MANHATTAN PHARMACEUTICALS INC
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OFFERING PROSPECTUS

Manhattan Pharmaceuticals, Inc.

15,169,075 Shares
Common Stock

The selling stockholders identified on pages 41-47 of this prospectus are offering on a resale basis a total of 15,169,075 shares of our common stock, including 3,437,460 shares issuable upon the exercise of outstanding warrants. We will not receive any proceeds from the sale of these shares by the selling stockholders.

Our common stock is quoted on the Over-the-Counter Bulletin Board under the symbol "MHTT." On October 4, 2005, the last sale price for our common stock as reported on the OTC Bulletin Board was $ 1.22. Effective October 7, 2005, our common stock will begin trading on the American Stock Exchange under the symbol "MHA."

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The securities offered by this prospectus involve a high degree of risk.
See "Risk Factors" beginning on page 6.

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Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved these securities or determined that this prospectus is truthful or complete. A representation to the contrary is a criminal offense.

The date of this Prospectus is October 5, 2005.

Table of Contents

Table of Contents

Table of Contents

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. Because it is a summary, it may not contain all of the information that is important to you. Accordingly, you are urged to carefully review this prospectus in its entirety.

Our Company

We are engaged in the business of developing and commercializing early-stage technologies, particularly biomedical and pharmaceutical technologies. We aim to acquire proprietary rights to these technologies, by license or acquisition of an ownership interest, fund their research and development and eventually bring the technologies to market. We currently are researching and developing three biomedical technologies: oleoyl-estrone, an orally administered hormone which we believe can be used to treat obesity; lingual spray propofol, a proprietary lingual spray technology to deliver propofol for pre-procedural sedation prior to diagnostic, therapeutic or endoscopic procedures; and PTH (1-34), a topical treatment for psoriasis. None of the product candidates have been approved by the United States Federal Drug Administration or any other regulatory body. Further, we have not received any commercial revenues to date and, until we receive the necessary approvals from the FDA or a similar foreign regulatory authority, we will not have any commercial revenues.

- ***Oleoyl-estrone***, our lead product candidate, is an orally administered novel therapeutic being developed to treat obesity. We recently completed a Phase Ia trial relating to oleoyl-estrone pursuant to an investigational new drug application, or "IND," accepted by the FDA in January 2005. This study, which was conducted at Basel, Switzerland, involved 36 obese volunteers and was conducted to measure the pharmacokinetic (i.e., the manner in which the drug is absorbed, distribution, metabolism and elimination by the body) profile of oleoy-estrone, as well as its safety and tolerability in obese males and females. Twelve of the 36 patients received placebo and 24 receved a single dose in one of six strengths ranging from 1 mg to 150 mg. Oleoyl-estrone was shown to be safe with no serious adverse events noted in this study. We also are conducting a follow-on Phase 1b trial that will assess safety and tolerability in 24 obese volunteers and anticipate releasing the results of this study before the end of 2005.

- ***PTH(1-34)***, which we acquired as a result of our April 2005 acquisition of Tarpan Therapeutics, Inc., is being developed as a topical treatment for psoriasis. In early 2001, a Phase I and II clinical trial of PTH(1-34) was completed at Boston University Medical Center. The study evaluated safety and efficacy of the drug as a topical treatment for psoriasis. This double-blinded, controlled trial in 15 patients indicated that PTH(1-34) was a potentially safe and effective treatment for plaque psoriasis. After 8 weeks of treatment, application of PTH(1-34) appeared to result in at least a partial clearing of the treated lesion in 85 percent of the patients and complete clearing in 60 percent of the patients. None of the patients appeared to experience any significant adverse effects. We plan to initiate additional clinical trials in PTH(1-34) in late 2005 or early 2006.

- We are developing ***propofol lingual spray***, the right to which we license from NovaDel Pharma, Inc., for light to medium sedation on a Section 505b2 bioequivalence regulatory pathway toward FDA approval. In January 2005, the FDA accepted our IND for propofol lingual spray, allowing us to commence clinical trials. The FDA has indicated to us in discussions that we may proceed to a pivotal Phase III trial of propofol lingual spray following completion of Phase I trials. We are actively planning the next steps for the clinical development of this product candidate, meeting with our scientific advisors and NovaDel regarding formulation, reviewing existing data, developing trial design and evaluating plans to re-enter the clinic.

We were incorporated in Delaware in May 1993 under the name "Atlantic Pharmaceuticals, Inc." and, in March 2000, we changed our name to "Atlantic Technology Ventures, Inc." On February 21, 2003, we completed a "reverse" acquisition of privately-held Manhattan Research Development, Inc. (formerly Manhattan Pharmaceuticals, Inc.), a

Delaware corporation. To effect this transaction, we caused Manhattan Pharmaceuticals Acquisition Corp., our wholly-owned subsidiary, to merge with and into Manhattan Research Development, with Manhattan Research Development surviving as our wholly owned subsidiary. In accordance with the terms of the merger, the outstanding common stock of Manhattan Research Development automatically converted into the right to receive an aggregate of approximately 80 percent of our outstanding common stock (after giving effect to the transaction). In connection with the merger, we also changed our name to “Manhattan Pharmaceuticals, Inc.”

Table of Contents

Our executive offices are located at 810 Seventh Avenue, 4th Floor, New York, New York, 10019 and our telephone number is (212) 582-3950. Our Internet site is www.manhattanpharma.com.

Recent Developments

American Stock Exchange

Our common stock has been approved for listing on the American Stock Exchange. Effective October 7, 2005, our common stock will begin trading on the American Stock Exchange under the symbol "MHA."

Changes in Board of Directors

In September 2005, Joshua Kazam and David M. Tanen, who have been directors of our company since February 2003 and January 2002, respectively, tendered their resignations from the board. We currently do not intend to fill the vacancies left by these resignations, but instead will reduce the size of our board of directors from nine persons to seven.

2005 Private Placement

We recently completed a private placement offering of units consisting of shares of our common stock and warrants to purchase additional shares of common stock. The private placement was completed in two separate closings held on August 26, 2005 and August 30, 2005. In the August 26 closing, we sold a total of 10,808,971 shares of common stock and five-year warrants to purchase 2,161,767 shares for total gross proceeds of approximately $12 million. The warrants issued at the August 26 closing are exercisable at a price of $1.44 per share. On August 30, 2005, we closed on the sale of an additional 1,108,709 shares of common stock and warrants to purchase 221,741 common shares, which resulted in gross proceeds of approximately $1.28 million. The warrants issued in connection with the August 30 closing are exercisable at a price of $1.49 per share. Accordingly, the total gross proceeds resulting from the private placement was $13.27 million, before deducting selling commissions and expenses.

We engaged Paramount BioCapital, Inc. as placement agent and paid total cash commissions of $836,360, of which $121,625 was paid to certain selected dealers engaged by Paramount in connection with the private placement and issued five-year warrants to purchase an aggregate of 538,191 shares of common stock exercisable at a price of $1.44 per share, of which Paramount received warrants to purchase 459,932 common shares. In connection with the August 30 closing, we paid cash commissions to Paramount of $88,550 and issued an additional five-year warrant to purchase 55,000 common shares at a price of $1.49 per share. After deduction of these selling commissions and expenses, we realized aggregate net proceeds from our August 2005 private placement of approximately $12.2 million.

In accordance with the terms of the private placement, we agreed to file a registration statement under the Securities Act within 30 days of the final closing of the private placement covering the resale of the shares sold in the private placement, including the shares issuable upon the exercise of the warrants.

As a result of this offering, we expect that our current cash position is sufficient to fund our operations, including the development of our three product candidates, through late 2006.

Conversion of Series A Preferred Stock

The terms of our Series A Preferred Stock, which was originally issued in November 2003, provided for its automatic conversion upon our completion of a financing that results in gross proceeds to of at least $10 million at a pre-money valuation of our company of at least $30 million. Accordingly, as a result of the August 26, 2005 closing of our

private placement discussed above, all of the remaining outstanding shares of our Series A Preferred Stock automatically converted into shares of our common stock. As of such date, there were 729,626 shares of Series A Preferred Stock outstanding, which, upon the closing of the private placement, converted into an aggregate of 6,632,957 shares of common stock (at a rate of 9.0909 common shares per share of preferred stock).

Acquisition of Tarpan Therapeutics, Inc.

