default (as defined in the Note), the Investors shall have, in addition to any rights provided hereunder, the rights provided them under the Transaction Documents.
- 2.5 **Restrictions on Release of Proceeds.** In addition to the other conditions to Closing listed in <u>Section 8</u> hereof, the release of proceeds from the Escrow Account to the Company shall be subject to the following restrictions:
 - (i) The proceeds from the sale of the Units to be released to the Company shall be released from the Escrow Account and transferred to the deposit account (the "Deposit Account") established by the Deposit Account Agreement. Funds shall be released from the Deposit Account retroactive as of October 1, 2008, in a series of monthly payments (a "Monthly Payment") and Closing lump sum payments ("Lump Sum Payment") in the amounts set forth above:

| | | | Agg | regate | |
|----------------------------|---------|---------|------------|---------------------------|--|
| | | | Lum | p Sum | |
| | Monthly | | Payment at | | |
| Gross Proceeds | Payr | Payment | | Closing | |
| \$1,000,000 to \$1,499,999 | \$ | 106,000 | | 0 | |
| \$1,500,000 to \$1,999,999 | \$ | 113,300 | \$ | 200,000 | |
| \$2,000,000 to 2,500,000 | \$ | 119,375 | \$ | 225,000 | |
| | | | Aı | ny amount in excess of | |
| \$2,500,000 or more | \$ | 125,000 | | \$1,500,000 | |

- (ii) At the First Closing the Company shall receive an amount equal to the Monthly Payment for the month in which such Closing occurs, plus any applicable Lump Sum Payment; provided, however, that if the First Closing shall occur after October 31, 2008 and prior to or on November 30, 2008, the Company shall receive an amount equal to two Monthly Payments, plus any applicable Lump Sum Payment; provided, further, that if the First Closing shall occur after November 30, 2008 and on or prior to December 31, 2008, the Company shall receive an amount equal to three Monthly Payments, plus any applicable Lump Sum Payment and provided, further, that if First Closing after December 31, 2008, the Company shall receive an amount equal to three Monthly Payments, plus any applicable Lump Sum Payment. Following the First Closing, Monthly Payments shall be paid by the Escrow Agent to the Company on the first Business Day of each month and shall be increased, as applicable in accordance with Section 2.5(i). The Escrow Agent shall pay to the Company the applicable Lump Sum Payment at each Closing which results in gross proceeds from the sale of the Units being at least equal to \$1,500,000, \$2,000,000 or \$2,500,000, as the case may be.
- 2.6 **Use of Proceeds.** The Company hereby covenants and agrees that the proceeds from the sale of Units shall be used as provided for in the Private Placement Memorandum.

3. ACKNOWLEDGEMENTS OF THE INVESTORS.

Each Investor, severally and not jointly, acknowledges that:

- 3.1 **Resale Restrictions.** None of the Securities have been registered under the Securities Act, or under any state securities or "blue sky" laws of any state of the United States, and, unless so registered, none of the Securities may be offered or sold by the Investor except pursuant to an effective registration statement under the Securities Act, or pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and in each case only in accordance with applicable state securities laws.
- 3.2 **Legends on Notes, Warrants and Warrant Shares.** Such Investor understands that the Notes, the Warrants and certificates evidencing the Warrant Shares shall bear a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of the certificates evidencing such Warrant Shares):

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS, OR AN OPINION OF COUNSEL, IN A FORM ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR APPLICABLE STATE SECURITIES LAWS OR UNLESS SOLD PURSUANT TO RULE 144 UNDER SAID ACT.

If required by the authorities of any state in connection with the issuance or sale of the Notes, the Warrants or any Warrant Shares, the Securities will also bear any legend required by such state authority.

3.3 **Agreements.** It has received and carefully read the Transaction Documents and Private Placement Memorandum, including the Risk Factors set forth in the Private Placement Memorandum;

- 3.4 **Books and Records.** The books and records of the Company were available upon reasonable notice for inspection, subject to certain confidentiality restrictions, by the Investor during reasonable business hours at its principal place of business, that all documents, records and books in connection with the sale of the Securities hereunder have been made available for inspection by it and its attorney and/or advisor(s) and that the Investor and/or its advisor has reviewed all such documents, records and books to its full satisfaction and all questions it and/or its advisor may have had been answered to their respective full satisfaction;
- 3.5 **Independent Advice.** The Investor has been advised to consult the Investor's own legal, tax and other advisors with respect to the merits and risks of an investment in the Securities and with respect to applicable resale restrictions, and it is solely responsible (and neither the Company nor the Placement Agent is in any way, directly and/or indirectly, responsible) for compliance with:
 - (a) any applicable laws of the jurisdiction in which the Investor is resident in connection with the distribution of the Securities hereunder, and
 - (b) applicable resale restrictions;
- 3.6 **No Insurance.** There is no government or other insurance covering any of the Securities.

4. REPRESENTATIONS, WARRANTIES AND ACKNOWLEDGMENTS OF THE INVESTORS.

Each Investor, severally and not jointly, represents and warrants to the Company solely as to such Investor that:

4.1 Capacity. The Investor: (i) if a natural person, represents that the Investor has reached the age of 21 and has full authority, legal capacity and competence to enter into, execute and deliver this Agreement and the Transaction Documents to which the Investor is a party and all other related agreements or certificates and to take all actions required pursuant hereto and thereto and to carry out the provisions hereof and thereof and, (ii) if a corporation, partnership, or limited liability company or partnership, or association, joint stock company, trust, unincorporated organization or other entity, represents that such entity was not formed for the specific purpose of acquiring the Units, such entity is duly organized, validly existing and in good standing under the laws of the state of its organization, such entity has full power and authority to execute and deliver this Agreement, the Transaction Documents to which it is a party and all other related agreements or certificates and to take all actions required pursuant hereto and thereto and to carry out the provisions hereof and thereof and to purchase and hold the Units, the execution and delivery of this Agreement and the Transaction Documents to which it is a Party have been duly authorized by all necessary action; or (iii) if executing this Agreement in a representative or fiduciary capacity, represents that it has full power and authority to execute and deliver this Agreement and the Transaction Documents to which it is a Party in such capacity and on behalf of the subscribing individual, ward, partnership, trust, estate, corporation, or limited liability company or partnership, or other entity for whom the Investor is executing this Agreement and the Transaction Documents, and such individual, partnership, ward, trust, estate, corporation, or limited liability company or partnership, or other entity has full right and power to perform pursuant to this Agreement and the Transaction Documents to which it is a Party and make an investment in the Company;

- 4.2 **No Violation of Corporate Governance Documents.** If the Investor is a corporation or other entity, the entering into of this Agreement and the other Transaction Documents to which it is a party and the transactions contemplated hereby and thereby do not and will not result in the violation of any of the terms and provisions of any law applicable to, or the charter or other organizational documents, bylaws or other constating documents of, the Investor or of any agreement, written or oral, to which the Investor may be a party or by which the Investor is or may be bound;
- 4.3 **Binding Agreement.** The Investor has duly executed and delivered this Agreement and the other Transaction Documents to which it is a party, and this Agreement and the other Transaction Documents to which it is a party constitute a valid and binding agreement of the Investor enforceable against the Investor in accordance with their respective terms, except as such enforceability may be limited by general principals of equity, or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies.
- 4.4 **No SEC Review or Approval.** Neither the SEC nor any other securities commission, securities regulator or similar regulatory authority has reviewed or passed on the merits of the Securities or on any of the documents reviewed or executed by the Investor in connection with the sale of the Securities.
- 4.5 **Purchase Entirely for Own Account**. The Securities are being acquired for such Investor's own account, not as nominee or agent, for investment purposes only and not with a view to the resale or distribution of any part thereof in violation of the Securities Act, and such Investor has no present intention of selling, granting any participation in, or otherwise distributing the same in violation of the Securities Act, without prejudice, however, to such Investor's right at all times to sell or otherwise dispose of all or any part of such Securities in compliance with applicable federal and state securities laws.
- 4.6 **Not a Broker-Dealer.** Such Investor is neither a registered representative under the Financial Industry Regulatory Authority ("FINRA"), a member of FINRA or associated or Affiliated with any member of FINRA, nor a broker-dealer registered with the SEC under the Exchange Act or engaged in a business that would require it to be so registered, nor is it an Affiliate of a such a broker-dealer or any Person engaged in a business that would require it to be registered as a broker-dealer. In the event such Investor is a member of FINRA, or associated or Affiliated with a member of FINRA, such Investor agrees, if requested by FINRA, to sign a lock-up, the form of which shall be satisfactory to FINRA with respect to the Warrants and the Warrant Shares.
- 4.7 **Not an Underwriter.** Such Investor is not an underwriter of the Common Stock, nor is it an Affiliate of an underwriter of the Common Stock.
- 4.8 **Investment Experience**. Such Investor acknowledges that the purchase of the Securities is a highly speculative investment and that it can bear the economic risk and complete loss of its investment in the Securities and has such knowledge and experience in financial and/or business matters that it is capable of evaluating the merits and risks of the investment contemplated hereby.

- 4.9 **Disclosure of Information**. Such Investor has had an opportunity to receive, and fully and carefully review, all information related to the Company and the Securities requested by it and to ask questions of and receive answers from the Company regarding the Company, its business and the terms and conditions of the offering of the Securities. Neither such inquiries nor any other due diligence investigation conducted by such Investor shall modify, amend or affect such Investor's right to rely on the Company's representations and warranties contained in this Agreement. Such Investor acknowledges that it has received, and fully and carefully reviewed and understands all of the Transaction Documents, including, but not limited to, the Private Placement Memorandum describing, among other items, the Company, its business, its risks, the Securities and the offering of the Securities. Investor acknowledges that it has received, and fully and carefully reviewed and understands, copies of the SEC Documents, either in hard copy or electronically through the SEC's EDGAR system. Such Investor understands that its investment in the Securities involves a high degree of risk. Such Investor's decision to enter into this Agreement and the Registration Rights Agreement has been made based solely on the independent evaluation of the Investor and its representatives. Such Investor has received such accounting, tax and legal advice from Persons other than the Company as it has considered necessary to make an informed investment decision with respect to the acquisition of the Securities.
- 4.10 **Restricted Securities**. Such Investor understands that except as provided in the Registration Rights Agreement, the sale or re-sale of the Securities has not been and is not being registered under the Securities Act or any applicable state securities laws, and the Securities, as applicable, may not be transferred unless:
 - (a) they are sold pursuant to an effective registration statement under the Securities Act; or
 - (b) they are being sold pursuant to a valid exemption from the registration requirements of the Securities Act and, if required by the Company, such Investor shall have delivered to the Company, at the Investor's sole cost and expense, an opinion of counsel that shall be in form, substance and scope customary for opinions of counsel in comparable transactions to the effect that the Securities to be sold or transferred may be sold or transferred pursuant to an exemption from the registration requirements of the Securities Act, which opinion shall be acceptable to the Company; or
 - (c) they are sold or transferred to an "affiliate" (as defined in Rule 144, promulgated under the Securities Act (or a successor rule ("**Rule 144**")) of such Investor who agrees to sell or otherwise transfer the Securities only in accordance with this <u>Section 4.10</u> and who is an accredited investor, or
 - (d) they are sold pursuant to Rule 144.

Such Investor understands that any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of Rule 144 and other than as provided in the Transaction Documents, neither the Company nor any other Person is under any obligation to register the Securities under the Securities Act or any state securities laws. Notwithstanding the foregoing or anything else contained herein to the contrary, the Securities may be pledged as collateral in connection with a *bona fide* margin account or other lending arrangement.

4.11 Accredited Investor. Such Investor is an accredited investor as defined in Rule 501(a) of Regulation D, as amended, under the Securities Act ("Regulation D").

- 4.12 **No General Solicitation**. Such Investor did not learn of the investment in the Securities as a result of any public advertising or general solicitation, and is not aware of any public advertisement or general solicitation in respect of the Company or its securities.
- 4.13 **Brokers and Finders**. No Investor will have, as a result of the transactions contemplated by the Transaction Documents, any valid right, interest or claim against or upon the Company, any Subsidiary or any other Investor for any commission, fee or other compensation pursuant to any agreement, arrangement or understanding entered into by or on behalf of such Investor.
- 4.14 **Prohibited Transactions**. Other than with respect to the transactions contemplated herein, since the earlier to occur of (i) the time that such Investor was first contacted by the Company, or any other Person regarding an investment in the Company and (ii) the thirtieth (30th) day prior to the date hereof, neither the Investor nor any Affiliate of the Investor which (x) had knowledge of the transactions contemplated hereby, (y) has or shares discretion relating to the Investor's investments or trading or information concerning such Investor's investments, including in respect of the Securities, or (z) is subject to the Investor's review or input concerning such Affiliate's investments or trading decisions (collectively, "**Trading Affiliates**") has, directly or indirectly, nor has any Person acting on behalf of, or pursuant to, any understanding with such Investor or Trading Affiliate effected or agreed to effect any transactions in the securities of the Company or involving the Company's securities (a "**Prohibited Transaction**").
- 4.15 **Residency**. Such Investor is a resident of the jurisdiction set forth in the Investor Questionnaire provided separately.
- 4.16 **Reliance on Exemptions.** The Investor understands that the Securities are being offered and sold to it in reliance upon specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying upon the truth and accuracy of, and the Investor's compliance with, the representations, warranties, agreements, acknowledgments and understandings of the Investor set forth herein in order to determine the availability of such exemptions and the eligibility of the Investor to acquire the Securities. All of the information which the Investor has provided to the Company is true, correct and complete as of the date this Agreement is signed, and if there should be any change in such information prior to the Closing, the Investor will immediately provide the Company with such information.
- 4.17 **Conflicts.** The Investor understands that Affiliates and/or employees of the Placement Agent (i) beneficially own in the aggregate approximately 1,087,920 shares of Common Stock, (ii) will receive the compensation set forth elsewhere herein in connection with the Offering, and (iii) may, but are not obligated to, purchase Securities in the Offering and any and all such Securities purchased shall be counted toward the Minimum Amount and the Maximum Amount.

5. COVENANTS OF THE COMPANY

5.1 **Affirmative Covenants.**

(a) **Furnishing of Information**. Until the date that any Investor owning Warrant Shares may sell all of them under Rule 144 of the Securities Act (or any successor provision) without restriction, the Company covenants to use its commercially reasonable efforts to (a) timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act and (b) make and keep adequate "current public information" (as such term is described in Rule 144) available.

- (b) Rule 144 Sales. In connection with any proposed sale of Warrant Shares pursuant to Rule 144 (or any successor provision) by the Investor, the Company covenants that it shall take such reasonable action as the Investor may request (including, without limitation, promptly obtaining any required legal opinions from Company counsel necessary to effect the sale of Warrant Shares under Rule 144 and paying all related fees and expenses of such counsel in connection with such opinions), all to the extent required from time to time to enable such Investor to sell Warrant Shares without registration under the Securities Act pursuant to the provisions of Rule 144 under the Securities Act (or any successor provision). The Company further covenants to take such action and to provide such legal opinions within three (3) business days after receipt from such Investor (or its representative) of documentation reasonably required by Company counsel to provide such opinion.
- (c) **Filing of Tax Reports**. The Company shall, and shall cause each of its Subsidiaries to prepare and timely file (or obtain extensions in respect thereof and file within the applicable grace period) all tax returns and tax reports required to be filed by each of them in all required jurisdictions after the date hereof pursuant to applicable tax laws.

6. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company represents, warrants and covenants to the Investors that:

6.1 **Organization; Execution, Delivery and Performance.**

- (a) The Company and each Subsidiary is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction in which it is incorporated or organized, with full power and authority (corporate and other) to own, lease, use and operate its properties and to carry on its business as and where now owned, leased, used, operated and conducted. The Company is duly qualified as a foreign corporation to do business and is in good standing in every jurisdiction in which its ownership or use of property or the nature of the business conducted by it makes such qualification necessary except where the failure to be so qualified or in good standing would not have a Material Adverse Effect.
- (b) <u>Subsidiaries</u>. The Company has no Subsidiaries other than those listed in <u>Schedule 6.1(b)</u> hereto. Except as disclosed in <u>Schedule 6.1(b)</u> hereto or in the SEC Documents, the Company owns, directly or indirectly, all of the capital stock or comparable equity interests of each Subsidiary free and clear of any and all Liens and all of the issued and outstanding shares of capital stock or comparable equity interest of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive rights of first refusal and other similar rights. The Company has the unrestricted right to vote, and (subject to limitations imposed by applicable law) to receive dividends and distributions on, all capital stock or other equity securities of its Subsidiaries that are owned by the Company.

- (c) (i) The Company has all requisite corporate power and authority to enter into and perform the Transaction Documents and to consummate the transactions contemplated hereby and thereby and to issue the Securities in accordance with the terms hereof and thereof;
 - (ii) the execution and delivery of the Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby have been duly authorized by the Company's Board of Directors and no further consent or authorization of the Company, its Board of Directors, or its stockholders, is required except as expressly contemplated by this Agreement;
 - (iii) each of the Transaction Documents has been duly executed and delivered by the Company by its authorized representative, and such authorized representative is a true and official representative with authority to sign each such document and the other documents or certificates executed in connection herewith and bind the Company accordingly; and
 - (iv) each of the Transaction Documents constitutes, and upon execution and delivery thereof by the Company will constitute, a legal, valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except as such enforceability may be limited by general principals of equity, or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies.
- 6.2 <u>Warrants Shares Duly Authorized</u>. The Warrant Shares will be duly authorized and reserved for future issuance and, upon exercise of the Warrants in accordance with their terms, will be duly and validly issued, fully paid and non-assessable, and free from all taxes or Liens with respect to the issue thereof and shall not be subject to preemptive rights, rights of first refusal and/or other similar rights of stockholders of the Company and/or any other Person.
- 6.3 <u>No Conflicts</u>. Except as disclosed in <u>Schedule 6.3</u>, the execution, delivery and performance of the Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the issuance and reservation for issuance of the Warrant Shares) will not:
 - (a) conflict with or result in a violation of any provision of the Certificate of Incorporation or By-laws or similar documents of the Company; or
 - (b) violate or conflict with, or result in a breach of any provision of, or constitutes a default and/or an event of default (or an event which with notice or lapse of time or both could become a default and/or an event of default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture, patent, patent license or instrument to which the Company is a party, except for possible violations, conflicts or defaults as would not, individually or in the aggregate, have a Material Adverse Effect; or
 - (c) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations and regulations of any self-regulatory organizations to which the Company or its securities are subject) applicable to the Company or by which any property or asset of the Company is bound or affected.

The Company is not in violation of its Certificate of Incorporation, By-laws or other organizational documents. The Company is not in default (and no event has occurred which with notice or lapse of time or both could put the Company in default), under, and the Company has not taken any action or failed to take any action that would give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which the Company is a party or by which any property or assets of the Company is bound or affected, except for possible defaults, terminations, amendments, accelerations or cancellations which would not, individually or in the aggregate, have a Material Adverse Effect. The businesses of the Company are not being conducted in violation of any law, rule ordinance or regulation of any governmental entity, except for possible violations which would not, individually or in the aggregate, have a Material Adverse Effect. Based in part on the truth and accuracy of the Investor's representations set forth herein and in the Investor Questionnaires, except as required under the Securities Act, the Exchange Act, or any applicable state securities laws, the Company is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court, governmental agency, regulatory agency, self regulatory organization or stock market or any third party in order for it to execute, deliver or perform any of its obligations under this Agreement or the Warrants in accordance with the terms hereof or to issue and sell the Units, Notes and Warrants in accordance with the terms hereof and to issue the Warrant Shares upon exercise of the Warrants. All consents, authorizations, orders, filings and registrations which the Company is required to obtain pursuant to the preceding sentence have been obtained or effected on or prior to the date hereof or will be obtained or effected in a timely manner following the Closing Date.

6.4 <u>Capitalization</u>.

- (a) As of September 15, 2008, the authorized capital stock of the Company consists solely of 1,500,000 share of preferred stock, of which no shares of preferred stock are issued and outstanding and 300,000,000 shares of Common Stock, of which 70,624,232 shares of Common Stock are issued and outstanding, 10,766,336 shares of Common Stock are reserved for issuance pursuant to options granted under the Company's stock option plan, and 15,966,710 shares are reserved for issuance pursuant to securities (other than the Warrants and the warrants issued to the Placement Agent in the Offering) exercisable for, or convertible into or exchangeable for shares of Common Stock.
- (b) Except as described above, in the SEC Documents or <u>Schedule 6.4(b)</u> annexed hereto, as of September 15, 2008:
 - there are no outstanding options, warrants, scrip, rights to subscribe for, puts, calls, rights of first refusal, agreements, understandings, claims or other commitments or rights of any character whatsoever relating to, or securities or rights convertible into or exchangeable for any shares of capital stock of the Company, or arrangements by which the Company is or may become bound to issue additional shares of capital stock of the Company;
 - (ii) other than the Registration Rights Agreement there are no agreements or arrangements under which the Company is obligated to register the sale of any of its securities under the Securities Act (except for the registration rights provisions contained herein); and

(iii) there are no anti-dilution or price adjustment provisions contained in any security issued by the Company (or in any agreement providing rights to security holders) that will be triggered by the issuance of any of the Notes, the Warrants and/or the Warrant Shares. All of such outstanding shares of capital stock are, or upon issuance will be, duly authorized, validly issued, fully paid and nonassessable. No shares of capital stock and/or other securities of the Company are subject to preemptive rights, rights of first refusal and/or any other similar rights of the stockholders of the Company and/or any other Person or any Lien imposed through the actions or failure to act of the Company.

6.5 SEC Information.

- Except as set forth in <u>Schedule 6.5</u> or in the SEC Documents, since January 1, 2007, the Company has timely filed (subject to 12b-25 filings (a) with respect to certain periodic filings) all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the reporting requirements of the Exchange Act, including, but not limited to, all Current Reports on Form 8-K (all of the foregoing filed with the SEC prior to the date hereof and all exhibits included therein and financial statements and schedules thereto and documents incorporated by reference therein, being hereinafter referred to herein as the "SEC Documents"). The SEC Documents have been made available to the Investors via the SEC's EDGAR system. Except as set forth on Schedule 6.5 to this Agreement, as of their respective dates the SEC Documents complied in all material respects with the requirements of the Exchange Act and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC, 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 light of the circumstances under which they were made, not misleading. In addition, as of each Closing, the SEC Documents, together with any additional documents filed with the SEC after the date hereof and through the date of Closing, when taken in their entirety, shall not contain any untrue statements of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the date upon which they were made and the circumstances under which they were made, not misleading. As of their respective dates, the financial statements of the Company included in the SEC Documents ("Company Financial Statements") complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto as in effect at the time of the filing. The Company Financial Statements have been prepared in accordance with United States generally accepted accounting principles ("GAAP"), consistently applied, during the periods involved (except:
 - (i) as may be otherwise indicated in such financial statements or the notes thereto; or
 - (ii) in the case of unaudited interim statements, to the extent they may not include footnotes or may be condensed or summary statements) and fairly present in all material respects the consolidated financial position of the Company and its consolidated Subsidiaries, if any, as of the dates thereof and the consolidated results of their operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments).

Except as expressly set forth in the Company Financial Statements, in the SEC Documents or on <u>Schedule 6.5</u>, the Company has no liabilities, contingent or otherwise, other than:

- (i) liabilities incurred in the ordinary course of business subsequent to December 31, 2007; and
- (ii) obligations under contracts and commitments incurred in the ordinary course of business and not required under GAAP to be reflected in such financial statements, which, individually or in the aggregate, are not material to the financial condition or operating results of the Company.
- (b) The shares of Common Stock are quoted on the OTCBB under the symbol "MHAN." The Company has not received notice (written or oral) from the OTCBB to the effect that the Company is not in compliance with the continuing requirements of the OTCBB. The Company is, and it has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such maintenance requirements.
- (c) All information relating to or concerning the Company and its officers, directors, employees, customers or clients (including, without limitation, all information regarding the Company's internal financial accounting controls and procedures) set forth in the Transaction Documents and the SEC Documents incorporated by reference therein, when taken together as a whole, does not contain an untrue statement of material fact or omit to state any material fact necessary in order to make the statements made herein or therein, in light of the circumstances under which they were made, not misleading.
- 6.6 **Intellectual Property**. Except as set forth in <u>Schedule 6.6</u> or in the SEC Documents, the Company or its Subsidiaries owns valid title, free and clear of any Liens, or possesses the requisite valid and current licenses or rights, free and clear of any Liens, to use all Intellectual Property in connection with the conduct its business as now operated. There is no pending claim or action by any person pertaining to, or proceeding pending, or to the Company's knowledge threatened, which challenges the right of the Company or of a Subsidiary with respect to any Intellectual Property necessary to enable it to conduct its business as now operated. To the best of the Company's knowledge, the Company's current products, services and processes do not infringe on any Intellectual Property or other rights held by any person, and the Company is unaware of any facts or circumstances which might give rise to any of the foregoing. The Company has not received any written notice of infringement of, or conflict with, the asserted rights of others with respect to the Intellectual Property. The Company has taken reasonable security measures to protect the secrecy, confidentiality and value of its Intellectual Property.
- 6.7 **Permits; Compliance**. The Company is in possession of all franchises, grants, authorizations, licenses, permits, easements, variances, exemptions, consents, certificates, approvals and orders necessary to own, lease and operate its properties and to carry on its business as it is now being conducted (collectively, the "**Company Permits**"), except where such failure to posses would not have a Material Adverse Effect, and there is no action pending or, to the knowledge of the Company, threatened regarding suspension or cancellation of any of the Company Permits. The Company is not in conflict with, or in default or violation of, any of the Company Permits, except for any such conflicts, defaults or violations which, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect. Since December 31, 2007, the Company has received no notification with respect to possible conflicts, defaults or violations of applicable laws, except for notices relating to possible conflicts, defaults or violations, which conflicts, defaults or violations would not have a Material Adverse Effect.

- 6.8 **Absence of Litigation**. Except as set forth in <u>Schedule 6.8</u> or in the SEC Documents, there is no action, suit, claim, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company, or its businesses, properties or assets or their officers or directors in their capacity as such, that would have a Material Adverse Effect.
- 6.9 **No Materially Adverse Contracts, etc.** Except as set forth in <u>Schedule 6.9</u>, the Company is not subject to any charter, corporate or other legal restriction, or any judgment, decree, order, rule or regulation which in the judgment of the Company's officers has or is expected in the future to have a Material Adverse Effect. The Company is not a party to any contract or agreement which has or is reasonably expected to have a Material Adverse Effect.
- 6.10 **No Material Changes.** Except as set forth in the SEC Documents, since December 31, 2007, there has not been:
 - (a) Any material adverse change in the financial condition, operations or business of the Company from that shown on the Company Financial Statements, or any material transaction or commitment effected or entered into by the Company outside of the ordinary course of business;
 - (b) To the Company's Knowledge, any effect, change or circumstance which has had, or could reasonably be expected to have, a Material Adverse Effect; or
 - (c) Any incurrence of any material liability outside of the ordinary course of business.

6.11 Labor Matters.

- (a) The Company is not a party to or bound by any collective bargaining agreements or other agreements with labor organizations. The Company has not violated in any material respect any laws, regulations, orders or contract terms, affecting the collective bargaining rights of employees, labor organizations or any laws, regulations or orders affecting employment discrimination, equal opportunity employment, or employees' health, safety, welfare, wages and hours.
- (b) The Company is, and at all times has been, in compliance in all material respects with all applicable laws respecting employment (including laws relating to classification of employees and independent contractors) and employment practices, terms and conditions of employment, wages and hours, and immigration and naturalization.
- 6.12 **Environmental Matters**. To the Company's knowledge, neither the Company nor any Subsidiary is in violation of any statute, rule, regulation, decision or order of any governmental agency or body or any court, domestic or foreign, relating to the use, disposal or release of hazardous or toxic substances or relating to the protection or restoration of the environment or human exposure to hazardous or toxic substances (collectively, "**Environmental Laws**"), owns or operates any real property contaminated with any substance that is subject to any Environmental Laws, is liable for any off-site disposal or contamination pursuant to any Environmental Laws, and is subject to any claim relating to any Environmental Laws, which violation, contamination, liability or claim has had or could reasonably be expected to have a Material Adverse Effect, individually or in the aggregate; and there is no pending or, to the Company's knowledge, threatened investigation that might lead to such a claim.

- 6.13 **Tax Matters.** None of the Company and its Subsidiaries has made or filed any federal, state and foreign income or any other tax returns, reports and declarations required by any jurisdiction to which it is subject and none of them has ever paid any taxes or other governmental assessments or charges that are material in amount, nor is it aware of any that have been assessed or are due. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim. Neither the Company nor any of its Subsidiaries have executed a waiver with respect to the statute of limitations relating to the assessment or collection of any foreign, federal, state or local tax.
- 6.14 **Certain Transactions**. Except as set forth on <u>Schedule 6.14</u> or in the SEC Documents, there are no loans, leases, royalty agreements or other transactions between:
 - (a) the Company or any of its customers or suppliers; and
 - (b) any officer, employee, consultant or director of the Company or any person owning five (5%) percent or more of the capital stock of the Company or five (5%) percent or more of the ownership interests of the Company or any member of the immediate family of such officer, employee, consultant, director, stockholder or owner or any corporation or other entity controlled by such officer, employee, consultant, director, stockholder or owner.
- 6.15 **No General Solicitation**. The Company has not, and to the Company's knowledge no other Person has conducted any "general solicitation," as such term is defined in Regulation D promulgated under the Securities Act, with respect to any of the Securities being offered hereby.
- 6.16 **No Integrated Offering; Compliance With Prior Sales of Securities**. Neither the Company, nor any of its Affiliates, nor any person acting on its or their behalf, has directly or indirectly made any offers or sales of any security or solicited any offers to buy any security under circumstances that would require registration under the Securities Act of the issuance of the Securities to the Investors. The issuance of the Securities to the Investors will not be integrated with any other issuance of the Company's securities (past, current or future) for purposes of any stockholder approval provisions applicable to the Company or its securities. All prior sales of the Company's Securities were made in compliance with all Federal and State laws, rules and regulations.
- 6.17 **No Brokers**. Except as set forth in <u>Section 10.1</u>, the Company has taken no action which would give rise to any claim by any person for brokerage commissions, transaction fees or similar payments relating to this Agreement or the transactions contemplated hereby.
- 6.18 **ERISA**. The Company has not made or currently makes no contributions to any employee pension benefit plan for its employees which plan is subject to the Employee Retirement Income Security Act of 1974, as amended from time to time ("**ERISA**").
- 6.19 **Title to Property**. The Company holds no title in fee simple to any real property. The Company holds good and marketable title to all personal property owned by it which is material to the business of the Company, in each case free and clear of all Liens, except such as are described in <u>Schedule 6.1(b)</u>. Any real property and facilities held under lease by the Company is held under valid, subsisting and enforceable leases against the Company.

- 6.20 **Insurance**. Except as set forth on <u>Schedule 6.20</u> and for Directors' and Officers' liability insurance, the Company does not carry any insurance policies.
- 6.21 **Internal Controls**. Except as set forth in <u>Schedule 6.21</u> or the SEC Documents, the Company is in material compliance with the provisions of the *Sarbanes-Oxley Act* of 2002 currently applicable to the Company that are effective as of the date hereof and the Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that:
 - (a) transactions are executed in accordance with management's general or specific authorizations;
 - (b) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability;
 - (c) access to assets is permitted only in accordance with management's general or specific authorization; and
 - (d) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

The Company has established disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the Company and designed such disclosure controls and procedures to ensure that material information relating to the Company is made known to the certifying officers by others within those entities, particularly during the period in which the Company's most recently filed period report under the Exchange Act, as the case may be, is being prepared. The Company's certifying officers have evaluated the effectiveness of the Company's controls and procedures as of the end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the "**Evaluation Date**"). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date and except as set forth in the SEC Documents, there have been no changes in the Company's internal controls as such term is defined in Item 308 of Regulation S-K) over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal controls over financial reporting.

- 6.22 **Books and Records**. The books of account, ledgers, order books, records and documents of the Company accurately and completely reflect all material information relating to the businesses of the Company, the location and collection of its assets, and the nature of all transactions giving rise to the obligations or accounts receivable of the Company.
- 6.23 **FCPA Matters**. Neither the Company, nor to the Knowledge of the Company any director, officer, agent, employee or other person acting on behalf of the Company has, in the course of his or her actions for, or on behalf of, the Company:
 - (a) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity;

- (b) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds;
- (c) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended; or
- (d) made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic governmental or private official or person.
- 6.24 **Form D; Blue Sky Laws**. The Company shall file a Form D with respect to the Securities as required under Regulation D and to provide a copy thereof to the Placement Agent, promptly after such filing. The Company shall assist the Placement Agent's legal counsel, on or before the Closing Date, in qualifying the Securities for sale to the Investors in the applicable closing pursuant to this Agreement under applicable securities or "blue sky" laws of the states of the United States (or to obtain an exemption from such qualification), and shall pay all fees and expenses of such counsel in connection therewith, including, but not limited to, all State filing fees and such counsel's legal fees and expenses.
- 6.25 Public Information. Public Information. At any time during the period commencing from the six (6) month anniversary of the First Closing Date and ending at such time that all of the Warrant Shares can be sold either pursuant to a registration statement, or if a registration statement is not available for the resale of all of such securities, may be sold without the requirement for the Company to be in compliance with Rule 144(c) (1) and otherwise without restriction or limitation pursuant to Rule 144, if the Company shall fail for any reason or no reason to satisfy the current public information requirement under Rule 144(c) (a "Public Information Failure") then, as a remedy for the damages to any holder of Securities by reason of any such delay in or reduction of its ability to sell the Warrant Shares (which remedy shall not be exclusive of any other remedies available), including, without limitation, specific performance), the Company shall pay to each holder of Warrant Shares who is not eligible to sell all of his, her or its Warrant Shares pursuant to Rule 144 as a result of such Public Information Failure an amount in cash, as liquidated damages and not as a penalty equal to two (2%) percent of the aggregate Purchase Price of such holder's Securities on the day of a Public Information Failure and on every thirtieth (30th) day (pro rated for periods totalling less than thirty (30) days) thereafter until the earlier of (i) the date such Public Information Failure is cured and (ii) such time that such public information is no longer required pursuant to Rule 144. The payments to which a holder shall be entitled pursuant to this Section 6.25 are referred to herein as "Public Information Failure Payments." Public Information Failure Payments shall be paid on the earlier of (I) the last day of the calendar month during which such Public Information Failure Payments are incurred and (II) the fifth (5th) Business Day after the event or failure giving rise to the Public Information Failure Payments is cured. The parties agree that the maximum aggregate amount of Public Information Failure Payments payable to any Holder by the Company shall be ten (10%) percent of the aggregate Purchase Price of such holder's Securities. In the event the Company fails to make Public Information Failure Payments in a timely manner, such Public Information Failure Payments shall bear interest at the rate of two (2%) percent per month (prorated for partial months) until paid in full.
- 6.26 **Registration Rights**. Except as contemplated pursuant to this Agreement or as set forth on <u>Schedule 6.26</u> to this Agreement or in the SEC Documents, the Company has not granted or agreed to grant to any Person any rights (including "piggy-back" registration rights) to have any securities of the Company registered pursuant to the Registration Rights Agreement that have not been satisfied or expressly waived, in writing, by the Person who has such registration rights.

- 6.27 **Ranking of Notes.** Except as set forth on <u>Schedule 6.27</u>, no Indebtedness of the Company (and/or Subsidiary) ranks senior to or pari passu with the Notes in right of payment.
- 6.28 **Indebtedness of the Company**. <u>Schedule 6.28</u> sets forth a complete and correct list of all outstanding Indebtedness of the Company (including a description of the obligors and obligees, principal amount outstanding and collateral therefor, if any, and guaranty thereof, if any). The Company is not in default and no waiver of default is currently in effect in the payment of any principal or interest on any Indebtedness of the Company, and no event or condition exists with respect to any Indebtedness of the Company that would permit (or that with notice or the lapse of time, or both, would permit) one or more Persons to cause such Indebtedness to become due and payable before its stated maturity or before its regularly scheduled dates of payment.