Pursuant to an Agreement and Plan of Merger dated April 1, 2005 (the "Agreement") among us, Tarpan Therapeutics, Inc., a Delaware corporation ("Tarpan"), and Tarpan Acquisition Corp., a Delaware corporation and our wholly-owned subsidiary ("TAC"), TAC merged with and into Tarpan, with Tarpan remaining as the surviving corporation and our wholly-owned subsidiary. In consideration for their shares of Tarpan capital stock and in accordance with the Agreement, the stockholders of Tarpan received an aggregate of approximately 10,731,000 shares or approximately 20% of our common stock. As a result of the merger, we assumed Tarpan's outstanding indebtedness of approximately $648,000, which resulted from a series of promissory notes issued to Paramount BioCapital Investments, LLC and Horizon BioMedical Ventures, LLC, both of which are owned or controlled by Dr. Lindsay Rosenwald. The notes were amended at the time of the merger to provide that one-half of the outstanding indebtedness was payable upon completion of the merger and the remaining one-half will be payable at such time as we raise at least $5 million in new financing. As a result of the August 2005 private placement, discussed above, we have now satisfied the remaining balance of this indebtedness.

Table of Contents

Several of Tarpan's former stockholders are directors or significant stockholders of our company. Dr. Rosenwald and various trusts established for the benefit of Dr. Rosenwald and members of his immediate family collectively beneficially owned approximately 46 percent of Tarpan's common stock and beneficially own approximately 26 percent our common stock (Dr. Rosenwald disclaims beneficial ownership of shares held by such trusts, except to the extent of any precuniary interest). In addition, Joshua Kazam, David Tanen, Dr. Michael Weiser and Timothy McInerney, all of whom were then members of our board of directors, collectively owned approximately 13.4 percent of Tarpan's outstanding common stock. Dr. Weiser and Mr. McInerney are also employed by Paramount BioCapital, Inc., an entity owned and controlled by Dr. Rosenwald. As a result of such relationships between us and Tarpan, our board of directors established a special committee to consider and approve the merger. The special committee consisted of three independent directors, none of whom had any prior relationship with Tarpan.

Risk Factors

For a discussion of some of the risks you should consider before purchasing shares of our common stock, you are urged to carefully review and consider the section entitled "Risk Factors" beginning on page 5 of this prospectus.

The Offering

The selling stockholders identified on pages 41-47 of this prospectus are offering on a resale basis a total of 15,169,075 shares of our common stock, of which 3,029,561 shares are issuable upon exercise of outstanding warrants and options.

Common stock offered	15,169,075 shares
Common stock outstanding before the offering[(1)]	59,413,271 shares
Common stock outstanding after the offering[(2)]	62,442,832 shares
Common Stock OTC Bulletin Board symbol	MHTT

(1) Based on the number of shares outstanding as of September 22, 2005, not including 12,835,672 shares issuable upon exercise of various warrants and options to purchase common stock.

(2) Assumes the issuance of all shares offered hereby that are issuable upon exercise of warrants.

Table of Contents

RISK FACTORS

An investment in our common stock is very risky. You may lose the entire amount of your investment. Prior to making an investment decision, you should carefully review this entire prospectus and consider the following risk factors:

Risks Relating to our Business

We currently have no product revenues and will need to raise additional funds in the future. If we are unable to obtain the funds necessary to continue our operations, we will be required to delay, scale back or eliminate one or more of our drug development programs.

We have generated no product revenues to date and will not until we receive approval from the FDA and other regulatory authorities for our product candidates. We have already spent substantial funds developing our potential products and business, however, and we expect to continue to have negative cash flow from our operations for at least the next several years. As of June 30, 2005, we had $889,864 of cash and cash equivalents and $1,505,853 of short-term investments, although we received net proceeds of approximately $12.2 million in connection with our August 2005 private placement. We will have to raise additional funds to complete the development of our drug candidates and to bring them to market, however. Beyond the capital requirements mentioned above, our future capital requirements will depend on numerous factors, including:

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

Additional financing may not be available on acceptable terms, if at all. If adequate funds are not available, we will be required to delay, scale back or eliminate one or more of our drug development programs or obtain funds through arrangements with collaborative partners or others that may require us to relinquish rights to certain of our technologies or products that we would not otherwise relinquish.

We are not currently profitable and may never become profitable.

We have a history of losses and expect to incur substantial losses and negative operating cash flow for the foreseeable future, and we may never achieve or maintain profitability. For each of the fiscal years ended December 31, 2004, 2003 and 2002 and from August 6, 2001 (inception) through December 31, 2001, we realized net losses of $5,896,031, $5,960,907, $1,037,320 and $56,796, respectively. Even if we succeed in developing and commercializing one or both of our current product candidates, we expect to incur substantial losses for the foreseeable future and may never become profitable. We also expect to continue to incur significant operating and capital expenditures and anticipate that our expenses will increase substantially in the foreseeable future as we:

- continue to undertake pre-clinical development and clinical trials for our product candidates;
- seek regulatory approvals for our product candidates;
- implement additional internal systems and infrastructure;
- lease additional or alternative office facilities; and
- hire additional personnel.

We also expect to experience negative cash flow for the foreseeable future as we fund our operating losses and capital expenditures. As a result, we will need to generate significant revenues in order to achieve and maintain profitability.

We may not be able to generate these revenues or achieve profitability in the future. Our failure to achieve or maintain profitability could negatively impact the value of our common stock.

Table of Contents

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

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

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

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

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

We will need FDA approval to commercialize our product candidates in the U.S. and approvals from the FDA equivalent regulatory authorities in foreign jurisdictions to commercialize our product candidates in those jurisdictions. In order to obtain FDA approval of any of our product candidates, we must first submit to the FDA an Investigational New Drug Application, or an “IND,” which will set forth our plans for clinical testing of our product candidates. In January 2005, the FDA accepted INDs for both our Oleoyl-estrone and Propofol LS product candidates. We have not yet filed an IND for PTH(1-34). In February 2005, we began dosing patients in our first Phase I trial in Basel, Switzerland to evaluate the safety and tolerability of defined doses of orally administered oleoyl-estrone in obese adults, in accordance with FDA guidelines. Pending completion of formulation work, we expect to conduct a Phase I clinical study for propofol lingual spray as early as 2005 assuming formulation work is completed satisfactorily. Because propofol has already been approved by the FDA for intravenous use, the FDA has informed us that we may utilize a rapid development strategy that will enable us to go directly to a Pivotal Phase III trial following completion of our planned Phase I trials. Accordingly, we currently anticipate that development of propofol lingual spray may be completed in 2006. See "Business - Lingual Spray Propofol." We are unable to estimate the size and timing of all the Phase II and Phase III programs for oleoyl-estrone at this time and, accordingly, cannot estimate the time when development of that product candidate will be completed.

When the clinical testing for our product candidates is complete, we will submit to the FDA a New Drug Application, or “NDA,” demonstrating that the product candidate is safe for humans and effective for its intended use. This demonstration requires significant research and animal tests, which are referred to as pre-clinical studies, as well as human tests, which are referred to as clinical trials. Satisfaction of the FDA’s regulatory requirements typically takes many years, depends upon the type, complexity and novelty of the product candidate and requires substantial resources for research, development and testing. We cannot predict whether our research and clinical approaches will result in drugs that the FDA considers safe for humans and effective for indicated uses. The FDA has substantial discretion in the drug approval process and may require us to conduct additional pre-clinical and clinical testing or to perform post-marketing studies. The approval process may also be delayed by changes in government regulation, future legislation or administrative action or changes in FDA policy that occur prior to or during our regulatory review. Delays in obtaining regulatory approvals may:

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

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

Table of Contents

In foreign jurisdictions, we must receive approval from the appropriate regulatory authorities before we can commercialize our drugs. Foreign regulatory approval processes generally include all of the risks associated with the FDA approval procedures described above. We have not yet made any determination as to which foreign jurisdictions we may seek approval and have not undertaken any steps to obtain approvals in any foreign jurisdiction.

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

Human clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. The clinical trial process is also time consuming. We estimate that clinical trials of our product candidates will take at least several years to complete. Furthermore, failure can occur at any stage of the trials, and we could encounter problems that cause us to abandon or repeat clinical trials. The commencement and completion of clinical trials may be delayed by several factors, including:

- unforeseen safety issues;
- determination of dosing issues;
- lack of effectiveness during clinical trials;
- slower than expected rates of patient recruitment;
- inability to monitor patients adequately during or after treatment; and
- inability or unwillingness of medical investigators to follow our clinical protocols.

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

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

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

Physicians and patients may not accept and use our drugs.

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

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

Because we expect sales of our current product candidates, if approved, to generate substantially all of our product revenues for the foreseeable future, the failure of any of these drugs to find market acceptance would harm our

business and could require us to seek additional financing.

Table of Contents

Our drug-development program will depend upon third-party researchers and other collaborators who are outside our control.

We currently are collaborating with NovaDel Pharma, from which we license our rights to lingual spray propofol, in the development of that product candidate in the pre-clinical and early clinical trial stages. Under our agreement with NovaDel, it has agreed to perform certain development on our behalf and at our expense, including formulation stability testing, formulation analytic method development and testing and manufacture of clinical trial material for the pre-clinical and early clinical development of propofol lingual spray. Beyond those limited activities, we need to engage independent investigators and other third party collaborators to conduct pre-clinical and clinical trials for lingual spray propofol. We are not currently collaborating with any third party with respect to the development of oleoyl-estrone, but we intend to engage third party independent investigators and collaborators, which may include universities and medical institutions, to conduct our pre-clinical and clinical trials for that product candidate, as well. Accordingly, the successful development of our product candidates will depend on the performance of these third parties. These collaborators will not be our employees, however, and we cannot control the amount or timing of resources that they will devote to our programs. Our collaborators may not assign as great a priority to our programs or pursue them as diligently as we would if we were undertaking such programs ourselves. If outside collaborators fail to devote sufficient time and resources to our drug-development programs, or if their performance is substandard, the approval of our FDA applications, if any, and our introduction of new drugs, if any, will be delayed. These collaborators may also have relationships with other commercial entities, some of whom may compete with us. If our collaborators assist our competitors at our expense, our competitive position would be harmed.

We will rely exclusively on third parties to formulate and manufacture our product candidates.

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

- We may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA must approve any replacement contractor. This approval would require new testing and compliance inspections. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our products after receipt of FDA approval, if any.
- Our third-party manufacturers might be unable to formulate and manufacture our drugs in the volume and of the quality required to meet our clinical needs and commercial needs, if any.
- Our future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products.
- Drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the DEA, and corresponding state agencies to ensure strict compliance with good manufacturing practice and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards.
- If any third-party manufacturer makes improvements in the manufacturing process for our products, we may not own, or may have to share, the intellectual property rights to the innovation.

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

substantially equivalent processes for, production of our products after receipt of FDA approval, if any.

Table of Contents

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

Our future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products. Drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the DEA, and corresponding state agencies to ensure strict compliance with good manufacturing practice and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards. If any third-party manufacturer makes improvements in the manufacturing process for our products, we may not own, or may have to share, the intellectual property rights to the innovation.

Each of these risks could delay our clinical trials, the approval, if any of our product candidates by the FDA or the commercialization of our product candidates or result in higher costs or deprive us of potential product revenues.

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

We currently have no sales, marketing or distribution capabilities. We do not anticipate having the resources in the foreseeable future to allocate to the sales and marketing of its proposed products. Our future success depends, in part, on our ability to enter into and maintain such collaborative relationships, the collaborator's strategic interest in the products under development and such collaborator's ability to successfully market and sell any such products. We intend to pursue collaborative arrangements regarding the sales and marketing of our products, however, there can be no assurance that we will be able to establish or maintain such collaborative arrangements, or if able to do so, that they will have effective sales forces. To the extent that we decide not to, or are unable to, enter into collaborative arrangements with respect to the sales and marketing of its proposed products, significant capital expenditures, management resources and time will be required to establish and develop an in-house marketing and sales force with technical expertise. There can also be no assurance that we will be able to establish or maintain relationships with third party collaborators or develop in-house sales and distribution capabilities. To the extent that we depend on third parties for marketing and distribution, any revenues we receive will depend upon the efforts of such third parties, and there can be no assurance that such efforts will be successful. In addition, there can also be no assurance that we will be able to market and sell our product in the United States or overseas.

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

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

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

· developing drugs;

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

Table of Contents

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

Companies that currently sell both generic and proprietary anti-obesity compounds formulations include, among others, Abbot Laboratories, Inc. and Amgen Inc. Alternative technologies are being developed to treat obesity and overweight disease, several of which are in advanced clinical trials. In addition, companies pursuing different but related fields represent substantial competition. Many of these organizations competing with us have substantially greater capital resources, larger research and development staffs and facilities, longer drug development history in obtaining regulatory approvals and greater manufacturing and marketing capabilities than we do. These organizations also compete with us to attract qualified personnel, parties for acquisitions, joint ventures or other collaborations.

If we fail to adequately protect or enforce our intellectual property rights or secure rights to patents of others, the value of our intellectual property rights may diminish.

Our success, competitive position and future revenues will depend in part on our ability and the abilities of our licensors to obtain and maintain patent protection for our products, methods, processes and other technologies, to preserve our trade secrets, to prevent third parties from infringing on our proprietary rights and to operate without infringing the proprietary rights of third parties.

We currently do not directly own the rights to any patents or patent applications. We license the exclusive rights to two issued patents relating to oleoyl-estrone, which expire in 2016, and three patent applications. We also license the exclusive rights to three issued patents relating to lingual spray propofol, which expire from 2016 to 2017. In addition, our license for propofol lingual spray covers one pending patent application. See “Business - Intellectual Property and License Agreements.” There are no other pending patent applications relating to either of our product candidates, although we anticipate the need to file additional patent applications both in the U.S. and in other countries, as appropriate.

However, with regard to the patents covered by our license agreements and any future patents issued to which we will have rights, we cannot predict:

- the degree and range of protection any patents will afford us against competitors, including whether third parties will find ways to invalidate or otherwise circumvent our patents;
- if and when patents will issue;
- whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings which may be costly whether we win or lose.

Our success also depends upon the skills, knowledge and experience of our scientific and technical personnel, our consultants and advisors as well as our licensors and contractors. To help protect our proprietary know-how and our inventions for which patents may be unobtainable or difficult to obtain, we rely on trade secret protection and confidentiality agreements. To this end, we require all of our employees, consultants, advisors and contractors to enter into agreements which prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business. These agreements may not provide adequate protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information. For example, despite covenants in our license agreements with Oleoylestrone Developments and NovaDel Pharma, from which we license oleoyl-estrone and lingual spray propofol, respectively, that generally prohibit those companies from disclosing information relating to our licensed technology, the respective license agreements allow for each company to publish data and other information relating to our licensed technology. If any of our trade secrets, know-how or

other proprietary information is disclosed, the value of our trade secrets, know-how and other proprietary rights would be significantly impaired and our business and competitive position would suffer.

Table of Contents

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

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

- obtain licenses, which may not be available on commercially reasonable terms, if at all;
- redesign our products or processes to avoid infringement;
- stop using the subject matter claimed in the patents held by others;
- pay damages; or
- defend litigation or administrative proceedings which may be costly whether we win or lose, and which could result in a substantial diversion of our valuable management resources.

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

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

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

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

We may not successfully manage our growth.

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

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

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

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

The testing and marketing of medical products entail an inherent risk of product liability. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our products. We currently carry clinical trial insurance in an amount up to $2,000,000, which may be inadequate to protect against potential product liability claims or may inhibit the commercialization of pharmaceutical products we develop, alone or with corporate collaborators. Although we intend to maintain clinical trial insurance during any clinical trials, this may be inadequate to protect us against any potential claims. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

Table of Contents

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

Our directors, executive officers and principal stockholders beneficially own approximately 38 percent of our outstanding voting stock and, including shares underlying outstanding options and warrants, this group beneficially owns approximately 40 percent of our common stock. Accordingly, these persons and their respective affiliates have the ability to exert substantial influence over the election of our Board of Directors and the outcome of issues submitted to our stockholders.

Risks Related to Our Securities

Trading of our common stock is limited.

Trading of our common stock is conducted on the National Association of Securities Dealers' Over-the-Counter Bulletin Board, or "OTC Bulletin Board." This has adversely effected the liquidity of our securities, not only in terms of the number of securities that can be bought and sold at a given price, but also through delays in the timing of transactions and reduction in security analysts' and the media's coverage of us. This may result in lower prices for our common stock than might otherwise be obtained and could also result in a larger spread between the bid and asked prices for our common stock.

Because it is a "penny stock," it will be more difficult for you to sell shares of our common stock.

In addition, our common stock is a "penny stock." Broker-dealers who sell penny stocks must provide purchasers of these stocks with a standardized risk-disclosure document prepared by the SEC. This document provides information about penny stocks and the nature and level of risks involved in investing in the penny-stock market. A broker must also give a purchaser, orally or in writing, bid and offer quotations and information regarding broker and salesperson compensation, make a written determination that the penny stock is a suitable investment for the purchaser, and obtain the purchaser's written agreement to the purchase. The penny stock rules may make it difficult for you to sell your shares of our stock. Because of the rules, there is less trading in penny stocks. Also, many brokers choose not to participate in penny-stock transactions. Accordingly, you may not always be able to resell shares of our common stock publicly at times and prices that you feel are appropriate.

A significant number of shares of our common stock are or will become available for sale and their sale could depress the price of our common stock.