7. TRANSFER RESTRICTIONS.

- 7.1 **Transfer or Resale**. Except as provided in the Registration Rights Agreement, the resale of the Securities by the Investor has not been and will not be registered under the Securities Act or any applicable state securities laws, and none of the Securities may be transferred or sold by the Investor unless:
 - (a) they are sold pursuant to an effective registration statement under the Securities Act;
 - (b) they are being sold pursuant to a valid exemption from the registration requirements of the Securities Act and, if required by the Company, the Investor shall have delivered to the Company, at the Investor's sole cost and expense, an opinion of counsel that shall be in form, substance and scope customary for opinions of counsel in comparable transactions to the effect that the Securities to be sold or transferred may be sold or transferred pursuant to an exemption from the registration requirements of the Securities Act, which opinion shall be acceptable to the Company;
 - (c) the Securities are sold or transferred to an "affiliate" (as defined in Rule 144) of the Investor who agrees to sell or otherwise transfer the Securities only in accordance with this Section 7.1 and who is an Accredited Investor; or
 - (d) the Securities are sold pursuant to Rule 144.
- 7.2 Transfer Agent Instructions. The Company shall issue irrevocable instructions to its transfer agent, substantially in the form attached hereto as Exhibit G, to issue certificates, registered in the name of each Investor or its nominee, for any Warrant Shares in such amounts as specified from time to time by each Investor to the Company upon exercise of the Warrants in accordance with the terms thereof (the "Irrevocable Transfer Agent Instructions"). Prior to registration of the Warrant Shares under the Securities Act or the date on which the Warrant Shares may be sold pursuant to Rule 144 without any restriction as to the number of securities as of a particular date that can then be immediately sold, all such certificates shall bear the restrictive legend specified in Section 3.2 of this Agreement. Nothing in this Section shall affect in any way the Investor's obligations and agreement set forth in Section 7.1 hereof to comply with all applicable prospectus delivery requirements, if any, upon re-sale of the Securities. If an Investor provides the Company with a customary opinion of counsel, that shall be in form, substance and scope reasonably acceptable to the Company, to the effect that a public sale or transfer of such Securities may be made without registration under the Securities Act and such sale or transfer is effected, the Company shall permit the transfer, and, in the case of the Warrant Shares, promptly instruct its transfer agent to issue one or more certificates, free from restrictive legend, in such name and in such denominations as specified by such Investor. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Investors, by vitiating the intent and purpose of the transactions contemplated hereby. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Section 7.2 may be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section 7.2, that the Investors shall be entitled, in addition to all other available remedies, to an injunction restraining any breach and requiring immediate transfer, without the necessity of showing economic loss and without any bond or other security being required.

8. CONDITIONS TO EACH CLOSING OF THE INVESTORS.

The obligation of an Investor to purchase the Units at any Closing at which such Investor is purchasing Units is subject to the fulfillment to such Investor's satisfaction, on or prior to such applicable Closing Date, of the following conditions, any of which may be waived by such Investor (as to itself only):

- 8.1 **Representations and Warranties**. The representations and warranties made by the Company in <u>Section 8</u> hereof qualified as to materiality shall be true and correct at all times prior to and on the applicable Closing Date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct as of such earlier date, and, the representations and warranties made by the Company in <u>Section 8</u> hereof not qualified as to materiality shall be true and correct in all material respects at all times prior to and on the applicable Closing Date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct in all material respects at all times prior to and on the applicable Closing Date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct in all material respects as of such earlier date. The Company shall have performed in all material respects all obligations and covenants herein required to be performed by it on or prior to the applicable Closing Date.
- 8.2 **Approvals**. The Company shall have obtained any and all consents, permits, approvals, registrations and waivers necessary or appropriate for consummation of the purchase and sale of the Securities and the consummation of the other transactions contemplated by the Transaction Documents, all of which shall be in full force and effect.
- 8.3 **Judgments, Etc.** No judgment, writ, order, injunction, award or decree of or by any court, or judge, justice or magistrate, including any bankruptcy court or judge, or any order of or by any governmental authority, shall have been issued, and no action or proceeding shall have been instituted by any governmental authority, enjoining or preventing the consummation of the transactions contemplated hereby or in the other Transaction Documents.
- 8.4 **Stop Orders**. No stop order or suspension of trading shall have been imposed by the SEC or any other governmental or regulatory body having jurisdiction over the Company or the market(s) where the Common Stock is listed or quoted, with respect to public trading in the Common Stock.

- 8.5 **Executive Agreements**. The Company shall have entered into an agreement with each of the Executives (the "**Executive Agreements**"), substantially the form attached hereto as <u>Exhibits H-1</u> and <u>H-2</u>.
- 8.6 **Company CEO/CFO Certificate**. The Company shall have delivered a Certificate, executed on behalf of the Company by its Chief Executive Officer or its Chief Financial Officer, dated as of the applicable Closing Date, certifying to the fulfillment of the conditions specified in <u>Subsections 8.1, 8.3 and 8.4</u> hereof.
- 8.7 **Company Secretary Certificate**. The Company shall have delivered a Certificate, executed on behalf of the Company by its Secretary, dated as of the First Closing Date, certifying the resolutions adopted by the Board of Directors of the Company approving the transactions contemplated by this Agreement and the other Transaction Documents and the issuance of the Securities, certifying the current versions of the Certificate of Incorporation and Bylaws of the Company and certifying as to the signatures and authority of persons signing the Transaction Documents and related documents on behalf of the Company. The foregoing certificate shall only be required to be delivered on the First Closing Date, unless any material information contained in the certificate has changed.
- 8.8 **Opinion of Counsel**. The Investors and the Placement Agent shall have received an opinion from Lowenstein Sandler PC, the Company's legal counsel, dated as of each Closing Date, in such form and substance as agreed to by the Company and the Placement Agent.
- 8.9 **Registration Rights Agreement.** The Company shall have executed and delivered the Registration Rights Agreement.
- 8.10 **Security Agreement**. The Company shall have executed and delivered the Security Agreement.
- 8.11 **Default Agreement.** The Company shall have executed and delivered the Default Agreement.
- 8.12 **Escrow Agreements.** The Company shall have executed and delivered the Escrow Agreement and the Deposit Account Agreement.
- 8.13 **10b-5 Letters**. The Company shall have delivered to the Placement Agent, a representation letter, in form and substance as mutually agreed by the Company and the Placement Agent, from each of the Company's officers and directors, addressed to the Company.
- 8.14 **Note and Warrants**. The Company shall have delivered the Notes and Warrants being sold at the applicable Closing.

9. CONDITIONS TO EACH CLOSING OF THE COMPANY.

The obligations of the Company to effect the transactions contemplated by this Agreement are subject to the fulfillment at or prior to the applicable Closing Date of the conditions listed below.

9.1 **Representations and Warranties**. The representations and warranties made by the Investors in <u>Section 4</u> shall be true and correct in all material respects at the time of Closing as if made on and as of such date.

- 9.2 **Corporate Proceedings.** All corporate and other proceedings required to be undertaken by the Investor in connection with the transactions contemplated hereby shall have occurred and all documents and instruments incident to such proceedings shall be reasonably satisfactory in substance and form to the Company.
- 9.3 **Agreements**. Such Investor shall have completed and executed this Agreement, the Registration Rights Agreement and the investor questionnaire, and delivered the same to the Company
- 9.4 **Purchase Price**. The Investors shall have delivered or caused to be delivered the Purchase Price to the Company.
- 9.5 Minimum Amount. The Minimum Amount shall have been raised.
- 9.6 **Payment of Expenses.** The Company shall have delivered checks or initiated wire transfers to Lowenstein Sandler PC for its fees and expenses.

10. MISCELLANEOUS.

- 10.1 **Compensation of Placement Agent, Brokers, etc.** The Investor acknowledges that it is fully aware that the Placement Agent will receive from the Company, in consideration of its services as placement agent in respect of the offer and sale of the Units contemplated hereby:
 - (a) a success fee of ten (10%) percent of the aggregate Purchase Price of the Units sold at each Closing, payable in cash (five (5%) percent of the Purchase Price of the Units sold to investors introduced by the Company, up to the sale of \$500,000 of Units); and
 - (b) a warrant to purchase a number of shares of Common Stock equal fifteen (15%) of the number of Warrant Shares underlying the Units sold in the Offering, at exercise price per share of \$0.09, subject to adjustment, which expire on December 31, 2013.

In addition, the Investor acknowledges that it is aware that the Placement Agent will receive from the Company (i) a non-accountable expense allowance equal to one and one-half (1.5%) percent of the gross proceeds from the sale of the Units at each Closing and (ii) payment of all of its accountable fees and expenses including, but not limited to, all legal fees and expenses incurred in connection with the Offering.

10.2 **Notices**. All notices, requests, demands and other communications provided in connection with this Agreement shall be in writing and shall be deemed to have been duly given at the time when hand delivered, delivered by express courier, or sent by facsimile (with receipt confirmed by the sender's transmitting device) in accordance with the contact information provided below or such other contact information as the parties may have duly provided by notice.

(a) **The Company**:

Manhattan Pharmaceuticals, Inc. 48 Wall Street, Suite 1100 New York, NY 10005 Facsimile: (212) 582-3957 Attention: Doug Abel Chief Executive Officer

With a copy to:

Lowenstein Sandler PC 65 Livingston Avenue Roseland, NJ 07068-1791 Facsimile: (973) 597-2445 Attention: Anthony Pergola, Esq.

(b) The Investors:

As per the contact information provided on the signature page hereof.

(c) **The Placement Agent**:

[1]

With a copy to:

Gusrae, Kaplan, Bruno & Nusbaum PLLC 120 Wall Street New York, NY 10005 Facsimile: (212) 809-5449 Attention: Lawrence G. Nusbaum, Esq.

10.3 Survival of Representations and Warranties.

Each party hereto covenants and agrees that the representations and warranties of such party contained in this Agreement shall survive the Closing.

10.4 **Indemnification**.

(a) The Company expressly and irrevocably agrees to indemnify and hold harmless each Investor and its Affiliates and their respective directors, officers, employees and agents (the "Investor Indemnitees") from and against any and all losses, claims, damages, liabilities and expenses (including without limitation reasonable attorney fees and disbursements and other expenses as and when incurred in connection with investigating, preparing or defending any action, claim or proceeding, pending or threatened and the costs of enforcement thereof) (collectively, "Losses") to which such Investor Indemnitees may become subject as a result of any breach of representation, warranty, covenant or agreement made by the Company under the Transaction Documents and will reimburse any such Investor Indemnitees for all such amounts as they are incurred by such Investor Indemnitees.

- (b) Each Investor agrees to indemnify and hold harmless the Company and its Affiliates and their respective directors, officers, employees and agents (collectively, the "Company Indemnitees") from and against any and all Losses to which such Company Indemnitees may become subject as a result of any breach of representation, warranty, covenant or agreement made by or to be performed on the part of such Investors under the Transaction Documents, and will reimburse any such Company Indemnitees for all such amounts as they are incurred by such Company Indemnitees.
- (c) Promptly after receipt by any Investor Indemnitees or Company Indemnitees, as applicable, of notice of any demand, claim or circumstances which would or might give rise to a claim or the commencement of any action, proceeding or investigation in respect of which indemnity may be sought pursuant to <u>Section 10.4</u>, such Investor Indemnitees or Company Indemnitees, as applicable, shall promptly notify the other Party in writing and such other Party shall assume the defense thereof, including the employment of counsel reasonably satisfactory to such Investor Indemnitees or Company Indemnitees, as applicable, so to notify the other Party shall not relieve the other Party of its obligations hereunder except to the extent that the other Party is materially prejudiced by such failure to notify. In any such proceeding, any Investor Indemnitees or Company Indemnitees, as applicable, shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Investor Indemnitees or Company Indemnitees or Company Indemnitees, as applicable, shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Investor Indemnitees or Company Indemnitees or Company Indemnitees, as applicable, shall have the right to retain its own counsel.
 - (i) the Parties shall have mutually agreed to the retention of such counsel; or
 - (ii) in the reasonable judgment of counsel to such Investor Indemnitees or Company Indemnitees, as applicable, representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them.

The other Party shall not be liable for any settlement of any proceeding effected without its written consent, which consent shall not be unreasonably withheld, but if settled with such consent, or if there be a final judgment for the plaintiff, the other Party shall indemnify and hold harmless such Investor Indemnitees or Company Indemnitees, as applicable, from and against any loss or liability (to the extent stated above) by reason of such settlement or judgment. Without the prior written consent of the Investor Indemnitees or Company Indemnitees, as applicable, which consent shall not be unreasonably withheld, the other Party shall not effect any settlement of any pending or threatened proceeding in respect of which any Investor Indemnitees or Company Indemnitees, as applicable, is or could have been a party and indemnity could have been sought hereunder by such Investor Indemnitees or Company Indemnitees, as applicable, from all liability arising out of such settlement includes an unconditional release of such Investor Indemnitees or Company Indemnitees, as applicable, from all liability arising out of such proceeding.

- 10.5 **Entire Agreement**. This Agreement and the other Transaction Documents contain the entire agreement between the Company and each Investor in respect of the subject matter contained herein and supersedes all prior agreements and understandings of the parties, oral and written, with respect to the subject matter contained herein.
- 10.6 **Third Party Beneficiaries**. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other person.
- 10.7 **Successors and Assigns**. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and assigns. Neither the Company nor any Investor shall assign this Agreement or any rights or obligations hereunder without the prior written consent of the other.
- 10.8 **Independent Nature of Investors' Obligations and Rights**. The obligations of each Investor under any Transaction Document are several and not joint with the obligations of any other Investor, and neither the Company nor any other Investor shall be responsible in any way for the performance of the obligations of any other Investor under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Investor pursuant hereto or thereto, shall be deemed to constitute the Investors as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Investors are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents and the Company acknowledges that the Investors are not acting in concert or as a group with respect to such obligations or the transaction Documents. Each Investor confirms that it has independently participated in the negotiation of the transaction contemplated hereby with the advice of its own counsel and advisors. Each Investor shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of any other Transaction Document, and it shall not be necessary for any other Investor to be joined as an additional party in any proceeding for such purpose.
- 10.9 **Publicity**. The Company and [1] shall have the right to review a reasonable period of time before issuance of any press releases or any other public statements with respect to the transactions contemplated hereby; *provided, however*, that the Company shall be entitled, without the prior approval of [1] or the Investors, to make any press release or SEC or other regulatory filings with respect to such transactions as is expressly required by applicable law and regulations (although [1] shall be consulted by the Company in connection with any press release prior to its release and shall be provided with a copy thereof and be given an opportunity to comment thereon). No Investor shall issuance any press release or public statement with respect to the transactions contemplated hereby without the prior written approval of the Company.
- 10.10 **Binding Effect; Benefits.** This Agreement and all the provisions hereof shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns; nothing in this Agreement, expressed or implied, is intended to confer on any persons other than the parties hereto or their respective successors and permitted assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement.

- 10.11 **Amendment; Waivers**. All modifications, amendments or waivers to this Agreement shall require the written consent of both the Company and a majority in interest of the Investors (based on the number of Units purchased hereunder).
- 10.12 **Governing Law; Consent to Jurisdiction; Waiver of Jury Trial.** This Agreement shall be governed by, and construed solely and exclusively in accordance with, the internal laws of the State of New York without regard to the choice of law principles thereof. Each of the parties hereto irrevocably submits to the sole and exclusive jurisdiction of the courts of the State of New York located in New York County and the United States District Court for the Southern District of New York for the purpose of any suit, action, proceeding or judgment relating to or arising out of this Agreement and the transactions contemplated hereby (a "**Proceeding**"). Each of the parties hereto irrevocably consents to the sole and exclusive jurisdiction of any such court in any such Proceeding and to the laying of venue in such court. Each party hereto expressly and irrevocably waives any objection to the laying of venue of any such Proceeding brought in such courts and irrevocably waives any claim that any such Proceeding brought in any such court has been brought in an inconvenient forum. The successful party in any Proceeding shall be entitled to its legal fees and expenses from the losing party. EACH OF THE PARTIES HERETO WAIVES ANY RIGHT TO REQUEST A TRIAL BY JURY IN ANY LITIGATION WITH RESPECT TO THIS AGREEMENT AND REPRESENTS THAT COUNSEL HAS BEEN CONSULTED SPECIFICALLY AS TO THIS WAIVER.
- 10.13 **Further Assurances**. Each party hereto shall do and perform or cause to be done and performed all such further acts and shall execute and deliver all such other agreements, certificates, instruments and documents as any other party hereto reasonably may request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.
- 10.14 **Counterparts.** This agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, and all of which shall constitute one and the same document. in the event that any signature (including a financing signature page) is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, 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 or ".pdf" signature page were an original thereof.
- 10.15 **Severability**. Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof but shall be interpreted as if it were written so as to be enforceable to the maximum extent permitted by applicable law, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. To the extent permitted by applicable law, the parties hereby waive any provision of law which renders any provision hereof prohibited or unenforceable in any respect.
- 10.16 **Use of Proceeds**. The Company agrees, represents, warranties and covenants that it shall use the net proceeds received in the Offering expressly as set forth in the Private Placement Memorandum.

[SIGNATURE PAGES IMMEDIATELY FOLLOW]

IN WITNESS WHEREOF, the undersigned Investors and the Company have caused this Securities Purchase Agreement to be duly executed as of the date first above written.

MANHATTAN PHARMACEUTICALS, INC.

By: /s/ Michael McGuinness

Name: Michael McGuinness Title: Chief Financial Officer

INVESTORS:

The Investors executing the Signature Page in the form attached hereto as $\underline{Annex A}$ and delivering the same to the Company or its agents shall be deemed to have executed this Agreement and agreed to the terms hereof.

Annex A

Securities Purchase Agreement

Investor Counterpart Signature Page

The undersigned, desiring to:

- (a) enter into this Securities Purchase Agreement dated as of November 19, 2008 (the "**Agreement**"), between the undersigned, Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), and the other parties thereto, in or substantially in the form furnished to the undersigned; and
- (b) purchase the securities of the Company as set forth below,

hereby agrees to purchase such securities from the Company as of the Closing and further agrees to join the Agreement as a party thereto, with all the rights and privileges appertaining thereto, and to be bound in all respects by the terms and conditions thereof. The undersigned specifically acknowledges having read the representations in the Purchase Agreement section entitled "Representations, Warranties and Acknowledgments of the Investors," and hereby represent that the statements contained therein are complete and accurate with respect to the undersigned as an Investor. The undersigned further hereby agrees that execution by the undersigned of this Investor Counterpart Signature Page shall constitute an agreement to be bound by the terms and conditions of each of the Agreement and the Registration Rights Agreement, with the same effect as if such separate, but related agreement, was separately signed.

Purchaser herby elects to purchase a total of 40 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF | F AN ENTITY: | | IF AN INDIVIDUAL: |
|-----------------------|--------------|-------------------|------------------------------|
| Print Name of Entity: | | Print Name: Neel | B. Ackerman |
| Signature: | | Signature: | /s/ Neel B. Ackerman |
| Date: | | Date: October 27, | 2008 |
| Print Name: | | Co-Investor Print | Name: Martha N. Ackerman |
| Title: | | Co-Investor Signa | ture: /s/ Martha N. Ackerman |
| | | Date: October 27, | 2008 |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: | | |
|---|-------------------------|--|--|
| Print Name of Entity: Stephen M. Burnich Revocable Trust u/a 10/08/04 | Print Name: | | |
| Signature: /s/ Stephen M. Burnich | Signature: | | |
| Date: October 29, 2008 | Date: | | |
| Print Name: Stephen M. Burnich | Co-Investor Print Name: | | |
| Title: Trustee | Co-Investor Signature: | | |
| | Date: | | |
| | | | |

Purchaser herby elects to purchase a total of 10 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| | IF AN ENTITY: | | IF AN INDIVIDUAL: |
|-----------------------|---------------|---------------|---------------------|
| Print Name of Entity: | | Print Name: I | Ennio De Pianto |
| Signature: | | Signature: | /s/ Ennio De Pianto |
| Date: | | Date: | October 29, 2008 |
| Print Name: | | Co-Investor F | Print Name: |
| Title: | | Co-Investor S | ignature: |
| | | Date: | |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|------------------------------|
| Print Name of Entity: | Print Name: Matthew Ernst |
| Signature: | Signature: /s/ Matthew Ernst |
| Date: | Date: October 29, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | | IF AN INDIVIDUAL: |
|--------------------------------|------------------------------|-------------------------|
| Print Name of Entity: | John M. Goodman Living Trust | Print Name: |
| Signature: /s/ John M. Goodmar | I. | Signature: |
| Date: November 4, 2008 | | Date: |
| Print Name: John M. Goodman | | Co-Investor Print Name: |
| Title: Trustee | | Co-Investor Signature: |
| | | Date: |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| | IF AN ENTITY: | | IF AN INDIVID | OUAL: |
|-----------------------|---------------|-------------------|-----------------|---------------------|
| Print Name of Entity: | | Print Name: Leon | ı Kanner | |
| Signature: | | Signature: | /s/ Leon Kanner | |
| Date: | | Date: October 29 | , 2008 | |
| Print Name: | | Co-Investor Print | Name: | Rosemary Kanner |
| Title: | | Co-Investor Signa | ature: | /s/ Rosemary Kanner |
| | | Date: October 29 | , 2008 | |

Purchaser herby elects to purchase a total of 2 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|------------------------------|
| Print Name of Entity: | Print Name: Richard Kindt |
| Signature: | Signature: /s/ Ricahrd Kindt |
| Date: | Date: October 29, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 10 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|-------------------------------------|
| Print Name of Entity: | Print Name: Douglas E. Pritchett |
| Signature: | Signature: /s/ Douglas E. Pritchett |
| Date: | Date: October 31, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 2 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN EN | ΓΙΤΥ: | | IF AN INDIVIDUAL: |
|-----------------------|-------|------------------|-----------------------|
| Print Name of Entity: | | Print Name: Jer | ome A. Shinkay |
| Signature: | | Signature: | /s/ Jerome A. Shinkay |
| Date: | | Date: October 3 | 1, 2008 |
| Print Name: | | Co-Investor Prin | nt Name: |
| Title: | | Co-Investor Sig | nature: |
| | | Date: | |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|--|---|
| Print Name of Entity: | Print Name: Michael J. Spezia |
| Signature: | Signature: /s/ Michael J. Spezia |
| Date: | Date: November 3, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| Durch near heater electric to purchase a total of 2 Units at a price of $C 000$ per Unit | t (Each Unit consisting of Notes and Marrants to purchase Marrant Shares) |

Purchaser herby elects to purchase a total of 2 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | | IF AN INDIVID | UAL: |
|-----------------------|-------------------|----------------------|---------------------|
| Print Name of Entity: | Print Name: Georg | ge D. Wilson | |
| Signature: | Signature: | /s/ George D. Wilson | |
| Date: | Date: October 27, | 2008 | |
| Print Name: | Co-Investor Print | Name: | Diane J. Wilson |
| Title: | Co-Investor Signa | ture: | /s/ Diane J. Wilson |
| | Date: October 27, | 2008 | |

Purchaser herby elects to purchase a total of 2 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|---------------------------------|
| Print Name of Entity: | Print Name: Joseph L. Jerger |
| Signature: | Signature: /s/ Joseph L. Jerger |
| Date: | Date: November 6, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: | |
|-----------------------|---|--|
| Print Name of Entity: | Print Name: David Pudelsky | |
| Signature: | Signature: /s/ David Pudelsky | |
| Date: | Date: November 6, 2008 | |
| Print Name: | Co-Investor Print Name: Nancy Pudelsky | |
| Title: | Co-Investor Signature: /s/ Nancy Pudelsky | |
| | Date: November 6, 2008 | |

Purchaser herby elects to purchase a total of 2 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|------------------------------|
| Print Name of Entity: | Print Name: James R. Buck |
| Signature: | Signature: /s/ James R. Buck |
| Date: | Date: November 6, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 3 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| | IF AN ENTITY: | | IF AN INDIVIDUAL: |
|-----------------------|---------------|-----------------|--------------------|
| Print Name of Entity: | | Print Name: Jo | hn O. Dunkin |
| Signature: | | Signature: | /s/ John O. Dunkin |
| Date: | | Date: Novembe | er 4, 2008 |
| Print Name: | | Co-Investor Pri | int Name: |
| Title: | | Co-Investor Sig | gnature: |
| | | Date: | |

Purchaser herby elects to purchase a total of 3 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|---|-------------------------|
| Print Name of Entity: NFS/FMTC SEP IRA FBO Jay Jennings | Print Name: |
| Signature: /s/ Jay Jennings | Signature: |
| Date: October 29, 2008 | Date: |
| Print Name: Jay Jennings | Co-Investor Print Name: |
| Title: IRA Owner | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 13 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | | IF AN INDIVIDUAL: | |
|------------------------------------|--|-------------------------|--|
| Print Name of Entity: | Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser | Print Name: | |
| Signature: /s/ William K. Nasser | , Jr. | Signature: | |
| Date: November 4, 2008 | | Date: | |
| Print Name: William K. Nasser, Jr. | | Co-Investor Print Name: | |
| Title: Attorney-in-fact | | Co-Investor Signature: | |
| | | Date: | |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | | IF AN INDIVIDUAL: | |
|----------------------------------|---------------------|-------------------------|--|
| Print Name of Entity: | Nasser Family Trust | Print Name: | |
| Signature: /s/ William K. Nasser | | Signature: | |
| Date: November 4, 2008 | | Date: | |
| Print Name: William K. Nasser | | Co-Investor Print Name: | |
| Title: Trustee | | Co-Investor Signature: | |
| | | Date: | |

Purchaser herby elects to purchase a total of 1 Unit at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| | IF AN ENTITY: | | IF AN INDIVI | DUAL: |
|-----------------------|---------------|-------------------|-------------------|-------------------|
| Print Name of Entity: | | Print Name: Jame | es R. Kahn | |
| Signature: | | Signature: | /s/ James R. Kahn | |
| Date: | | Date: November | 12, 2008 | |
| Print Name: | | Co-Investor Print | : Name: | Debra A. Kahn |
| Title: | | Co-Investor Sign | ature: | /s/ Debra A. Kahn |
| | | Date: November | 12, 2008 | |

Purchaser herby elects to purchase a total of 10 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN E | ENTITY: | | IF AN INDIVID | UAL: |
|-----------------------|---------|--------------------|---------------------------|--------------------|
| Print Name of Entity: | | Print Name: A. Sta | arke Taylor, Jr. | |
| Signature: | | Signature: | /s/ A. Starke Taylor, Jr. | |
| Date: | | Date: October 7, 2 | :008 | |
| Print Name: | | Co-Investor Print | Name: Carolyn Taylor | |
| Title: | | Co-Investor Signa | ture: | /s/ Carolyn Taylor |
| | | Date: October 7, 2 | 2008 | |

Purchaser herby elects to purchase a total of 1 Unit at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|-----------------------------|
| Print Name of Entity: | Print Name: Mark Vollmer |
| Signature: | Signature: /s/ Mark Vollmer |
| Date: | Date: November 11, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|----------------------------------|
| Print Name of Entity: | Print Name: Robert J. Guercio |
| Signature: | Signature: /s/ Robert J. Guercio |
| Date: | Date: November 6, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| | |

Purchaser herby elects to purchase a total of 1 Unit at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|----------------------------|
| Print Name of Entity: | Print Name: Ralph Hanby |
| Signature: | Signature: /s/ Ralph Hanby |
| Date: | Date: November 13, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 2 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

IF AN ENTITY:

IF AN INDIVIDUAL:

| Print Name of Entity: | Print Name: Robert E. Jacobson | | |
|-----------------------|--------------------------------|------------------------|----------------------|
| Signature: | Signature: | /s/ Robert E. Jacobson | |
| Date: | Date: November 10 |), 2008 | |
| Print Name: | Co-Investor Print N | lame: | Saralee Jacobson |
| Title: | Co-Investor Signate | ure: | /s/ Saralee Jacobson |
| | Date: November 10 |), 2008 | |

Purchaser herby elects to purchase a total of 6 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|--------------------------------|
| Print Name of Entity: | Print Name: Michael Cushing |
| Signature: | Signature: /s/ Michael Cushing |
| Date: | Date: November 13, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 1 Unit at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|------------------------------------|
| Print Name of Entity: | Print Name: Raymond Yarusi, Jr. |
| Signature: | Signature: /s/ Raymond Yarusi, Jr. |
| Date: | Date: November 12, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|-----------------------------|
| Print Name of Entity: | Print Name: James C. Orr |
| Signature: | Signature: /s/ James C. Orr |
| Date: | Date: November 9, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: | |
|---|----------------------------------|--|
| Print Name of Entity: | Print Name: Vernon L. Simpson | |
| Signature: | Signature: /s/ Vernon L. Simpson | |
| Date: | Date: November 17, 2008 | |
| Print Name: | Co-Investor Print Name: | |
| Title: | Co-Investor Signature: | |
| | Date: | |
| Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares) | | |
| IF AN ENTITY: | IF AN INDIVIDUAL: | |

| Print Na | me of Entity: Michael Yokoyama & Jaye Ventui Family Trust | Print Name: |
|----------|---|-------------------------|
| Signatur | e: /s/ Michael Yokoyama & /s/ Jaye Venuti | Signature: |
| Date: | November 12, 2008 | Date: |
| Print Na | me: Michael Yokoyama & Jaye Ventui | Co-Investor Print Name: |
| Title: | Co-Trustees | Co-Investor Signature: |
| | | Date: |

Purchaser herby elects to purchase a total of 4 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|-------------------------------|
| Print Name of Entity: | Print Name: Frederick Peet |
| Signature: | Signature: /s/ Frederick Peet |
| Date: | Date: November 7, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 2 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN INDIVIDUAL: |
|---|
| Print Name: Ronald Rasmussen |
| Signature: /s/ Ronald Rasmussen |
| Date: November 12, 2008 |
| Co-Investor Print Name: |
| Co-Investor Signature: |
| Date: |
| (Each Unit consisting of Notes and Warrants to purchase Warrant Shares) |
| • |

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|----------------------------------|
| Print Name of Entity: | Print Name: Lewis R. Jacobson |
| Signature: | Signature: /s/ Lewis R. Jacobson |
| Date: | Date: November 17, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|---------------------------------|
| Print Name of Entity: | Print Name: Mark B. Ginsburg |
| Signature: | Signature: /s/ Mark B. Ginsburg |
| Date: | Date: November 18, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 4 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|--|--|
| Print Name of Entity: | Print Name: Gregory Dovolis |
| Signature: | Signature: /s/ Greogory Dovolis |
| Date: | Date: November 3, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit | t. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares) |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|----------------------------------|
| Print Name of Entity: | Print Name: William S. Silver |
| Signature: | Signature: /s/ William S. Silver |
| Date: | Date: November 5, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 5 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| | IF AN ENTITY: | | IF AN INDIVIDUAL: |
|-----------------------|---------------|---------------------|-------------------|
| Print Name of Entity: | | Print Name: Praful | Desai |
| Signature: | | Signature: | /s/ Praful Desai |
| Date: | | Date: November 5, | , 2008 |
| Print Name: | | Co-Investor Print M | Name: |
| Title: | | Co-Investor Signat | rure: |
| | | Date: | |

Purchaser herby elects to purchase a total of 1 Unit at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|---------------------------------|
| Print Name of Entity: | Print Name: Thomas Gemellaro |
| Signature: | Signature: /s/ Thomas Gemellaro |
| Date: | Date: November 13, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |

Purchaser herby elects to purchase a total of 14 Units at a price of \$5,000 per Unit. (Each Unit consisting of Notes and Warrants to purchase Warrant Shares)

| IF AN ENTITY: | | IF AN INDIVIDUAL: |
|--------------------------------|--------------------------------|-------------------------|
| Print Name of Entity: | Howard M. Tanning Rollover IRA | Print Name: |
| Signature: /s/ Howard M. Tanni | ng | Signature: |
| Date: November 3, 2008 | | Date: |
| Print Name: Howard M. Tanning | | Co-Investor Print Name: |
| Title: IRA Owner | | Co-Investor Signature: |
| | | Date: |
| | | |

Investor's principal address is as set forth in the Investor Questionnaire provided separately.