A substantial number of shares of our common stock are being offered by this prospectus. In addition, we issued an aggregate of 11,917,680 shares of common stock in connection with our August 2005 private placement and are required to register the resale of those shares under the Securities Act. We may also issue additional shares in connection with our business and may grant additional stock options to our employees, officers, directors and consultants or warrants to third parties. Sales of a substantial number of shares of our common stock in the public market after this offering could adversely affect the market price for our common stock and make it more difficult for you to sell our shares at times and prices that you feel are appropriate.

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

During the last two years, the price of our common stock has ranged from a low of $0.25 per share to a high of $2.50, as adjusted for our 1-for-5 reverse stock split in September 2003. The volatile price of our stock makes it difficult for investors to predict the value of their investment, to sell shares at a profit at any given time, or to plan purchases and sales in advance. A variety of factors may affect the market price of our common stock. These include, but are not limited to:

13

Table of Contents

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

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

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

We have never paid dividends.

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

NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained in this prospectus that are forward-looking in nature are based on the current beliefs of our management as well as assumptions made by and information currently available to management, including statements related to the markets for our products, general trends in our operations or financial results, plans, expectations, estimates and beliefs. In addition, when used in this prospectus, the words “may,”“could,”“should,”“anticipate,”“believe,”“estimate,”“expect,”“intend,”“plan,”“predict” and similar expressions and the they relate to us or our management, may identify forward-looking statements. These statements reflect our judgment as of the date of this prospectus with respect to future events, the outcome of which is subject to risks, which may have a significant impact on our business, operating results or financial condition. You are cautioned that these forward-looking statements are inherently uncertain. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results or outcomes may vary materially from those described herein. We undertake no obligation to update forward-looking statements. The risks identified under the heading “Risk Factors” in this prospectus, among others, may impact forward-looking statements contained in this prospectus.

Table of Contents

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

We have compiled the following discussion of out results of operations and financial condition from our Quarterly Report on Form 10-QSB for the quarter ended June 30, 2005 and from our Annual Report on Form 10-KSB for the year ended December 31, 2004. We have not attempted to update this discussion, except as specifically noted. You should read the following discussions in conjunction with our consolidated financial statements and related notes included in this prospectus.

Overview

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

We are a development stage biopharmaceutical company that holds an exclusive world-wide, royalty-free license to certain intellectual property related to oleoyl-estrone, which is owned by Oleoyl-Estrone Developments, SL ("OED") of Barcelona, Spain. Oleoyl-estrone is an orally administered small molecule that has been shown to cause significant weight loss in pre-clinical animal studies regardless of dietary modifications. We also hold the worldwide, exclusive rights to proprietary lingual spray technology to deliver the drug propofol for pre-procedural sedation prior to diagnostic, therapeutic or endoscopic procedures.

Although we are primarily focused on developing these technologies, we continue to seek to acquire proprietary rights to other biomedical and pharmaceutical technologies, by licensing or acquiring an ownership interest, funding their research and development and bringing the technologies to market. On April 1, 2005 we acquired Tarpan Therapeutics, Inc. ("Tarpan"), a privately-held, New York-based biopharmaceutical company developing dermatological therapeutics, in an all stock transaction. Former Tarpan shareholders own approximately 20% of the shares of Manhattan on a fully-diluted basis. Through the acquisition we have acquired Tarpan's primary product candidate, PTH (1-34), a peptide believed to be a regulator of epidermal cell growth and differentiation, which is being developed for the treatment of psoriasis.

Several of Tarpan's former stockholders were also directors or significant stockholders of our company at the time of the acquisition. For example, Joshua Kazam, Timothy McInerney, David Tanen and Dr. Michael Weiser, all of whom were then directors of our company, collectively held approximately 13.4 percent of Tarpan's outstanding common stock. In addition, Dr. Lindsay Rosenwald and various trusts established for the benefit of Dr. Rosenwald and members of his immediate family collectively (Dr. Rosenwald disclaims beneficial ownership of shares held by such trusts, except to the extent of any precuniary interest) beneficially owned approximately 46 percent of Tarpan's common stock and beneficially owned approximately 26 percent our common stock at the time of the acquisition. Because of these relationships, our board established a committee of disinterested directors to consider the Tarpan transaction.

Table of Contents

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

Results Of Operations

Six-Month Period Ended June 30, 2005 vs 2004

During the six months ended June 30, 2005 and 2004, we had no revenue. We do not expect to have significant revenues relating to our product candidates in development prior to June 30, 2006.

For the six months ended June 30, 2005, research and development expense was $1,921,275 as compared to $1,228,234 for the six months ended June 30, 2004. The increase of $693,041 is due primarily to an acceleration of pre-clinical development of our Oleoyl-estrone drug candidate.

For the six months ended June 30, 2005, general and administrative expense was $1,046,403 as compared to $880,993 for the six months ended June 30, 2004. The increase of $165,410 is due primarily to increases in payroll and investor relations expenses of approximately $97,000 and $52,000 respectively. In addition we had increases in expenses related to rent, directors' fees, telephone and all other expenses of $32,000, $23,000, $17,000 and $16,000, respectively. These increases are partially offset by reductions in consulting and meetings of approximately $46,000 and $26,000, respectively.

For the six months ended June 30, 2005, interest and other income was $68,346 as compared to $81,091 for the six months ended June 30, 2004. The decrease of $12,745 is due primarily to a reduction in cash balances and short-term investments.

Net loss for the six months ended June 30, 2005, was $14,787,139 as compared to $1,956,954 for the six months ended June 30, 2004. This increase in net loss is attributable primarily to the in-process research and development charge of $11,887,807 related to the acquisition of Tarpan. Additionally, there were increases in research and development expenses of $693,041 and general and administrative expenses of $165,410 as well as a reduction in interest and other income of $12,745. Finally in 2004 we had a realized gain on sale of marketable equity securities of $71,182, which we did not have in the current year.

Preferred stock dividends of $251,401 and $392,805 reduced earnings per share for the six months ended June 30, 2005 and 2004 by $0.01 and $0.01, respectively.

2004 vs 2003

During each of the years ended December 31, 2004 and 2003, we had no revenue. We do not expect to have revenues relating to our technologies prior to December 31, 2005.

For the year ended December 31, 2004, research and development expense was $4,152,994 as compared to $1,724,043 for the year ended December 31, 2003. The increase of $2,428,951 is due primarily to an acceleration of

pre-clinical development of our Oleoyl-estrone drug to the pre-clinical and clinical development of our Propofol Lingual Spray.

For the year ended December 31, 2004, general and administrative expense was $1,989,829 as compared to $1,786,080 for the year ended December 31, 2003. The increase of $203,749 is due primarily to investor relations expenses of approximately $160,000 and consulting expenses of approximately $67,000. In addition, we had increases in expenses associated with travel of approximately $85,000 and meetings and conferences of approximately $54,000 as well as rent and other expenses of approximately $19,000 and $55,000, respectively. These increases are partially offset by a net reduction in legal and accounting fees of approximately $91,000. Finally, in 2003 we had amortization of intangible assets of approximately $145,000 which we did not have in the current year.

For the year ended December 31, 2004, interest and other income was $246,792 as compared to $11,324 for the year ended December 31, 2003. The increase of $235,468 is a result of an increase in cash balances and a gain on sale of short-term investments.

Table of Contents

Net loss for the year ended December 31, 2004, was $5,896,031 as compared to $5,960,907 for the year ended December 31, 2003. This decrease in net loss is attributable primarily to losses in 2003 on the disposition of intangible assets as a result of our sale of our remaining rights to CT-3 to Indevus Pharmaceuticals, Inc. of $1,213,878 as well as an impairment of intangible assets of $1,248,230 as a result of a decision by Bausch & Lomb not to pursue the Avantix cataract removal technology. This decrease in net loss is partially offset by an increase in research and development expenses of $2,428,951 and an increase in general and administrative expenses of $203,749. These expense increases are partially offset by an increase in interest and other income of $235,468.

Preferred stock dividends of $585,799 increased loss per common share for the year ended December 31, 2004 by $0.02. There were no preferred stock dividend requirements in 2003.

Liquidity and Capital Resources

From inception to June 30, 2005, we incurred a deficit during the development stage of $28,993,575 primarily as a result of losses, and we expect to continue to incur additional losses and negative cash flows from operating activities through at least June 30, 2006 and for the foreseeable future. The acquisition of Tarpan will increase these losses. These losses have been incurred through a combination of research and development activities related to the various technologies under our control and expenses supporting those activities.

We have financed our operations since inception primarily through equity financing and our licensing and sale of residual royalty rights of CT-3 to Indevus. During the six months ended June 30, 2005, we had a net decrease in cash and cash equivalents of $15,792. This decrease resulted from net cash used in operating activities of $2,757,519, net cash provided by investing activities of $2,979,732 and net cash used in financing activities of $238,005. Total liquid resources including short term investments as of June 30, 2005 were $2,395,717 compared to $5,419,872 at December 31, 2004. In addition, during the six months ended June 30, 2005, we accrued a preferred stock dividend of $251,401.