Exhibit A-1 <u>First Closing</u> <u>Schedule of Investors</u>

| Neel B. Ackerman and Marha N. Ackerman \$ 200,000 6.666,600 \$ 200,000 Stephen M. Burnich Revocable Trust Wa 10/08/04 \$ 25,000 833,335 \$ 25,000 Barnio De Pinno \$ 0,000 833,335 \$ 25,000 Matthew Ernst \$ 25,000 833,335 \$ 25,000 John M. Coodman Living Trust \$ 25,000 833,335 \$ 25,000 Richard Kindt \$ 0,000 333,334 \$ 0,000 Douglas F. Pritchett \$ 50,000 333,334 \$ 0,000 Jerome A. Shinkay \$ 10,000 333,334 \$ 0,000 George D. Wilson & Diane J. Wilson \$ 10,000 333,334 \$ 10,000 Jass P. Suck \$ 10,000 333,334 \$ 10,000 Jass P. Buck \$ 25,000 833,335 \$ 25,000 James R. Banck \$ 25,000 333,334 \$ 10,000 James R. Banck \$ 25,000 333,334 \$ 50,000 James R. Banck \$ 25,000 333,334 \$ 50,000 James R. Banck \$ 25,000 833,335 \$ 52,000 James R. S | Investor | Notes | Warrants | Pu | chase Price |
|--|---|-----------------|------------|----|-------------|
| Emio De Pianto \$ 50,000 1.666.670 \$ 50,000 Mathew Ernst \$ 25,000 833,335 \$ 25,000 John M. Goodma Living Trust \$ 25,000 833,335 \$ 25,000 Richard Kindt \$ 0,000 333,334 \$ 10,000 Douglas E. Pritchet \$ 50,000 1.666,670 \$ 50,000 Jacone A. Shinkay \$ 25,000 333,334 \$ 10,000 George D. Wilson & Diane J. Wilson \$ 10,000 333,334 \$ 10,000 Jacone Y. Beyzia \$ 25,000 833,335 \$ 25,000 Jareger \$ 10,000 333,344 \$ 10,000 Jareger, D. Wilson & Diane J. Wilson \$ 10,000 333,334 \$ 10,000 Jareger, A. Kanky Pubelsky \$ 25,000 833,335 \$ 25,000 James R. Kahk Pubera A. Kahn, JTWROS \$ 50,000 16,6667 \$ 50,000 | Neel B. Ackerman and Martha N. Ackerman | \$ 200,000 | 6,666,680 | \$ | 200,000 |
| Mathew Ernst\$25,000833,335\$25,000John K. Goodman Living Trust\$25,000833,335\$25,000Richard Kindt\$10,000333,334\$10,000Douglas F. Prichert\$10,000333,334\$10,000Jorom A. Shinkay\$10,000333,334\$20,000Michael J. Spezia\$25,000333,334\$10,000Joseph L. Jerger\$10,000333,334\$10,000David & Nancy Pudelsky\$25,000333,334\$25,000James R. Buck\$10,000333,334\$10,000John O. Dunkin\$50,000333,334\$10,000John C. Dunkin\$15,000333,334\$15,000Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser\$65,00016,66,67\$5,000Mark Voltner\$50,000166,667\$\$5,00016,66,67\$\$5,000Mark Voltner\$50,00016,66,67\$\$5,00016,66,67\$\$5,000Robert J. Guercio\$\$5,00016,66,67\$\$5,0001,66,67\$\$5,000Robert J. Guercio\$\$5,00016,66,67\$\$\$5,0001,66,67\$\$5,000Michael T. Noxyama & Jaye S. Venuti Family Trust\$\$5,00016,66,67 <td>Stephen M. Burnich Revocable Trust u/a 10/08/04</td> <td>\$ 25,000</td> <td>833,335</td> <td>\$</td> <td>25,000</td> | Stephen M. Burnich Revocable Trust u/a 10/08/04 | \$ 25,000 | 833,335 | \$ | 25,000 |
| John M.Goodman Living Trust \$ 25,000 833,335 \$ 25,000 Leon Kanner & Rosemary E. Kanner \$ 10,000 333,334 \$ 10,000 Douglas E. Pritchett \$ 50,000 1,666,670 \$ 50,000 Jerome A. Shinkay \$ 10,000 333,334 \$ 10,000 George D. Wilson & Diane J. Wilson \$ 10,000 333,334 \$ 10,000 Joseph L. Jerger Divide Nancy Pudelsky \$ 25,000 833,335 \$ 10,000 John O. Dunkin \$ 10,000 333,334 \$ 10,000 John C. Dunkin \$ 15,000 333,334 \$ 10,000 John O. Dunkin \$ 15,000 333,334 \$ 15,000 Nasser Family Trust \$ 25,000 833,335 \$ 25,000 Nasser Family Trust \$ 25,000 333,334 \$ 10,000 Nasser Family Trust \$ 5,000 16,66677 \$ 5,00 | Ennio De Pianto | \$ 50,000 | 1,666,670 | \$ | 50,000 |
| Leon Kanner & Rosemary E. Kanner\$25,000833,333\$25,000Richard Kindt\$10,000333,334\$10,000Douglas F. Prichert\$50,000333,334\$10,000Jerome A. Shinkay\$10,000333,334\$20,000Michael J. Spezia\$10,000333,334\$10,000George D. Wilson & Diane J. Wilson\$10,000333,334\$10,000Jaceph L. Jerger\$10,000333,334\$10,000James R. Buck\$10,000333,334\$10,000James R. Buck\$10,000333,334\$10,000John D. Dunkin\$15,00015,00015,00015,000Landmark Coulteral Account FBO Estate of Catherine Nasser\$65,00026,667\$55,000Nasser Family Trust\$55,000166,667\$55,000166,667\$55,000Mark A. Bucha A. Kahn, JTWROS\$50,000166,667\$55,00066,667\$50,000Mark Vollmer\$50,0001,000,001\$50,00033,333\$\$25,000Robert J. Guercio\$50,000166,667\$50,000\$50,000\$50,000Robert J. Guercio\$50,00010,000,001\$\$50,000\$\$50,000Robert J. Guercio\$50,00010,000,001\$\$\$\$\$ </td <td>Matthew Ernst</td> <td>\$ 25,000</td> <td>833,335</td> <td>\$</td> <td>25,000</td> | Matthew Ernst | \$ 25,000 | 833,335 | \$ | 25,000 |
| Richard Kindt \$ 10,000 333,334 \$ 10,000 Douglas E. Pritchett \$ 50,000 1,666,670 \$ 50,000 Binkay \$ 10,000 333,334 \$ 10,000 Michael J. Spezia \$ 10,000 333,334 \$ 10,000 Joseph L. Jerger \$ 10,000 333,334 \$ 10,000 David & Nancy Pudelsky \$ 25,000 833,335 \$ 25,000 James R. Buck \$ 10,000 333,334 \$ 10,000 James R. Buck \$ 15,000 500,001 \$ 15,000 Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser \$ 65,000 2,166,671 \$ 65,000 Carolyn N. Taylor & A. Starke Taylor, Jr. \$ 50,000 1,666,677 \$ 5,000 Garder N. Guercio \$ 5,000 1,666,677 \$ 5,000 Robert J. Guercio \$ 30,000 1,000,002 \$ 3,000 1,000,002 \$ 3,000 Robert G. Guercio \$ | John M. Goodman Living Trust | \$ 25,000 | 833,335 | \$ | 25,000 |
| Douglas E. Pritchett\$\$0,0001,666,670\$\$0,000Jerome A. Shinkay\$10,000333,334\$10,000Michael J. Spezia\$25,000833,335\$10,000George D. Wilson & Diane J. Wilson\$10,000333,334\$10,000Joseph L. Jerger\$10,000333,334\$\$10,000David & Nancy Pudelsky\$25,000833,335\$\$25,000James R. Buck\$10,000333,334\$\$10,000John O. Dunkin\$\$15,000500,001\$\$15,000Nasser Family Trust\$65,0002,166,671\$\$50,000Landmark Collateral Account FBO Estate of Catherine Nasser\$50,000166,667\$\$50,000Garolyn N. Taylor & A. Starke Taylor, Jr.\$50,000166,667\$\$50,000Mark Vollmer\$50,000166,667\$\$50,000Robert J. Guercio\$\$50,000166,667\$\$50,000Robert J. Guercio\$\$50,00033,3334\$\$\$50,000Robert J. Guercio\$\$\$50,00033,3335\$\$\$50,000Robert J. Guercio\$ | Leon Kanner & Rosemary E. Kanner | \$ 25,000 | 833,335 | \$ | 25,000 |
| Jerome A. Shinkay \$ 10,000 333,334 \$ 10,000 Michael J. Spezia \$ 25,000 833,335 \$ 25,000 George D. Wilson & Diane J. Wilson \$ 10,000 333,334 \$ 10,000 Joseph L. Jerger \$ 10,000 333,334 \$ 10,000 David & Nancy Pudelsky \$ 25,000 833,333 \$ 10,000 James R. Buck \$ 10,000 333,334 \$ 10,000 John O. Dunkin \$ 15,000 500,001 \$ 15,000 NFS/FMTC SEP IRA FEO Jay Jennings \$ 15,000 500,001 \$ 15,000 Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser \$ 65,000 166,667 \$ 50,000 Mark Vollmer \$ 5,000 166,667 \$ 5,000 Robert J. Guercio \$ 5,000 166,667 \$ 5,000 Robert J. Guercio \$ 5,000 166,667 \$ 5,000 | Richard Kindt | \$ 10,000 | 333,334 | \$ | 10,000 |
| Michael J. Spezia\$25,000833,333\$25,000George D. Wilson & Diane J. Wilson\$10,000333,334\$10,000Joseph L. Jerger\$10,000333,334\$10,000David & Nancy Pudelsky\$25,000333,334\$10,000James R. Buck\$10,000333,334\$10,000John O. Dunkin\$15,00050,0001\$15,000DrS/FMTC SEP IRA FED Jay Jennings\$15,00050,0001\$50,000Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser\$65,0002,166,671\$50,000James R. Kahn & Debra A. Kahn, JTWROS\$50,0001,666,677\$50,000Garolyn N. Taylor & A. Starke Taylor, Jr.\$50,00016,66,677\$50,000Robert J. Guercio\$5,00016,66,677\$5,000Robert J. Guercio\$5,00016,66,677\$5,000Robert J. Guercio\$30,00010,66,677\$5,000Robert J. Guercio\$30,00016,66,677\$5,000Raymond Yarusi, Jr.\$5,00016,66,677\$5,000James Or\$25,00033,333\$25,000Vernon L. Simpson\$20,00066,66,678\$25,000Michael H. Yokoyama & Jaye S. Venuti Family Trust\$25,00033,333\$25,000Mark B. Ginsburg\$0,000 | Douglas E. Pritchett | \$ 50,000 | 1,666,670 | \$ | 50,000 |
| George D. Wilson & Diane J. Wilson \$ 10,000 333,334 \$ 10,000 Joseph L. Jerger \$ 10,000 333,334 \$ 10,000 David & Nancy Pudelsky \$ 25,000 833,335 \$ 25,000 James R. Buck \$ 10,000 333,334 \$ 10,000 John O. Dunkin \$ 15,000 500,001 \$ 15,000 NFS/FMTC SEP IRA FBO Jay Jennings \$ 15,000 2,166,671 \$ 65,000 Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser \$ 50,000 166,667 \$ 50,000 James R. Kahn & Debra A. Kahn, JTWROS \$ 50,000 166,667 \$ 50,000 Carolyn N. Taylor & A. Starke Taylor, Jr. \$ 50,000 166,667 \$ 50,000 Robert J. Guercio \$ 50,000 166,667 \$ 50,000 Robert J. Guercio \$ 50,000 166,667 \$ 50,000 Robert J. Guercio \$ 50,000 <t< td=""><td>Jerome A. Shinkay</td><td>\$ 10,000</td><td>333,334</td><td>\$</td><td>10,000</td></t<> | Jerome A. Shinkay | \$ 10,000 | 333,334 | \$ | 10,000 |
| Joseph L. Jerger\$10,000333,334\$10,000David & Nancy Pudelsky\$25,000833,334\$25,000James R. Buck\$15,000500,001\$50,000\$15,000Ohn O. Dunkin\$15,000500,001\$15,000\$500,001\$50,000RASKE TAR FBO Jay Jennings\$15,000500,001\$\$50,000\$50,000\$50,000\$50,000\$50,000\$\$50,000\$\$50,000\$\$50,000\$\$50,000\$\$\$50,000\$ <t< td=""><td>Michael J. Spezia</td><td>\$ 25,000</td><td>833,335</td><td>\$</td><td>25,000</td></t<> | Michael J. Spezia | \$ 25,000 | 833,335 | \$ | 25,000 |
| David & Nancy Pudelsky \$ 25,000 833,333 \$ 25,000 James R. Buck \$ 10,000 333,334 \$ 10,000 John O. Dunkin \$ 15,000 500,001 \$ 15,000 Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser \$ 65,000 2,166,671 \$ 65,000 Nasser Family Trust \$ 25,000 833,335 \$ 25,000 James R. Kahn & Debra A. Kahn, JTWROS \$ 50,000 1,66,667 \$ 5,000 Carolyn N. Taylor & A. Starke Taylor, Jr. \$ 50,000 166,667 \$ 5,000 Robert J. Guercio \$ 50,000 166,667 \$ 5,000 Robert J. Guercio \$ 30,000 1,000,002 \$ 30,000 Robert J. Guercio \$ 30,000 1,000,002 \$ 30,000 Robert J. Guercio \$ 30,000 1,000,002 \$ 30,000 Robert J. Guercio \$ 30,000 1,000,002 < | George D. Wilson & Diane J. Wilson | \$ 10,000 | 333,334 | \$ | 10,000 |
| James R. Buck\$10,000333,334\$10,000Joho O. Dunkin\$15,000500,001\$15,000NFS/FMTC SEP IRA FBO Jay Jennings\$65,0002,166,671\$65,000Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser\$65,0002,166,677\$5,000Nasser Family Trust\$5,000166,667\$5,0006,666,70\$5,000Garolyn N. Taylor & A. Starke Taylor, Jr.\$5,000166,667\$5,0006,666,70\$5,000Robert J. Guercio\$5,000166,667\$5,0006,666,70\$5,000Robert J. Guercio\$5,000166,667\$5,0006,666,70\$5,000Robert J. Guercio\$5,000166,667\$5,0006,666,70\$5,000Robert J. Guercio\$5,000166,667\$5,0006,666,70\$5,000Robert L. Jacobson & Saralee Jacobson, JTWROS\$3,0001,000,003,33,33\$2,5000Raymond Yarusi, Jr.\$5,000166,667\$5,0006,666,80\$2,5000James Or\$\$2,0006,66,668\$2,00006,66,667\$5,000Michael H. Yokoyama & Jaye S. Venuti Family Trust\$2,0006,66,668\$2,0000Ronal Rasmussen\$3,000166,667\$5,0001,000,003,33,35\$2,5000 | Joseph L. Jerger | \$ 10,000 | 333,334 | \$ | 10,000 |
| John O. Dunkin \$ 15,000 500,001 \$ 15,000 NFS/FMTC SEP IRA FBO Jay Jennings \$ 15,000 500,001 \$ 15,000 Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser \$ 65,000 2,166,671 \$ 65,000 Nasser Family Trust \$ 25,000 833,335 \$ 25,000 James R. Kahn & Debra A. Kahn, JTWROS \$ 5,000 166,667 \$ 5,000 Carolyn N. Taylor & A. Starke Taylor, Jr. \$ 5,000 166,667 \$ 5,000 Rahph Hanby \$ 5,000 166,667 \$ 5,000 Robert J. Guercio \$ 5,000 166,667 \$ 5,000 Robert E. Jacobson & Saralee Jacobson, JTWROS \$ 10,000 33,334 \$ 10,000 James Orr \$ 5,000 166,667 \$ 5,000 James Orr \$ 25,000 833,335 \$ 25,000 James Orr \$ 25,000 833,335 \$ | David & Nancy Pudelsky | \$ 25,000 | 833,335 | \$ | 25,000 |
| NFS/FMTC SEP IRA FBO Jay Jennings\$15,000500,001\$15,000Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser\$65,0002,166,671\$65,000Nasser Family Trust\$25,000833,335\$25,000James R. Kahn & Debra A. Kahn, JTWROS\$50,0001,666,670\$50,000Carolyn N. Taylor & A. Starke Taylor, Jr.\$50,0001,666,677\$50,000Mark Vollmer\$5,000166,667\$5,000Robert J. Guercio\$25,000833,335\$25,000Robert E. Jacobson & Saralee Jacobson, JTWROS\$10,00033,334\$10,000Michael Cushing\$30,0001,000,002\$30,000Marko Yamusi, Jr.\$5,000166,667\$5,000James Orr\$25,000833,335\$25,000James Orr\$25,000833,335\$25,000Vernon L. Simpson\$25,000833,335\$25,000Michael H. Yokoyama & Jaye S. Venuti Family Trust\$25,000833,335\$25,000Ronald Rasmussen\$10,000333,334\$10,000Lewis R. Jacobson\$25,000833,335\$25,000Mark B. Ginsburg\$20,000666,668\$20,000Mark B. Ginsburg\$20,000666,668\$20,000Mark B. Ginsburg\$20,000833,335 | James R. Buck | \$ 10,000 | 333,334 | \$ | 10,000 |
| Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser \$ 65,000 2,166,671 \$ 65,000 Nasser Family Trust \$ 25,000 833,335 \$ 25,000 James R, Kahn & Debra A. Kahn, JTWROS \$ 50,000 166,667 \$ 50,000 Carolyn N. Taylor & A. Starke Taylor, Jr. \$ 50,000 166,667 \$ 50,000 Mark Vollmer \$ 50,000 166,667 \$ 50,000 Robert J. Guercio \$ 25,000 833,335 \$ 25,000 Robert E. Jacobson & Saralee Jacobson, JTWROS \$ 10,000 333,334 \$ 10,000 Michael Cushing \$ 30,000 1,000,0002 \$ 30,000 Raymond Yausi, Jr. \$ 25,000 833,335 \$ 25,000 James Or \$ 25,000 833,335 \$ 25,000 James Or \$ 20,000 666,668 \$ 20,000 Vernon L. Simpson \$ 20,000 666,668 | John O. Dunkin | \$ 15,000 | 500,001 | \$ | 15,000 |
| Nasser Family Trust\$25,000833,333\$25,000James R. Kahn & Debra A. Kahn, JTWROS\$5,0001,66,667\$\$5,000Carolyn N. Taylor & A. Starke Taylor, Jr.\$50,0001,66,667\$\$5,000Mark Vollmer\$5,000166,667\$\$5,000Robert J. Guercio\$5,000166,667\$\$5,000Ralph Hanby\$5,000166,667\$\$5,000Robert E. Jacobson & Saralee Jacobson, JTWROS\$10,00033,334\$10,000Raymond Yarusi, Jr.\$30,0001,000,002\$\$30,000Michael Cushing\$\$5,000166,667\$\$\$5,000James Orr\$\$30,0001,000,002\$ <td>NFS/FMTC SEP IRA FBO Jay Jennings</td> <td>\$ 15,000</td> <td>500,001</td> <td>\$</td> <td>15,000</td> | NFS/FMTC SEP IRA FBO Jay Jennings | \$ 15,000 | 500,001 | \$ | 15,000 |
| James R. Kahn & Debra A. Kahn, JTWROS \$ 5,000 166,667 \$ 5,000 Carolyn N. Taylor & A. Starke Taylor, Jr. \$ 50,000 1,666,670 \$ 50,000 Mark Vollmer \$ 5,000 166,667 \$ 5,000 Robert J. Guercio \$ 25,000 833,335 \$ 25,000 Ralph Hanby \$ 5,000 166,667 \$ 5,000 Robert E. Jacobson & Saralee Jacobson, JTWROS \$ 10,000 333,334 \$ 10,000 Raymond Yarusi, Jr. \$ 5,000 166,667 \$ 5,000 James Orr \$ 25,000 833,335 \$ 25,000 Yernon L. Simpson \$ 25,000 833,335 \$ 25,000 Rohald Rasmussen \$ 20,000 666,668 \$ 20,000 Lewis R. Jacobson \$ 20,000 666,668 \$ 20,000 Mark B. Ginsburg \$ 20,000 666,668 \$ 20,000 | Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser | \$ 65,000 | 2,166,671 | \$ | 65,000 |
| Carolyn N. Taylor & A. Starke Taylor, Jr. \$ 50,000 1,666,670 \$ 50,000 Mark Vollmer \$ 5,000 166,667 \$ 5,000 Robert J. Guercio \$ 25,000 833,335 \$ 25,000 Ralph Hanby \$ 5,000 166,667 \$ 5,000 Robert E. Jacobson & Saralee Jacobson, JTWROS \$ 10,000 333,334 \$ 10,000 Michael Cushing \$ 30,000 1,000,002 \$ 30,000 Raymond Yarusi, Jr. \$ 5,000 166,667 \$ 5,000 James Orr \$ 25,000 833,335 \$ 25,000 Vernon L. Simpson \$ 25,000 833,335 \$ 25,000 Kichael H. Yokoyama & Jaye S. Venuti Family Trust \$ 20,000 666,668 \$ 20,000 Ronald Rasmussen \$ 10,000 333,335 \$ 25,000 Mark B. Ginsburg \$ 20,000 666,668 \$ 20,000 Greegory J. Dovolis \$ 20,000 666,668 \$ 20,0 | Nasser Family Trust | \$ 25,000 | 833,335 | \$ | 25,000 |
| Mark Vollmer \$ 5,000 166,667 \$ 5,000 Robert J. Guercio \$ 25,000 833,335 \$ 25,000 Ralph Hanby \$ 5,000 166,667 \$ 5,000 Robert E. Jacobson & Saralee Jacobson, JTWROS \$ 10,000 333,334 \$ 10,000 Michael Cushing \$ 30,000 1,000,002 \$ 30,000 Raymond Yarusi, Jr. \$ 5,000 166,667 \$ 5,000 James Orr \$ 25,000 833,335 \$ 25,000 Vernon L. Simpson \$ 25,000 833,335 \$ 25,000 Kohael H. Yokoyama & Jaye S. Venuti Family Trust \$ 25,000 833,335 \$ 25,000 Ronald Rasmussen \$ 10,000 333,334 \$ 10,000 Lewis R. Jacobson \$ 5,000 166,667 \$ 5,000 Gregory J. Dovolis \$ 20,000 666,688 \$ 20,000 Wark B. Ginsburg \$ 20,000 666,688 \$ 20,000 | James R. Kahn & Debra A. Kahn, JTWROS | \$ 5,000 | 166,667 | \$ | 5,000 |
| Robert J. Guercio\$25,000833,335\$25,000Ralph Hanby\$5,000166,667\$5,000Robert E. Jacobson & Saralee Jacobson, JTWROS\$10,000333,334\$10,000Michael Cushing\$30,0001,000,002\$30,000Raymond Yarusi, Jr.\$5,000166,667\$5,000James Orr\$25,000833,335\$25,000Vernon L. Simpson\$25,000833,335\$25,000Michael H. Yokoyama & Jaye S. Venuti Family Trust\$25,000833,335\$25,000Fredrick Peet\$20,000666,668\$20,000Ronald Rasmussen\$10,000333,334\$10,000Lewis R. Jacobson\$5,000166,667\$5,000Gregory J. Dovolis\$20,000666,668\$20,000William S. Silver\$20,000666,668\$20,000Praful Desai\$20,000666,668\$20,000Howard M. Tanning Rollover IRA\$5,000833,335\$25,000\$\$5,000166,667\$\$5,000Howard M. Tanning Rollover IRA\$70,0002,333,38\$\$5,000 | Carolyn N. Taylor & A. Starke Taylor, Jr. | \$ 50,000 | 1,666,670 | \$ | 50,000 |
| Ralph Hanby\$5,000166,667\$5,000Robert E. Jacobson & Saralee Jacobson, JTWROS\$10,000333,334\$10,000Michael Cushing\$30,0001,000,002\$30,000Raymond Yarusi, Jr.\$5,000166,667\$5,000James Orr\$25,000833,335\$25,000Vernon L. Simpson\$25,000833,335\$25,000Michael H. Yokoyama & Jaye S. Venuti Family Trust\$25,000833,335\$25,000Frederick Peet\$20,000666,668\$20,000Ronald Rasmussen\$10,000333,334\$10,000Lewis R. Jacobson\$5,000166,667\$5,000Mark B. Ginsburg\$20,000666,668\$20,000Gregory J. Dovolis\$20,000666,668\$20,000William S. Silver\$25,000833,335\$25,000Praful Desai\$5,000166,667\$20,000Howard M. Tanning Rollover IRA\$\$0,0002,333,38\$25,000 | Mark Vollmer | \$ 5,000 | 166,667 | \$ | 5,000 |
| Robert E. Jacobson & Saralee Jacobson, JTWROS \$ 10,000 333,334 \$ 10,000 Michael Cushing \$ 30,000 1,000,002 \$ 30,000 Raymond Yarusi, Jr. \$ 5,000 166,667 \$ 5,000 James Orr \$ 25,000 833,335 \$ 25,000 Vernon L. Simpson \$ 25,000 833,335 \$ 25,000 Michael H. Yokoyama & Jaye S. Venuti Family Trust \$ 25,000 833,335 \$ 25,000 Frederick Peet \$ 20,000 666,668 \$ 20,000 Ronald Rasmussen \$ 10,000 333,334 \$ 10,000 Lewis R. Jacobson \$ 5,000 166,667 \$ 5,000 Mark B. Ginsburg \$ 5,000 833,335 \$ 25,000 Gregory J. Dovolis \$ 20,000 666,668 \$ 20,000 William S. Silver \$ 20,000 666,668 \$ 20,000 Praful Desai \$ 20,000 833,335 \$ 25,000 833,3 | Robert J. Guercio | \$ 25,000 | 833,335 | \$ | 25,000 |
| Michael Cushing\$30,0001,000,002\$30,000Raymond Yarusi, Jr.\$5,000166,667\$5,000James Orr\$25,000833,335\$25,000Vernon L. Simpson\$25,000833,335\$25,000Michael H. Yokoyama & Jaye S. Venuti Family Trust\$20,000666,668\$20,000Frederick Peet\$20,000666,668\$20,000Ronald Rasmussen\$10,000333,334\$10,000Lewis R. Jacobson\$5,000166,667\$5,000Mark B. Ginsburg\$20,000666,668\$20,000Gregory J. Dovolis\$20,000666,668\$20,000William S. Silver\$25,000833,335\$25,000Praful Desai\$25,000833,335\$25,000Howard M. Tanning Rollover IRA\$70,0002,333,338\$70,000 | Ralph Hanby | \$ 5,000 | 166,667 | \$ | 5,000 |
| Raymond Yarus, Jr.\$5,000166,667\$5,000James Orr\$25,000833,335\$25,000Vernon L. Simpson\$25,000833,335\$25,000Michael H. Yokoyama & Jaye S. Venuti Family Trust\$25,000833,335\$25,000Frederick Peet\$20,000666,668\$20,000Ronald Rasmussen\$10,000333,334\$10,000Lewis R. Jacobson\$5,000166,667\$5,000Mark B. Ginsburg\$25,000833,335\$25,000Gregory J. Dovolis\$20,000666,668\$20,000William S. Silver\$25,000833,335\$25,000Praful Desai\$5,000166,667\$25,000Howard M. Tanning Rollover IRA\$70,0002,333,388\$70,000 | Robert E. Jacobson & Saralee Jacobson, JTWROS | \$ 10,000 | 333,334 | \$ | 10,000 |
| Ames Orr\$25,000833,335\$25,000Vernon L. Simpson\$25,000833,335\$25,000Michael H. Yokoyama & Jaye S. Venuti Family Trust\$25,000833,335\$25,000Frederick Peet\$20,000666,668\$20,000Ronald Rasmussen\$10,000333,334\$10,000Lewis R. Jacobson\$5,000166,667\$5,000Mark B. Ginsburg\$25,000833,335\$25,000Gregory J. Dovolis\$20,000666,668\$20,000William S. Silver\$25,000833,335\$25,000Praful Desai\$5,000166,667\$5,000Howard M. Tanning Rollover IRA\$70,0002,33,338\$70,000 | Michael Cushing | \$ 30,000 | 1,000,002 | \$ | 30,000 |
| Vernon L. Simpson\$25,000833,335\$25,000Michael H. Yokoyama & Jaye S. Venuti Family Trust\$25,000833,335\$25,000Frederick Peet\$20,000666,668\$20,000Ronald Rasmussen\$10,000333,334\$10,000Lewis R. Jacobson\$5,000166,667\$5,000Mark B. Ginsburg\$25,000833,335\$25,000Gregory J. Dovolis\$20,000666,668\$20,000William S. Silver\$25,000833,335\$25,000Praful Desai\$25,000833,335\$25,000Thomas Gemellaro\$5,000166,667\$5,000Howard M. Tanning Rollover IRA\$70,0002,33,338\$70,000 | Raymond Yarusi, Jr. | \$ 5,000 | 166,667 | \$ | 5,000 |
| Michael H. Yokoyama & Jaye S. Venuti Family Trust\$25,000833,335\$25,000Frederick Peet\$20,000666,668\$20,000Ronald Rasmussen\$10,000333,334\$10,000Lewis R. Jacobson\$5,000166,667\$5,000Mark B. Ginsburg\$25,000833,335\$25,000Gregory J. Dovolis\$20,000666,668\$20,000William S. Silver\$25,000833,335\$25,000Praful Desai\$25,000833,335\$25,000Thomas Gemellaro\$5,000166,667\$5,000Howard M. Tanning Rollover IRA\$70,0002,333,388\$70,000 | James Orr | \$ 25,000 | 833,335 | \$ | 25,000 |
| Frederick Peet\$20,000666,668\$20,000Ronald Rasmussen\$10,000333,334\$10,000Lewis R. Jacobson\$5,000166,667\$5,000Mark B. Ginsburg\$25,000833,335\$25,000Gregory J. Dovolis\$20,000666,668\$20,000William S. Silver\$25,000833,335\$25,000Praful Desai\$25,000833,335\$25,000Thomas Gemellaro\$5,000166,667\$5,000Howard M. Tanning Rollover IRA\$70,0002,333,338\$70,000 | Vernon L. Simpson | \$ 25,000 | 833,335 | \$ | 25,000 |
| Ronald Rasmussen \$ 10,000 333,334 \$ 10,000 Lewis R. Jacobson \$ 5,000 166,667 \$ 5,000 Mark B. Ginsburg \$ 25,000 833,335 \$ 25,000 Gregory J. Dovolis \$ 20,000 666,668 \$ 20,000 William S. Silver \$ 25,000 833,335 \$ 25,000 Praful Desai \$ 25,000 833,335 \$ 25,000 Thomas Gemellaro \$ 5,000 166,667 \$ 5,000 Howard M. Tanning Rollover IRA \$ 70,000 2,333,388 \$ 70,000 | Michael H. Yokoyama & Jaye S. Venuti Family Trust | \$ 25,000 | 833,335 | \$ | 25,000 |
| Lewis R. Jacobson\$5,000166,667\$5,000Mark B. Ginsburg\$25,000833,335\$25,000Gregory J. Dovolis\$20,000666,668\$20,000William S. Silver\$25,000833,335\$25,000Praful Desai\$25,000833,335\$25,000Thomas Gemellaro\$5,000166,667\$5,000Howard M. Tanning Rollover IRA\$70,0002,333,388\$70,000 | Frederick Peet | \$ 20,000 | 666,668 | \$ | 20,000 |
| Mark B. Ginsburg \$ 25,000 833,335 \$ 25,000 Gregory J. Dovolis \$ 20,000 666,668 \$ 20,000 William S. Silver \$ 25,000 833,335 \$ 25,000 Praful Desai \$ 25,000 833,335 \$ 25,000 Thomas Gemellaro \$ 5,000 166,667 \$ 5,000 Howard M. Tanning Rollover IRA \$ 70,000 2,333,338 \$ 70,000 | Ronald Rasmussen | \$ 10,000 | 333,334 | \$ | 10,000 |
| Gregory J. Dovolis\$20,000666,668\$20,000William S. Silver\$25,000833,335\$25,000Praful Desai\$25,000833,335\$25,000Thomas Gemellaro\$5,000166,667\$5,000Howard M. Tanning Rollover IRA\$70,0002,333,338\$70,000 | Lewis R. Jacobson | \$ 5,000 | 166,667 | \$ | 5,000 |
| William S. Silver\$25,000833,335\$25,000Praful Desai\$25,000833,335\$25,000Thomas Gemellaro\$5,000166,667\$5,000Howard M. Tanning Rollover IRA\$70,0002,333,338\$70,000 | Mark B. Ginsburg | \$ 25,000 | 833,335 | \$ | 25,000 |
| Praful Desai \$ 25,000 833,335 \$ 25,000 Thomas Gemellaro \$ 5,000 166,667 \$ 5,000 Howard M. Tanning Rollover IRA \$ 70,000 2,333,338 \$ 70,000 | Gregory J. Dovolis | 20,000 | 666,668 | \$ | 20,000 |
| Thomas Gemellaro \$ 5,000 166,667 \$ 5,000 Howard M. Tanning Rollover IRA \$ 70,000 2,333,338 \$ 70,000 | William S. Silver | \$ 25,000 | 833,335 | \$ | 25,000 |
| Howard M. Tanning Rollover IRA \$ 70,000 2,333,338 \$ 70,000 | Praful Desai | \$ 25,000 | 833,335 | \$ | 25,000 |
| | Thomas Gemellaro | \$ 5,000 | 166,667 | \$ | 5,000 |
| FIRST CLOSING TOTAL: \$ 1,035,000 34,500,069 \$ 1,035,000 | Howard M. Tanning Rollover IRA | \$ 70,000 | 2,333,338 | \$ | 70,000 |
| | FIRST CLOSING TOTAL: | \$ 1,035,000 | 34,500,069 | \$ | 1,035,000 |

Exhibit A-2 <u>Schedule of Investors</u> <u>Subsequent Closing held</u>

| Investor | Notes | Warrants | Purchase Price |
|----------|-------|----------|-----------------------|
| | | | |
| | | | |
| | | | |

SUBSEQUENT CLOSING TOTAL

REGISTRATION RIGHTS AGREEMENT

This REGISTRATION RIGHTS AGREEMENT (this "<u>Agreement</u>") is made as of November 19, 2008, by and among (i) Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "<u>Company</u>"), (ii) each person listed on <u>Exhibit A</u> attached hereto, as may be amended from time to time (each an "<u>Investor</u>" and, collectively, the "<u>Investors</u>"), (iii) [1] (the "<u>Placement Agent</u>") and (iv) each person or entity that subsequently becomes a party to this Agreement pursuant to, and in accordance with, the provisions of <u>Section 13</u> hereof (each an "<u>Investor Permitted Transferee</u>" and, collectively, the "<u>Investor Permitted Transferee</u>").

WHEREAS, the Company has agreed to issue and sell to the Investors (the "<u>Offering</u>"), and the Investors have agreed to purchase from the Company, an aggregate of up to five hundred (500) units (each a "<u>Unit</u>" and, collectively, the "<u>Units</u>") for an aggregate purchase price of \$2,500,000 (the "<u>Offering Amount</u>"), subject to an overallotment option to purchase up to an additional two hundred (200) Units (\$1,000,000) (the "<u>Overallotment Amount</u>"), priced at \$5,000 per Unit, with each Unit consisting of (i) a \$5,000 aggregate principal amount twelve (12%) percent senior secured promissory note (each a "<u>Note</u>" and, collectively, the "<u>Notes</u>") of the Company, and (ii) a warrant (each a "<u>Warrant</u>" and, collectively, the "<u>Warrants</u>"), to purchase shares (the "<u>Warrant Shares</u>") of the Company's common stock, \$0.001 par value per share (the "<u>Common Stock</u>") as provided in that certain Securities Purchase Agreement, dated of even date herewith, between the Company and the Investors (the "<u>Securities Purchase Agreement</u>"); and

WHEREAS, the Company has agreed to provide certain registration rights with respect to the resale of the Warrant Shares, all on the terms and conditions provided herein; and

WHEREAS, the terms of the Securities Purchase Agreement provide that it shall be a condition precedent to the closing of the transactions thereunder, for the Company and the Investors to execute and deliver this Agreement.

NOW, THEREFORE, in consideration of the promises and mutual covenants contained herein, the parties hereto hereby agree as follows:

1. <u>DEFINITIONS</u>. The following terms shall have the meanings provided therefor below or elsewhere in this Agreement as described below:

"Business Day" means a day, other than a Saturday or Sunday, on which banks in New York City are open for the general transaction of business.

"Closing" shall have the meaning ascribed to such term in the Securities Purchase Agreement.

"Effectiveness Date" means, (i) with respect to the Initial Registration Statement, as soon as practicable, but if the Initial Registration Statement is not subject to a SEC review no later than ninety (90) calendar days after the Filing Date, and if the Initial Registration Statement is subject to a SEC review no later than one hundred twenty (120) calendar days after the Filing Date, and (ii) with respect to any additional Registration Statements which may be required to be filed hereunder pursuant to <u>Section 3(d)</u> or otherwise, not later than ninety (90) calendar days following the date on which the additional Registration Statement is subject to a SEC review or if the additional Registration Statement is subject to a SEC review one hundred twenty (120) calendar days after the date such Registration Statement is required to be filed hereunder after the date such Registration Statement is required to be filed hereunder.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended, and all of the rules and regulations promulgated thereunder.

"Filing Date" shall mean, with respect to the Initial Registration Statement, within twenty (20) calendar days after the Final Closing, <u>provided</u>, <u>however</u>, that if the Filing Date falls on a Saturday, Sunday or other day, that the SEC is closed for business the Filing Date shall be extended to the next Business Day.

"Final Closing" shall mean the final Subsequent Closing Date (as defined in the Securities Purchase Agreement).

"First Closing" shall have the meaning ascribed to such term in the Securities Purchase Agreement.

"Holder" or "Holders" shall mean the holder or holders, as the case may be, from time to time of Registrable Securities.

"Initial Nordic Registration Statement" shall mean the registration statement filed by the Company with the SEC (File No. 333-150580), as amended or supplemented from time to time.

"Initial Registration Statement" shall mean the initial Registration Statement filed pursuant to this Agreement.

"Investor Permitted Transferees" as defined in the Preamble.

"Investors" shall mean, collectively, the Investors and the Investor Permitted Transferees; provided, however, that the term "Investors" shall not include any of the Investors or any of the Investor Permitted Transferees that do not own or hold any Registrable Securities.

"<u>Nordic Registration Statement</u>" shall mean any registration statement filed pursuant to the Registration Rights Agreement, dated February 25, 2008, by and among the Company and Nordic Biotech Venture Fund II K/S, as amended from time to time, including the Initial Nordic Registration Statement.

"Person" means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or agency or subdivision thereof) or other entity of any kind.

"Placement Agent" as defined in the Preamble.

"Registrable Securities" shall mean the Warrant Shares.

"<u>Registration Statement</u>" means any one or more registration statements filed (and/or required to be filed pursuant hereto) with the SEC by the Company on Form S-3, or in the event the Company is not eligible to use Form S-3, on Form S-1, for the purpose of registering the Registrable Securities, including (in each case) the prospectus, amendments and supplements to such registration statement or prospectus, including pre- and post-effective amendments, all exhibits thereto, and all material incorporated by reference or deemed to be incorporated by reference in such registration statement. The term "Registration Statement" shall include, but not be limited to, the Initial Registration Statement and shall not include any Nordic Registration Statement.

"Rule 144" shall mean Rule 144 promulgated by the SEC pursuant to the Securities Act and any successor or substitute rule, law or provision.

"Rule 172" means Rule 172 promulgated by the SEC pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the SEC having substantially the same purpose and effect as such Rule.

"Rule 424" means Rule 424 promulgated by the SEC pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the SEC having substantially the same purpose and effect as such Rule.

"SEC" shall mean the United States Securities and Exchange Commission.

"SEC Guidance" means (i) any publicly-available written guidance, or rule of general applicability of the SEC staff, or (ii) oral or written comments, requirements or requests of the SEC staff to the Company in connection with the review of a Registration Statement.

"Securities Act" shall mean the Securities Act of 1933, as amended, and all of the rules and regulations promulgated thereunder.

"<u>Trading Day</u>" means (a) if the Common Stock is listed or quoted on the NASDAQ Market, then any day during which securities are generally eligible for trading on the NASDAQ Market, or (b) if the Common Stock is not then listed or quoted and traded on the NASDAQ Market, then any Business Day.

"Warrant Shares" as defined in the preamble.

2. EFFECTIVENESS; This Agreement shall become effective and legally binding only if the First Closing occurs.

3. MANDATORY REGISTRATION.

(a) The Company shall be required to file an Initial Registration Statement on or prior to the Filing Date registering the Registrable Securities for resale by the Holders as selling stockholders thereunder. On or prior to the Filing Date, the Company shall prepare and file with the SEC an Initial Registration Statement for the purpose of registering under the Securities Act the resale of all, or such portion as permitted by SEC Guidance (and the Company shall make a commercially reasonable effort to advocate with the SEC for the registration of all or the maximum number of the Registrable Securities as permitted by SEC Guidance) of the Registrable Securities by, and for the account of, the Holders as selling stockholders thereunder, that are not then registered on an effective Registration Statement for an offering to be made on a continuous basis pursuant to Rule 415. No other securities shall be included in the Initial Registration Statement that is filed except for the Registrable Securities. Each Registration Statement (including the Initial Registration Statement) shall contain the "Plan of Distribution" included in the Investor Questionnaire, in substantially the form of which was provided to Investors with the Securities Purchase Agreement (except if otherwise required pursuant to written comments received from the SEC upon a review of such Registration Statement). The Company shall cause a Registration Statement to be declared effective by the SEC under the Securities Act as promptly as practicable after the filing thereof, but in any event on or prior to the applicable Effectiveness Date.