Our current liabilities as of June 30, 2005 were $1,451,035 compared to $1,195,705 at December 31, 2004, an increase of $255,330. The increase was primarily due to an increase in expenditures associated with the commencement of our Phase I clinical trial for our Oleoyl-estrone product candidate and a payable to related parties as a result of the Tarpan acquisition. As of June 30, 2005, we had working capital of $961,694 compared to $4,264,293 at December 31, 2004.

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

Our continued operations will depend on whether we are able to raise additional funds through various potential sources, such as equity and debt financing, other collaborative agreements, strategic alliances, and our ability to realize the full potential of our technology in development. Such additional funds may not become available on acceptable terms and there can be no assurance that any additional funding that we do obtain will be sufficient to meet our needs in the long term. Through June 30, 2005, a significant portion of our financing has been through private placements of common stock and warrants. Unless our operations generate significant revenues and cash flows from operating activities, we will continue to fund operations from cash on hand and through the similar sources of capital previously described. We can give no assurances that any additional capital that we are able to obtain will be sufficient to meet our needs. Management believes that we will continue to incur net losses and negative cash flows

from operating activities for the foreseeable future.

We recently completed a private placement offering of units consisting of shares of our common stock and warrants to purchase additional shares of common stock. The private placement was completed in two separate closings held on August 26, 2005 and August 30, 2005. In the August 26 closing, we sold a total of 10,808,971 shares of common stock and five-year warrants to purchase 2,161,767 shares for total gross proceeds of approximately $12 million. The warrants issued at the August 26 closing are exercisable at a price of $1.44 per share. On August 30, 2005, we closed on the sale of an additional 1,108,709 shares of common stock and warrants to purchase 221,741 common shares, which resulted in gross proceeds of approximately $1.28 million. The warrants issued in connection with the August 30 closing are exercisable at a price of $1.49 per share. Accordingly, the total gross proceeds resulting from the private placement was $13.27 million, before deducting selling commissions and expenses.

We engaged Paramount BioCapital, Inc. as placement agent and paid total cash commissions of $836,360, of which $121,625 was paid to certain selected dealers engaged by Paramount in connection with the private placement and issued five-year warrants to purchase an aggregate of 538,191 shares of common stock exercisable at a price of $1.44 per share, of which Paramount received warrants to purchase 459,932 common shares. In connection with the August 30 closing, we paid cash commissions to Paramount of $88,550 and issued an additional five-year warrant to purchase 55,000 common shares at a price of $1.49 per share. After deduction of these selling commissions and expenses, we realized aggregate net proceeds from our August 2005 private placement of approximately $12.2 million.

As a result of this offering, we expect that our current cash position is sufficient to fund our operations, including the development of our three product candidates, through late 2006.

Table of Contents

Research And Development Projects

Oleoyl-estrone. In January 2005, the United States Food and Drug Administration (FDA) accepted our filed Investigational New Drug Application (IND) for the human clinical testing of oleoyl estrone. This IND allowance was granted on the preclinical chemistry, manufacturing, and safety data submitted to the FDA by the Company.

In February 2005, we began dosing patients in our first Phase I trial in Basel, Switzerland to evaluate the safety and tolerability of defined doses of orally administered oleoyl-estrone in obese adults, in accordance with FDA guidelines after obtaining formal approval from the Swiss medical regulatory authority, Swissmedic. The objective of this human Phase I dose-escalation study was to determine the pharmacokinetic profile of oleoyl-estrone, as well as its safety and tolerability in obese adult volunteers of both genders. The study was completed in two parts, Phase Ia and Phase Ib. In May 2005, we concluded Phase Ia, in which 36 obese volunteers received a single dose of either OE or a placebo, in a dose escalating manner. The Phase Ib trial was a 7-day repeat-dose, dose escalation trial that evaluated 24 obese volunteers in four cohorts, randomized 2 to 1, active to placebo. Both Phase Ia and Phase Ib have been completed. Results from both studies will also be used, in conjunction with extensive preclinical work, to establish the protocol and obtain approval from the FDA to begin Phase II clinical trials. The Phase Ia trial was conducted under the IND accepted by the FDA in January 2005. Under our license agreement with Oleoyl-Estrone Developments, we made a $250,000 milestone payment upon the treatment of the first patient in the Phase I trial.

To date, we have incurred $5,735,870 of project costs related to our development of oleoyl-estrone, of which $1,750,376 and $462,305 was incurred in the first six months of 2005 and 2004, respectively. Currently, we anticipate that we will need to expend approximately an additional $1,500,000 to $2,500,000 in development costs in fiscal 2005. Since oleoyl-estrone is regarded by the FDA as a new entity, it is not realistic to predict the size and the design of the study at this time.

We do not have sufficient capital to fund our anticipated 2005 R&D expenditures relating to oleoyl-estrone in their entirety. We will need to raise additional capital from debt financings or by selling shares of our capital stock in order to complete the anticipated five or six year development program for the product. If we are unable to raise such additional capital, we may have to sublicense our rights to oleoyl-estrone to a third party as a means of continuing development, or though less likely, we may be required to abandon further development efforts altogether, either of which would have a material adverse effect on the prospects of our business.

In addition to raising additional capital, whether we are successful in developing oleoyl-estrone is dependent on numerous other factors, including unforeseen safety issues, lack of effectiveness, significant unforeseen delays in the clinical trial and regulatory approval process, both of which could be extremely costly, and inability to monitor patients adequately before and after treatments. Additional risks and uncertainties are also described in this prospectus under the discussion entitled "Risk Factor." The existence of any of these factors could increase our development costs or make successful completion of development impractical, which would have a material adverse affect on the prospects of our business.

Lingual Spray Propofol. We are currently working with NovaDel to develop, manufacture and commercialize a propofol lingual spray. In July 2004, we released the results of the first human trial for our proprietary lingual spray formulation of propofol. In January 2005, the FDA accepted our IND for the initiation of the human clinical trials in the United States required for FDA approval of Propofol Lingual Spray (Propofol LS). We continue to pursue FDA approval of Propofol LS under 505b2 regulatory pathway. Section 505b2 of the U.S. Food, Drug & Cosmetic Act allows the FDA to approve a drug on the basis of existing data in the scientific literature or data used by the FDA in the approval of other drugs. Accordingly, the FDA has indicated to us that we will be able to utilize Section 505b2 to proceed directly to a pivotal Phase III trial for lingual spray propofol following completion of Phase I trials. We are actively planning the next steps of the clinical development process for Propofol LS, meeting with scientific advisors

and Novadel regarding formulation, reviewing existing data, developing trial design, and evaluating plans to re-enter the clinic.

Table of Contents

To date, we have incurred $2,787,839 of project costs related to our development of propofol lingual spray, of which $170,899 and $797,198 was incurred during the first six months of 2005 and 2004, respectively. Currently, we anticipate that we will need to expend approximately an additional $1,000,000 to $1,500,000 in development costs in fiscal 2005 and at least an aggregate of approximately $3,000,000 to $5,000,000 until we receive FDA approval for propofol, should we opt to continue development until then, including anticipated 2005 costs. As with our development of oleoyl-estrone, we do not have sufficient capital to fund our development activities of propofol lingual spray in their entirety during 2005. Since our business does not generate any cash flow, however, we will need to raise additional capital to continue development of the product beyond 2005. We expect to raise such additional capital through debt financings or by selling shares of our capital stock. To the extent additional capital is not available when we need it, we may be forced to sublicense our rights to propofol lingual spray or abandon our development efforts altogether, either of which would have a material adverse effect on the prospects of our business.

PTH (1-34). As of April 1, 2005 and as a result of the expenses we absorbed from Tarpan Therapeutics, Inc. following completion of our acquisition of that Company, we have incurred $307,555 of projects costs related to our development of PTH (1-34), of which $300,000 was incurred in the first six months of 2004. Currently, we anticipate that we will need to expend approximately an additional $1,000,000 to $1,500,000 in development costs in fiscal 2005. We are working toward a meeting with the FDA to run our development plan for PTH (1-34). In light of the information available from the development of FORTEO® (which contains recombinant human parathyroid hormone (1-34), [rhPTH(1-34)]) and in the absence of the meeting with the FDA, we are not able to realistically predict the size and the design of the study at this time. As with the development of our other product candidates, we do not have sufficient capital to fund our development activities of PTH (1-34) in their entirety during 2005. FORTEO® is registered trademark of Eli Lilly and Company.