(b) The Company shall be required to keep a Registration Statement effective until such date that is the earlier of (the "Effectiveness Period") (i) the date as of which all of the Holders as selling stockholders thereunder may sell all of the Registrable Securities registered for resale thereon without restriction pursuant to Rule 144 or (ii) the date when all of the Registrable Securities registered thereunder shall have been sold (such date is referred to herein as the "Mandatory Registration Termination Date"). Thereafter, the Company shall be entitled to withdraw such Registration Statement and the Holders shall have no further right to offer or sell any of the Registrable Securities registered for resale thereon pursuant to the respective Registration Statement (or any prospectus relating thereto).

(c) Notwithstanding any other provision of this Agreement, if any SEC Guidance sets forth a limitation on the number of Registrable Securities to be registered in the Initial Registration Statement (and the Company has made a commercially reasonable effort to advocate with the SEC for the registration of all or a greater number of Registrable Securities), the number of Registrable Securities to be registered on such Registration Statement will be reduced on a pro rata basis among the Investors based on the total number of unregistered Warrant Shares held by such Investors on a fully diluted basis. The Company shall file a new registration statement as soon as reasonably practicable covering the resale by the Holders of not less than the number of such Registrable Securities that are not registered in the Initial Registration Statement. The Company shall not be liable for liquidated damages under <u>Section 5(a)</u> as to any Registrable Securities which are not permitted by the SEC to be included in a Registration Statement due solely to SEC Guidance from time to time. In such case, any liquidated damages payable under <u>Section 5(a)</u> shall be calculated to apply only the percentage of Registrable Securities which are permitted in accordance with SEC Guidance to be included in such Registration Statement.

(d) If during the Effectiveness Period, subject to <u>Section 3(a)</u> and <u>Section 3(c)</u>, the Company becomes aware that the number of Registrable Securities at any time exceeds the number of Registrable Securities then registered for resale in a Registration Statement, then the Company shall file as soon as reasonably practicable an additional Registration Statement covering the resale by the Holders of not less than the number of such Registrable Securities that are not then registered.

(e) Notwithstanding any other provision of this Agreement, if during the Effectiveness Period any of the Registrable Securities become eligible for resale without restriction pursuant to Rule 144 (the "**Rule 144 Eligible Securities**") then the number of Registrable Securities outstanding at any one time shall be reduced by the number of Rule 144 Eligible Securities and the Company may at its option file an amendment to any Registration Statement to reduce the number of Registrable Securities accordingly. The Company acknowledges that the Company's obligation to file its periodic disclosure documents for the twelve (12) month period preceding the date of sale is a "restriction" as that term is used in the first sentence of this <u>Section 3(e)</u>.

4. PIGGYBACK REGISTRATION.

(a) If, at any time, commencing on the date of the First Closing, the Company proposes to prepare and file with the SEC a registration statement under the Securities Act other than a Nordic Registration Statement, the Company will give written notice to each Holder and the Placement Agent of its intention to do so by certified mail and shall include all of the Registrable Securities in such registration statement; provided, however, that in connection with any offering involving an underwriting of shares of Common Stock, the Company shall not be required to include the Registrable Securities of any Holder in such registration statement unless they accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters determine in their sole discretion will not jeopardize the success of the offering by the Company. In the event that the underwriters determine that less than all of the Registrable Securities required to be registered can be included in such offering, then the Registrable Securities that are included shall be apportioned, among the Investors on a pro rata basis based on the total number of unregistered Warrant Shares held by such Investors and requested to be included in the Registrable Securities at the Company's sole cost and expense and at no cost or expense to the Holders (other than any commission, discounts or counsel fees payable by the Holders, as further provided in <u>Section 7</u> hereof).

(b) Notwithstanding the preceding provisions of this <u>Section 4</u>, the Company shall have the right any time after it shall have given written notice pursuant to this <u>Section 4</u> (irrespective of whether any written request for inclusion of such securities shall have already been made) to elect not to file any proposed registration statement, or to withdraw the same after the filing but prior to the effective date thereof.

(c) The Company shall use its commercially reasonable efforts to cause the registration statement filed pursuant to this <u>Section 4</u> to become effective as promptly as possible under the circumstances at the time prevailing and, if any stop order shall be issued by the SEC in connection therewith, to use its reasonable efforts to obtain the removal of such order.

(d) To the extent any Registrable Securities of the Holders are included in such registration statement, the Company shall notify each Holder by facsimile or e-mail as promptly as practicable, and in any event, within two (2) Trading Days, after such registration statement is declared effective and shall simultaneously provide the Holders with a copy of any related prospectus to be used in connection with the sale or other disposition of the Registrable Securities covered thereby.

5. PENALTIES/SUSPENSION OF A REGISTRATION STATEMENT.

(a) If: (i) the Initial Registration Statement and any other Registration Statement other than a Nordic Registration Statement is not filed on or prior to the Filing Date, or (ii) the Company fails to file with the SEC a request for acceleration in accordance with Rule 461 promulgated under the Securities Act, within five (5) Trading Days of the date that the Company is notified (orally or in writing, whichever is earlier) by the SEC that the Initial Registration Statement or any other Registration Statement will not be "reviewed" or not be subject to further review and the Company has obtained any required clearance from the Financial Industry Regulatory Authority, Inc. ("FINRA"), or (iii) prior to the Effectiveness Date of the Initial Registration Statement or any other Registration Statement, the Company fails to file a pre-effective amendment and otherwise respond in writing to comments made by the SEC in respect of such Initial Registration Statement or any other Registration Statement within ten (10) Business Days after the receipt of comments by or notice from the SEC that such amendment is required in order for such Initial Registration Statement or any other Registration Statement to be declared effective, or (iv) subject to the tolling provisions contained herein, as to, in the aggregate among all Investors on a pro rata basis based on the amount of Registrable Securities held by each of them, respectively, the lesser of (A) all of the Registrable Securities and (B) the maximum number of Registrable Securities permitted by SEC Guidance (collectively, the "Initial Shares"), a Registration Statement registering for resale all of the Initial Shares is not declared effective by the SEC by the Effectiveness Date, or (v) after the Effectiveness Date of the Initial Registration Statement or any other Registration Statement, subject to the tolling provisions contained herein, such Initial Registration Statement or other Registration Statement ceases for any reason to remain continuously effective as to all Registrable Securities included in such Initial Registration Statement or other Registration Statement, as applicable, or the Investors are otherwise not permitted to utilize the Prospectus therein to resell such Registrable Securities, for more than ten (10) consecutive Business Days or more than an aggregate of twenty (20) Business Days during any twelve (12) month period (which need not be consecutive Business Days), provided, however, that no such payments shall be required in connection with a Suspension Period (as hereinafter defined) (any such failure or breach being referred to as an "Event," and for purposes of clause (i), (iv) or (v) the date on which such Event occurs, or for purposes of clause (ii) the date on which such five (5) Trading Day period is exceeded, or for purposes of clause (iii) the date which such ten (10) Business Day period is exceeded, or for purposes of clause (v) the date on which such ten (10) or twenty (20) Business Day period, as applicable, is exceeded being referred to as "Event Date"), then, in addition to any other rights the Investors may have hereunder or under applicable law, on each such Event Date and on each monthly anniversary of each such Event Date (if the applicable Event shall not have been cured by such date) until the applicable Event is cured, the Company shall, subject to Section 3(c), pay to each Investor on a monthly basis within three (3) Business Days of the end of the month an amount in cash, as partial liquidated damages and not as a penalty, equal to one and one-half (1.5%) percent of the aggregate purchase price paid by such Investor pursuant to the Securities Purchase Agreement for any Registrable Securities then held by such Investor (as applicable under clause (iv)) that are not then eligible for resale pursuant to the Initial Registration Statement or other Registration Statement. The parties agree that the maximum aggregate liquidated damages payable to an Investor under this Agreement shall be ten (10%) percent of the aggregate amount paid by such Investor for its respective Registrable Securities pursuant to the Securities Purchase Agreement. If the Company fails to pay any partial liquidated damages pursuant to this Section 5(a) in full within ten (10) calendar days after the date payable, the Company will be required to pay such liquidation damages in cash only and shall pay interest thereon at a rate of eighteen (18%) percent per annum (or such lesser maximum amount that is required to be paid by applicable law) to the Investor, accruing daily from the date such partial liquidated damages are due until such amounts, plus all such interest thereon, are paid in full; provided, however, that if the tenth calendar day after the date payable is not a Business Day then the payment shall be due on the next Business Day. The partial liquidated damages pursuant to the terms hereof shall apply on a daily pro-rata basis for any portion of a month prior to the cure of an Event.

(b) The Company shall notify each Holder and the Placement Agent by facsimile or e-mail as promptly as practicable, and in any event, within two (2) Trading Days, after a Registration Statement is declared effective and shall simultaneously provide the Investors with a copy of any related prospectus to be used in connection with the sale or other disposition of the Registrable Securities covered thereby. Failure to notify the Holders in accordance with this <u>Section 5(b)</u> shall be deemed an Event under <u>Section 5(a)</u>.

(c) No Investor shall be entitled to a payment pursuant to this <u>Section 5</u> if effectiveness of a Registration Statement has been delayed or a prospectus has been unavailable as a result of (i) a failure by such Investor to promptly provide on request by the Company the information required under the Securities Purchase Agreement or this Agreement or requested by the SEC as a condition to effectiveness of a Registration Statement; (ii) the provision of inaccurate or incomplete information by such Investor; or (iii) a statement or determination of the SEC that any provision of the rights of the Investor under this Agreement are contrary to the provisions of the Securities Act.

6. <u>OBLIGATIONS OF THE COMPANY</u>. In the event the Company files a Registration Statement with the SEC in connection with <u>Section 3</u> or <u>Section 4</u> hereof that covers the Registrable Securities and uses its commercially reasonable efforts to cause a Registration Statement to become effective, the Company shall, as expeditiously as reasonably possible:

(a) Prepare and file with the SEC such amendments and supplements to a Registration Statement and the prospectus used in connection therewith as may be necessary to comply with the provisions of the Securities Act with respect to the disposition of all Registrable Securities covered by a Registration Statement;

(b) Furnish to the selling Holders such number of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the Securities Act, and such other documents (including, without limitation, prospectus amendments and supplements as are prepared by the Company in accordance with <u>Section 6(a)</u> above) as the selling Holders may reasonably request in order to facilitate the disposition of such selling Holders' Registrable Securities;

(c) Use commercially reasonable efforts to comply with all applicable rules and regulations of the SEC under the Securities Act and the Exchange Act, including, without limitation, Rule 172 under the Securities Act, file any final prospectus, including any supplement or amendment thereof, with the SEC pursuant to Rule 424 under the Securities Act, promptly inform the Holders in writing if, at any time during a period of effectiveness, the Company does not satisfy the conditions specified in Rule 172 and, as a result thereof, the Holders are required to deliver a prospectus in connection with any disposition of Registrable Securities; notify the selling Holders of the happening of any event as a result of which the prospectus included in or relating to a Registration Statement contains an untrue statement of a material fact or omits any fact necessary to make the statements therein not misleading; and, thereafter, subject to Section 12 hereof, the Company will promptly prepare (and, when completed, give notice and provide a copy thereof to each selling Holder) a supplement or amendment to such prospectus so that such prospectus will not contain an untrue statement of a material fact or omit to state any fact necessary to make the statements therein not misleading; provided, however, that upon such notification by the Company (which shall be a Suspension pursuant to Section 12), the selling Holders will not offer or sell Registrable Securities until the Company has notified the selling Holders that it has prepared a supplement or amendment to such prospectus and filed it with the SEC or, if the Company does not then meet the conditions for the use of Rule 172, delivered copies of such supplement or amendment to the selling Holders (it being understood and agreed by the Company that the foregoing proviso shall in no way diminish or otherwise impair the Company's obligation to promptly prepare a prospectus amendment or supplement as above provided in this <u>Section 6(c)</u> and deliver copies of same as above provided

(d) Use its best efforts to register and qualify the Registrable Securities covered by a Registration Statement under such other securities or Blue Sky laws of such states as shall be reasonably appropriate in the opinion of the Company, <u>provided</u>, <u>however</u>, that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, and <u>provided further</u> that (notwithstanding anything in this Agreement to the contrary with respect to the bearing of expenses) if any jurisdiction in which any of such Registrable Securities shall be qualified shall require that expenses incurred in connection with the qualification therein of any such Registrable Securities be borne by the selling Holders, then the selling Holders shall, to the extent required by such jurisdiction, pay their pro rata share of such qualification expenses.

(e) Subject to the terms and conditions of this Agreement, including <u>Section 3</u> and <u>Section 4</u> hereof, the Company shall use its commercially reasonable efforts to (i) prevent the issuance of any stop order or other suspension of effectiveness of a Registration Statement, or the suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction in the United States, and (ii) if such an order or suspension is issued, obtain the withdrawal of such order or suspension at the earliest practicable moment and notify each holder of Registrable Securities of the issuance of such order and the resolution thereof or its receipt of notice of the initiation or threat of any proceeding such purpose.

(f) The Company shall (i) comply with all requirements of FINRA with regard to the issuance of the Registrable Securities and the listing thereof on the OTC Bulletin Board and such other securities exchange or automated quotation system, as applicable, and (ii) engage a transfer agent and registrar to maintain the Company's stock ledger for all Registrable Securities covered by a Registration Statement not later than the effective date of a Registration Statement.

(g) The Company will file a Registration Statement and all amendments and supplements thereto electronically on EDGAR.

7. OBLIGATIONS OF THE PLACEMENT AGENT AND THE HOLDERS.

(a) It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Agreement that the selling Holders shall furnish to the Company a completed Selling Stockholder Questionnaire in the form attached as <u>Exhibit B</u> hereto (the "<u>Selling Stockholder</u> <u>Questionnaire</u>") and such other information regarding them and the securities held by them as the Company shall reasonably request and as shall be required in order to effect any registration by the Company pursuant to this Agreement. The Company shall not be required to include the Registrable Securities of any Holder who fails to furnish to the Company a fully completed Selling Stockholder Questionnaire at least three (3) Trading Days prior to the Filing Deadline. Additionally, each Holder shall promptly notify the Company of any changes in the information furnished in the Selling Stockholder Questionnaire or otherwise to the Company.

(b) Each Holder agrees to cooperate with the Company as reasonably requested by the Company in connection with the filing of any Registration Statement hereunder, unless such Holder has notified the Company in writing that such Holder elects to exclude all of its Registrable Securities from such Registration Statement.

(c) Each Holder agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 6(c), each Holder shall immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement covering such Registrable Securities until such Holders receipt of the copies of the supplemented or amended prospectus contemplated by Section 6(c) or receipt of notice that no supplement or amendment is required.

(d) Each Holder covenants and agrees that it will comply with the prospectus delivery requirements of the Securities Act as applicable to it or an exemption therefrom in connection with sale of Registrable Securities pursuant to any Registration Statement.

(e) Each Holder and the Placement Agent who are members or affiliated or associated with members of FINRA will agree, if requested by FINRA, to sign a lock-up, the form of which shall be satisfactory to FINRA (the "**FINRA Lock-Up**"), with respect to the Warrant and Warrant Shares, in case of the Holders or, in the case of the Placement Agent, the warrant issued to the Placement Agent in connection with the transactions contemplated by the Securities Purchase Agreement (the "**Placement Agent Warrants**") and the shares of Common Stock issuable upon exercise thereof.

8. EXPENSES OF REGISTRATION.

(a) Except as set forth in <u>Section 6(d)</u>, all expenses incurred in connection with the registration of the Registrable Securities pursuant to this Agreement (excluding underwriting, brokerage and other selling commissions and discounts), including without limitation all registration and qualification and filing fees, printing, fees and disbursements of counsel for the Company and fees and expenses of one counsel to the Holders, which shall be Gusrae, Kaplan, Bruno & Nusbaum PLLC (not to exceed \$10,000), shall be borne by the Company; <u>provided</u>, <u>however</u>, other than as provided in this <u>Section 8(a)</u>, the Holders shall be required to pay the expenses of counsel and any other advisors for the Holders and any brokerage or other selling discounts or commissions and any other expenses incurred by the Holders for their own account. In addition, the Company shall also reimburse the Placement Agent for the fees and disbursements of its counsel in connection with its filings with FINRA Rule 2710 that are required with respect to the Placement Agent's participation in the public offering with respect to a Registration Statement.

(b) Until such time as all of the Registrable Securities have been sold pursuant to an effective Registration Statement, the Company shall take such reasonable action as the Holder may request (including, without limitation, promptly obtaining any required legal opinions from Company counsel necessary to effect the sale of the Registrable Securities under Rule 144 and paying the related fees and expenses of such counsel), all to the extent required from time to time to enable such Holder to sell the Registrable Securities without registration under the Securities Act pursuant to the provisions of Rule 144 under the Securities Act (or any successor provision). The Company further covenants to take such action and to provide such legal opinions within five (5) Business Days after receipt from such Holder (or its representative) of documentation reasonably required by the Company counsel to provide such opinion.

9. <u>DELAY OF REGISTRATION</u>. The Holders shall not take any action to restrain, enjoin or otherwise delay any registration as the result of any controversy which might arise with respect to the interpretation or implementation of this Agreement.

10. INDEMNIFICATION.

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and each officer and director of such selling Holder and each person, if any, who controls such selling Holder, within the meaning of the Securities Act, against any losses, claims, damages or liabilities, joint or several, to which they may become subject under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon (i) any untrue or alleged untrue statement of any material fact contained in a Registration Statement, in any preliminary prospectus or final prospectus relating thereto or in any amendments or supplements to a Registration Statement or any such preliminary prospectus or final prospectus, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; (ii) any blue sky application or other document executed by the Company specifically for that purpose or based upon written information furnished by the Company filed in any state or other jurisdiction in order to qualify any or all of the Registrable Securities under the securities laws thereof (any such application, document or information herein called a "Blue Sky Application"); (iii) the omission or alleged omission to state in a Blue Sky Application a material fact required to be stated therein or necessary to make the statements therein not misleading; (iv) any violation by the Company or its agents of any rule or regulation promulgated under the Securities Act applicable to the Company or its agents and relating to action or inaction required of the Company in connection with such registration of the Registrable Securities; or (v) any failure to register or qualify the Registrable Securities included in any such Registration Statement in any state where the Company or its agents has affirmatively undertaken or agreed in writing that the Company will undertake such registration or qualification on a Holder's behalf; and will reimburse such selling Holder, or such officer, director or controlling person for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the indemnity agreement contained in this Section 10(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld), nor shall the Company be liable in any such case for any such loss, damage, liability or action to the extent that it arises out of or is based upon (i) an untrue statement or alleged untrue statement or omission made in connection with a Registration Statement, any preliminary prospectus or final prospectus relating thereto or any amendments or supplements to a Registration Statement or any such preliminary prospectus or final prospectus, in reliance upon and in conformity with written information furnished expressly for use in connection with a Registration Statement or any such preliminary prospectus or final prospectus by the selling Holders or (ii) at any time when the Company has advised the Holder in writing that the Company does not meet the conditions for use of Rule 172 and as a result that the Holder is required to deliver a current prospectus in connection with any disposition of Registrable Securities, an untrue statement or alleged untrue statement or omission in a prospectus that is (whether preliminary or final) corrected in any subsequent amendment or supplement to such prospectus that was delivered to the selling Holder before the pertinent sale or sales by the selling Holder.

(b) To the extent permitted by law, each selling Holder will severally and not jointly indemnify and hold harmless the Company, each of its directors, each of its officers who have signed a Registration Statement, each person, if any, who controls the Company within the meaning of the Securities Act, against any losses, claims, damages or liabilities to which the Company or any such director, officer, controlling person, may become subject to, under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any untrue or alleged untrue statement of any material fact contained in a Registration Statement or any preliminary prospectus or final prospectus, relating thereto or in any amendments or supplements to a Registration Statement or any such preliminary prospectus or final prospectus, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent and only to the extent that such untrue statement or alleged untrue statement or omission or alleged omission (i) was made in a Registration Statement, in any preliminary prospectus or final prospectus relating thereto or in any amendments or supplements to a Registration Statement or any such preliminary prospectus or final prospectus, in reliance upon and in conformity with written information furnished by the selling Holder expressly for use in connection with a Registration Statement, or any preliminary prospectus or final prospectus or (ii) at any time when the Company has advised the Holder in writing that the Company does not meet the conditions for use of Rule 172 and as a result that the Holder is required to deliver a current prospectus in connection with any disposition of Registrable Securities, was corrected in any subsequent amendment or supplement to such prospectus that was delivered to the selling Holder before the pertinent sale or sales by the selling Holder; and such selling Holder will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person, or other selling Holder in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the liability of each selling Holder hereunder shall be limited to the net proceeds received by such selling Holder from the sale of Registrable Securities giving rise to such liability, and provided further, that the indemnity agreement contained in this Section 10(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of those selling Holder(s) against which the request for indemnity is being made (which consent shall not be unreasonably withheld).

(c) Promptly after receipt by an indemnified party under this Section 10 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 10, notify the indemnifying party in writing of the commencement thereof and the indemnifying party shall have the right to participate in and, to the extent the indemnifying party desires, jointly with any other indemnifying party similarly noticed, to assume at its expense the defense thereof with counsel satisfactory to the indemnifying party or indemnifying parties, but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to any indemnified party for contribution or otherwise under the indemnity agreement contained in this Section 10 (except to the extent that such omission materially and adversely affects the indemnifying person's ability to defend such action). In the event that the indemnifying party assumes any such defense, the indemnified party may participate in such defense with its own counsel and at its own expense, provided, however, if the defendants in any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded, based on an opinion of counsel reasonably satisfactory to the indemnifying party, that there may be a conflict of interest between the positions of the indemnifying party and the indemnified party in conducting the defense of any such action or that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, the indemnified party or parties shall have the right to select separate counsel to assume such legal defenses and to otherwise participate in the defense of such action on behalf of such indemnified party or parties. Upon receipt of notice from the indemnifying party to such indemnified party of its election to assume the defense of such action and approval by the indemnified party of counsel, the indemnifying party will not be liable to such indemnified party under this Section 10 for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof unless the indemnified party shall have employed such counsel in connection with the assumption of legal defenses in accordance with the proviso to the preceding sentence (it being understood, however, that the indemnifying party shall not be liable for the expenses of more than one separate counsel and one local counsel, reasonably satisfactory to such indemnifying party, representing all of the indemnified parties who are parties to such action in which case the reasonable fees and expenses of counsel shall be at the expense of the indemnifying party.

(d) Notwithstanding anything to the contrary herein, the indemnifying party shall not be entitled to settle any claim, suit or proceeding unless in connection with such settlement the indemnified party receives an unconditional release with respect to the subject matter of such claim, suit or proceeding and such settlement does not contain any admission of fault by the indemnified party.

(e) If the indemnification provided for in this Section 10 is unavailable to or insufficient to hold harmless an indemnified party under subsection (a) or (b) above in respect of any losses, claims, damages or liabilities (or actions or proceedings in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect the relative fault of the Company on the one hand and the Holders on the other in connection with the statements or omissions or other matters which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), as well as any other relevant equitable considerations. The relative fault shall be determined by reference to, among other things, in the case of an untrue statement, whether the untrue statement relates to information supplied by the Company on the one hand or a Holder on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such untrue statement. The Company and the Holders agree that it would not be just and equitable if contribution pursuant to this subsection (e) were determined by pro rata allocation (even if the Holders were treated as one entity for such purpose) or by any other method of allocation which does not take into account the equitable considerations referred to above in this subsection (e). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this subsection (e) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Holders' obligations in this subsection to contribute are several in proportion to their sales of Registrable Securities to which such loss relates and not joint. In no event shall the contribution obligation of a Holder be greater in amount than the dollar amount of the net proceeds (net of all expenses paid by such Holder in connection with any claim relating to this Section 10 and the amount of any damages such Holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission) received by it upon the sale of the Registrable Securities giving rise to such contribution obligation.

(f) The parties to this Agreement hereby acknowledge that they are sophisticated business persons who were represented by counsel during the negotiations regarding the provisions hereof including, without limitation, the provisions of this <u>Section 10</u>, and are fully informed regarding said provisions. They further acknowledge that the provisions of this <u>Section 10</u> fairly allocate the risks in light of the ability of the parties to investigate the Company and its business in order to assure that adequate disclosure is made in a Registration Statement as required by the Securities Act and the Exchange Act.

11. <u>REPORTS UNDER THE EXCHANGE ACT</u>. With a view to making available to the Holders the benefits of Rule 144 and any other rule or regulation of the SEC that may at any time permit the Holders to sell the Registrable Securities to the public without registration, the Company agrees: (i) to make and keep public information available as those terms are understood in Rule 144, (ii) to file with the SEC in a timely manner all reports and other documents required to be filed by an issuer of securities registered under the Securities Act or the Exchange Act pursuant to Rule 144, (iii) as long as any Holder owns any Registrable Securities, to furnish in writing upon such Holder's request a written statement by the Company that it has complied with the reporting requirements of Rule 144 and of the Securities Act and the Exchange Act, and to furnish to such Holder a copy of the most recent annual or quarterly report of the Company, and such other reports and documents so filed by the Company as may be reasonably requested in availing such Holder of any rule or regulation of the SEC permitting the selling of any such Registrable Securities without registration and (iv) undertake any additional actions reasonably necessary to maintain the availability of the use of Rule 144.

12. SUSPENSION. Notwithstanding anything in this Agreement to the contrary, in the event (i) of any non-voluntary demand on the Company by the SEC or any other federal or state governmental authority during the period of effectiveness of a Registration Statement for amendments or supplements to a Registration Statement or related prospectus or for additional information; (ii) of the issuance by the SEC or any other federal or state governmental authority of any stop order suspending the effectiveness of a Registration Statement or the initiation of any proceedings for that purpose; (iii) of the receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction or the initiation of any proceeding for such purpose; or (iv) of any event or circumstance which requires to comply with applicable law the making of any changes in a Registration Statement or related prospectus, or any document incorporated or deemed to be incorporated therein by reference, so that, in the case of a Registration Statement, it will not contain any untrue statement of a material fact or any omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and that in the case of the prospectus, it will not contain any untrue statement of a material fact or any omission to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, then the Company shall furnish to the selling Holders a certificate signed by the President or Chief Executive Officer of the Company setting forth in detail the facts relating to one or more of the above described circumstances, and the right of the selling Holders to use a Registration Statement (and the prospectus relating thereto) shall be suspended for a period (the "Suspension Period") of not more than ten (10) days after delivery by the Company of the certificate referred to above in this Section 12. During the Suspension Period, none of the Holders shall offer or sell any Registrable Securities pursuant to or in reliance upon a Registration Statement (or the prospectus relating thereto). The Company shall use its best efforts to terminate any Suspension Period as promptly as practicable.

13. <u>TRANSFER OF REGISTRATION RIGHTS</u>. A Holder shall have the right and may transfer or assign, at any time and from time to time, in whole or in part, to one or more Persons its rights hereunder in connection with the transfer of the Registrable Securities by such Holder to such person, provided that (a) such Holder complies with all laws applicable thereto, (b) the Company is furnished with written notice of the name and address of such transferee or assignee and the Registrable Securities to which such registration rights are being transferred, (c) at or before the time the Company received the written notice contemplated by clause (b) of this sentence the transferee or assignee agrees in writing (i) that it is an "accredited investor" as that term is defined in Rule 501 of Regulation D, (ii) to be bound by, all of the terms and conditions of, this Agreement by duly executing and delivering to the Company an Instrument of Adherence in the form attached as <u>Exhibit C</u> hereto and (iii) agree to deliver the FINRA Lock-Up if so requested by FINRA.

14. <u>ENTIRE AGREEMENT</u>. This Agreement, the Warrants, the Placement Agency Agreement, the Securities Purchase Agreement and other documents relating to the Offering (and all exhibits and supplements to such documents) constitute and contain the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersede any and all prior negotiations, correspondence, agreements or understandings with respect to the subject matter hereof.

15. MISCELLANEOUS.

(a) This Agreement may not be amended, modified or terminated, and no rights or provisions may be waived, except with the written consent of the Company and the holders of a majority of the Registrable Securities issued and outstanding or issuable upon exercise of the Warrants; <u>provided</u>, <u>that</u>, no consent shall be required in order to add additional Investors as parties hereto in accordance with the Offering.

(b) This Agreement shall be governed by and construed and enforced solely and exclusively in accordance with the internal laws of the State of New York and without regard to any conflicts of laws principles thereof, and shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, personal representatives, permitted transferees, successors or assigns. This Agreement shall also be binding upon and inure to the benefit of the Registrable Securities.

(c) Each of the parties hereto irrevocably and expressly submits to the exclusive and sole jurisdiction of the courts of the State of New York located in New York County and the United States District Court for the Southern District of New York for the purpose of any suit, action, proceeding or judgment relating to or arising out of this Agreement and the transactions contemplated hereby. Service of process in connection with any such suit, action or proceeding may be served on each party hereto anywhere in the world by the same methods as are specified for the giving of notices under this Agreement. Each of the parties hereto irrevocably consents to the jurisdiction of any such court in any such suit, action or proceeding and to the laying of venue in such court. Each party hereto irrevocably waives any objection to the laying of venue of any such suit, action or proceeding brought in such courts and irrevocably waives any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum. **EACH OF THE PARTIES HERETO WAIVES ANY RIGHT TO REQUEST A TRIAL BY JURY IN ANY LITIGATION WITH RESPECT TO THIS AGREEMENT AND REPRESENTS THAT COUNSEL HAS BEEN CONSULTED SPECIFICALLY AS TO THIS WAIVER.**

(d) Any notices, reports or other correspondence (hereinafter collectively referred to as "correspondence") required or permitted to be given hereunder shall be in writing and shall be sent by postage prepaid first class mail, courier or telecopy or delivered by hand to the party to whom such correspondence is required or permitted to be given hereunder, and shall be deemed sufficient upon receipt when delivered personally or by courier, overnight delivery service or confirmed facsimile, or three (3) business days after being deposited in the regular mail as certified or registered mail (airmail if sent internationally) with postage prepaid, if such notice is addressed to the party to be notified at such party's address or facsimile number as set forth below:

(i) All correspondence to the Company shall be addressed as follows:

Manhattan Pharmaceuticals, Inc. 48 Wall Street, Suite 1100 New York, New York 10005 Attention: Douglas Abel Chief Executive Officer Facsimile: (212) 582-3957

with a copy to:

Lowenstein Sandler PC 65 Livingston Avenue Roseland, New Jersey 07068 Attention: Anthony Pergola, Esq. Facsimile: (973) 597-2445

(ii) All correspondence to any Investor shall be sent to such Investor at the address set forth in the Investor Counterpart Signature Page to the Securities Purchase Agreement.

(iii) Any entity may change the address to which correspondence to it is to be addressed by written notification as provided for herein.

(e) The parties acknowledge and agree that in the event of any breach of this Agreement, remedies at law may be inadequate, and each of the parties hereto shall be entitled to seek specific performance of the obligations of the other parties hereto and such appropriate injunctive relief as may be granted by a court of competent jurisdiction.

(f) Should any part or provision of this Agreement be held unenforceable or in conflict with the applicable laws or regulations of any jurisdiction, the invalid or unenforceable part or provisions shall be replaced with a provision which accomplishes, to the extent possible, the original business purpose of such part or provision in a valid and enforceable manner, and the remainder of this Agreement shall remain binding upon the parties hereto.

(g) This Agreement may be executed in a number of counterparts, any of which together shall for all purposes constitute one Agreement, binding on all the parties hereto notwithstanding that all such parties have not signed the same counterpart.

[Signature Page to Follow]

IN WITNESS WHEREOF, the parties hereto have executed this Registration Rights Agreement as of the date and year first above written.

MANHATTAN PHARMACEUTICALS, INC.

| By: | /s Michael McGuinness |
|-----|-------------------------|
| | Michael McGuinness |
| | Chief Financial Officer |
| | |
| [1] | |
| | |
| By: | |
| - | |

THE INVESTOR'S SIGNATURE TO THE SECURITES PURCHASE AGREEMENT DATED OF EVEN DATE HEREWITH SHALL CONSTITUTE THE INVESTOR'S SIGNATURE TO THIS REGISTRATION RIGHTS AGREEMENT.

Signature Page to Registration Rights Agreement

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EXHIBIT A

INVESTOR LIST

| Neel | В. | Ackerman | and | Martha | N. | Ackerman |
|--------|----|----------|-----|--------|----|----------|
| I ICCI | ъ. | renerman | unu | munu | T | renerman |

Stephen M. Burnich Revocable Trust u/a 10/08/04

Ennio De Pianto

Matthew Ernst

John M. Goodman Living Trust

Leon Kanner & Rosemary E. Kanner

Richard Kindt

Douglas E. Pritchett

Jerome A. Shinkay

Michael J. Spezia

George D. Wilson & Diane J. Wilson

Joseph L. Jerger

David & Nancy Pudelsky

James R. Buck

John O. Dunkin

NFS/FMTC SEP IRA FBO Jay Jennings

Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser

Nasser Family Trust

James R. Kahn & Debra A. Kahn, JTWROS

Carolyn N. Taylor & A. Starke Taylor, Jr.

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| Mark Vollmer |
|---|
| Robert J. Guercio |
| Ralph Hanby |
| Robert E. Jacobson & Saralee Jacobson, JTWROS |
| Michael Cushing |
| Raymond Yarusi, Jr. |
| James Orr |
| Vernon L. Simpson |
| Michael H. Yokoyama & Jaye S. Venuti Family Trust |
| Frederick Peet |
| Ronald Rasmussen |
| Lewis R. Jacobson |
| Mark B. Ginsburg |
| Gregory J. Dovolis |
| William S. Silver |
| Praful Desai |
| Thomas Gemellaro |
| Howard M. Tanning Rollover IRA |
| |

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<u>EXHIBIT B</u>

Selling Stockholder Questionnaire

EXHIBIT C

Instrument of Adherence

Reference is hereby made to that certain Registration Rights Agreement, dated as of November 19, 2008, among Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "<u>Company</u>"), the Investors and the Investor Permitted Transferees, as amended and in effect from time to time (the "<u>Registration</u> <u>Rights Agreement</u>"). Capitalized terms used herein without definition shall have the respective meanings ascribed thereto in the Registration Rights Agreement.

The undersigned, in order to become the owner or holder of [_____] shares of common stock, par value \$0.001 per share of the Company (the "<u>Common Stock</u>"), or a Warrant or Warrants to purchase [_____] Warrant Shares, hereby agrees that, from and after the date hereof, the undersigned has become a party to the Registration Rights Agreement in the capacity of an Investor Permitted Transferee, and is entitled to all of the benefits under, and is subject to all of the obligations, restrictions and limitations set forth in, the Registration Rights Agreement that are applicable to Investor Permitted Transferees. This Instrument of Adherence shall take effect and shall become a part of the Registration Rights Agreement immediately upon execution.

Executed as of the date set forth below under the laws of the State of New York.

| | Signature: |
|-----------|------------|
| | Name: |
| | Title: |
| Accepted: | |
| [] | |
| By: | |
| Name: | |
| Title: | |
| Date:, 20 | |
| | C-1 |

SECURITY AGREEMENT

THIS SECURITY AGREEMENT (the "<u>Security Agreement</u>") is dated as of November 19, 2008 by and among Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "<u>Company</u>" or the "<u>Debtor</u>") and each of the persons named on <u>Exhibit A-1</u> and <u>Exhibit A-2</u> of the SPA (as hereinafter defined) (each a "<u>Secured Party</u>" and, collectively, the "<u>Secured Parties</u>").

WITNESSETH

WHEREAS, pursuant to the Securities Purchase Agreement of even date herewith, as may be amended or supplemented from time to time (the "<u>SPA</u>"), the Debtor is selling to the Secured Parties up to \$3,500,000 aggregate principal amount of units (the "<u>Units</u>"), each Unit consisting of (i) a \$5,000 aggregate principal amount senior secured promissory note (each a "<u>Note</u>," and, collectively, the "<u>Notes</u>") of the Company and (ii) a warrant (the "<u>Warrants</u>") to purchase up to 166,667 shares of the Company's common stock, par value \$0.001 per share (the "<u>Common Stock</u>"); and

WHEREAS, Debtor has agreed, pursuant to the terms and conditions of the SPA, to secure the repayment of the Notes, as more specifically provided herein;

NOW, THEREFORE, in consideration of the foregoing, Debtor and the Secured Parties agree as follows:

SECTION 1. Definitions.