Off-Balance Sheet Arrangements

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

Critical Accounting Policies

In December 2001, the SEC requested that all registrants discuss their most “critical accounting policies” in management’s discussion and analysis of financial condition and results of operations. The SEC indicated that a “critical accounting policy” is one which is both important to the portrayal of the company’s financial condition and results and requires management’s most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain.

Use of Estimates

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

Research and development expenses

Research and development expenses are expensed as incurred.

Stock-based Compensation

Options, warrants and stock awards issued to non-employees and consultants are recorded at their fair value as determined in accordance with Statement of Financial Accounting Standards No. 123, “Accounting for Stock-Based Compensation,” and EITF No. 96-18, “Accounting for Equity Instruments That are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services” and recognized as expense over the related vesting period.

Table of Contents

Recently Issued Accounting Standards

In December 2004, the FASB issued SFAS No. 123(R) (revised 2004), “Share-Based Payment”, which amends SFAS Statement No. 123 and will be effective for small business issuers for interim or annual periods beginning after December 15, 2005. The new standard will require us to expense employee stock options and other share-based payments over the vesting period. The new standard may be adopted in one of three ways - the modified prospective transition method, a variation of the modified prospective transition method or the modified retrospective transition method. We are currently evaluating how we will adopt the standard and evaluating the effect that the adoption of SFAS 123(R) will have on our financial position and results of operations.

Table of Contents

BUSINESS

Overview

We are engaged in the business of developing and commercializing biomedical and pharmaceutical technologies. We aim to acquire proprietary rights to these technologies by licensing or otherwise acquiring an ownership interest, funding their research and development and eventually bringing the technologies to market. We do not have any drugs or other products available for sale, but we are currently researching and developing three biomedical technologies:

- Oleoyl-estrone, an orally administered hormone attached to a fatty-acid that has been shown to cause significant weight loss in preclinical animal studies regardless of dietary modifications;

- Lingual spray propofol, a proprietary lingual spray technology to deliver propofol for pre-procedural sedation prior to diagnostic, therapeutic or endoscopic procedures; and

- PTH(1-34), a peptide believed to be a regulator of epidermal cell growth and differentiation currently under development as a topical treatment for psoriasis and additional dermatological indications.

Although we are primarily focused on developing these technologies, we continue to seek to acquire proprietary rights to other biomedical and pharmaceutical technologies, by licensing or acquiring an ownership interest, funding their research and development and bringing the technologies to market.

We were incorporated originally under the name “Atlantic Pharmaceuticals, Inc.” and in March 2000, we changed our name to “Atlantic Technology Ventures, Inc.” On February 21, 2003, we completed a “reverse” acquisition of privately-held Manhattan Research Development, Inc. (formerly known as Manhattan Pharmaceuticals, Inc.), a Delaware corporation. To effect this transaction, Manhattan Pharmaceuticals Acquisition Corp., a wholly-owned subsidiary of Atlantic Technology Ventures, merged with and into Manhattan Research Development, with Manhattan Research Development surviving as a wholly owned subsidiary of Atlantic Technology Ventures. In accordance with the terms of the merger, the outstanding shares of common stock of Manhattan Research Development automatically converted into an aggregate of approximately 80 percent of the outstanding common stock of Atlantic Technology Ventures (after giving effect to the transaction). While in connection with the merger, Atlantic Technology Ventures changed its name to “Manhattan Pharmaceuticals, Inc.”, for accounting purposes, Manhattan Research Development was treated as the acquiring company. Accordingly, when we refer to our business or financial information for periods prior to the merger, we are referring to the business and financial information of Manhattan Research Development, unless the context indicates otherwise.

Oleoyl-estrone

We acquired the rights to develop and commercialize oleoyl-estrone, a hormone modified by an attachment to a fatty acid, pursuant to a February 2002 license agreement with Oleoylestrone Development, SL., a Spanish corporation. Oleoyl-estrone is an orally administered small molecule that has been shown to cause significant weight loss in preclinical animal studies regardless of dietary modifications. We believe that oleoyl-estrone causes weight loss in two ways. First, the scientific community believes that weight loss is regulated by a part of the hypothalamus, located in the brain, called the ponderostat. It is believed that the ponderostat regulates the body’s weight in a manner similar to the way in which a thermostat regulates a room’s temperature. Preclinical studies suggest that oleoyl-estrone resets the ponderostat, telling the body that a lower weight is normal. We believe that this signal then decreases appetite, which leads to weight loss that may be maintained even after oleoyl-estrone treatment is discontinued. Second, fat cells that have been treated with oleoyl-estrone appear to shrink in size, indicating a local effect of oleoyl-estrone acting directly on cells. The apparent dual effect of oleoyl-estrone leads us to believe that the drug has the potential to

cause weight loss in a variety of obese and overweight patients.

Oleoyl-estrone was initially developed by researchers at the University of Barcelona ("UB") in Spain. Through a decade of research, scientists of the Nitrogen-Obesity Research Group at UB noted that hormones that effect metabolism play a significant role in body weight regulation. At the same time, the obesity research community suggested that weight is regulated by the ponderostat, a central mechanism in the hypothalamus of the brain believed to set the point of ideal weight. Researchers at UB believe that a hormone controls the ponderostat, raising or lowering body weight by changing the central set point for the entire body.

Table of Contents

After examining the available work related to estrogens, changes in body weight and body fat percentage (such as during pregnancy), researchers at UB noted that the estrogen-like hormone, estrone, was elevated in the blood of both obese men and women. Initially thought to be a simple estrogen, UB researchers noticed that although estrone levels were elevated, very few obese men manifest the effects of elevated estrogen levels. Further testing revealed that oleoyl-estrone was the main form of estrone that existed in obese patients. The researchers suggested that when cells become filled with fat they produce oleoyl-estrone, signaling the brain to lose weight. They further suggested that fat cells in obese people do not produce sufficiently high levels of oleoyl-estrone to signal the ponderostat to suppress appetite and cause weight loss. Based on this concept, investigators at UB believed that they could induce weight loss by increasing levels of oleoyl-estrone in obese individuals. When oleoyl-estrone was given to rats, the rats lost weight in a dose-dependent manner, supporting the idea that oleoyl-estrone is a primary weight loss signal produced by fat cells. At the doses employed, no side effects were observed in the rats and, in female rats, uterine size remained unchanged, indicating that oleoyl-estrone did not act as an estrogen.

In January 2005, the FDA accepted our filed IND for the human clinical testing of oleoyl-estrone. In February 2005, we began dosing patients in our first Phase I trial in Basel, Switzerland to evaluate the safety and tolerability of defined doses of orally administered oleoyl-estrone in obese adults, in accordance with FDA guidelines after obtaining formal approval from the Swiss medical regulatory authority, Swissmedic. The objective of this human Phase I dose-escalation study was to determine the pharmacokinetic profile of oleoyl-estrone, as well as its safety and tolerability in obese adult volunteers of both genders. The study was completed in two parts, Phase Ia and Phase Ib. In May 2005, we concluded Phase Ia, in which 36 obese volunteers received a single dose of either OE or a placebo, in a dose escalating manner. The Phase Ib trial was a 7-day repeat-dose, dose escalation trial that evaluated 24 obese volunteers in four cohorts, randomized 2 to 1, active to placebo. Both Phase Ia and Phase Ib have been completed. Results from both studies will also be used, in conjunction with extensive preclinical work, to establish the protocol and obtain approval from the FDA to begin Phase II clinical trials. The Phase Ia trial was being conducted under the IND accepted by the FDA in January 2005. Under our license agreement with Oleoyl-Estrone Developments, we made a $250,000 milestone payment upon the treatment of the first patient in the Phase I trial.

Lingual Spray Propofol

On April 4, 2003, we entered into a License and Development Agreement (the “Propofol License”) with NovaDel Pharma Inc. (“NovaDel”) for the worldwide, exclusive rights to NovaDel’s proprietary lingual spray technology to deliver propofol for pre-procedural sedation prior to diagnostic, therapeutic or endoscopic procedures.

Propofol is currently delivered in an oily emulsion for intravenous infusion for induction and maintenance of general anesthesia or “monitored anesthesia care” in operating rooms, or deep sedation in intensive care units. Propofol has previously not been available for dosing via a convenient route of administration for office-based and other ambulatory uses. Accordingly, we have filed a patent application for this new method of use. Other patent applications are being prepared related to our non-oily, novel formulation.

We believe that delivering propofol via this proprietary delivery system provides many advantages over currently formulated sedatives. In addition to the convenience and ease of administration, we believe the lingual spray route will eliminate delayed onset and poor coordination of timing associated with administering oral sedatives, and allow for rapid clinical responses typical of intravenous delivery (i.e., less than 5 minutes). Lingual spray propofol is intended to allow patients to tolerate unpleasant procedures, by relieving anxiety and producing a pleasant, short-term amnesia. Particularly in children and adults unable to cooperate, mild sedation expedites the conduct of numerous ambulatory procedures that are not particularly painful, but which require the patient to remain still for the best technical result.

Novadel’s delivery systems (both patented and patent-pending) are lingual sprays, enabling drug absorption through the oral mucosa and more rapid absorption into the bloodstream than presently available oral delivery systems.

NovaDel refers to its delivery system as Immediate-Immediate Release (I2R™) because its delivery system is designed to provide therapeutic benefits within minutes of administration. We are working with NovaDel to develop, manufacture and commercialize the licensed product, having jointly announced commencement of a development program for lingual spray propofol in June 2003.

Table of Contents

In July 2004, we released the results of the first human trial for our proprietary lingual spray formulation of propofol. The study, which took place in the United Kingdom, was a single-center, randomized, double-blind, placebo-controlled dose-escalating study of propofol lingual spray in twelve healthy adult volunteers. The primary objectives were to compare the safety and tolerability of three dose levels of the propofol spray to a single intravenous bolus low dose of propofol, as well as to determine the respective pharmacokinetic profiles and relative bioavailability of the three escalating doses.

No serious adverse events, nor dose-dependent changes in vital signs, occurred in any group. The mean time to maximum blood concentration of propofol following spray was approximately 30 min across all doses. Propofol was detectable in blood as early as 4 minutes following spray administration. The mean maximum blood concentrations plateaued at the highest of the three doses tested, and the mean bioavailability of the current spray formulation was up to 18% of that of the intravenous formulation.

In January 2005, the FDA accepted our IND for the initiation of the human clinical trials in the United States required for FDA approval of Propofol Lingual Spray. We continue to pursue FDA approval of Propofol LS under 505b2 regulatory pathway. Section 505b2 of the U.S. Food, Drug & Cosmetic Act allows the FDA to approve a drug on the basis of existing data in the scientific literature or data used by the FDA in the approval of other drugs. Accordingly, the FDA has indicated to us that we will be able to utilize Section 505b2 to proceed directly to a pivotal Phase III trial for lingual spray propofol following completion of Phase I trials. We are actively planning the next steps of the clinical development process for Propofol LS, meeting with scientific advisors and Novadel regarding formulation, reviewing existing data, developing trial design, and evaluating plans to re-enter the clinic. See also “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources - Research and Development Projects - Lingual Spray Propofol.

Although we have the sole right and obligation to develop and commercialize lingual spray propofol on a worldwide basis, NovaDel has undertaken to perform certain development activities on our behalf. NovaDel’s responsibilities include formulation development, formulation stability testing, formulation analytic method development and testing and manufacture of clinical trial material for the pre-clinical and early clinical development. We will oversee pre-clinical testing, as necessary, and have responsibility for overall product development and product management. In addition, we will design and oversee clinical trials and be responsible for regulatory filings and meetings. The license agreement provides that these development activities are to be performed under the supervision of a development committee, which is comprised of an equal number of appointees of us and NovaDel. Within 30 days of the end of each calendar quarter in which any agreed-upon development activities are to be performed, each of us and NovaDel are to provide a written progress report to the development committee, which should describe the activities that have been performed and evaluate the work performed in relation to the goals of the development plan and budget. Currently, a proprietary formulation has been prepared and is undergoing one, two, three and six month stability tests, as well as specification analysis. The NovaDel license agreement also provides that NovaDel will manufacture and supply us with lingual spray propofol for use in clinical development and for commercial purposes pursuant to a manufacturing agreement to be entered into between us and NovaDel.

PTH(1-34)

On April 1, 2005, through our acquisition of Tarpan Therapeutics, Inc., we acquired the rights to a third biomedical technology currently under development. PTH(1-34) is a peptide believed to be a regulator of epidermal cell growth and differentiation currently under development as a topical treatment for psoriasis and additional dermatological indications.

In August 2003, researchers, led by Michael Holick, MD, PhD, Professor of Medicine, Physiology, and Biophysics at Boston University Medical Center, reported positive results from a US Phase I and II clinical trial evaluating the

safety and efficacy of PTH (1-34) as a topical treatment for psoriasis. This double-blinded, controlled trial in 15 patients comparing PTH (1-34) formulated in the Novasome® Technology versus the Novasome® vehicle alone showed PTH (1-34) to be a potentially safe and effective treatment for plaque psoriasis. Following 8 weeks of treatment, the application of PTH (1-34) resulted in complete clearing of the treated lesion in 60% of patients and partial clearing in 85% of patients. Additionally, there was a statistically significant improvement in the global severity score. Ten patients continued into an open label extension study in which the Psoriasis Area and Severity Index (PASI) was measured; PASI improvement across all 10 patients achieved statistically significant improvement compared to baseline. No patients experienced any significant adverse events.

Table of Contents

Due to the high response rate seen in psoriasis patients in the initial trial PTH (1-34) may have an important clinical advantage over current topical psoriasis treatments. We intend to initiate additional clinical activities with PTH (1-34) in late 2005 or early 2006. Through the transaction with Tarpan, Manhattan obtains rights to issued and pending patents for all topical uses of PTH (1-34) as well as access to the Novasome® technology and patents for these applications. Novasome® is a registered trademark of IGI, Inc., Buena Park, NJ.

Market and Competition

According to estimates, the market for prescription anti-obesity drugs is approximately $10 billion, or equal to that of diabetes. It is estimated that 61 percent of Americans are overweight and that 26 percent are obese. According to the National Institute of Health's estimate, direct costs for the treatment of obesity in 1988 were in excess of $45 billion and accounted for nearly 8 percent of the total national cost of health care in the United States. By 1999, direct costs for the treatment of obesity had reached $102.2 billion dollars. Meridia® and Xenical®, two currently approved anti-obesity medications, together accounted for approximately $800 million in sales in 2001. We believe that the disease currently lacks a treatment that is safe and effective for most patient groups, and that oleoyl-estrone has the potential to meet the needs of this market.

Competition in the pharmaceutical industry, and the anti-obesity drug market in particular, is intensely competitive. In addition to Abbott Laboratories, Inc. and Roche Holdings AG, the makers of Meridia® and Xenical,® respectively, some of the largest drug companies in the world have anti-obesity drugs currently in development, including GlaxoSmithKline PLC, Johnson & Johnson, Inc., Bristol-Myers Squibb Company, Regeneron Pharmaceutical, Inc., Phytopharm, PLC, Amgen, Inc. These companies are all substantially larger and more established than we are and have significantly greater financial and other resources than we do.

To date, Midazolam (now a generic), which is delivered both intravenously and orally, has dominated the pre-procedural sedation market, posting sales of $536 million in 1999. However, serious adverse events are reported in midazolam's package insert, including respiratory depression, airway obstruction, oxygen desaturation, apnea and even respiratory arrest. In contrast, at the doses being developed by us, we believe that Propofol Lingual Spray may offer a safer, noninvasively administered alternative to midazolam. Propofol's rapid onset profile will allow clinicians to more accurately time its peak effects during procedures, as well as to determine the precise concentration needed for desired levels of sedation.

The efficacy and safety profile of PTH (1-34) will potentially make it an attractive alternative to existing topical treatments, photo therapies and systemic treatments such as methotrexate and biologics for the treatment of psoriasis. We intend to achieve market share as a monotherapy at the expense of existing and established products to be used in combination with currently available therapies. Some of PTH (1-34)'s competitors would include, but are not limited to over-the-counter, or "OTC," and prescription topical treatments, Dovonex, phototherapies, laser treatment, methotrexate, cyclosporine, Johnson & Johnson (Remicade), Amgen (Enbrel), BiogenIdec (Amevive) and Genentech (Raptiva).

Topical treatments include numerous OTC ointments that help to reduce inflammation, soothe skin and enhance the efficacy of other therapies. Additionally, steroids are prescribed as an adjunct therapy for pain and anti-inflammation. One of the most frequently prescribed topical treatments is Calcipotriene (Dovonex), which is an active vitamin D3 analogue. Approximately 60% of patients show some response to Dovonex in the first few months of treatment, however, 60% of these become resistant to treatment in 6-12 months. Dovonex achieved $700 million in sales in its first two years after launch but sales have now declined to $130 million due to high incidence of resistance.

There are two main types of phototherapy, Ultra-violet A, or "UVA" and Ultra-violet B, or "UVB." UVA penetrates deeper into the skin but requires the use of photo-sensitizing agent and carries a higher risk of skin cancer. UVB, on

the other hand, is 1,000 times more powerful than UVA in producing sunburn. UV treatments are often combined with other treatments such as topicals and methotrexate. Phototherapy treatments have been shown to clear the disease and induce remission but they require frequent doctor visits, making treatment expensive and inconvenient.