1.1 Certain Defined Terms. The following terms, as used herein, have the meanings set forth below:

"Accounts" means all "accounts" (as defined in the UCC) now owned or hereafter created or acquired by Debtor including all of the following now owned or hereafter created or acquired by Debtor: (a) accounts receivable, contracts, contract rights, book debts, notes, drafts and other obligations or indebtedness owing to Debtor arising from the sale, lease or exchange of goods or other property or the performance of services; (b) Debtor's rights in, to and under all purchase orders for goods, services or other property; (c) Debtor's rights to any goods, services or other property represented by any of the foregoing (including returned or repossessed goods and unpaid sellers' rights of rescission, repletion, reclamation and rights to stoppage in transit); (d) monies due to or to become due to Debtor under all contracts for the sale, lease or exchange of goods or other property or the performance of services (whether or not yet earned by performance on the part of Debtor); and (e) Proceeds of any of the foregoing and all collateral security and guaranties of any kind given by any Person with respect to any of the foregoing.

"<u>Collateral</u>" has the meaning assigned to that term in <u>Section 2</u>.

"Collateral Agent" has the meaning assigned to that term in Section 10.

"<u>Computer Software</u>" or "<u>Software</u>" means a computer program and any supporting information provided in connection with a transaction relating to the program.

"Contracts" means all contracts and agreements (as defined in the UCC).

"<u>Debtor</u>" has the meaning assigned to that term in the introduction to this Security Agreement.

"Default Agreement" means the Default Agreement by and among the Company, the Collateral Agent and the persons listed on Schedule A thereto.

"Documents" means all "documents" (as defined in the UCC) or other receipts covering, evidencing or representing goods now owned or hereafter acquired by Debtor.

"Equipment" means all "equipment" (as defined in the UCC) now owned or hereafter acquired by Debtor including all machinery, motor vehicles, trucks, trailers, vessels, aircraft and rolling stock and all parts thereof and all additions and accessions thereto and replacements therefor.

"Event of Default" has the meaning assigned to that term in Section 8(a).

"Fixtures" means all of the following now owned or hereafter acquired by Debtor: plant fixtures; business fixtures; other fixtures and storage office facilities, wherever located; and all additions and accessions thereto and replacements therefor.

"<u>General Intangibles</u>" means all "general intangibles" (as defined in the UCC) now owned or hereafter acquired by Debtor including all right, title and interest of Debtor in and to: (a) all Software of the Debtor, including all source code and object code thereto; (b) all agreements, leases, licenses and contracts to which Debtor is or may become a party; (c) all obligations or indebtedness owing to Debtor (other than Accounts) from whatever source arising; (d) all tax refunds; (e) intellectual property; and (f) all trade secrets and other confidential information of the Debtor relating to the business of Debtor.

"Instruments" means all "instruments" "chattel paper" or "letters of credit" (each as defined in the UCC) including promissory notes, drafts, bills of exchange and trade acceptances, now owned or hereafter acquired by Debtor.

"<u>Inventory</u>" means all "inventory" (as defined in the UCC), now owned or hereafter acquired by Debtor, wherever located including finished goods, raw materials, work in process and other materials and supplies (including packaging and shipping materials) used or consumed in the manufacture or production thereof and goods which are returned to or repossessed by Debtor.

"Note" has the meaning assigned to that term in the introduction to this Security Agreement.

"<u>Partnership Agreement</u>" means the Limited Partnership Agreement between Nordic Biotech Venture Fund II K/S, the Company and Hedrin Pharmaceuticals General Partner ApS regarding Hedrin Pharmaceuticals K/S.

"Placement Agent" means [1].

"<u>Proceeds</u>" means all proceeds of, and all other profits, rentals or receipts, in whatever form, arising from the collection, sale, lease, exchange, assignment, licensing or other disposition of, or realization upon, any Collateral including all claims of Debtor against third parties for loss of, damage to or destruction of, or for proceeds payable under, or unearned premiums with respect to, policies of insurance with respect to any Collateral, and any condemnation or requisition payments with respect to any Collateral, in each case whether now existing or hereafter arising.

"Required Lenders" means Secured Parties holding a majority of the then outstanding principal amount of the Notes.

"Secured Obligations" has the meaning assigned to that term in Section 3.

"Security Agreement" means this Security Agreement as it may be amended, supplemented or otherwise modified from time to time.

"<u>Security Interests</u>" means the security interest granted pursuant to <u>Section 2</u>, as well as all other security interests created or assigned as additional security for the Secured Obligations pursuant to the provisions of this Security Agreement.

"Shareholders' Agreement" means the Shareholders' Agreement between Nordic Biotech Venture Fund II K/S and the Company.

"<u>UCC</u>" means the Uniform Commercial Code as in effect on the date hereof in the State of New York, as amended from time to time, and any successor statute; <u>provided</u> that if by reason of mandatory provisions of law, the perfection or the effect of perfection or non-perfection of the Security Interest in any Collateral is governed by the Uniform Commercial Code as in effect on or after the date hereof in any other jurisdiction, "UCC" shall also mean the Uniform Commercial Code as in effect in such other jurisdiction for purposes of the provision hereof relating to such perfection or effect of perfection or non-perfection.

1.2 Other Definition Provisions. References to "Sections" "subsections," "Exhibits" and "Schedules" shall be to Sections, subsections, Exhibits and Schedules, respectively, of this Security Agreement unless otherwise specifically provided. References to the words "including," "includes" and "include" shall be deemed to be followed by the words "without limitation;" and the term "or" has, except where otherwise indicated, the inclusive meaning represented by the phrase "and/or." Any of the terms defined in subsection 1.1 may, unless the context otherwise requires, be used in the singular or the plural depending on the reference. All references to statutes and related regulations shall include any amendments of same and any successor statutes and regulations.

SECTION 2. Grant of Security Interest.

In order to secure the payment and performance of the Secured Obligations in accordance with the terms thereof, except as otherwise specifically provided in this Security Agreement, the Debtor hereby grants to the Secured Parties a continuing first priority security interest and lien in and to all right, title and interest of Debtor in the following property, whether now owned or existing or hereafter acquired or arising and regardless of where located (all being collectively referred to as the "<u>Collateral</u>").

- (a) Accounts;
- (b) Inventory;
- (c) Computer Software;
- (d) General Intangibles;
- (e) Documents;
- (f) Instruments;
- (g) Equipment;
- (h) Fixtures;
- (i) Contracts;
- (j) All deposit accounts of Debtor maintained with any bank or financial institution;

(k) All books, records, ledger cards, files, correspondence, computer programs, tapes, disks and related data processing software that at any time evidence or contain information relating to any of the property described in <u>subparts (a) - (j)</u> above or are otherwise necessary or helpful in the collection thereof or realization thereon;

- (l) any and all other assets of the Debtor, whether currently held or hereafter acquired; and
- (m) Proceeds of all or any of the property described in <u>subparts (a) (l)</u> above.

Notwithstanding anything herein to the contrary, neither the term "Collateral" nor any other defined term used herein (including "Instruments," "Documents" or "General Intangibles") shall include, and no security interest is created or granted hereunder in, Debtor's interest in (1) Debtor's joint venture with Nordic Biotech Venture Fund K/S, created pursuant to a Joint Venture Agreement, dated as of January 31, 2008, as amended (the "Joint Venture Agreement"), including, without limitation, (i) Debtor's limited partnership interest in Hedrin Pharmaceuticals K/S, a Danish limited partnership (the "Partnership") and Debtor's shares of the Partnership and (ii) Debtor's interest in Hedrin Pharmaceuticals General Partner ApS and its shares therein, or in any of the agreements relating thereto, including, without limitation, the Joint Venture Agreement and the Partnership Agreement and Shareholders' Agreement referred to therein (2) the rent deposit held by Metropolitan 810 7th Avenue LLC pursuant to a lease for office space, (3) a refund of a prepayment in the amount of \$10,000 from Dow Pharmaceutical Sciences, Inc. or (4) Debtor's tax refund for the 2007 tax year from the State of New York and City of New York.

Notwithstanding Debtor's grant of a security interest as set forth above, so long as no Event of Default has occurred and is continuing, Debtor shall have the exclusive, non-transferable right and license to use the Collateral and the exclusive right to sell, transfer, convey, rent, lease, and grant to third parties licenses and sublicenses with respect to the Collateral, provided that any such sale, transfer, conveyance, rental, lease, license or sublicense is effected in the Debtor's ordinary course of business. In the event that the Debtor sells any of its inventory in the ordinary course of business, such shall be transferred without any liens under the terms of this Security Agreement. The parties acknowledge and agree that any security interest granted by Debtor to the Secured Parties with respect to the Debtor's rights under any franchise, license or similar agreements are granted in accordance with Section 9-408 of Revised Article 9 of the Uniform Commercial Code as in effect in the State of New York and are subject to all limitations on enforcement and other restrictions imposed on the Secured Parties by Section 9-408 of Revised Article 9 of the Uniform Commercial Code are void and deemed unless those limitations or restrictions are explicitly waived in writing by all parties to the affected agreement.

SECTION 3. <u>Security for Obligations</u>.

This Security Agreement secures the payment and performance of all obligations of Debtor to the Secured Parties with respect to the Notes, including any and all accrued (and accruing) but unpaid interest on all such indebtedness (all such debts, obligations and liabilities of Debtor being collectively called the "Secured Obligations").

SECTION 4. <u>Debtor Remains Liable</u>.

Anything herein to the contrary notwithstanding: (a) Debtor shall remain liable under the contracts and agreements included in the Collateral to the extent set forth therein to perform all of its duties and obligations thereunder to the same extent as if this Security Agreement had not been executed; (b) the exercise by the Secured Parties of any of the rights hereunder shall not release Debtor from any of its duties or obligations under the contracts and agreements included in the Collateral; and (c) the Secured Parties shall not have any obligation or liability under the contracts and agreements included in the Collateral by reason of this Security Agreement, nor shall the Secured Parties be obligated to perform any of the obligations or duties of Debtor thereunder or to take any action to collect or enforce any claim for payment assigned hereunder.

SECTION 5. <u>Representations and Warranties</u>. Debtor represents and warrants as follows:

5.1. <u>Binding Obligation; Authorization</u>. This Security Agreement and the Notes are legally valid and binding obligations of Debtor, enforceable against it in accordance with their terms, except as limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally. The execution, delivery and performance of this Security Agreement and the Notes by the Debtor has been duly approved by the Board of Directors of the Debtor and all other actions required to authorize and effect the granting of the Security Interests and the issuance of the Notes have been duly taken and approved by the Debtor.

5.2. Location of Equipment and Inventory. All of the Equipment and Inventory is located at the places specified on <u>Schedule I</u>.

5.3. <u>Ownership of Collateral</u>. Debtor owns the Collateral free and clear of any liens, security interests, charges or other encumbrances (collectively, "Liens"). No financing statement or other form of Lien notice covering all or any part of the Collateral is on file in any recording office, except for those in favor of the Secured Parties.

5.4. <u>Office Locations; Fictitious Names</u>. The chief place of business, the chief executive office and the office where Debtor keeps its books and records are located at the places specified on <u>Schedule I</u>.

5.5. **Deposit and Security Accounts**. Set forth on **Schedule II** hereto are all of Debtor's deposit accounts maintained with any bank or financial intermediary including, with respect to each such account, the names and addresses and telephone numbers of such banks or financial intermediaries, the names in which the accounts are held, a description of the purpose of the account and the respective account numbers.

5.6. **Perfection.** This Security Agreement creates a valid security interest in the Collateral, securing the payment of the Secured Obligations. Upon the filing of the appropriate financing statements on Form UCC-1, this Security Agreement shall create a perfected security interest in all items of Collateral for which the security interest created by this Security Agreement may be perfected by filing a Form UCC-1 under the UCC. All filings and other actions necessary or desirable to perfect and protect such security interest will be taken immediately by the Debtor as provided in <u>Section 6.1</u> or as may be requested by the Collateral Agent; <u>provided</u>, nothing herein constitutes a representation as to actions that must be taken, if any, to perfect a security interest in any item of Equipment, the ownership of which is evidenced by a certificate of title.

5.7. <u>Governmental Authorizations</u>. No authorization, approval or other action by, and no notice to or filing with, any governmental authority or regulatory body is required either (a) for the grant by Debtor of the Security Interests granted hereby or for the execution, delivery or performance of this Security Agreement and/or the Notes by Debtor or (b) for the perfection of or the exercise by the Secured Parties of their rights and remedies hereunder except (i) for the filing under the Code of financing statements on Form UCC-1, (ii) for the filing in the United States Patent and Trademark Office of (1) patent collateral assignments and (2) the trademark security agreements with respect to Debtor's patents and trademarks (and applications therefore) and (iii) as may be required in connection with the sale of any Collateral by laws affecting the offering and sale of securities generally.

5.8. <u>Accurate Information</u>. All information heretofore, herein or hereafter supplied to the Secured Parties by or on behalf of Debtor with respect to the Collateral is and will be accurate and complete in all material respects.

SECTION 6. <u>Further Assurances; Covenants</u>.

6.1. Other Documents and Actions. Debtor will, from time to time, at its expense, immediately execute and deliver all further instruments and documents and take all further action that may be necessary or desirable, or that the Collateral Agent may reasonably request, in order to perfect and protect any security interest granted or purported to be granted hereby or to enable the Secured Parties to exercise and enforce their rights and remedies hereunder with respect to any Collateral. Without limiting the generality of the foregoing, Debtor will: (a) on the date of the First Closing (as defined in the SPA), execute and file such financing statements on Form UCC-1 and such other instruments or notices as may be necessary or desirable in order to perfect to be granted hereby; (b) immediately upon request of the Collateral Agent, execute and file such other financing statements or notices, as may be necessary or desirable, or as the Collateral Agent may request, in order to perfect and preserve the security interests granted or purported to be granted hereby (in such jurisdictions and with such officers as the Collateral Agent may request); (b) upon demand by the Collateral Agent exhibit the Collateral to allow inspection of the Collateral by the Collateral Agent or persons designated by the Collateral Agent; and (c) upon the Collateral Agents' request, appear in and defend any action or proceeding that may affect Debtor's title to or the Secured Parties' security interest in the Collateral.

6.2. <u>Business Locations</u>. Debtor will keep the Collateral at the locations specified on <u>Schedule I</u> & <u>Schedule II</u> hereto.

6.3. Insurance. At its sole expense, the Debtor shall insure the Collateral at all times for the full insurable value thereof against casualty and theft and against such other risks, in such form and with such insurers, as may be satisfactory to the Collateral Agent from time to time. In addition, each such policy shall (i) name the Secured Parties as mortgagees and loss payees as their interest may appear and name the Secured Parties as additional insureds relating to liability risks, (ii) provide that no act of omission or commission or misrepresentation or breach of warranty by the Debtor shall affect the Secured Parties' rights thereunder, (iii) provide that the Secured Parties shall not be liable for any premiums or other amounts and (iv) upon the agreement of the insurer, at the Debtor's request, provide that the insurer shall give the Collateral Agent, on behalf of the Secured Parties not less than twenty (20) days' prior written notice of cancellation or lapse. If the Debtor shall fail at any time to maintain such insurance, the Required Lenders may direct the Collateral Agent to obtain such insurance coverage, at the cost of the Required Lenders and the Debtor agrees to reimburse the Required Lenders therefor on demand with interest thereon at the rate specified in the Notes. The Debtor shall notify the Collateral Agent, on behalf of the Secured Parties promptly if any loss or casualty relating to the Collateral occurs.

6.4. <u>Taxes and Claims</u>. Debtor will pay promptly when due all property and other taxes, assessments and governmental charges or levies imposed upon, and all claims against, the Collateral (including claims for labor, materials and supplies), except to the extent the validity thereof is being contested in good faith.

6.5. <u>Use of Collateral</u>. Debtor will not use or permit any Collateral to be used unlawfully or in violation of any provision of this Security Agreement or any applicable statute, regulation or ordinance or any policy of insurance covering any of the Collateral.

6.6. <u>Condition of Collateral</u>. The Debtor shall maintain the Collateral in good condition and operate the Collateral with reasonable care and caution and the Debtor hereby indemnifies and holds the Secured Parties harmless from any and all loss, damage and liability suffered, incurred or asserted by or against the Secured Parties as a result of the use and operation of the Collateral.

6.7. <u>Records Relating to Collateral</u>. The Debtor will keep its records concerning the Collateral at its address designated on <u>Schedule I</u> hereof or at such other place or places of which the Secured Parties shall have been notified in writing upon no less than ten (10) days' advance written notice. The Debtor (a) will hold and preserve such records and will permit representatives of the Secured Parties at any time during normal business hours without disrupting the Debtor's business to examine, inspect and to make abstracts from such records and (b) will furnish to the Secured Parties such information and reports regarding the Collateral as the Secured Parties may from time to time request.

6.8. <u>Other Information</u>. Debtor will, promptly upon request of the Secured Parties, provide to the Secured Parties all information and evidence they may reasonably request concerning the Collateral, and in particular the Accounts, to enable the Secured Parties to enforce the provisions of this Security Agreement.

SECTION 7. <u>Transfers and Other Liens</u>.

- (a)
- Except in the ordinary course of business, Debtor shall not:

Collateral; or

(i) Sell, assign (by operation of law or otherwise) or otherwise dispose of, or grant any option with respect to, any of the

(ii) Create or suffer to exist any Liens with respect to any of the Collateral to secure indebtedness of any Person except for (1) the Security Interests created by this Security Agreement, (2) any Liens and/or security interests existing prior to the date of this Security Agreement; (3) any security interests that are junior and subordinate to the Security Interests created by this Security Agreement, and (4) any purchase money security interests required in connection with Debtor's purchase or lease of Equipment.

(b) In the event that Debtor sells at least \$1,000,000 of Units but less than \$2,000,000 of Units, Debtor shall not: (i) other than pursuant to the Default Agreement, and subject to the Joint Venture Agreement, Partnership Agreement and Shareholders' Agreement, sell, assign (by operation of law or otherwise) or otherwise dispose of, or grant any option with respect to (1) the Joint Venture Agreement, (2) Debtor's limited partnership interest in the Partnership or (3) Debtor's shares of the Partnership or (4) Debtor's interest in Hedrin Pharmaceuticals General Partner ApS (collectively, the "Joint Venture Assets") or (ii) create or suffer to exist any Liens with respect to any of the Joint Venture Assets; except that Debtor shall be permitted to sell, assign (by operation of law or otherwise) or otherwise dispose of, or grant any option with respect to the percentage of the Joint Venture Assets determined by subtracting (x) the quotient obtained by dividing the dollar amount of Units sold by \$2,000,000, from (y) one (1).

⁸

(c) In the event that Debtor sells at least \$2,000,000 of Units, Debtor shall not: (i) other than pursuant to the Default Agreement, and subject to the Joint Venture Agreement, Partnership Agreement and Shareholders' Agreement, sell, assign (by operation of law or otherwise) or otherwise dispose of, or grant any option with respect to the Joint Venture Assets or (ii) create or suffer to exist any Liens with respect to any of the Joint Venture Assets.

SECTION 8. Events of Default; Remedies

(a)

Notes.

An "Event of Default" under this Security Agreement shall mean any Event of Default as that term is defined in the

notes.

An <u>Event of Default</u> under this Security Agreement shall mean any Event of Default as that term is defined in the

If any Event of Default shall have occurred and be continuing, the Collateral Agent, on behalf of all Secured Parties, may (b)exercise in respect of the Collateral, in addition to all other rights and remedies provided for herein or otherwise available to them, all the right and remedies of a secured party on default under the UCC (whether or not the UCC applies to the affected Collateral) and also may: (a) require Debtor to, and Debtor hereby agrees that it will, at its expense and upon request of the Collateral Agent, assemble all or part of the Collateral as directed by the Collateral Agent and make it available to the Collateral Agent, on behalf of all Secured Parties, at a place to be designated by the Collateral Agent which is reasonably convenient to the Debtor; (b) without notice or demand or legal process, enter upon any premises of Debtor and take possession of the Collateral; and (c) without notice except as specified below, sell the Collateral or any part thereof in one or more parcels at public or private sale, at such time or times, for cash, on credit or for future delivery, and at such price or prices and upon such other terms as the Collateral Agent may deem commercially reasonable. Debtor agrees that, to the extent notice of sale shall be required by law, at least two (2) days' notice to Debtor of the time and place of any public sale or the time after which any private sale is to be made shall constitute reasonable notification. At any sale of the Collateral, if permitted by law, the Collateral Agent, on behalf of all Secured Parties, may bid (which bid may be, in whole or in part, in the form of cancellation of indebtedness) for the purchase of the Collateral or any portion thereof for the account of the Secured Parties. The Secured Parties shall not be obligated to make any sale of Collateral regardless of notice of sale having been given. The Collateral Agent, on behalf of all Secured Parties, may adjourn any public or private sale from time to time by announcement at the time and place fixed therefor, and such sale may, without further notice, be made at the time and place to which it was so adjourned. To the extent permitted by law, Debtor hereby specifically waives all rights of redemption, stay or appraisal which it has or may have under any law now existing or hereafter enacted. All cash proceeds received by the Secured Parties resulting from the disposition of or collection from the Collateral may be held by the Secured Parties as collateral for the Secured Obligations and/or then or at any time thereafter applied in payment of all or any of the Secured Obligations in such order as the Collateral Agent, on behalf of all Secured Parties, shall elect. The balance of such cash proceeds held by the Secured Parties and remaining after payment in full of the Secured Obligations shall be paid over to the Debtor or to the person who may be lawfully entitled to such balance. The remedies provided in this Security Agreement are cumulative and not exclusive of any other remedies provided by law including, without limitation, any rights of setoff available to the Secured Parties.

SECTION 9. Limitation on Duty of the Secured Parties with Respect to Collateral.

Beyond the safe custody thereof, the Secured Parties shall have no duty with respect to any Collateral in their possession or control (or in the possession or control of the Secured Parties or bailee) or with respect to any income thereon or the preservation of rights against prior parties or any other rights pertaining thereto. The Secured Parties shall be deemed to have exercised reasonable care in the custody and preservation of the Collateral in their possession if the Collateral is accorded treatment substantially equal to that which they accord their own property. The Secured Parties shall not be liable or responsible for any loss or damage to any of the Collateral, or for any diminution in the value thereof, by reason of the act or omission of any warehouseman, carrier, forwarding agency, consignee or other agent or bailee selected by the Collateral Agent, on behalf of the Secured Parties, in good faith.

SECTION 10. <u>Appointment of Collateral Agent for Secured Parties</u>

(a) Each of the Secured Parties hereby agrees that at any time and from time to time, the Placement Agent shall have the right, but not the obligation, to appoint a collateral agent (the "<u>Collateral Agent</u>") to act for and on behalf of all Secured Parties as collateral agent under this Security Agreement and the Default Agreement. If the Placement Agent has not appointed a Collateral Agent within ten (10) business days after the occurrence of an Event of Default, then the Secured Party holding the largest principal amount outstanding of Notes (the "<u>Largest Holder</u>") shall have ten (10) business days to appoint a Collateral Agent. If the Largest Holder has not appointed a Collateral Agent within such ten (10) business days to a Collateral Agent. If the Largest Holder has not appointed a Collateral Agent within such ten (10) business days to a Collateral Agent. In the event that the Next Largest Holder has not appointed a Collateral Agent within such ten (10) business day period, then the Required Lenders may appoint a Collateral Agent.

(b) <u>Failure to Appoint a Collateral Agent</u>. In the event that a Collateral Agent has not been appointed, as required herein, then references to the Collateral Agent in this Security Agreement shall be deemed to mean the Required Lenders and the Required Lenders shall have the right to take all actions which the Collateral Agent is entitled to take.

(c) <u>Notice of Appointment</u>. Upon the appointment of a Collateral Agent pursuant hereto, the party appointing such Collateral Agent shall provide written notice to each of the Secured Parties, the Company and the Placement Agent of the appointment of the Collateral Agent and the terms pursuant to which such Collateral Agent has agreed to serve as Collateral Agent.

(d) <u>Exculpation</u>. Notwithstanding anything to the contrary provided herein or elsewhere, each of the Secured Parties and the Company hereby expressly acknowledge and agree that neither the Placement Agent nor any Collateral Agent shall be liable for any action taken, suffered or omitted by it in connection with, arising out of and/or pursuant to the Security Agreement or Default Agreement, except for actions determined by a court of competent jurisdiction following the exhaustion of all appeals that such action was directly based upon the Placement Agent's or Collateral Agent's own bad faith or willful misconduct.

(e) Indemnification. The Company and each Secured Party jointly and severally agree to indemnify and hold harmless to the fullest extent permitted by law, the Placement Agent and any Collateral Agent, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind or nature whatsoever that may be imposed on, incurred by, or asserted against Placement Agent and/or any Collateral Agent in connection therewith; provided, that no Secured Party shall be liable for any portion of such liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursement Agent's and/or any Collateral Agent in connection therewith; provided, that no Secured Party shall be liable for any portion of such liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements resulting from Placement Agent's and/or any Collateral Agent's own bad faith willful misconduct.

SECTION 11. Collateral Agent Appointed Attorney-In-Fact.

Debtor hereby irrevocably appoints the Collateral Agent, if and when a Collateral Agent is appointed (and if not appointed, the Required Lenders), as Debtor's attorney-in-fact, with full authority in the place and stead of Debtor and in the name of Debtor to take any action and to execute any instrument that the Collateral Agent may deem necessary and/or advisable under this Security Agreement and the Default Agreement, as applicable, as follows:

(a)

to obtain and adjust insurance required to be paid to the Secured Parties if Debtor has not done so in the ordinary course of its

business;

(b) to ask, demand, collect, sue for, recover, compound, receive and give receipts for moneys due and to become due under or in respect of any of the Collateral upon the occurrence of an Event of Default;

(c) to receive, endorse, and collect any drafts or other instruments, documents and chattel paper, in connection with clauses (a) and (b) above upon the occurrence of an Event of Default;

(d) to file any claims or take any action or institute any proceedings that the Secured Parties may deem necessary or desirable for the collection of any of the Collateral or otherwise to enforce the rights of the Secured Parties with respect to any of the Collateral if Debtor has not done so in the ordinary course of its business;

(e) to pay or discharge taxes or liens, levied or placed upon or threatened against the Collateral, the legality or validity thereof and the amounts necessary to discharge the same to be determined by the Collateral Agent in its sole discretion, and such payments made by the Secured Parties to become obligations of Debtor to the Secured Parties, due and payable immediately without demand if Debtor has not done so in the ordinary course of its business;

(f) to sign and endorse any invoices, freight or express bills, bills of lading, storage or warehouse receipts, assignments, verifications and notices in connection with Accounts and other documents relating to the Collateral upon the occurrence of an Event of Default;

(g) generally to sell, transfer, pledge, make any agreement with respect to or otherwise deal with any of the Collateral as fully and completely as though the Secured Parties were the absolute owner thereof for all purposes, and to do, at the Collateral Agent's option and Debtor's expense, at any time or from time to time, all acts and things that the Collateral Agent's deem necessary to protect, preserve or realize on the Collateral upon the occurrence of an Event of Default; and

(h) to accomplish the purposes of this Security Agreement if Debtor has not done so in the ordinary course of its business.

Neither the Secured Parties nor any person designated by the Secured Parties shall be liable for any acts or omissions or for any error of judgment or mistake of fact or law. This power, being coupled with an interest, is irrevocable so long as this Security Agreement shall remain in force.

SECTION 12. Expenses.

Debtor shall pay all insurance expenses and all expenses of protecting, storing, warehousing, appraising, insuring, handling, maintaining and shipping the Collateral, all costs, fees and expenses of perfecting, and maintaining the Security Interest, any and all excise, property, sales and use taxes imposed by any state, federal or local authority on any of the Collateral, or with respect to periodic appraisals and inspections of the Collateral, or with respect to the sale or other disposition thereof. If Debtor fails to promptly pay any portion of the above expenses when due or to perform any other obligation of Debtor under this Security Agreement, the Secured Parties may, at the option of the Required Lenders, but shall not be required to, pay or perform the same and charge Debtor's account for all costs and expenses incurred therefor, and Debtor agrees to reimburse the Secured Parties therefor on demand. All sums so paid or incurred by the Secured Parties (at the option of the Required Lenders) for any of the foregoing, any and all other sums for which Debtor may become liable hereunder and all costs and expenses (including reasonable and documented attorneys' fees, legal expenses and court costs) incurred by the Secured Parties in enforcing or protecting the Secured Dobligations and shall be secured by the Collateral.

SECTION 13. Termination of Security Interests; Release of Collateral.

Upon payment in full of all Secured Obligations, including the aggregate principal amount of the Notes, including all Interest (as defined in the Notes), the Security Interests shall immediately terminate and all rights to the Collateral shall revert to Debtor automatically and without the need for further action to be taken on the part of the Debtor or the Secured Parties. Upon such termination of the Security Interests or release of any Collateral, the Secured Parties will, at the expense of Debtor, execute and deliver to Debtor such documents as Debtor shall reasonably request to evidence the termination of the Security Interests or the release of such Collateral, as the case may be; provided that, any such documents may be executed and delivered by the Collateral Agent on behalf of all the Secured Parties.

<u>Notices</u>.

All notices, requests, demands and other communications provided for hereunder shall be in writing and directed to the applicable party at the addresses set forth below, as to each party, at such other address as shall be designated by such party in a written notice to the other parties complying as to delivery with the terms of this <u>Section 14</u>:

The Company:

Manhattan Pharmaceuticals, Inc. 48 Wall Street, Suite 1100 New York, NY 10005 Facsimile: (212) 582-3957 Attention: Doug Abel Chief Executive Officer

With a copy to:

Lowenstein Sandler PC 65 Livingston Avenue Roseland, NJ 07068-1791 Facsimile: (973) 597-2445 Attention: Anthony Pergola, Esq.

The Secured Parties:

As per the contact information provided on the signature page hereof.

All such notices, requests, demands and other communication shall be deemed given upon the earlier to occur of (i) the third (3rd) day following deposit thereof with the United States Postal Service for mailing via certified or registered mail, return receipt requested, or (ii) the actual receipt by the party to whom such notice is directed.

SECTION 15. Waivers, Non-Exclusive Remedies.

No failure on the part of the Secured Parties to exercise, and no delay in exercising and no course of dealing with respect to, any right under the Notes or this Security Agreement shall operate as a waiver thereof; nor shall any single or partial exercise by the Secured Parties of any right under the Notes or this Security Agreement preclude any other or further exercise thereof or the exercise of any other right. The rights in this Security Agreement and/or the Notes are cumulative and are not exclusive of any other remedies provided by law.

SECTION 16. Successors and Assigns.

This Security Agreement is for the benefit of the Secured Parties and each of their respective successors and assigns, and in no event shall the Debtor without the prior express written consent of the Collateral Agent, on behalf of all Secured Parties, assign all or any portion of the Secured Obligations, the rights hereunder, or the Notes. This Security Agreement shall be binding on Debtor and its successors and all permitted assigns.

SECTION 17. <u>Severability.</u>

If any provisions hereof are invalid or unenforceable in any jurisdiction, the other provisions hereof shall remain in full force and effect in such jurisdiction and shall be liberally construed in favor of the Secured Parties.

SECTION 18. Changes in Writing.

None of the terms or provisions of this Security Agreement may be waived, amended, supplemented or otherwise modified except by a written instrument executed by the Debtor, the Collateral Agent and the Required Lenders (which waiver, amendment, supplement or modification shall be binding on all Secured Parties).

SECTION 19. <u>Governing Law; Venue; Waiver Of Jury Trial</u>.

This Security Agreement shall be governed by and construed exclusively in accordance with the internal laws of the State of New York without regard to the conflicts of laws principles thereof. The parties hereto hereby expressly and irrevocably agree that any suit or proceeding arising directly and/or indirectly pursuant to, arising out of or under this Security Agreement, shall be brought solely and exclusively in a federal or state court located in the City, County and State of New York. By their execution hereof, the parties hereby expressly covenant and irrevocably submit to the <u>in personam</u> jurisdiction of the federal and state courts located in the City, County and State of New York and agree that any process in any such action may be served upon any of them personally, or by certified mail or registered mail upon them or their agent, return receipt requested, with the same full force and effect as if personally served upon them in New York City. The parties hereto expressly and irrevocably waive any claim that any such jurisdiction is not a convenient forum for any such suit or proceeding and any defense or lack of <u>in personam</u> jurisdiction with respect thereto. In the event of any such action or proceeding (including, but not limited to, any motions made), the party prevailing therein shall be entitled to payment from the other party hereto of its reasonable counsel fees and disbursements. The Company and the Secured Parties hereby waive all rights to a trial by jury.

SECTION 20. Distr

Distributions.

Unless otherwise specifically provided herein, whenever the Secured Parties are entitled to the distribution of monies, Collateral or any other property, pursuant to the terms of this Security Agreement, such monies, Collateral and/or other property shall be distributed to the Secured Parties, on a prorata basis, based on the outstanding principal amounts under the Notes.

SECTION 21.

<u>Headings</u>.

Section and subsection headings in this Security Agreement are included herein for convenience of reference only and shall not constitute a part of this Security Agreement for any other purpose or be given any substantive effect.

Signature Page Follows

DEBTOR:

MANHATTAN PHARMACEUTICALS, INC.

By: /s/ Michael McGuinness

Name: Michael McGuinness

Title: Chief Financial Officer

SECURED PARTIES:

The Secured Parties executing the Signature Page in the form attached hereto as $\underline{Annex A}$ and delivering the same to the Company or its agents shall be deemed to have executed this Security Agreement and agreed to the terms hereof.

ANNEX A

Investor Counterpart Signature Page

The undersigned, desiring to enter into this Security Agreement dated as of November 19, 2008 (the "**Security Agreement**"), between the undersigned, Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), and the other parties thereto, in or substantially in the form furnished to the undersigned, hereby agrees that execution by the Investor of this Investor Counterpart Signature Page shall constitute an agreement to join the Security Agreement as a party thereto, with all the rights and privileges appertaining thereto, and to be bound in all respects by the terms and conditions of the Security Agreement.

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|--|---|
| Print Name of Entity: | Print Name: Neel B. Ackerman |
| Signature: | Signature: /s/ Neel B. Ackerman |
| Date: | Date: October 27, 2008 |
| Print Name: | Co-Investor Print Name: Martha N. Ackerman |
| Title: | Co-Investor Signature: /s/ Martha N. Ackerman |
| | Date: October 27, 2008 |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: Stephen M. Burnich Revocable Trust u/a 10/08/04 | Print Name: |
| Signature: /s/ Stephen M. Burnich | Signature: |
| Date: October 29, 2008 | Date: |
| Print Name: Stephen M. Burnich | Co-Investor Print Name: |
| Title:Trustee | Co-Investor Signature: |
| | Date: |
| | |

| IF AN ENT | TITY: | | IF AN INDIVIDUAL: |
|--------------------------------|---|----------------|-------------------|
| Print Name of Entity: | | Print Name: E | Ennio De Pianto |
| Signature: | | Signature: /s/ | Ennio De Pianto |
| Date: | | Date: | October 29, 2008 |
| Print Name: | | Co-Investor P | rint Name: |
| Title: | | Co-Investor S | ignature: |
| | | Date: | |
| IF AN ENT | TTY: | | IF AN INDIVIDUAL: |
| Print Name of Entity: | | Print Name: N | Aatthew Ernst |
| Signature: | | Signature: /s/ | Matthew Ernst |
| Date: | | Date: | October 29, 2008 |
| Print Name: | | Co-Investor P | rint Name: |
| Title: | | Co-Investor S | ignature: |
| | | Date: | |
| IF AN ENT | TTY: | | IF AN INDIVIDUAL: |
| Print Name of Entity: | John M. Goodman Living Trust | Print Name: | |
| Signature: /s/ John M. Goodman | L. C. | Signature: | |
| Date: November 4, 2008 | | Date: | |
| Print Name: John M. Goodman | | Co-Investor P | rint Name: |
| Title: Trustee | | Co-Investor S | ignature: |
| | | Date: | |
| | | | |

| Print Name of Entity: | Print Name: Leon | Kanner | |
|-----------------------|-------------------|--------------------------|---------------------|
| Signature: | Signature: | /s/ Leon Kanner | |
| Date: | Date: October 29, | 2008 | |
| Print Name: | Co-Investor Print | Name: | Rosemary Kanner |
| Title: | Co-Investor Signa | ature: | /s/ Rosemary Kanner |
| | Date: October 29, | 2008 | |
| IF AN ENTITY: | | IF AN INDIVID | UAL: |
| Print Name of Entity: | Print Name: Richa | ard Kindt | |
| Signature: | Signature: | /s/ Ricahrd Kindt | |
| Date: | Date: October 29, | 2008 | |
| Print Name: | Co-Investor Print | Name: | |
| Title: | Co-Investor Signa | ature: | |
| | Date: | | |
| IF AN ENTITY: | | IF AN INDIVID | UAL: |
| Print Name of Entity: | Print Name: Doug | glas E. Pritchett | |
| Signature: | Signature: | /s/ Douglas E. Pritchett | |
| Date: | Date: October 31, | 2008 | |
| Print Name: | Co-Investor Print | Name: | |
| Title: | Co-Investor Signa | ature: | |
| | Date: | | |
| | | | |

| Print Name of Entity: | Print Name: Jerome A. Shinkay |
|-----------------------|--|
| Signature: | Signature: /s/ Jerome A. Shinkay |
| Date: | Date: October 31, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Michael J. Spezia |
| Signature: | Signature: /s/ Michael J. Spezia |
| Date: | Date: November 3, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: George D. Wilson |
| Signature: | Signature: /s/ George D. Wilson |
| Date: | Date: October 27, 2008 |
| Print Name: | Co-Investor Print Name: Diane J. Wilson |
| Title: | Co-Investor Signature: /s/ Diane J. Wilson |
| | Date: October 27, 2008 |
| | |

| Print Name of Entity: | Print Name: Josep | bh L. Jerger | |
|-----------------------|-------------------|----------------------|--------------------|
| Signature: | Signature: | /s/ Joseph L. Jerger | |
| Date: | Date: November 6 | 5, 2008 | |
| Print Name: | Co-Investor Print | Name: | |
| Title: | Co-Investor Signa | ature: | |
| | Date: | | |
| IF AN ENTITY: | | IF AN INDIVID | UAL: |
| Print Name of Entity: | Print Name: Davi | d Pudelsky | |
| Signature: | Signature: | /s/ David Pudelsky | |
| Date: | Date: N | ovember 6, 2008 | |
| Print Name: | Co-Investor Print | Name: | Nancy Pudelsky |
| Title: | Co-Investor Signa | ature: | /s/ Nancy Pudelsky |
| | Date: November 6 | 5, 2008 | |
| IF AN ENTITY: | | IF AN INDIVID | UAL: |
| Print Name of Entity: | Print Name: Jame | s R. Buck | |
| Signature: | Signature: | /s/ James R. Buck | |
| Date: | Date: November 6 | 5, 2008 | |
| Print Name: | Co-Investor Print | Name: | |
| Title: | Co-Investor Signa | ature: | |
| | Date: | | |
| | | | |

| Print Name of Entity: | Print Name: John O. Dunkin |
|---|-------------------------------|
| Signature: | Signature: /s/ John O. Dunkin |
| Date: | Date: November 4, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: NFS/FMTC SEP IRA FBO Jay Jennings | Print Name: |
| Signature: /s/ Jay Jennings | Signature: |
| Date: October 29, 2008 | Date: |
| Print Name: Jay Jennings | Co-Investor Print Name: |
| Title: IRA Owner | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser | Print Name: |
| Signature: /s/ William K. Nasser, Jr. | Signature: |
| Date: November 4, 2008 | Date: |
| Print Name: William K. Nasser, Jr. | Co-Investor Print Name: |
| Title: Attorney-in-fact | Co-Investor Signature: |
| | Date: |

| Print Name of Ent | ity: Nasser Family Trust | Print Name: | |
|--------------------|--------------------------|-------------------------------|--------------------|
| Signature: | /s/ William K. Nasser | Signature: | |
| Date: Novemb | er 4, 2008 | Date: | |
| Print Name: Willia | am K. Nasser | Co-Investor Print Name: | |
| Title: Trustee | | Co-Investor Signature: | |
| | | Date: | |
| | IF AN ENTITY: | IF A | AN INDIVIDUAL: |
| Print Name of Ent | ity: | Print Name: James R. Kahn | |
| Signature: | | Signature: /s/ James | R. Kahn |
| Date: | | Date: November 12, 2008 | |
| Print Name: | | Co-Investor Print Name: | Debra A. Kahn |
| Title: | | Co-Investor Signature: | /s/ Debra A. Kahn |
| | | Date: November 12, 2008 | |
| | IF AN ENTITY: | IF A | AN INDIVIDUAL: |
| Print Name of Ent | ity: | Print Name: A. Starke Taylor, | , Jr. |
| Signature: | | Signature: /s/ A. Star | rke Taylor, Jr. |
| Date: | | Date: October 7, 2008 | |
| Print Name: | | Co-Investor Print Name: Caro | olyn Taylor |
| Title: | | Co-Investor Signature: | /s/ Carolyn Taylor |
| | | Date: October 7, 2008 | |
| | | | |

| Print Name of Entity: | Print Name: Mark Vollmer |
|-----------------------|----------------------------------|
| Signature: | Signature: /s/ Mark Vollmer |
| Date: | Date: November 11, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Robert J. Guercio |
| Signature: | Signature: /s/ Robert J. Guercio |
| Date: | Date: November 6, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Ralph Hanby |
| Signature: | Signature: /s/ Ralph Hanby |
| Date: | Date: November 13, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| | |

| Print Name of Entity: | Print Name: Rober | rt E. Jacobson | |
|-----------------------|-------------------|-------------------------|----------------------|
| Signature: | Signature: | /s/ Robert E. Jacobson | |
| Date: | Date: November 1 | 0, 2008 | |
| Print Name: | Co-Investor Print | Name: | Saralee Jacobson |
| Title: | Co-Investor Signa | ture: | /s/ Saralee Jacobson |
| | Date: November 1 | 0, 2008 | |
| IF AN ENTITY: | | IF AN INDIVIDU | VAL: |
| Print Name of Entity: | Print Name: Micha | ael Cushing | |
| Signature: | Signature: | /s/ Michael Cushing | |
| Date: | Date: November 1 | 3, 2008 | |
| Print Name: | Co-Investor Print | Name: | |
| Title: | Co-Investor Signa | ture: | |
| | Date: | | |
| IF AN ENTITY: | | IF AN INDIVIDU | JAL: |
| Print Name of Entity: | Print Name: Raym | ond Yarusi, Jr. | |
| Signature: | Signature: | /s/ Raymond Yarusi, Jr. | |
| Date: | Date: November 1 | 2, 2008 | |
| Print Name: | Co-Investor Print | Name: | |
| Title: | Co-Investor Signa | ture: | |
| | Date: | | |
| | | | |

| Print Name of Entity: | Print Name: James C. Orr |
|--|----------------------------------|
| Signature: | Signature: /s/ James C. Orr |
| Date: | Date: November 9, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Vernon L. Simpson |
| Signature: | Signature: /s/ Vernon L. Simpson |
| Date: | Date: November 17, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: Michael Yokoyama & Jaye Ventui Family Trust | Print Name: |
| Signature: /s/ Michael Yokoyama & /s/ Jaye Venuti | Signature: |
| Date: November 12, 2008 | Date: |
| Print Name: Michael Yokoyama & Jaye Ventui | Co-Investor Print Name: |
| Title: Co-Trustees | Co-Investor Signature: |
| | Date: |

| Print Name of Entity: | Print Name: Frederick Peet |
|-----------------------|----------------------------------|
| Signature: | Signature: /s/ Frederick Peet |
| Date: | Date: November 7, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Ronald Rasmussen |
| Signature: | Signature: /s/ Ronald Rasmussen |
| Date: | Date: November 12, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Lewis R. Jacobson |
| Signature: | Signature: /s/ Lewis R. Jacobson |
| Date: | Date: November 17, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| | |

| Print Name of Entity: | Print Name: Mark B. Ginsburg | |
|-----------------------|----------------------------------|--|
| Signature: | Signature: /s/ Mark B. Ginsburg | |
| Date: | Date: November 18, 2008 | |
| Print Name: | Co-Investor Print Name: | |
| Title: | Co-Investor Signature: | |
| | Date: | |
| IF AN ENTITY: | IF AN INDIVIDUAL: | |
| Print Name of Entity: | Print Name: Gregory Dovolis | |
| Signature: | Signature: /s/ Greogory Dovolis | |
| Date: | Date: November 3, 2008 | |
| Print Name: | Co-Investor Print Name: | |
| Title: | Co-Investor Signature: | |
| | Date: | |
| IF AN ENTITY: | IF AN INDIVIDUAL: | |
| Print Name of Entity: | Print Name: William S. Silver | |
| Signature: | Signature: /s/ William S. Silver | |
| Date: | Date: November 5, 2008 | |
| Print Name: | Co-Investor Print Name: | |
| Title: | Co-Investor Signature: | |
| | Date: | |
| | | |

| Print Name of Entity: | Print Name: Praful Desai | |
|---|---------------------------------|--|
| Signature: | Signature: /s/ Praful Desai | |
| Date: | Date: November 5, 2008 | |
| Print Name: | Co-Investor Print Name: | |
| Title: | Co-Investor Signature: | |
| | Date: | |
| IF AN ENTITY: | IF AN INDIVIDUAL: | |
| Print Name of Entity: | Print Name: Thomas Gemellaro | |
| Signature: | Signature: /s/ Thomas Gemellaro | |
| Date: | Date: November 13, 2008 | |
| Print Name: | Co-Investor Print Name: | |
| Title: | Co-Investor Signature: | |
| | Date: | |
| IF AN ENTITY: | IF AN INDIVIDUAL: | |
| Print Name of Entity: Howard M. Tanning Rollover IRA | Print Name: | |
| Signature: /s/ Howard M. Tanning | Signature: | |
| Date: November 3, 2008 | Date: | |
| Print Name: Howard M. Tanning | Co-Investor Print Name: | |
| Title: IRA Owner | Co-Investor Signature: | |
| | Date: | |

SCHEDULE I TO SECURITY AGREEMENT

Locations of Equipment, Inventory, Books and Records, Chief Executive Office

Locations of Equipment and Inventory:

48 Wall Street New York, New York 10005

Location of Books and Records and Chief Executive Office:

48 Wall Street New York, New York 10005

SCHEDULE II TO SECURITY AGREEMENT

Deposit Accounts

| Name, Address and Telephone Number | Account Name | Description | Account Number |
|---|---------------------------------|-------------|----------------|
| Chase 45 Wall Street New York, New York 10005 | Manhattan Pharmaceuticals, Inc. | Checking | 904 807 479 |
| Signature Bank 261 Madison Avenue, New York, New York 10016 | Manhattan Pharmaceuticals, Inc. | Deposit | 1501126434 |

DEFAULT AGREEMENT

Default Agreement, dated as of November 19, 2008, by and among Manhattan Pharmaceuticals, Inc. (the "<u>Company</u>"), a Delaware corporation, with a principal address at 48 Wall Street, Suite 1100, New York, New York 10005, and the persons and entities listed on <u>Schedule A</u> hereto (individually, a "<u>Lender</u>" and, collectively, the "<u>Lenders</u>").

WHEREAS, the Company holds 500 shares (the "Shares") of Hedrin Pharmaceuticals K/S, a Danish limited partnership (the "Partnership");

WHEREAS, the Lenders are the holders of the Company's 12% Senior Secured Notes (the "Notes") in the principal amounts set forth opposite their names on Schedule A hereto;

WHEREAS, in connection with the issuance and sale of the Notes, the Company has entered into a Security Agreement, dated as of November 19, 2008 (the "Security Agreement"), with the Lenders, pursuant to which the Company has granted to the Lenders a security interest in all of the Company's assets, other than the Shares;

WHEREAS, the Company wishes to provide, as additional security for its Secured Obligations (as defined in the Security Agreement) under the Notes, for the sale of the Shares to the extent necessary to generate proceeds for the payment of amounts due under the Notes in the event of an Event of Default (as defined in the Notes) under the Notes, and

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and to induce the Lenders to make the loans under the Notes, the Company hereby agrees with the Lenders as follows:

1. <u>Defined Terms</u>. Capitalized terms used herein and not otherwise defined herein shall have the respective meanings ascribed thereto in the Security Agreement.

2. <u>Rights Upon an Event of Default</u>.

(a) Pursuant to and in accordance with the Security Agreement, the Collateral Agent, if and when so appointed (and if not appointed, the Required Lenders) shall act for and on behalf of the Lenders as Collateral Agent under this Default Agreement and has been appointed the Company's attorney in fact, with full authority in the place and stead of the Company and in the name of the Company to take any and all action including, but not limited to, executing any and all instruments that the Collateral Agent may deem necessary and/or advisable under this Default Agreement, as applicable, to enforce Lenders' rights hereunder.

(b) Upon an Event of Default, the Collateral Agent shall have the right, subject to <u>Section 3</u> below, with respect to the Shares to give the Company a written notice (the "<u>Sale Notice</u>") that all or a portion (as necessary) of the Shares must be immediately sold in order to generate proceeds to fulfill any and all Secured Obligations of the Company to the Lenders. The Sale Notice may be revoked at any time by written notice solely by the Collateral Agent and shall be rescinded and null and void if and at such time as there is no longer any outstanding uncured Event of Default.

(c) After receipt of the Sale Notice, the Company shall promptly use its commercially reasonable efforts to sell all or a portion (as necessary to pay the Secured Obligations) of the Shares to an unaffiliated third party (a "<u>Third Party Purchaser</u>") on an arms' length basis. The Company may undertake any reasonable process for selling the Shares and the Company shall not be required to retain any investment banker, finder, or other financial advisor in connection with the sale of the Shares. Any sale of Shares to a Third Party Purchaser shall be subject to the approval of the Board of Directors of the Company in the exercise of its fiduciary obligations under applicable law.

(d) To the extent that the Company is unsuccessful in entering into an agreement with a Third Party Purchaser with respect to a sale of the Shares within sixty (60) days of the Sale Notice, the Company shall on the sixty first (61st) day (or earlier) inform the Lenders in writing of such fact and, and the Placement Agent and/or the Required Lenders shall have the option of accepting Shares in fulfillment of the Secured Obligations, or requiring the Company to engage an investment banking firm, acceptable to either the Placement Agent or the Required Lenders, to complete the sale of Shares to a Third Party Purchaser. Any acceptance of Shares by the Lenders, or requirement to engage an investment banker, shall be made in writing by the Collateral Agent and shall be binding on all Lenders. The number of Shares to be transferred to the Lenders shall be determined by dividing the amount of the Secured Obligations to be paid by the fair market value of a Share. The fair market value of a Share shall be determined by a reputable investment banker (the "<u>Banker</u>"), unaffiliated with the Company or any of the Lenders, and chosen by the Board of Directors of the Company and reasonably acceptable to the Collateral Agent. The Company shall pay the fees and expenses of the Banker.

(e) In the event that (i) the value of all the Shares, together with the value of cash and other assets available to apply to the Secured Obligations is greater than the Secured Obligations and (ii) the Collateral Agent provides notice to the Company that the Lenders will accept Shares as partial fulfillment of the Secured Obligations, then to the extent that any of the Company's cash and other assets do not fulfill all of the Secured Obligations of the Company to the Lenders then the Company shall, transfer such number of Shares equal to the value of any remaining outstanding Secured Obligations to the Lenders as fulfillment of any remaining outstanding Secured Obligations of the Company. Any Shares, cash and other property transferred to the Lenders shall (unless otherwise agreed by the Company and all the Lenders) be allocated to the Lenders pro rata based on the amount of Secured Obligations owed to each such Lender so that, each Lender shall receive the same combination of Shares, cash and other property.

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3. <u>Joint Venture Agreements</u>.

(a) Reference is made to the Limited Partnership Agreement of the Partnership, dated February, 2008, as amended (the "<u>Partnership</u> <u>Agreement</u>"), and the Shareholders' Agreement, dated February 2008, as amended (the "<u>Shareholders' Agreement</u>") of Hedrin Pharmaceuticals General Partner ApS (the "<u>General Partner</u>"), among the holders of shares of the General Partner. It is acknowledged and agreed that, in accordance with the Shareholders' Agreement, any transfer of Shares must be accompanied by a transfer of a pro rata number of shares of the General Partner ("<u>General Partner</u>"). Any transfer of Shares hereunder and a corresponding transfer of General Partner Shares, including any sale to a Third Party Purchaser or transfer to the Lenders, shall be subject to compliance with the terms of the Partnership Agreement and the Shareholders' Agreement. Without limiting the foregoing, the Lenders acknowledge that (i) the Shares are subject to a right of first refusal in favor of the other limited partners of the Partnership as set forth in the Partnership Agreement, (ii) the other limited partners of the Partnership have certain tag-along rights ("<u>Tag-Along Rights</u>") with respect to transfers of the Shares as set forth in the Partnership Agreement and (iii) the Shareholders' Agreement contains certain restrictions on transfer of the General Partner Shares. In addition, under the Joint Venture Agreement, dated January 31, 2008, as amended, by and between the Company and Nordic Biotech Venture Fund II K/S ("<u>Nordic</u>"), Nordic has certain rights to sell its shares in the Partnership and the General Partner (the "<u>Put Rights</u>") to the Company.

(b) The Company shall have no liability hereunder to the extent that any sale or transfer of the Shares contemplated by this Agreement is not completed because of any action or inaction by the other limited partners of the Partnership or shareholders of the General Partner, including due to any exercise by Nordic of its Put Rights or Tag-Along Rights. In the event that any action or inaction by the other limited partners of the Partnership or shareholders' Agreement, as the case may be, the Company will use its reasonable commercial efforts to cause such parties to comply with the terms of the Partnership Agreement and/or the Shareholders' Agreement, as applicable. The Company may, in its sole discretion, cease all efforts to sell Shares (and General Partner Shares) to the Lenders hereunder, without any liability to the Lenders hereunder, if Nordic exercises any of its Put Rights or Tag-Along Rights.

(c) Nothing contained herein shall be deemed a transfer, attempted transfer, lien, pledge or other encumbrance on the Shares or the General Partner Shares. Nothing contained herein shall prevent, or require any Lender consent for, the Company's exercise of all rights and privileges of a shareholder of the Partnership or the General Partner with respect to the Shares and General Partner Shares, including any sale of the Shares or the General Partner Shares.

(d) In accordance with the Partnership Agreement, upon any transfer of the Shares and General Partner Shares to the Lenders, the Lenders shall execute and adhere to the Partnership Agreement and the Shareholders' Agreement. BY EXECUTING THIS AGREEMENT EACH LENDER AGREES THAT UPON EXECUTION OF THE PARTNERSHIP AGREEMENT AND THE SHAREHOLDERS' AGREEMENT BY THE COLLATERAL AGENT, SOLELY ON BEHALF OF THE LENDERS, EACH LENDER SHALL BE BOUND BY THE PARTNERSHIP AGREEMENT AND THE SHAREHOLDERS' AGREEMENT AS IF HE, SHE OR IT WERE A PARTY SIGNATORY THERETO.

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4. <u>Paragraph Headings</u>. The paragraph headings used in this Agreement are for convenience of reference only and are not to affect the construction hereof or be taken into consideration in the interpretation hereof.

5. <u>No Waiver; Cumulative Remedies</u>. The Lenders shall not by any act, delay, indulgence, omission or otherwise be deemed to have waived any right or remedy hereunder or to have acquiesced in any Event of Default or in any breach of any of the terms and conditions hereof. No failure to exercise, nor any delay in exercising, on the part of the Lenders, any right, power or privilege hereunder shall operate as a waiver thereof. No single or partial exercise of any right, power or privilege hereunder shall preclude any other or further exercise thereof or the exercise of any other right, power or privilege. A waiver by the Lenders of any right or remedy hereunder on any one occasion shall not be construed as a bar to any right or remedy which the Lenders would otherwise have on any future occasion. The rights and remedies herein provided are cumulative, may be exercised singly or concurrently and are not exclusive of any rights or remedies provided by law.

6. <u>Waivers and Amendments; Successors and Assigns</u>. None of the terms or provisions of this Agreement may be waived, amended, supplemented or otherwise modified except by a written instrument executed by the Company and the Collateral Agent. This Agreement shall be binding upon the successors and assigns of the Borrower; provided that any Third Party Purchaser of the Shares or the General Partner Shares shall not be bound by this Agreement, and, subject to the foregoing, shall inure to the benefit of the Lenders and their respective successors and assigns.

7. Notices. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given: (a) when personally delivered, (b) five (5) days after having been deposited in the United States mail, certified or registered, return receipt requested, postage prepaid, or (c) one (1) business day after having been dispatched by a nationally recognized overnight courier service, addressed to (i) in the case of the Company, at its addresse as set forth above and (ii) in the case of the Lenders, at the addresses set forth on <u>Schedule A</u> to this Agreement.

8. <u>Governing Law; Venue; Waiver Of Jury Trial</u>. This Agreement shall be governed by and construed exclusively in accordance with the internal laws of the State of New York without regard to the conflicts of laws principles thereof. The parties hereto hereby expressly and irrevocably agree that any suit or proceeding arising directly and/or indirectly pursuant to, arising out of or under this Agreement, shall be brought solely and exclusively in a federal or state court located in the City, County and State of New York. By their execution hereof, the parties hereby expressly covenant and irrevocably submit to the <u>in personam</u> jurisdiction of the federal and state courts located in the City, County and State of New York. By their execution hereof new York and agree that any process in any such action may be served upon any of them personally, or by certified mail or registered mail upon them or their agent, return receipt requested, with the same full force and effect as if personally served upon them in New York City. The parties hereto expressly and irrevocably waive any claim that any such jurisdiction is not a convenient forum for any such suit or proceeding and any defense or lack of <u>in personam</u> jurisdiction with respect thereto. In the event of any such action or proceeding (including, but not limited to, any motions made), the party prevailing therein shall be entitled to payment from the other party hereto of its reasonable counsel fees and disbursements. The Company and the Lenders hereby waive all rights to a trial by jury.

9. <u>Termination</u>. This Agreement shall terminate and be of no further force or effect at such time as the Company shall have fully satisfied its Secured Obligations or shall have disposed of all of the Shares.

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MANHATTAN PHARMACEUTICALS, INC.

By: /s/ Michael McGuinness

Name: Michael McGuinness Title: Chief Financial Officer

LENDERS:

The LENDERS executing the Signature Page in the form attached hereto as $\underline{\text{Annex } A}$ and delivering the same to the Company or its agents shall be deemed to have executed this Agreement and agreed to the terms hereof.

ANNEX A

Investor Counterpart Signature Page

The undersigned, desiring to enter into this Default Agreement dated as of November 19, 2008 (the "**Default Agreement**"), between the undersigned, Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), and the other parties thereto, in or substantially in the form furnished to the undersigned, hereby agrees that execution by the Investors of this Investor Counterpart Signature Page shall constitute an agreement to join the Security Agreement as a party thereto, with all the rights and privileges appertaining thereto, and to be bound in all respects by the terms and conditions of the Default Agreement.

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|--|---|
| Print Name of Entity: | Print Name: Neel B. Ackerman |
| Signature: | Signature: /s/ Neel B. Ackerman |
| Date: | Date: October 27, 2008 |
| Print Name: | Co-Investor Print Name: Martha N. Ackerman |
| Title: | Co-Investor Signature: /s/ Martha N. Ackerman |
| | Date: October 27, 2008 |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: Stephen M. Burnich Revocable Trust u/a 10/08/04 | Print Name: |
| Signature: /s/ Stephen M. Burnich | Signature: |
| Date: October 29, 2008 | Date: |
| Print Name: Stephen M. Burnich | Co-Investor Print Name: |
| Title: Trustee | Co-Investor Signature: |
| | Date: |
| | |

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|--|--------------------------------|
| Print Name of Entity: | Print Name: Ennio De Pianto |
| Signature: | Signature: /s/ Ennio De Pianto |
| Date: | Date: October 29, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Matthew Ernst |
| Signature: | Signature: /s/ Matthew Ernst |
| Date: | Date: October 29, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: John M. Goodman Living Trust | Print Name: |
| Signature: /s/ John M. Goodman | Signature: |
| Date: November 4, 2008 | Date: |
| Print Name: John M. Goodman | Co-Investor Print Name: |
| Title: Trustee | Co-Investor Signature: |
| | Date: |
| | |

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|--|
| Print Name of Entity: | Print Name: Leon Kanner |
| Signature: | Signature: /s/ Leon Kanner |
| Date: | Date: October 29, 2008 |
| Print Name: | Co-Investor Print Name: Rosemary Kanner |
| Title: | Co-Investor Signature: /s/ Rosemary Kanner |
| | Date: October 29, 2008 |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Richard Kindt |
| Signature: | Signature: /s/ Ricahrd Kindt |
| Date: | Date: October 29, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Douglas E. Pritchett |
| Signature: | Signature: /s/ Douglas E. Pritchett |
| Date: | Date: October 31, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| | |

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|--|
| Print Name of Entity: | Print Name: Jerome A. Shinkay |
| Signature: | Signature: /s/ Jerome A. Shinkay |
| Date: | Date: October 31, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Michael J. Spezia |
| Signature: | Signature: /s/ Michael J. Spezia |
| Date: | Date: November 3, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: George D. Wilson |
| Signature: | Signature: /s/ George D. Wilson |
| Date: | Date: October 27, 2008 |
| Print Name: | Co-Investor Print Name: Diane J. Wilson |
| Title: | Co-Investor Signature: /s/ Diane J. Wilson |
| | Date: October 27, 2008 |
| | |

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|---|
| Print Name of Entity: | Print Name: Joseph L. Jerger |
| Signature: | Signature: /s/ Joseph L. Jerger |
| Date: | Date: November 6, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: David Pudelsky |
| Signature: | Signature: /s/ David Pudelsky |
| Date: | Date: November 6, 2008 |
| Print Name: | Co-Investor Print Name: Nancy Pudelsky |
| Title: | Co-Investor Signature: /s/ Nancy Pudelsky |
| | Date: November 6, 2008 |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: James R. Buck |
| Signature: | Signature: /s/ James R. Buck |
| Date: | Date: November 6, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| | |

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|---|-------------------------------|
| Print Name of Entity: | Print Name: John O. Dunkin |
| Signature: | Signature: /s/ John O. Dunkin |
| Date: | Date: November 4, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: NFS/FMTC SEP IRA FBO Jay Jennings | Print Name: |
| Signature: /s/ Jay Jennings | Signature: |
| Date: October 29, 2008 | Date: |
| Print Name: Jay Jennings | Co-Investor Print Name: |
| Title: IRA Owner | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser | Print Name: |
| Signature: /s/ William K. Nasser, Jr. | Signature: |
| Date: November 4, 2008 | Date: |
| Print Name: William K. Nasser, Jr. | Co-Investor Print Name: |
| Title: Attorney-in-fact | Co-Investor Signature: |
| | Date: |
| | |

IF AN ENTITY:

IF AN INDIVIDUAL:

| Print Name of Entity: Nasser Family Trust | Print Name: |
|---|---|
| Signature: /s/ William K. Nasser | Signature: |
| Date: November 4, 2008 | Date: |
| Print Name: William K. Nasser | Co-Investor Print Name: |
| Title: Trustee | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: James R. Kahn |
| Signature: | Signature: /s/ James R. Kahn |
| Date: | Date: November 12, 2008 |
| Print Name: | Co-Investor Print Name: Debra A. Kahn |
| Title: | Co-Investor Signature: /s/ Debra A. Kahn |
| | Date: November 12, 2008 |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: A. Starke Taylor, Jr. |
| Signature: | Signature: /s/ A. Starke Taylor, Jr. |
| Date: | Date: October 7, 2008 |
| Print Name: | Co-Investor Print Name: Carolyn Taylor |
| Title: | Co-Investor Signature: /s/ Carolyn Taylor |
| | Date: October 7, 2008 |
| | |

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|----------------------------------|
| Print Name of Entity: | Print Name: Mark Vollmer |
| Signature: | Signature: /s/ Mark Vollmer |
| Date: | Date: November 11, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Robert J. Guercio |
| Signature: | Signature: /s/ Robert J. Guercio |
| Date: | Date: November 6, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Ralph Hanby |
| Signature: | Signature: /s/ Ralph Hanby |
| Date: | Date: November 13, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| | |

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|---|
| Print Name of Entity: | Print Name: Robert E. Jacobson |
| Signature: | Signature: /s/ Robert E. Jacobson |
| Date: | Date: November 10, 2008 |
| Print Name: | Co-Investor Print Name: Saralee Jacobson |
| Title: | Co-Investor Signature: /s/ Saralee Jacobson |
| | Date: November 10, 2008 |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Michael Cushing |
| Signature: | Signature: /s/ Michael Cushing |
| Date: | Date: November 13, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Raymond Yarusi, Jr. |
| Signature: | Signature: /s/ Raymond Yarusi, Jr. |
| Date: | Date: November 12, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| | |

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|--|----------------------------------|
| Print Name of Entity: | Print Name: James C. Orr |
| Signature: | Signature: /s/ James C. Orr |
| Date: | Date: November 9, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Vernon L. Simpson |
| Signature: | Signature: /s/ Vernon L. Simpson |
| Date: | Date: November 17, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: Michael Yokoyama & Jaye Ventui Family Trust | Print Name: |
| Signature: /s/ Michael Yokoyama & /s/ Jaye Venuti | Signature: |
| Date: November 12, 2008 | Date: |

Co-Investor Print Name:

Co-Investor Signature:

Date:

Print Name: Michael Yokoyama & Jaye Ventui

Title: Co-Trustees

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|----------------------------------|
| Print Name of Entity: | Print Name: Frederick Peet |
| Signature: | Signature: /s/ Frederick Peet |
| Date: | Date: November 7, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Ronald Rasmussen |
| Signature: | Signature: /s/ Ronald Rasmussen |
| Date: | Date: November 12, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Lewis R. Jacobson |
| Signature: | Signature: /s/ Lewis R. Jacobson |
| Date: | Date: November 17, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| | |

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|-----------------------|----------------------------------|
| Print Name of Entity: | Print Name: Mark B. Ginsburg |
| Signature: | Signature: /s/ Mark B. Ginsburg |
| Date: | Date: November 18, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Gregory Dovolis |
| Signature: | Signature: /s/ Greogory Dovolis |
| Date: | Date: November 3, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: William S. Silver |
| Signature: | Signature: /s/ William S. Silver |
| Date: | Date: November 5, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| | |

| IF AN ENTITY: | IF AN INDIVIDUAL: |
|---|---------------------------------|
| Print Name of Entity: | Print Name: Praful Desai |
| Signature: | Signature: /s/ Praful Desai |
| Date: | Date: November 5, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: | Print Name: Thomas Gemellaro |
| Signature: | Signature: /s/ Thomas Gemellaro |
| Date: | Date: November 13, 2008 |
| Print Name: | Co-Investor Print Name: |
| Title: | Co-Investor Signature: |
| | Date: |
| IF AN ENTITY: | IF AN INDIVIDUAL: |
| Print Name of Entity: Howard M. Tanning Rollover IRA | Print Name: |
| Signature: /s/ Howard M. Tanning | Signature: |
| Date: November 3, 2008 | Date: |
| Print Name: Howard M. Tanning | Co-Investor Print Name: |
| Title: IRA Owner | Co-Investor Signature: |
| | Date: |

Schedule A

| Name of Lenders | ipal Amount of Note |
|---|------------------------|
| Neel B. Ackerman and Martha N. Ackerman | \$ 200,000 |
| Stephen M. Burnich Revocable Trust u/a 10/08/04 | \$ 25,000 |
| Ennio De Pianto | \$ 50,000 |
| Matthew Ernst | \$ 25,000 |
| John M. Goodman Living Trust | \$ 25,000 |
| Leon Kanner & Rosemary E. Kanner | \$ 25,000 |
| Richard Kindt | \$ 10,000 |
| Douglas E. Pritchett | \$ 50,000 |
| Jerome A. Shinkay | \$ 10,000 |
| Michael J. Spezia | \$ 25,000 |
| George D. Wilson & Diane J. Wilson | \$ 10,000 |
| Joseph L. Jerger | \$ 10,000 |
| David & Nancy Pudelsky | \$ 25,000 |
| James R. Buck | \$ 10,000 |
| John O. Dunkin | \$ 15,000 |
| NFS/FMTC SEP IRA FBO Jay Jennings | \$ 15,000 |
| Landmark Community Bank Collateral Account FBO Estate of Catherine Nasser | \$ 65,000 |
| Nasser Family Trust | \$ 25,000 |
| James R. Kahn & Debra A. Kahn, JTWROS | \$ 5,000 |
| Carolyn N. Taylor & A. Starke Taylor, Jr. | \$ 50,000 |
| Mark Vollmer | \$ 5,000 |
| Robert J. Guercio | \$ 25,000 |
| Ralph Hanby | \$ 5,000 |
| Robert E. Jacobson & Saralee Jacobson, JTWROS | \$ 10,000 |
| Michael Cushing | \$ 30,000 |
| Raymond Yarusi, Jr. | \$ 5,000 |
| James Orr | \$ 25,000 |
| Vernon L. Simpson | \$ 25,000 |
| Michael H. Yokoyama & Jaye S. Venuti Family Trust | \$ 25,000 |
| Frederick Peet | \$ 20,000 |
| Ronald Rasmussen | \$ 10,000 |
| Lewis R. Jacobson | \$ 5,000 |
| Mark B. Ginsburg | \$ 25,000 |
| Gregory J. Dovolis | \$ 20,000 |
| William S. Silver | \$ 25,000 |
| Praful Desai | \$ 25,000 |
| Thomas Gemellaro | \$ 5,000 |
| Howard M. Tanning Rollover IRA | \$ 70,000 |
| TOTAL: | 1,035,000 |

THIS SENIOR SECURED PROMISSORY NOTE HAS BEEN ACQUIRED FOR INVESTMENT PURPOSES ONLY AND MAY NOT BE SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED UNTIL (i) A REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "<u>ACT</u>") SHALL HAVE BECOME EFFECTIVE WITH RESPECT THERETO OR (ii) RECEIPT BY THE COMPANY OF AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY TO THE EFFECT THAT REGISTRATION UNDER THE ACT IS NOT REQUIRED IN CONNECTION WITH SUCH PROPOSED TRANSFER NOR IS IN VIOLATION OF ANY APPLICABLE STATE SECURITIES LAWS. THIS LEGEND SHALL BE ENDORSED UPON ANY NOTE ISSUED IN EXCHANGE FOR THIS NOTE.

MANHATTAN PHARMACEUTICALS, INC.

12% Senior Secured Promissory Note

Note No.: ____

November 19, 2008

FOR VALUE RECEIVED, Manhattan Pharmaceuticals, Inc., a Delaware limited liability corporation (the "<u>Company</u>") with its principal executive office at 48 Wall Street, Suite 1100, New York, New York 10005, promises to pay to the order of ______ or registered assigns (the "<u>Holder</u>") on the Maturity Date (as defined in <u>Section 2</u> below), the principal amount of ______ Dollars (\$______) (the "<u>Principal Amount</u>"), in such coin or currency of the United States of America as at the time of payment shall be legal tender for the payment of public and private debts. Interest on this Note shall accrue on the Principal Amount outstanding from time to time at a rate per annum computed in accordance with <u>Section 3</u> hereof.

The Company (i) waives presentment, demand, protest or notice of any kind in connection with this Note and (ii) agrees, in the event of an Event of Default (as defined in Section 7 below), to pay to the holder of this Note, on demand, all costs and expenses (including reasonable legal fees and expenses as and when incurred), incurred in connection with the enforcement and/or collection of this Note.

This Note is one of a series of notes (collectively, the "<u>Secured Notes</u>") being issued pursuant to the Securities Purchase Agreement (the "<u>SPA</u>") by and between the Company, the Holder and such other purchasers of Notes (the "<u>Holders</u>"). All capitalized terms used herein and not otherwise defined shall have the meanings ascribed to them in the SPA.

1. **Prepayment.** This Note shall be payable at any time and from time to time, in whole or in part, at the election of the Company. Any prepayments of this Note prior to the Maturity Date shall be applied first to the payment of any fees and expenses then owed to the Holder, second, to accrued and unpaid Interest (defined below) and third, to the payment of the Principal Amount then outstanding. Any amounts applied by the Company to the prepayment of any Secured Notes (including this Note) shall be allocated pro rata to all Holders based on the amounts then owed to them with respect to the Secured Notes.

2. <u>Maturity Date</u>. The entire unpaid Principal Amount of this Note, together with all fees and expenses (if any), and accrued, but unpaid, Interest thereon, shall be immediately due and payable at 12:01 a.m. on November 19, 2010 (the "<u>Maturity Date</u>"). In the event that the Maturity Date falls on a Saturday, Sunday or a holiday on which banks in the State of New York are closed, the Maturity Date shall be the first business day occurring immediately after such date.

3. Interest; Etc.

(a) <u>Interest Rate</u>. This Note shall bear interest (the "<u>Interest</u>") on the outstanding Principal Amount at the rate of twelve (12%) percent per annum. Interest on this Note shall commence accruing on the date hereof and shall be computed on the basis of a year of 360 days for the actual number of days elapsed. Interest shall be compounded quarterly and shall be payable on the Maturity Date as set forth in <u>Section 4</u> below.

(b) <u>Maximum Rate</u>. In the event that under the laws relating to usury applicable to the Company or the indebtedness evidenced by this Note ("<u>Applicable Usury Laws</u>"), the interest charges and fees payable by the Company in connection herewith or in connection with any other document or instrument executed and delivered in connection herewith cause the effective interest rate applicable to the indebtedness evidenced by this Note to exceed the maximum rate allowed by law (the "<u>Maximum Rate</u>"), then such interest shall be recalculated for the period in question and any excess over the Maximum Rate paid with respect to such period shall be credited, without further agreement or notice, to the Principal Amount outstanding hereunder to reduce said balance by such amount with the same force and effect as though the Company had specifically designated such extra sums to be so applied to principal and the Holder had agreed to accept such extra payment(s) as a premium-free prepayment. All such deemed prepayments shall be applied to the principal balance payable at maturity. In no event shall any agreed-to or actual exaction as consideration for this Note exceed the limits imposed or provided by Applicable Usury Laws in the jurisdiction in which the Company is resident applicable to the use or detention of money or to forbearance in seeking its collection in the jurisdiction in which the Company is resident.

4. <u>Manner of Payment</u>. The Principal Amount, Interest, and all other amounts due under this Note shall be due and payable on the Maturity Date, in lawful money of the United States of America, to the Holder at such address as designated from time to time by the Holder in writing to the Company or by electronic wire funds transfer of immediately available funds pursuant to written instructions provided to the Company by the Holder. All amounts due from the Company to the Holder under this Note shall be made without benefit of any setoff, counterclaim or other defense. All payments on this Note shall be applied first to the payment of fees and expenses, if any, then to accrued but unpaid Interest and then to the payment of the Principal Amount.

5. <u>Security</u>. The Company's obligations under this Note are secured, pursuant to and in accordance with the terms and conditions of (i) that certain Security Agreement dated as of the date hereof by and between, the Company, the Holder and the Holders (the "<u>Security Agreement</u>") and (ii) that certain Default Agreement, dated even date herewith, issued by the Company, in favor of the Holder and the Holders (the "<u>Default Agreement</u>"). Forms of the Security Agreement and the Default Agreement are annexed as <u>Exhibit E</u> and <u>Exhibit F</u>, respectively, to the SPA.

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6. Covenants of the Company. The Company covenants that so long as any of its obligations under the Notes remain outstanding and unpaid, the Company shall not without the prior written consent of the Holders holding a majority of the then outstanding principal amount of the Secured Notes (the "<u>Requisite Holders</u>"):

- (a) <u>Indebtedness of Borrowed Money</u>. Create, incur, assume or suffer to exist any indebtedness for borrowed money except:
 - (i) the Notes; and
 - (ii) the 10% secured promissory notes of the Company in the aggregate principal amount of \$70,000 due March 10, 2009.

(b) <u>Limitation on Contingent Obligations.</u> Guarantee or otherwise be or become liable directly or indirectly for the obligations of any other Person whether by agreement to purchase or repurchase obligations, or by agreement to supply funds for the purpose of enabling such other Person to pay any obligations, excluding from this restriction, the endorsement of negotiable instruments in the ordinary course of business in the course of collection.

(c) <u>Dividends</u>. Except as expressly provided in the SPA, pay or declare any dividend on any class of its securities or make any other distribution or redeem, purchase or otherwise acquire or retire directly or indirectly any securities, other than redemption of unvested options or restricted stock redeemed by the Company, at cost, in connection upon termination of such persons employment or other engagement with the Company.

(d) <u>Sale of Obligations Owing to the Company</u>. Sell, discount or dispose of notes, accounts receivables, or other obligations owing to the Company, with or without recourse, other than in the normal course of business.

(e) Loans and Advances to Others. Make any loans or advances to any other Person other than loans and advances in the ordinary course of the Company's business.

(f) <u>Prohibitions of Fundamental Changes and Acquisitions</u>.

(i) issue any securities or enter into any agreements to issue securities, or rights, options or warrants for the issuance of any securities, other than (1) issuances under the Company's 2003 Stock Option Plan, provided that the Company shall not increase the number of shares eligible for issuance thereunder, (2) issuances of Common Stock upon the exercise of options or warrants outstanding on the date hereof, (3) pursuant to the SPA, (4) the issuance of the Warrants and shares of Common Stock issuable upon exercise thereof, (5) the issuance warrants issued to the Placement Agent in connection with the transactions contemplated by the SPA and the shares of Common Stock issuable upon exercise thereof and (6) issuances pursuant to the Joint Venture Agreement, between the Company and Nordic Biotech Venture Fund II K/S. dated January 31, 2008, as amended from time to time (the "JV Agreement");

- (ii) consolidate with or merge into any other Person;
- (iii) except as may otherwise be required under the Default Agreement, sell, lease, exchange or otherwise dispose of, any of its securities in one transaction or a series of related transactions, or dispose of any of its assets except in the ordinary course of business or make any material change in the present methods of conducting business;
- (iv) except as contemplated by the JV Agreement, acquire the business of any other Person by way of a purchase of securities or of all or substantially all of the assets of such other Person; and
- (v) form any subsidiary; dissolve or liquidate.

(g) <u>Limitation on Liens</u>. Create, assume or suffer to exist any Lien of any kind upon any of its property or assets (including real property leases), income or profits, whether now owned or hereafter acquired, except:

- (i) Liens existing on the date hereof;
- (ii) Liens and security interests in favor of Holders securing the Company's obligations under the Notes;
- (iii) Liens for taxes not yet due or which are being contested in good faith and by appropriate proceedings, if adequate reserves with respect thereto are maintained on the books of the Company;
- (iv) deposits to secure the performances of leases, contracts, surety bonds, performance bonds and other obligations of like nature incurred in the ordinary course of business; and
- (v) carriers', warehousemen's, mechanics' or other like liens arising in the ordinary course of business for sums not yet due for a period of more than thirty days or which are being contested in good faith and by appropriate proceedings.
- (h) <u>Expenditures</u>. Make capital expenditures or commitments for such expenditures, in any fiscal year, in excess of an aggregate of \$50,000 in such year.
 - (i) <u>Change in Business</u>. Engage, directly or indirectly, in any business other than its current business.

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(j) <u>Transactions with Affiliates</u>. Enter into any transaction including, without limitation, the purchase, sale or exchange of property or assets or the rendering or accepting of any service with or to any of its Affiliates except with respect to (i) any employment agreement or amendment to an existing employment agreement, (ii) any transaction with Hedrin Pharmaceuticals K/S or Hedrin Pharmaceuticals General Partner ApS or (iii) in the ordinary course of business and pursuant to the reasonable requirements of the business of the Company and upon terms not less favorable to the Company than it could obtain in a comparable arm's length transaction with a third party other than such Affiliate.

7. Events of Defaults and Remedies

7.1 <u>Event of Default</u>. An "Event of Default" shall exist if any one or more of the following shall occur:

(a) failure by the Company to pay any of its obligations under the Notes when due, whether on the date fixed for payment or by acceleration or otherwise; or

(b) if any representation or warranty made by the Company in any of the Transaction Documents or in any certificate, financial or other statement furnished at the time of closing or pursuant to any other Transaction Document shall prove to have been untrue or misleading in any material respect at the time made which shall not have been cured within ten (10) days of the Company's receipt of the Holder written notice to the Company; or

(c) default by the Company in the performance or observance of any covenant or agreement contained in this Note, the SPA and/or in any other Transaction Document which is not cured within any applicable grace period for therein, if any; or

(d) a final judgment for the payment of money in excess of \$50,000 shall be rendered against the Company, and such judgment shall remain undischarged for a period of sixty (60) days from the date of entry thereof unless within such sixty (60) day period such judgment shall be stayed, and appeal taken therefrom and the execution thereon stayed during such appeal, other than any judgment arising out of the enforcement of the arbitration award or otherwise in favor of Swiss Pharma Contract LTD (as described in the Company's Confidential Private Placement Memorandum); or

- (e) The Company shall:
 - (i) apply for, consent to, or acquiesce in, the appointment of a trustee, receiver, sequestrator or other custodian for the Company or any of its properties, or make a general assignment for the benefit of creditors;
 - (ii) in the absence of such application, consent or acquiesce in, permit or suffer to exist the appointment of a trustee, receiver, sequestrator or other custodian for the Company or for any part of its properties, and such trustee, receiver, sequestrator or other custodian shall not be discharged within thirty (30) days;

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- (iii) permit or suffer to exist the commencement of any bankruptcy, reorganization, debt arrangement or other case or proceeding under any bankruptcy or insolvency law, or any dissolution, winding up or liquidation proceeding, in respect of the Company, and, if such case or proceeding is not commenced by the Company or converted to a voluntary case, such case or proceeding shall be consented to or acquiesced in by the Company or shall result in the entry of an order for relief or shall remain for sixty (60) days undismissed; or
- (iv) take any corporate action authorizing, or in furtherance of, any of the foregoing;

(f) the Security Agreement shall cease at any time after its execution and delivery and for any reason to create a valid first priority security interest in and to the property subject thereto or the validity or priority of such security interest shall be contested by the Company or any of its Affiliates or by any other Person; or any of the other Transaction Documents shall at any time after their execution and delivery for any reason cease to be in full force and effect or shall be declared null or void, or the validity or enforceability thereof shall be contested by the Company or any of its Affiliates or by any other Person.

(g) <u>Cross-Default</u>. The Company shall default in the payment when due (including any applicable grace period) of any amount payable under any other obligation of the Company for money borrowed in excess of \$50,000, which default shall continue uncured for three (3) business days;

(h) <u>Cross-Acceleration</u>. Any indebtedness for borrowed money of the Company (1) shall be duly declared to be or shall become due and payable prior to the stated maturity thereof or (2) shall not be paid as and when the same becomes due and payable including any applicable grace period, except in each case with respect to trade payables and expense accruals;

7.2 **Remedies**. Upon the occurrence of an Event of Default, specified in <u>Section 7.1(e)</u> above, the outstanding Principal Amount of this Note and all other obligations hereunder shall automatically be and become immediately due and payable, without notice or demand. Upon the occurrence of an Event of Default other than those specified in <u>Section 7.1(e)</u>, the Requisite Holders and/or the Placement Agent may declare, at their option, so long as the Event of Default is continuing at the time notice thereof is given, upon five (5) days' notice or demand, the Secured Notes to be immediately due and payable. In any case, the Secured Notes shall become due and payable without presentment, demand or protest, all of which are hereby expressly waived. Upon the occurrence of an Event of Default and after the expiration of any grace period therefor specified herein, the Holder and/or the Placement Agent shall thereupon have, in addition to any rights it may have to proceed directly against the Company as a result of such default, the rights, benefits, and remedies afforded to it under any of the Transaction Documents. The Company agrees that the Holder and the Placement Agent may or may not proceed, as each determines in their sole discretion, with any or all other rights, benefits, and remedies which they may have against the Company. The rights afforded to the Holder and the Placement Agent under all of the foregoing shall be cumulative.

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8. <u>Amendments and Waivers</u>.

(a) The provisions of this Note may from time to time be amended, modified or waived, if such amendment, modification or waiver is in writing and consented to in writing by the Company and the Requisite Holders, provided, that any such amendment, modification or waiver must apply to all outstanding Secured Notes.

(b) No failure or delay on the part of the Holder to exercise any right, power or privilege under this Note and no course of dealing between the Company and the Holder shall impair such right, power or privilege or operate as a waiver of any default or an acquiescence therein, nor shall any single or partial exercise of any such right, power or privilege preclude any other or further exercise thereof or the exercise of any other right, power or privilege. No notice to or demand on the Company in any case shall entitle it to any notice or demand in similar or other circumstances. No waiver or approval by the Requisite Holders shall, except as may be otherwise stated in such waiver or approval, be applicable to subsequent transactions. No waiver or approval hereunder shall require any similar or dissimilar waiver or approval thereafter to be granted hereunder.

(c) To the extent that the Company makes a payment or payments to the Holder, and such payment or payments or any part thereof are subsequently for any reason invalidated, set aside and/or required to be repaid to a trustee, receiver or any other party under any bankruptcy law, state or federal law, common law or equitable cause, then to the extent of such recovery, the obligation or part thereof originally intended to be satisfied, and all rights and remedies therefor, 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.

(d) After any waiver, amendment or supplement under this section becomes effective, the Company shall mail to the Holder a copy thereof.

9. Miscellaneous.

(a) <u>Parties in Interest</u>. All covenants, agreements and undertakings in this Note binding upon the Company or the Holder shall bind and inure to the benefit of the successors and permitted assigns of the Company and the Payee, respectively, whether so expressed or not.

(b) Notices. Except as may be otherwise provided herein, all notices, requests, waivers and other communications made pursuant to this Note shall be in writing and shall be conclusively deemed to have been duly given (a) when hand delivered to the other party; (b) when received when sent by facsimile at the address and number set forth below; (c) three (3) business days after deposit in the U.S. mail with first class or certified mail, return receipt requested, postage prepaid, and addressed to the other party as set forth below; or (d) the next business day after deposit with a national overnight delivery service, postage prepaid, addressed to the parties as set forth below with next-business-day delivery guaranteed, provided that the sending party receives a confirmation of delivery from the delivery service provider.

To the Company:

Manhattan Pharmaceuticals, Inc. 48 Wall Street, Suite 1100 New York, New York 10005 Attn: Douglas Abel Chief Executive Officer Fax Number: (212) 582-3957

Fax Number:

(c) <u>Notice of Certain Transactions</u>. In case at any time:

(i) There shall be any capital reorganization of the Company, or a sale of all or substantially all of the assets of the Company, or a consolidation or merger of the Company with another corporation (other than a merger with a wholly owned subsidiary of the Company in which merger the Company is the continuing corporation and which does not result in any reclassification); or

(ii) There shall be a voluntary or involuntary dissolution; liquidation or winding-up of the Company; or

(iii) The occurrence of an Event of Default, a default and/or breach of any provision of this Note and/or any Transaction Document and/or any event occurs that with the passage of time or otherwise could result in an Event of Default;

then, in any one or more of said cases, the Company shall cause to be mailed to the Holder at the earliest practicable time (and, in any event not less than twenty (20) days before any record date or other date set for definitive action, if any need be taken), written notice of the date on which the books of the Company shall close for such reorganization, reclassification, sale, consolidation, merger or dissolution, liquidation or winding-up shall take place, as the case may be. Such notice shall also set forth such facts as shall indicate the effect of such action (to the extent such effect may be known at the date of such notice) on this Note.

Nothing herein shall be construed as the consent of the Holder to any action otherwise prohibited by the terms of this Note or as a waiver of any such prohibition.

(d) <u>Expenses</u>. The Company agrees to pay all costs and expenses, including, but not limited to, reasonable attorneys' fees and costs of suit and preparation therefor (as and when incurred), incurred in connection with the collection and enforcement of this Note.

(e) <u>Assignment</u>. The rights, interests and obligations hereunder may not be assigned, by operation of law or otherwise, in whole or in part, by the Company without the prior written consent of the Holder. The Holder is entitled to assign its rights hereunder, subject to compliance with applicable securities laws.

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(f) <u>Partial Invalidity</u>. In case any one or more of the provisions of this Note shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Note shall not in any way be affected or impaired thereby and the parties will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Note.

(g) <u>Governing Law; Venue; Waiver Of Jury Trial</u>. This Note shall be governed by and construed exclusively in accordance with the internal laws of the State of New York without regard to the conflicts of laws principles thereof. The parties hereto hereby expressly and irrevocably agree that any suit or proceeding arising directly and/or indirectly pursuant to, arising out of or under this Note, shall be brought solely and exclusively in a federal or state court located in the City, County and State of New York. By its execution hereof, the parties hereby expressly covenant and irrevocably submit to the in personam jurisdiction of the federal and state courts located in the City, County and State of New York. By its execution hereof, the parties hereby expressly covenant and irrevocably submit to the in personam jurisdiction of the federal and state courts located in the City, County and State of New York and agree that any process in any such action may be served upon any of them personally, or by certified mail or registered mail upon them or their agent, return receipt requested, with the same full force and effect as if personally served upon them in New York City. The parties hereto expressly and irrevocably waive any claim that any such jurisdiction is not a convenient forum for any such suit or proceeding and any defense or lack of in personam jurisdiction with respect thereto. In the event of any such action or proceeding (including, but not limited to, any motions made), the party prevailing therein shall be entitled to payment from the other party hereto of its reasonable coursel fees and disbursements. The Company and Holders hereby waive all rights to a trial by jury.

(h) <u>Titles and Subtitles</u>. The titles of the paragraphs and subparagraphs of this Note are for convenience of reference only and are not to be considered in construing this Note.

[Signature Page Follows]

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IN WITNESS WHEREOF, this Note has been executed and delivered on the date specified above by the duly authorized representative of the Company.

Manhattan Pharmaceuticals, Inc.

By:

Name: Michael McGuinness Title: Chief Financial Officer THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS, OR AN OPINION OF COUNSEL, IN A FORM ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR APPLICABLE STATE SECURITIES LAWS OR UNLESS SOLD PURSUANT TO RULE 144 UNDER SAID ACT.

MANHATTAN PHARMACEUTICALS, INC.

FORM OF WARRANT

Warrant No. MPI-___

Dated: November 19, 2008

Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), hereby certifies that, for value received, _______ or its Permitted Transferees (as hereinafter defined) (the "**Holder**"), is entitled to purchase from the Company up to a total of ______ shares of common stock, \$0.001 par value per share (the "**Common Stock**"), of the Company (each such share, a "**Warrant Share**" and all such shares issuable under the warrants, the "**Warrant Shares**") at an exercise price of \$0.09 (as adjusted from time to time as provided in <u>Section 9</u>, the "**Exercise Price**"), at any time and from the date hereof and through December 31, 2013 (the "**Expiration Date**"), and subject to the following terms and conditions. This Warrant ("**Warrant**") is one of a series of similar Warrants issued pursuant to that certain Securities Purchase Agreement, dated as of November 19, 2008, by and among the Company and the Investors identified therein (the "**Purchase Agreement**"). All such warrants are referred to herein, collectively, as the "**Warrants**" and the holders thereof (as well as any subsequent Permitted Transferee) along with the Holder named herein, the "**Holders**."

1. <u>Definitions</u>. In addition to the terms defined elsewhere in this Warrant, capitalized terms that are not otherwise defined herein have the meanings given to such terms in the Purchase Agreement.

2. <u>Registration of Warrant</u>. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "**Warrant Register**"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

3. <u>Registration of Transfers</u>. The Company shall register the transfer and/or assignment of any portion of this Warrant (a "**Permitted Transferee**") in the Warrant Register, upon surrender of this Warrant, with the Form of Assignment attached hereto duly completed and signed, to the Company's transfer agent or to the Company at its address specified herein. Upon any such registration or transfer, a new warrant to purchase Common Stock, in substantially the form of this Warrant (any such new warrant, a "**New Warrant**"), evidencing the portion of this Warrant so transferred shall be issued to the Permitted Transferee and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the Permitted Transferee thereof shall be deemed the acceptance by such Permitted Transferee of all of the rights and obligations of a holder of a Warrant.

4. <u>Exercise and Duration of Warrants</u>.

(a) This Warrant shall be exercisable by the registered Holder at any time and from time to time on or after the date hereof to and including the Expiration Date. At 5:00 P.M., New York City time on the Expiration Date, the portion of this Warrant not exercised prior thereto shall be and become void and of no value and this Warrant shall be terminated and no longer be outstanding.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached hereto (the "**Exercise Notice**"), appropriately completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised, and the date such items are delivered to the Company (as determined in accordance with the notice provisions hereof) is an "**Exercise Date**."

(c) Exercise Disputes. In the case of any dispute with respect to the number of shares to be issued upon exercise of this Warrant, the Company shall promptly issue such number of shares of Common Stock that is not disputed and shall submit the disputed determinations or arithmetic calculations to the Holder via fax (or, it the Holder has not provided the Company with a fax number, by overnight courier) within five (5) Business Days of receipt of the Holder's election to purchase Warrant Shares. If the Holder and the Company are unable to agree as to the determination of the Exercise Price within five (5) Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall in accordance with this Section, submit via facsimile the disputed determination to its independent auditor. The Company shall cause its independent auditor to perform the determinations or calculations and notify the Company and the Holder of the results promptly, in writing and in sufficient detail to give the Holder and the Company a clear understanding of the issue. The determination by the Company's independent auditor shall be binding upon all parties absent manifest error. The Company shall then on the next Business Day instruct its transfer agent to issue certificate(s) representing the appropriate number of Warrant Shares of Common Stock in accordance with the independent auditor's determination and this Section. The prevailing party shall be entitled to reimbursement of all fees and expenses of such determination and calculation.

5. <u>Delivery of Warrant Shares</u>.

(a) Upon exercise of this Warrant, the Company shall promptly (but in no event later than five (5) Trading Days after the Exercise Date) issue or cause to be issued and cause to be delivered to or upon the written order of the Holder and in such name or names as the Holder may designate, a certificate for the Warrant Shares to which the Holder is entitled upon such exercise, free of restrictive legends unless a registration statement covering the resale of the Warrant Shares and naming the Holder as a selling stockholder thereunder is not then effective and the Warrant Shares are not freely transferable pursuant to Rule 144 under the Securities Act. To the extent the Warrant Shares may be issued free of restrictive legends as set forth above, upon request of the Holder, the Company shall use its best efforts to deliver Warrant Shares hereunder electronically through the Depository Trust Corporation or another established clearing corporation performing similar functions. For the purposes hereof, the term "**Trading Day**" means (a) any day on which the Common Stock is listed or quoted and traded on its primary trading market and/or quotation system, as the case may be, (b) if the Common Stock is not then listed or quoted and traded on any trading market, then a day on which trading occurs on the Nasdaq Global Market (or any successor thereto), any Business Day.

(b) This Warrant is exercisable, either in its entirety or, from time to time, for a portion of the number of Warrant Shares. Upon surrender of this Warrant following one or more partial exercises, the Company shall issue or cause to be issued, at its expense, a New Warrant evidencing the right to purchase the remaining number of Warrant Shares.

(c) The Company's obligations to issue and deliver Warrant Shares in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance which might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

6. <u>Charges, Taxes and Expenses</u>. Issuance and delivery of certificates for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, withholding tax, transfer agent fee or other incidental tax or expense in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company; <u>provided</u>, <u>however</u>, that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the registration of any certificates for Warrant Shares or Warrants in a name other than that of the Holder. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.

7. <u>Replacement of Warrant</u>. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction and customary and reasonable bond or indemnity, if requested. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe.

8. <u>Reservation of Warrant Shares</u>. The Company covenants that it will at all times reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares which are then issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (after giving effect to the adjustments and restrictions of <u>Section 9</u>, if any). The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and nonassessable. The Company will take all such action as may be necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the Common Stock may be listed.

9. <u>Certain Adjustments</u>. The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this <u>Section 9</u>.

(a) <u>Stock Dividends and Splits</u>. If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, (ii) subdivides outstanding shares of Common Stock into a larger number of shares, or (iii) combines outstanding shares of Common Stock into a smaller number of shares, then in each such case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination.

Fundamental Transactions. If at any time during the term of this Warrant the Company proposes to engage in a "Fundamental (b)Transaction" (as hereinafter defined) then, and in any one or more of such cases, the Company will give to the Holder at least 10 days' prior written notice of the date on which the books of the Company will close or a record will be taken for determining rights to vote with respect to such Fundamental Transaction. Such notice will describe the nature of the Fundamental Transaction, the date on which the holders of the Common Shares will be entitled thereto, and such notice will also specify the date on which the holders of the Common Shares will be entitled to exchange the Common Shares for securities or other property deliverable upon the consummation of the Fundamental Transaction. A "Fundamental Transaction" is any (i) merger or consolidation of the Company with or into (whether or not the Company is the surviving corporation) another Person, (ii) any sale, assignment, transfer, conveyance or other disposition by the Company of all or substantially all of its assets in one or a series of related transactions; provided, however, that for avoidance of doubt, the granting of a lien on all or substantially all of the Company's assets as collateral shall not be deemed a Fundamental Transaction hereunder, (iii) purchase, tender or exchange offer by the Company (or to which the Company is a party) that will be for more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the Person or Persons making or party to, or associated or affiliated with the Persons making or party to, such purchase, tender or exchange offer, (iv) business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) requiring shareholder approval with another Person whereby such other Person acquires more than the 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock purchase agreement or other business combination), or (v) reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 9(a) above).

(c) The Company will not by reorganization, transfer of assets, consolidation, merger, dissolution, or otherwise, avoid or seek to avoid observance or performance of any of the terms of this <u>Section 9</u>, but will at all times in good faith assist in the carrying out and performance of all provisions of this <u>Section 9</u> in order to protect the rights of the Holder against impairment.

(d) <u>Number of Warrant Shares</u>. Simultaneously with any adjustment to the Exercise Price pursuant to paragraph (a) of this Section, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, as applicable, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased, as applicable, number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment.

(e) <u>Calculations</u>. All calculations under this <u>Section 9</u> shall be made to the nearest cent or the nearest share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issue or sale of Common Stock.

(f) <u>Notice of Adjustments</u>. Upon the occurrence of each adjustment pursuant to this <u>Section 9</u>, the Company at its expense will promptly compute such adjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the Company's Transfer Agent.

(g) Notice of Corporate Events. If the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including without limitation any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any Subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then the Company shall deliver to the Holder a notice describing the material terms and conditions of such transaction, at least ten calendar days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction, and the Company will take all steps reasonably necessary in order to insure that the Holder is given the practical opportunity to exercise this Warrant prior to such time so as to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

10. <u>Payment of Exercise Price</u>. The Holder shall pay the Exercise Price in immediately available funds.

11. Limitation on Exercise. Notwithstanding anything to the contrary contained herein, the number of shares of Common Stock that may be acquired by the Holder upon any exercise of this Warrant (or otherwise in respect hereof) shall be limited to the extent necessary to insure that, following such exercise (or other issuance), the total number of shares of Common Stock then beneficially owned by such Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), does not exceed 4.999% (the "Maximum Percentage") of the total number of issued and outstanding shares of Common Stock (including for such purpose the shares of Common Stock issuable upon such exercise). For such purposes, "beneficial ownership" shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. The Company's obligation to issue shares of Common Stock in excess of the limitation referred to in this Section shall be suspended (and shall not terminate or expire notwithstanding any contrary provisions hereof) until such time, if any, as such shares of Common Stock may be issued in compliance with such limitation, but in no event later than the Expiration Date. By written notice to the Company, the Holder may waive the provisions of this Section or increase or decrease the Maximum Percentage to any other percentage specified in such notice, but (i) any such waiver or increase will not be effective until the 61st day after such notice is delivered to the Company, and (ii) any such waiver or increase will apply only to the Holder and not to any other holder of Warrants.

12. <u>Fractional Shares</u>. The Company shall not be required to issue or cause to be issued fractional Warrant Shares on the exercise of this Warrant. In lieu of any fractional shares which would, otherwise be issuable, subject to <u>Section 11</u>, the Company shall pay the Holder entitled to such fractional Warrant Share a sum in cash equal to such fraction (calculated to the nearest 1/100th of a Warrant Share) multiplied by the then effective Exercise Price.

13. <u>Notices</u>. Any and all notices or other communications or deliveries hereunder (including without limitation any Exercise Notice) shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in the Purchase Agreement prior to 5:00 p.m. (New York City time) on a Trading Day, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in the Purchase Agreement or a day that is not a Trading Day or later than 5:00 p.m. (New York City time) on any Trading Day, (iii) the Trading Day following the date of mailing if sent by nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. The address for such notices or communications shall be as set forth in the Purchase Agreement.

14. <u>Warrant Agent</u>. The Company shall serve as warrant agent under this Warrant. Upon thirty (30) days' notice to the Holder, the Company may appoint a new warrant agent. Any corporation and/or other entity into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.

15. <u>Registration of Warrant Shares</u>. The Warrant Shares shall be entitled to registration rights as set forth in the Registration Rights Agreement which is annexed as an Exhibit to the Purchase Agreement.

16. <u>Miscellaneous</u>.

(a) Subject to the restrictions on transfer set forth on the first page hereof, this Warrant may be transferred or assigned by the Holder to a Permitted Transferee pursuant to Section 3 provided, that, among other things, the Permitted Transferee covenants to be bound by the terms hereof. This Warrant may not be assigned by the Company, except to a successor in the event of a Fundamental Transaction. This Warrant shall be binding on and inure to the benefit of the parties hereto and their respective successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any Person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant.

(b) The Company will not, by amendment of its governing documents or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, seek to call or redeem this Warrant or avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder against dilution or other impairment. Without limiting the generality of the foregoing, the Company (i) will not increase the par value of any Warrant Shares above the amount payable therefor on such exercise, (ii) will take all such action as may be reasonably necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares, free from all taxes, liens, security interests, encumbrances, preemptive or similar rights and charges of stockholders (other than those imposed by the Holders), on the exercise of the Warrant, and (iii) will not close its stockholder books or records in any manner which interferes with the timely exercise of this Warrant.

(c) <u>Remedies; Specific Performance</u>. The Company acknowledges and agrees that there would be no adequate remedy at law to the Holder of this Warrant in the event of any default or threatened default by the Company in the performance of or compliance with any of the terms of this Warrant and accordingly, the Company agrees that, in addition to any other remedy to which the Holder may be entitled at law or in equity, the Holder shall be entitled to seek to compel specific performance of the obligations of the Company under this Warrant, without the posting of any bond, in accordance with the terms and conditions of this Warrant in any court of the United States or any State thereof having jurisdiction, and if any action should be brought in equity to enforce any of the provisions of this Warrant, the Company shall not raise the defense that there is an adequate remedy at law. Except as otherwise provided by law, a delay or omission by the Holder hereof in exercising any right or remedy accruing upon any such breach shall not impair the right or remedy or constitute a waiver of or acquiescence in any such breach. No remedy shall be exclusive of any other remedy. All available remedies shall be cumulative.

(d) Amendments and Waivers. The Company may, without the consent of the Holders, by supplemental agreement or otherwise, (i) make any changes or corrections in this Agreement that are required to cure any ambiguity or to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein or (ii) add to the covenants and agreements of the Company for the benefit of the Holders (including, without limitation, reduce the Exercise Price or extend the Expiration Date), or surrender any rights or power reserved to or conferred upon the Company in this Agreement; provided that, in the case of (i) or (ii), such changes or corrections shall not adversely affect the interests of Holders of then outstanding Warrants in any material respect. This Warrant may also be amended or waived with the consent of the Company and the Holder. Further, the Company may, with the consent, in writing or at a meeting, of the Holders (the "**Required Holders**") of the then outstanding Warrants exercisable for at least a majority of the Common Stock eligible under such Warrants, amend in any way, by supplemental agreement or otherwise, this Warrant and/or all of the outstanding Warrants; provided, however, that (i) no such amendment by its express terms shall adversely affect any Holder differently than it affects all other Holders, unless such Holder consents thereto, and (ii) no such amendment concerning the number of Warrant Shares or Exercise Price shall be made unless any Holder who will be affected by such amendment consents thereto. If a new warrant agent is appointed by the Company, it shall at the request of the Company and without need of independent inquiry as to whether such supplemental agreement is permitted by the terms of this <u>Section 16(d)</u>, join with the Company in the execution and delivery of any such supplemental agreements, but shall not be required to join in such execution and delivery for such supplemental agreement to become effective.

(e) <u>Governing Law; Venue; Waiver Of Jury Trial</u>. This Warrant shall be governed by and construed exclusively in accordance with the internal laws of the State of New York without regard to the conflicts of laws principles thereof. The parties hereto hereby expressly and irrevocably agree that any suit or proceeding arising directly and/or indirectly pursuant to, arising out of or under this Warrant, shall be brought solely and exclusively in a federal or state court located in the City, County and State of New York. By its execution hereof, the parties hereby expressly covenant and irrevocably submit to the in personam jurisdiction of the federal and state courts located in the City, County and State of New York. By its execution hereof, the parties hereby expressly covenant and irrevocably submit to the in personally or by certified mail or registered mail upon them or their agent, return receipt requested, with the same full force and effect as if personally served upon them in New York City. The parties hereto expressly and irrevocably waive any claim that any such jurisdiction is not a convenient forum for any such suit or proceeding and any defense or lack of in personam jurisdiction with respect thereto. In the event of any such action or proceeding (including, but not limited to, any motions made), the party prevailing therein shall be entitled to payment from the other party hereto of its reasonable counsel fees and disbursements. The Company and Holders hereby waive all rights to a trial by jury.

(f) <u>Headings</u> The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.

(g) <u>Partial Invalidity.</u> In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby and the parties will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above.

MANHATTAN PHARMACEUTICALS, INC.

By: Name: Michael McGuinness Title: Chief Financial Officer

FORM OF EXERCISE NOTICE

(To be executed by the Holder to exercise the right to purchase shares of Common Stock under the foregoing Warrant)

To: MANHATTAN PHARMACEUTICALS, INC.

The undersigned is the Holder of Warrant No. _____ (the "**Warrant**") issued by Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"). Capitalized terms used herein and not otherwise defined have the respective meanings set forth in the Warrant.

(a) The Warrant is currently exercisable to purchase a total of ______ Warrant Shares.

(b) The undersigned Holder hereby exercises its right to purchase ______ Warrant Shares pursuant to the Warrant.

- (c) The holder shall pay the sum of \$______ to the Company in accordance with the terms of the Warrant.
- (d) Following this exercise, the Warrant shall be exercisable to purchase a total of ______ Warrant Shares.
- (e) Notwithstanding anything to the contrary contained herein, this Exercise Notice shall constitute a representation by the Holder that, after giving effect to the exercise provided for in this Exercise Notice, the Holder (together with its affiliates) will not have beneficial ownership (together with the beneficial ownership of such Person's affiliates) of a number of shares of Common Stock which exceeds the Maximum Percentage of the total outstanding shares of Common Stock as determined pursuant to the provisions of <u>Section 11</u> of the Warrant.

- i. the Warrant Shares being purchased pursuant to this Exercise Notice are being acquired solely for the Holder's own account and not as a nominee for any other party, for investment, and not with a view toward distribution or resale; and
- ii. the Holder is an "**accredited investor**" as such term is defined in Rule 501(a)(1) of Regulation D promulgated by the Securities and Exchange Commission under the Securities Act.
- (g) If the Holder cannot make the representations required in <u>Section (f)(ii)</u>, above, because it is factually incorrect, it shall be a condition to the exercise of the Warrant that the Company receive such other representations as the Company considers necessary, acting reasonably, to assure the Company that the issuance of securities upon exercise of this Warrant shall not violate any United States or other applicable securities laws.

Dated: ______ , _____

Name of Holder:_____

(Print) By: Name:

Title: _________(Signature must conform in all respects to name of holder as specified on the face of the Warrant)

FORM OF ASSIGNMENT

[To be completed and signed only upon transfer of Warrant]

The undersigned transferee agrees to be bound by the covenants of the Warrant Holder during the term of the Warrant.

The undersigned transferee agrees represents and warrants that:

- i. the Warrant Shares being purchased pursuant to this Assignment are being acquired solely for the transferee's own account and not as a nominee for any other party, for investment, and not with a view toward distribution or resale; and
- ii. the undersigned transferee is an "**accredited investor**" as such term is defined in Rule 501(a)(1) of Regulation D promulgated by the Securities and Exchange Commission under the Securities Act.

If the undersigned transferee cannot make the representations required in clause (ii) above, above, because it is factually incorrect, it shall be a condition to the transfer of the Warrant that the Company receive such other representations as the Company considers necessary, acting reasonably, to assure the Company that the transfer this Warrant shall not violate any United States or other applicable securities laws.

Dated: ______ , _____

(Signature must conform in all respects to name of holder as specified on the face of the Warrant)

Address of Transferee

In the presence of:

Signature of Transferee

AMENDMENT NO. 2 TO EMPLOYMENT AGREEMENT

This AMENDMENT NO. 2 TO EMPLOYMENT AGREEMENT (this "<u>Amendment</u>") is entered into as of November 19, 2008 and shall be effective as of October 1, 2008, by and between Manhattan Pharmaceuticals, Inc. (the "<u>Company</u>") and Douglas Abel (the "<u>Executive</u>").

WITNESSETH THAT:

WHEREAS, the Company and the Executive entered into that certain Employment Agreement, dated as of April 1, 2005 (the "<u>Agreement</u>"), as amended on March 28, 2008 ("<u>Amendment No. 1</u>");

WHEREAS, the Company proposes to offer and sell (the "<u>Offering</u>") up to \$2,500,000 of units (each a "<u>Unit</u>" and collectively, the "<u>Units</u>") consisting of (i) a senior secured note in the principal amount of \$5,000 (each a "<u>Note</u>" and collectively, the "<u>Notes</u>") and (ii) a warrant to purchase up to a number of shares of the Company's common stock, \$.001 par value per share, determined by dividing 300% of the principal amount of the Note by \$.09, the exercise price per share of the warrant;

WHEREAS, if \$2,500,000 of Units are sold (the "<u>Maximum Amount</u>"), [1] (the "<u>Placement Agent</u>") has the option to sell an additional \$1,000,000 of Units (the "<u>Overallotment Amount</u>") as part of the Offering;

WHEREAS, the Company may hold a closing at any time after subscriptions for at least \$1,000,000 of Units have been received and accepted and other conditions to the closing have been satisfied (the "<u>First Closing</u>");

WHEREAS, after the First Closing the Company may sell up to the Maximum Amount (or any Overallotment Amount, if applicable) until December 31, 2008 or, upon mutual agreement of the Company and the Placement Agent, January 31, 2009 (the "<u>Expiration Date</u>"); provided that the final closing (the "<u>Final Closing</u>") shall occur no later than 10 business days after the Expiration Date; and

WHEREAS, in connection with Offering, the Executive has determined that it is in the best interest of the Company to temporarily reduce his salary effective as of October 1, 2008 in accordance with the terms of this Amendment until such time as the Company shall have received at least \$2,500,000 of gross proceeds from the sale of the Units or other sales of securities (including any warrant exercise) or from other revenue received by the Company in the operation of its business or any combination of the foregoing (collectively, the "Qualified Payments").

NOW THEREFORE, for and in consideration of the foregoing, the Company and the Executive hereby agree as follows:

1. <u>Section 4(a)</u> of the Agreement is hereby amended and restated in its entirety to read as follows:

"(a) <u>Base Salary</u>.

(i) During the Term, the Company shall pay the Executive a salary (the "**Base Salary**") which shall initially be equal to \$375,000 per year. Effective as of October 1, 2008, the Base Salary payable to the Executive shall be decreased to \$250,000 per year (the "**First Tier Amount**"). Upon consummation of the Final Closing (as defined in Amendment No. 2 to this Agreement, dated November 19, 2008 ("**Amendment No. 2**")), the Base Salary of the Executive shall be adjusted as follows: (i) in the event that the Company sells at least \$1,500,000 but less than \$2,000,000 of Units in the Offering (as defined in Amendment No. 2), the Base Salary shall be increased to \$300,000 per year (the "**Second Tier Amount**"), (ii) in the event that the Company sells at least \$2,000,000 but less than \$2,500,000 of Units in the Offering, the Base Salary shall be increased to \$337,500 per year (the "**Third Tier Amount**") and (iii) in the event that the Company sells \$2,500,000 of Units or more Units in the Offering, the Base Salary shall be increased to \$375,000 (the "**Fourth Tier Amount**", and each of the of the First Tier Amount, Second Tier Amount, Third Tier Amount or Fourth Tier Amount, a "**Tier Amount**"), in each case, retroactively effective on and as of October 1, 2008; <u>provided, however</u>, that to the extent the Base Salary shall be increased above the First Tier Amount following the Final Closing (as defined in Amendment No. 2), the Executive shall receive a lump sum payment equal to the difference between the amount received during the entire pay period following October 1, 2008 based upon a Base Salary of \$250,000 and the applicable Tier Amount determined following the Final Closing in the next payroll payment made to the Executive.

(ii) In the event that the aggregate principal amount of Notes sold in the Offering is equal to or greater than 1,000,000 but less than 2,500,000, then following the Final Closing the Executive's Base Salary shall be adjusted to the next applicable Tier Amount for every additional 500,000 received by the Company following the Final Closing (other than from the sale of the Units) up to the Fourth Tier Amount. Any increase pursuant to this Section 4(a)(ii) shall be effective as of the date the Company receives additional Qualified Payments which result in the aggregate amount received by the Company (other than from the sale of the Notes) being at least equal to 500,000, 1,000,000 or 1,500,000, as the case may be.

(iii) Payments to the Executive of his Base Salary shall be made in accordance with the Company's normal payroll practices.

(iv) The Base Salary will be reviewed by the Board no less frequently then annually and except as otherwise provided herein may be increased (but not decreased)."

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2. This Amendment may be executed in counterparts, each of which shall constitute an original, but both of which together shall constitute one and the same instrument. Signatures delivered by facsimile shall have the same effect as original signatures. This Amendment shall be governed by, and construed and interpreted in accordance with, the laws of The Commonwealth of Massachusetts, without giving effect to its principles of conflicts of laws.

3. Except as specifically amended hereby, the Agreement, as amended by Amendment No. 1, remains otherwise unmodified and in full force an effect, and is hereby ratified by the Company and the Executive. This Amendment may not be amended except in accordance with <u>Section 11(e)</u> of the Agreement.

[Signature pages follows]

IN WITNESS WHEREOF, the parties have signed this Amendment to Employment Agreement as of the day and year set forth above.

MANHATTAN PHARMACEUTICALS, INC.

| By: | /s/ Michael G. McGuinness | |
|--------------|---------------------------|--|
| Name: | Michael G. McGuinness | |
| Title: | Chief Financial Officer | |
| | | |
| /s/ Dou | glas Abel | |
| DOUGLAS ABEL | | |

AMENDMENT NO. 1 TO EMPLOYMENT AGREEMENT

This AMENDMENT NO. 1 TO EMPLOYMENT AGREEMENT (this "<u>Amendment</u>") is entered into as of November 19, 2008 and shall be effective as of October 1, 2008, by and between Manhattan Pharmaceuticals, Inc. (the "<u>Company</u>") and Michael G. McGuinness (the "<u>Executive</u>").

WITNESSETH THAT:

WHEREAS, the Company and the Executive entered into that certain Employment Agreement, dated as of July 7, 2006 (the "Agreement");

WHEREAS, the Company proposes to offer and sell (the "<u>Offering</u>") up to \$2,500,000 of units (each a "<u>Unit</u>" and collectively, the "<u>Units</u>") consisting of (i) a senior secured note in the principal amount of \$5,000 (each a "<u>Note</u>" and collectively, the "<u>Notes</u>") and (ii) a warrant to purchase up to a number of shares of the Company's common stock, \$.001 par value per share, determined by dividing 300% of the principal amount of the Note by \$.09, the exercise price per share of the warrant;

WHEREAS, if \$2,500,000 of Units are sold (the "<u>Maximum Amount</u>"), [1] (the "<u>Placement Agent</u>") has the option to sell an additional \$1,000,000 of Units (the "<u>Overallotment Amount</u>") as part of the Offering;

WHEREAS, the Company may hold a closing at any time after subscriptions for at least \$1,000,000 of Units have been received and accepted and other conditions to the closing have been satisfied (the "<u>First Closing</u>");

WHEREAS, after the First Closing the Company may sell up to the Maximum Amount (or any Overallotment Amount, if applicable) until December 31, 2008 or, upon mutual agreement of the Company and the Placement Agent, January 31, 2009 (the "Expiration Date"); provided that the final closing (the "Final Closing") shall occur no later than 10 business days after the Expiration Date; and

WHEREAS, in connection with Offering, the Executive has determined that it is in the best interest of the Company to temporarily reduce his salary effective as of October 1, 2008 in accordance with the terms of this Amendment until such time as the Company shall have received at least \$2,500,000 of gross proceeds from the sale of the Units or other sales of securities (including any warrant exercise) or from other revenue received by the Company in the operation of its business or any combination of the foregoing (collectively, the "Qualified Payments").

NOW THEREFORE, for and in consideration of the foregoing, the Company and the Executive hereby agree as follows:

1. <u>Section 4(a)</u> of the Agreement is hereby amended and restated in its entirety to read as follows:

"(a) <u>Base Salary</u>.

(i) During the Term, the Company shall pay the Executive a salary (the "**Base Salary**") which shall initially be equal to \$300,000 per year. Effective as of October 1, 2008, the Base Salary payable to the Executive shall be decreased to \$200,000 per year (the "**First Tier Amount**"). Upon consummation of the Final Closing (as defined in Amendment No. 1 to this Agreement, dated November 19, 2008 ("**Amendment No. 1**")), the Base Salary of the Executive shall be adjusted as follows: (i) in the event that the Company sells at least \$1,500,000 but less than \$2,000,000 of Units in the Offering (as defined in Amendment No. 1), the Base Salary shall be increased to \$240,000 per year (the "**Second Tier Amount**"), (ii) in the event that the Company sells at least \$2,000,000 but less than \$2,500,000 of Units in the Offering, the Base Salary shall be increased to \$270,000 per year (the "**Third Tier Amount**") and (iii) in the event that the Company sells \$2,500,000 of Units or more Units in the Offering, the Base Salary shall be increased to \$300,000 (the "**Fourth Tier Amount**", and each of the of the First Tier Amount, Second Tier Amount, Third Tier Amount or Fourth Tier Amount, a "**Tier Amount**"), in each case, retroactively effective on and as of October 1, 2008; <u>provided, however</u>, that to the extent the Base Salary shall be increased above the First Tier Amount following the Final Closing (as defined in Amendment No. 1), the Executive shall receive a lump sum payment equal to the difference between the amount received during the entire pay period following October 1, 2008 based upon a Base Salary of \$200,000 and the applicable Tier Amount determined following the Final Closing in the next payroll payment made to the Executive.

(ii) In the event that the aggregate principal amount of Notes sold in the Offering is equal to or greater than 1,000,000 but less than 2,500,000, then following the Final Closing the Executive's Base Salary shall be adjusted to the next applicable Tier Amount for every additional 500,000 received by the Company following the Final Closing (other than from the sale of the Units) up to the Fourth Tier Amount. Any increase pursuant to this Section 4(a)(ii) shall be effective as of the date the Company receives additional Qualified Payments which result in the aggregate amount received by the Company (other than from the sale of the Notes) being at least equal to 500,000, 1,000,000 or 1,500,000, as the case may be.

(iii) Payments to the Executive of his Base Salary shall be made in accordance with the Company's normal payroll practices.

(iv) The Base Salary will be reviewed by the Board no less frequently then annually and except as otherwise provided herein may be increased (but not decreased)."

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2. This Amendment may be executed in counterparts, each of which shall constitute an original, but both of which together shall constitute one and the same instrument. Signatures delivered by facsimile shall have the same effect as original signatures. This Amendment shall be governed by, and construed and interpreted in accordance with, the laws of the State of New York, without giving effect to its principles of conflicts of laws.

3. Except as specifically amended hereby, the Agreement remains otherwise unmodified and in full force an effect, and is hereby ratified by the Company and the Executive. This Amendment may not be amended except in accordance with <u>Section 10(e)</u> of the Agreement.

[Signature page follows]

IN WITNESS WHEREOF, the parties have signed this Amendment to Employment Agreement as of the day and year set forth above.

MANHATTAN PHARMACEUTICALS, INC.

| By: | /s/ Douglas Abel | |
|---------------------------|-------------------------|--|
| Name: | Douglas Abel | |
| Title: | Chief Executive Officer | |
| | | |
| /s/ Michael G. McGuinness | | |
| Michael G. McGuinness | | |

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS, OR AN OPINION OF COUNSEL, IN A FORM ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR APPLICABLE STATE SECURITIES LAWS OR UNLESS SOLD PURSUANT TO RULE 144 UNDER SAID ACT.

MANHATTAN PHARMACEUTICALS, INC.

FORM OF WARRANT

Warrant No. MPI-

Dated: November 19, 2008

Exhibit 10.9

Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), hereby certifies that, for value received, [1] or its Permitted Transferees (as hereinafter defined) (the "**Holder**"), is entitled to purchase from the Company up to a total of 5,175,010 shares of common stock, \$0.001 par value per share (the "**Common Stock**"), of the Company (each such share, a "**Warrant Share**" and all such shares issuable under the warrants, the "**Warrant Share**") at an exercise price of \$0.09 (as adjusted from time to time as provided in <u>Section 9</u>, the "**Exercise Price**"), at any time and from the date hereof and through December 31, 2013 (the "**Expiration Date**"), and subject to the following terms and conditions. This Warrant ("**Warrant**") is one of a series of similar Warrants issued pursuant to that certain Placement Agency Agreement, dated as of October 21, 2008, by and among the Company and [1] (the "**Placement Agency Agreement**"). All such warrants are referred to herein, collectively, as the "**Warrants**" and the holders thereof (as well as any subsequent Permitted Transferee) along with the Holder named herein, the "**Holders**."

1. <u>Definitions</u>. In addition to the terms defined elsewhere in this Warrant, capitalized terms that are not otherwise defined herein have the meanings given to such terms in the Placement Agency Agreement.

2. <u>Registration of Warrant</u>. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "**Warrant Register**"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

3. <u>Registration of Transfers</u>. The Company shall register the transfer and/or assignment of any portion of this Warrant (a "**Permitted Transferee**") in the Warrant Register, upon surrender of this Warrant, with the Form of Assignment attached hereto duly completed and signed, to the Company's transfer agent or to the Company at its address specified herein. Upon any such registration or transfer, a new warrant to purchase Common Stock, in substantially the form of this Warrant (any such new warrant, a "**New Warrant**"), evidencing the portion of this Warrant so transferred shall be issued to the Permitted Transferee and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the Permitted Transferee thereof shall be deemed the acceptance by such Permitted Transferee of all of the rights and obligations of a holder of a Warrant.

4. Exercise and Duration of Warrants.

(a) This Warrant shall be exercisable by the registered Holder at any time and from time to time on or after the date hereof to and including the Expiration Date. At 5:00 P.M., New York City time on the Expiration Date, the portion of this Warrant not exercised prior thereto shall be and become void and of no value and this Warrant shall be terminated and no longer be outstanding.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached hereto (the "**Exercise Notice**"), appropriately completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised (which may take the form of a "cashless exercise" if so indicated in the Exercise Notice pursuant to <u>Section 10</u> below), and the date such items are delivered to the Company (as determined in accordance with the notice provisions hereof) is an "**Exercise Date**."

(c) Exercise Disputes. In the case of any dispute with respect to the number of shares to be issued upon exercise of this Warrant, the Company shall promptly issue such number of shares of Common Stock that is not disputed and shall submit the disputed determinations or arithmetic calculations to the Holder via fax (or, it the Holder has not provided the Company with a fax number, by overnight courier) within five (5) Business Days of receipt of the Holder's election to purchase Warrant Shares. If the Holder and the Company are unable to agree as to the determination of the Exercise Price within five (5) Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall in accordance with this Section, submit via facsimile the disputed determination to its independent auditor. The Company shall cause its independent auditor to perform the determinations or calculations and notify the Company and the Holder of the results promptly, in writing and in sufficient detail to give the Holder and the Company a clear understanding of the issue. The determination by the Company's independent auditor shall be binding upon all parties absent manifest error. The Company shall then on the next Business Day instruct its transfer agent to issue certificate(s) representing the appropriate number of Warrant Shares of Common Stock in accordance with the independent auditor's determination and this Section. The prevailing party shall be entitled to reimbursement of all fees and expenses of such determination and calculation. For the purposes hereof, the term "**Business Day**" means any day on which banks located in New York City are not required or authorized by law to remain closed.

5. <u>Delivery of Warrant Shares</u>.

(a) Upon exercise of this Warrant, the Company shall promptly (but in no event later than five (5) Trading Days after the Exercise Date) issue or cause to be issued and cause to be delivered to or upon the written order of the Holder and in such name or names as the Holder may designate, a certificate for the Warrant Shares to which the Holder is entitled upon such exercise, free of restrictive legends unless a registration statement covering the resale of the Warrant Shares and naming the Holder as a selling stockholder thereunder is not then effective and the Warrant Shares are not freely transferable pursuant to Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"). To the extent the Warrant Shares may be issued free of restrictive legends as set forth above, upon request of the Holder, the Company shall use its best efforts to deliver Warrant Shares hereunder electronically through the Depository Trust Corporation or another established clearing corporation performing similar functions. For the purposes hereof, the term "Trading Day" means (a) any day on which the Common Stock is listed or quoted and traded on its primary trading market and/or quotation system, as the case may be, (b) if the Common Stock is not then listed or quoted and traded on any trading market, then a day on which trading occurs on the Nasdaq Global Market (or any successor thereto), or (c) if trading ceases to occur on the Nasdaq Global Market (or any successor thereto), any Business Day.

(b) This Warrant is exercisable, either in its entirety or, from time to time, for a portion of the number of Warrant Shares. Upon surrender of this Warrant following one or more partial exercises, the Company shall issue or cause to be issued, at its expense, a New Warrant evidencing the right to purchase the remaining number of Warrant Shares.

(c) The Company's obligations to issue and deliver Warrant Shares in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance which might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof. For the purposes hereof, the term "**Person**" means an individual, entity, corporation, partnership, association, limited liability company, limited liability partnership, joint-stock company, trust or unincorporated organization.

6. <u>Charges, Taxes and Expenses</u>. Issuance and delivery of certificates for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, withholding tax, transfer agent fee or other incidental tax or expense in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company; <u>provided</u>, <u>however</u>, that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the registration of any certificates for Warrant Shares or Warrants in a name other than that of the Holder. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.

7. <u>Replacement of Warrant</u>. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction and customary and reasonable bond or indemnity, if requested. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe.

8. <u>Reservation of Warrant Shares</u>. The Company covenants that it will at all times reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares which are then issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (after giving effect to the adjustments and restrictions of <u>Section 9</u>, if any). The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and nonassessable. The Company will take all such action as may be necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the Common Stock may be listed.

9. <u>Certain Adjustments</u>. The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this <u>Section 9</u>.

(a) <u>Stock Dividends and Splits</u>. If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, (ii) subdivides outstanding shares of Common Stock into a larger number of shares, or (iii) combines outstanding shares of Common Stock into a smaller number of shares, then in each such case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination.

Fundamental Transactions. If at any time during the term of this Warrant the Company proposes to engage in a "Fundamental (b)Transaction" (as hereinafter defined) then, and in any one or more of such cases, the Company will give to the Holder at least ten (10) days' prior written notice of the date on which the books of the Company will close or a record will be taken for determining rights to vote with respect to such Fundamental Transaction. Such notice will describe the nature of the Fundamental Transaction, the date on which the holders of the Common Shares will be entitled thereto, and such notice will also specify the date on which the holders of the Common Shares will be entitled to exchange the Common Shares for securities or other property deliverable upon the consummation of the Fundamental Transaction. A "Fundamental Transaction" is any (i) merger or consolidation of the Company with or into (whether or not the Company is the surviving corporation) another Person, (ii) any sale, assignment, transfer, conveyance or other disposition by the Company of all or substantially all of its assets in one or a series of related transactions; provided, however, that for avoidance of doubt, the granting of a lien on all or substantially all of the Company's assets as collateral shall not be deemed a Fundamental Transaction hereunder, (iii) purchase, tender or exchange offer by the Company (or to which the Company is a party) that will be for more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the Person or Persons making or party to, or associated or affiliated with the Persons making or party to, such purchase, tender or exchange offer, (iv) business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) requiring shareholder approval with another Person whereby such other Person acquires more than the 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock purchase agreement or other business combination), or (v) reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 9(a) above).

(c) The Company will not by reorganization, transfer of assets, consolidation, merger, dissolution, or otherwise, avoid or seek to avoid observance or performance of any of the terms of this <u>Section 9</u>, but will at all times in good faith assist in the carrying out and performance of all provisions of this <u>Section 9</u> in order to protect the rights of the Holder against impairment.

(d) <u>Number of Warrant Shares</u>. Simultaneously with any adjustment to the Exercise Price pursuant to paragraph (a) of this Section, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, as applicable, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased, as applicable, number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment.

(e) <u>Calculations</u>. All calculations under this <u>Section 9</u> shall be made to the nearest cent or the nearest share, as applicable. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issue or sale of Common Stock.

(f) <u>Notice of Adjustments</u>. Upon the occurrence of each adjustment pursuant to this <u>Section 9</u>, the Company at its expense will promptly compute such adjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the Company's Transfer Agent.

(g) Notice of Corporate Events. If the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including without limitation any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then the Company shall deliver to the Holder a notice describing the material terms and conditions of such transaction, at least ten calendar days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction, and the Company will take all steps reasonably necessary in order to insure that the Holder is given the practical opportunity to exercise this Warrant prior to such time so as to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

10. <u>Payment of Exercise Price</u>. The Holder shall pay the Exercise Price in immediately available funds (a "**cash exercise**"); or the Holder may satisfy its obligation to pay the Exercise Price through a "**cashless exercise**," in which event the Company shall issue to the Holder the number of Warrant Shares determined as follows:

where:

X = Y [(A-B)/A]

X = the number of Warrant Shares to be issued to the Holder.

Y = the number of Warrant Shares with respect to which this Warrant is being exercised (prior to cashless exercise).

A = the average of the Closing Prices for the five (5) Trading Days immediately prior to (but not including) the Exercise Date.

B = the Exercise Price.

For purposes of this <u>Section 10</u>, "Closing Prices" for any date, shall mean the closing price per share of the Common Stock for such date (or the nearest preceding date) on the primary trading market on which the Common Stock is then listed or quoted.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in a cashless exercise transaction shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued pursuant to the Placement Agency Agreement (provided the Securities and Exchange Commission continues to take the position that such treatment is proper at the time of such exercise).

11. Limitation on Exercise. Notwithstanding anything to the contrary contained herein, the number of shares of Common Stock that may be acquired by the Holder upon any exercise of this Warrant (or otherwise in respect hereof) shall be limited to the extent necessary to insure that, following such exercise (or other issuance), the total number of shares of Common Stock then beneficially owned by such Holder and its affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), does not exceed 4.999% (the "Maximum Percentage") of the total number of issued and outstanding shares of Common Stock (including for such purpose the shares of Common Stock issuable upon such exercise). For such purposes, "beneficial ownership" shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. The Company's obligation to issue shares of Common Stock in excess of the limitation referred to in this Section shall be suspended (and shall not terminate or expire notwithstanding any contrary provisions hereof) until such time, if any, as such shares of Common Stock may be issued in compliance with such limitation, but in no event later than the Expiration Date. By written notice to the Company, the Holder may waive the provisions of this Section or increase or decrease the Maximum Percentage to any other percentage specified in such notice, but (i) any such waiver or increase will not be effective until the 61st day after such notice is delivered to the Company, and (ii) any such waiver or increase will apply only to the Holder and not to any other holder of Warrants.

12. <u>Fractional Shares</u>. The Company shall not be required to issue or cause to be issued fractional Warrant Shares on the exercise of this Warrant. In lieu of any fractional shares which would, otherwise be issuable, subject to <u>Section 11</u>, the Company shall pay the Holder entitled to such fractional Warrant Share a sum in cash equal to such fraction (calculated to the nearest 1/100th of a Warrant Share) multiplied by the then effective Exercise Price.

13. <u>Notices</u>. Any and all notices or other communications or deliveries hereunder (including without limitation any Exercise Notice) shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in the Purchase Agreement prior to 5:00 p.m. (New York City time) on a Trading Day, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in the Purchase Agreement or a day that is not a Trading Day or later than 5:00 p.m. (New York City time) on any Trading Day, (iii) the Trading Day following the date of mailing if sent by nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. The address for such notices or communications shall be as set forth in the Placement Agency Agreement.

14. <u>Warrant Agent</u>. The Company shall serve as warrant agent under this Warrant. Upon thirty (30) days' notice to the Holder, the Company may appoint a new warrant agent. Any corporation and/or other entity into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.

15. <u>Automatic Conversion upon Expiration</u>. Subject to <u>Section 11 above</u>, in the event that, upon the Expiration Date, the Closing Prices per share of Common Stock (or other security issuable upon the exercise hereof) as determined in accordance with <u>Section 10</u> above is greater than the Exercise Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be converted pursuant to <u>Section 10</u> above as to all Warrant Shares (or such other securities) for which it shall not previously have been exercised. Upon surrender of this Warrant as provided in <u>Section 10</u> above, the Company shall promptly deliver a certificate representing the Warrant Shares (or such other securities) issued upon such conversion to Holder.

16. <u>Miscellaneous</u>.

(a) Subject to the restrictions on transfer set forth on the first page hereof, this Warrant may be transferred or assigned by the Holder to a Permitted Transferee pursuant to <u>Section 3</u> provided, that, among other things, the Permitted Transferee covenants to be bound by the terms hereof. This Warrant may not be assigned by the Company, except to a successor in the event of a Fundamental Transaction. This Warrant shall be binding on and inure to the benefit of the parties hereto and their respective successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any Person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant.

(b) The Company will not, by amendment of its governing documents or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, seek to call or redeem this Warrant or avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder against dilution or other impairment. Without limiting the generality of the foregoing, the Company (i) will not increase the par value of any Warrant Shares above the amount payable therefor on such exercise, (ii) will take all such action as may be reasonably necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares, free from all taxes, liens, security interests, encumbrances, preemptive or similar rights and charges of stockholders (other than those imposed by the Holders), on the exercise of the Warrant, and (iii) will not close its stockholder books or records in any manner which interferes with the timely exercise of this Warrant.

(c) <u>Remedies; Specific Performance</u>. The Company acknowledges and agrees that there would be no adequate remedy at law to the Holder of this Warrant in the event of any default or threatened default by the Company in the performance of or compliance with any of the terms of this Warrant and accordingly, the Company agrees that, in addition to any other remedy to which the Holder may be entitled at law or in equity, the Holder shall be entitled to seek to compel specific performance of the obligations of the Company under this Warrant, without the posting of any bond, in accordance with the terms and conditions of this Warrant in any court of the United States or any State thereof having jurisdiction, and if any action should be brought in equity to enforce any of the provisions of this Warrant, the Company shall not raise the defense that there is an adequate remedy at law. Except as otherwise provided by law, a delay or omission by the Holder hereof in exercising any right or remedy accruing upon any such breach shall not impair the right or remedy or constitute a waiver of or acquiescence in any such breach. No remedy shall be exclusive of any other remedy. All available remedies shall be cumulative.

(d) <u>Amendments and Waivers</u>. The Company may, without the consent of the Holders, by supplemental agreement or otherwise, (i) make any changes or corrections in this Agreement that are required to cure any ambiguity or to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein or (ii) add to the covenants and agreements of the Company for the benefit of the Holders (including, without limitation, reduce the Exercise Price or extend the Expiration Date), or surrender any rights or power reserved to or conferred upon the Company in this Agreement; provided that, in the case of (i) or (ii), such changes or corrections shall not adversely affect the interests of Holders of then outstanding Warrants in any material respect. This Warrant may also be amended or waived with the consent of the Company and the Holder. Further, the Company may, with the consent, in writing or at a meeting, of the Holders (the "**Required Holders**") of the then outstanding Warrants exercisable for at least a majority of the Common Stock eligible under such Warrants, amend in any way, by supplemental agreement or otherwise, this Warrant and/or all of the outstanding Warrants; <u>provided</u>, <u>however</u>, that (i) no such amendment by its express terms shall adversely affect any Holder differently than it affects all other Holders, unless such Holder consents thereto, and (ii) no such amendment concerning the number of Warrant Shares or Exercise Price shall be made unless any Holder who will be affected by such amendment consents thereto. If a new warrant agent is appointed by the Company, it shall at the request of the Company and without need of independent inquiry as to whether such supplemental agreement is permitted by the terms of this <u>Section 16(d)</u>, join with the Company in the execution and delivery of any such supplemental agreements, but shall not be required to join in such execution and delivery for such supplemental agreement to become effective.

(e) <u>Governing Law; Venue; Waiver Of Jury Trial</u>. This Warrant shall be governed by and construed exclusively in accordance with the internal laws of the State of New York without regard to the conflicts of laws principles thereof. The parties hereto hereby expressly and irrevocably agree that any suit or proceeding arising directly and/or indirectly pursuant to, arising out of or under this Warrant, shall be brought solely and exclusively in a federal or state court located in the City, County and State of New York. By its execution hereof, the parties hereby expressly covenant and irrevocably submit to the in personam jurisdiction of the federal and state courts located in the City, County and State of New York. By its execution hereof, the parties hereby expressly covenant and irrevocably submit to the in personally or by certified mail or registered mail upon them or their agent, return receipt requested, with the same full force and effect as if personally served upon them in New York City. The parties hereto expressly and irrevocably waive any claim that any such jurisdiction is not a convenient forum for any such suit or proceeding and any defense or lack of in personam jurisdiction with respect thereto. In the event of any such action or proceeding (including, but not limited to, any motions made), the party prevailing therein shall be entitled to payment from the other party hereto of its reasonable counsel fees and disbursements. The Company and Holders hereby waive all rights to a trial by jury.

(f) <u>Headings</u> The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.

(g) <u>Partial Invalidity.</u> In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby and the parties will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above.

MANHATTAN PHARMACEUTICALS, INC.

| By: Name: Title: | Michael McGuinness Chief Financial Officer |
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FORM OF EXERCISE NOTICE

(To be executed by the Holder to exercise the right to purchase shares of Common Stock under the foregoing Warrant)

To: MANHATTAN PHARMACEUTICALS, INC.

The undersigned is the Holder of Warrant No. _____ (the "**Warrant**") issued by Manhattan Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"). Capitalized terms used herein and not otherwise defined have the respective meanings set forth in the Warrant.

- (a) The Warrant is currently exercisable to purchase a total of ______ Warrant Shares.
- (b) The undersigned Holder hereby exercises its right to purchase ______ Warrant Shares pursuant to the Warrant.
- (c) The Holder shall make Payment of the Exercise Price as follows (check one):

"Cash Exercise" under <u>Section 10</u>

"Cashless Exercise" under <u>Section 10</u>

- (d) If the holder is making a Cash Exercise, the holder shall pay the sum of \$______ to the Company in accordance with the terms of the Warrant.
- (e) Pursuant to this exercise, the Company shall deliver to the holder ______ Warrant Shares in accordance with the terms of the Warrant.
- (f) Following this exercise, the Warrant shall be exercisable to purchase a total of ______ Warrant Shares.
- (g) Notwithstanding anything to the contrary contained herein, this Exercise Notice shall constitute a representation by the Holder that, after giving effect to the exercise provided for in this Exercise Notice, the Holder (together with its affiliates) will not have beneficial ownership (together with the beneficial ownership of such Person's affiliates) of a number of shares of Common Stock which exceeds the Maximum Percentage of the total outstanding shares of Common Stock as determined pursuant to the provisions of <u>Section 11</u> of the Warrant.

- (h) The Holder represents that, as of the date of exercise:
 - i. the Warrant Shares being purchased pursuant to this Exercise Notice are being acquired solely for the Holder's own account and not as a nominee for any other party, for investment, and not with a view toward distribution or resale; and
 - ii. the Holder is an "**accredited investor**" as such term is defined in Rule 501(a)(1) of Regulation D promulgated by the Securities and Exchange Commission under the Securities Act.
- (i) If the Holder cannot make the representations required in <u>Section (h)(ii)</u>, above, because it is factually incorrect, it shall be a condition to the exercise of the Warrant that the Company receive such other representations as the Company considers necessary, acting reasonably, to assure the Company that the issuance of securities upon exercise of this Warrant shall not violate any United States or other applicable securities laws.

Dated: _____, ____

Name of Holder: _____(Print)

By: Name:

Title:

(Signature must conform in all respects to name of holder as specified on the face of the Warrant)

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FORM OF ASSIGNMENT

[To be completed and signed only upon transfer of Warrant]

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto ________ the right represented by the within Warrant to purchase _______ shares of Common Stock of Manhattan Pharmaceuticals, Inc. to which the within Warrant relates and appoints ______ attorney to transfer said right on the books of Manhattan Pharmaceuticals, Inc. with full power of substitution in the premises.

The undersigned transferee agrees to be bound by the covenants of the Warrant Holder during the term of the Warrant.

The undersigned transferee agrees represents and warrants that:

- i. the Warrant Shares being purchased pursuant to this Assignment are being acquired solely for the transferee's own account and not as a nominee for any other party, for investment, and not with a view toward distribution or resale; and
- ii. the undersigned transferee is an "**accredited investor**" as such term is defined in Rule 501(a)(1) of Regulation D promulgated by the Securities and Exchange Commission under the Securities Act.

If the undersigned transferee cannot make the representations required in clause (ii) above, above, because it is factually incorrect, it shall be a condition to the transfer of the Warrant that the Company receive such other representations as the Company considers necessary, acting reasonably, to assure the Company that the transfer this Warrant shall not violate any United States or other applicable securities laws.

Dated: _____, ____,

(Signature must conform in all respects to name of holder as specified on the face of the Warrant)

Address of Transferee

In the presence of:

Signature of Transferee

Manhattan Pharmaceuticals Completes \$1 Million Financing

NEW YORK, NY NOV 25, 2008 - Manhattan Pharmaceuticals, Inc. (OTCBB: MHAN) today announced that it has completed the first closing of a private placement of secured debt and warrants to purchase shares of its common stock. Pursuant to the terms of the private placement, the Company can sell up to 500 units to accredited investors with each unit consisting of (i) a 12% Senior Secured Promissory Note in the principal amount of \$5,000, and (ii) a warrant to purchase up to 166,667 shares of the Company's common stock at an exercise price of \$0.09.

On November 19, 2008, the Company completed the sale of 207 units for a total of approximately \$1.0 million. The Company may sell up to an additional 293 units (493 units if the overallotment is exercised) in subsequent closings. To secure the Company's obligations under the notes issued in the private placement, the Company has pledged its interest in certain of the Company's assets.

The units have not been registered under the Securities Act, or any state securities laws, and were issued in a private placement transaction under Regulation D and may not be transferred or resold except as permitted by the Securities Act. The Company has agreed to file a registration statement with the Securities and Exchange Commission covering the resale by the investors of the shares of common stock issuable upon exercise of the warrants. Until this registration statement is declared effective by the Securities and Exchange Commission the shares of common stock issuable upon exercise of the warrants may not be transferred or resold unless the transfer or resale is registered or unless exemptions from the registration requirements of the Securities Act and applicable state laws are available.

This press release does not constitute an offer to sell, or the solicitation of an offer to buy, any security and shall not constitute an offer, solicitation or sale in any jurisdiction in which such offering would be unlawful and is being issued under Rule 135c of the Securities Act.

About Manhattan Pharmaceuticals, Inc.

Manhattan Pharmaceuticals, Inc. is a specialty pharmaceutical company that acquires and develops novel, high-value drug candidates primarily for the treatment of dermatologic disorders. With a pipeline consisting of four clinical stage product candidates, the company is currently developing 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. (<u>http://www.manhattanpharma.com</u>)

Note Regarding Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements involve risks and uncertainties that could cause Manhattan Pharmaceuticals, Inc.'s actual results to differ materially from the anticipated results and expectations expressed in these forward-looking statements. These statements are often, but not always, made through the use of words or phrases such as "anticipates," "expects," "plans," "believes," "intends," "will," and similar words or phrases. These statements are based on Manhattan Pharmaceuticals, Inc.'s current expectations, forecasts and assumptions, which are subject to risks and uncertainties, which could cause actual outcomes and results to differ materially from these statements. Among other things, there can be no assurances that Manhattan Pharmaceuticals, Inc.'s development efforts relating to its HedrinTM, PTH (1-34), AltodermTM, or AltolynTM product candidates, being developed by our joint venture with Nordic Biotech Venture Fund, or any future product candidates, will be successful, or that Manhattan Pharmaceuticals, Inc. will be able to out-license its discontinued programs to other companies on terms acceptable to Manhattan Pharmaceuticals, Inc. or at all. Other risks that may affect forward-looking information contained in this press release include, without limitation, the company's extremely limited capital resources, the possibility of being unable to obtain regulatory approval of Manhattan Pharmaceuticals, Inc.'s product candidates, the risk that the results of clinical trials may not support the company's claims, the risk that the company's product candidates may not achieve market acceptance in North America or elsewhere, the company's reliance on third-party researchers to develop its product candidates, availability of patent protection, the risk that sufficient capital may not be available to develop and commercialize the company's product candidates, the company's lack of experience in developing and commercializing pharmaceutical products, and that trading in the company's stock may be adversely impacted by the company's voluntary delisting of its common stock from the American Stock Exchange. Additional risks are described in the company's filings with the Securities and Exchange Commission, including its Annual Report on Form 10-K for the year ended December 31, 2007. Manhattan Pharmaceuticals, Inc. assumes no obligation to update the information contained in this press release, whether as a result of new information, future events or otherwise.

Contact

Manhattan Pharmaceuticals, Inc. Michael G. McGuinness, *Chief Operating & Financial Officer* (212) 582-3950