Table of Contents

Systemic treatments are generally reserved for severe patients due to their harsh side effect profiles. The most effective systemic treatments are methotrexate and cyclosponine. Methotrexate is a classical antifolate commonly used for the treatment of widespread plaque psoriasis the psoriatic arthritis and other autoimmune diseases. The low cost and effectiveness of methotrexate is counter balanced by the significant risk of liver and kidney toxicity and inability to be used by pregnant women. Cyclosporine inhibits Nuclear Factor of Activated T-Cells (NFAT), which requires the transcription of cytokines and the immune response. It is only indicated in patients who have failed prior systemic therapies and carries the risk of impaired renal function and severe immunosuppression. Unlike methotrexate, cyclosporine is relatively expensive and costs over $6,000 per year.

Biologics are likely to play a large role in the treatment of patients with moderate to severe psoriasis but due to their high cost, use will likely be limited to patients that have failed all other treatments or have experienced intolerable side effects or toxicity with other therapies. Therefore the market will likely be limited to the patient population that can no longer be treated with methotrexate or cyclosporine. Amgen's TNF-a inhibitor, Enbrel, recently received marketing approval for psoriasis and is expected to have strong sales due to physician familiarity and efficacy data. However, Enbrel has been shown to cause serious infections and sepsis. Genentech and Serono's Raptiva received FDA approval in 2003 for the treatment of chronic moderate to severe plaque psoriasis in adults. Raptive is a humanized nonoclonal antibody that binds to CD11a, which leads to the inhibition of T-cell activation and migration to sites of inflammation. Clinical trials showed Raptive to have a fast onset of action and to be relatively effective, however, the companies are required to conduct post market safety and efficacy studies. There are other biologics that are either approved or in clinical studies for psoriasis, including BiogenIdec's Amevive and Johnson & Johnson's Remicade. Use of many of these will be limited by their side effect profiles, cost and method of delivery.

Intellectual Property and License Agreements

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

We also depend upon the skills, knowledge and experience of our scientific and technical personnel, as well as that of our advisors, consultants and other contractors, none of which is patentable. To help protect our proprietary know-how which is not patentable, and for inventions for which patents may be difficult to enforce, we rely on trade secret protection and confidentiality agreements to protect our interests. To this end, we require all employees, consultants, advisors and other contractors to enter into confidentiality agreements which prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business.

Oleoyl-estrone License Agreement. We currently have worldwide, exclusive license rights to the U.S. and foreign patents and patent applications regarding oleoyl-estrone and its use for the treatment of human disease:

1. US Patent No. 5,798,348 entitled "Fatty-acid monesters of estrogens for the treatment of obesity and/or overweight." M. Alemany, Inventor. Application filed, October 30, 1996. Patent issued August 25, 1998. This patent expires on October 30, 2016.

2. European Patent No. 771.817 entitled "Oleate monoesters of estrogens for the treatment of obesity and/or overweight." M. Alemany, Inventor. Application filed, October 28, 1996. Patent issued March 26, 2003. This patent expires on October 28, 2016.

3. Spanish Patent Application No. ES 200100785 entitled “Fatty-acid monoesters of estrogens acting as anti-diabetic and hypolipidemia agents.” M. Alemany Lamana, Francisco Javier Remesar Betiloch, and Jose Antonio Fernandez Lopez, Inventors. Application filed March 28, 2001, European Patent Application No. EP1380300A1, filed March 25, 2002, and Canadian Patent Application No. 2441890, filed March 25, 2002.

Table of Contents

The U.S. and European patents have numerous, detailed, and specific claims for both the composition of oleoyl-estrone, and its method of use for weight loss. Our rights to these patents are subject to the terms of a February 2002 license agreement between us and Oleoylestrone Developments. The license agreement provides us with an exclusive, worldwide right to the intellectual property covered by the license agreement, including the right to grant sublicenses. Our success in developing oleoyl-estrone depends on our ability to maintain and enforce the patents relating to oleoyl-estrone.

In consideration for the license, we paid an initial license fee of $175,000. The license agreement provides for further cash payments of $9,250,000 in the aggregate, payable as follows: $250,000 payable upon treatment of the first patient in a Phase I clinical trial under an IND sponsored by us; $250,000 upon treatment of the first patient in a Phase II clinical trial; $750,000 upon the first successful completion of a Phase II clinical trial; $2,000,000 upon the first successful completion of a Phase III clinical trial; and $6,000,000 upon the first final approval of a New Drug Application ("NDA") for oleoyl-estrone by the FDA. The license agreement does not require us to make any royalty payments.

Subject to earlier termination as described below, the term of the license expires on the last to expire patent right licensed under the agreement, which is currently October 2016. Oleoylestrone Developments has the right to terminate the license agreement sooner, subject to certain requirements to provide us advance notice, in the event we become bankrupt or similar proceedings are initiated, fail to make the required milestone payments required under the agreement or otherwise materially breach the license agreement. We have the right to terminate the license agreement for any reason upon written notice.

Propofol LS License Agreement. Pursuant to the NovaDel license agreement, we have an exclusive, worldwide license to NovaDel's proprietary lingual spray technology to deliver propofol for pre-procedural sedation prior to diagnostic, therapeutic or endoscopic procedures. Our rights under the NovaDel License include license rights to the following patents held by NovaDel:

1. U.S. Patent No. 5,955,098, entitled "Buccal Non Polar Spray or Capsule." H.A. Dugger, III, Inventor. Application filed April 12, 1996. Patent issued September 21, 1999. This patent expires April 12, 2016.

2. U.S. Patent No. 6,110,486, entitled "Buccal Polar Spray or Capsule." H.A. Dugger, III, Inventor. Application filed November 25, 1998. Patent issued August 29, 2000. This patent expires April 12, 2016.

3. European Patent No. 0904055 entitled "Buccal, Non-Polar Spray or Capsule." H.A. Dugger, III, Inventor. Application filed, February 21, 1997. Patent issued April 16, 2003. This patent expires February 21, 2017.

4. U.S. Patent Application No. 10/834815 entitled "Buccal, Polar and Non-Polar Sprays Containing Propofol." H.A. Dugger and M.A. El-Shafy, Inventors. Application filed April 27, 2004.

These issued patents have numerous, detailed, and specific claims relating to the formulation for lingual spray applications and their method of use. We have the right to use the technology in connection with one application - delivering propofol. Our success in developing lingual spray propofol depends substantially on the maintenance and enforcement of NovaDel's patents covering its proprietary spray technology. In consideration for our rights under the NovaDel license agreement, we paid NovaDel an initial license fee of $500,000 and an additional $500,000 upon the completion of our $10 million private placement of Series A Convertible Preferred Stock in November 2003. In addition, the license agreement requires us to make certain milestone payments as follows: $1,000,000 payable following the date that the first IND for lingual spray propofol is accepted for review by the FDA; $1,000,000 following the date that the first European Marketing Application is accepted for review by any European Union country; $2,000,000 following the date when the first filed NDA for lingual spray propofol is approved by the FDA;

$2,000,000 following the date when the first filed European Marketing Application for lingual spray propofol is approved by a European Union country; $1,000,000 following the date on which an application for commercial approval of lingual spray propofol is approved by the appropriate regulatory authority in each of Australia, Canada, Japan and South Africa; and $50,000 following the date on which an application for commercial approval for lingual spray propofol is approved in any other country (other than the U.S. or a member of the European Union). In addition, we are obligated to pay NovaDel an annual royalty based on a fixed rate of net sales of licensed products, or if greater, the annual royalty is based on our net profits from the sale of licensed products at a rate that is twice the net sales rate.

Table of Contents

Subject to certain requirements to provide us with notice and an opportunity to cure, NovaDel may terminate the license agreement in the event we (1) become subject to a bankruptcy or similar proceeding that is not dismissed within 60 days, (2) default in our obligation to make a required payment under the license agreement, or (3) otherwise materially breach the license agreement. The license agreement also provided that NovaDel could terminate the license agreement in the event we did not raise $5 million in financing on or before March 31, 2004; however, we satisfied that condition in November 2003 in connection with the $10 million private placement of our Series A Convertible Preferred Stock. We may terminate the license agreement for any reason upon 90 days' notice to NovaDel.

PTH (1-34) License Agreement. We currently have worldwide, exclusive license rights for all topical uses of PTH(1-34) for the treatment of hyperproliferative skin disorders including psoriasis.

1. PTH (1-34): In April 2004, Tarpan entered into an exclusive worldwide royalty bearing License Agreement with IGI, Inc., for the rights to the intellectual property and know-how relating to all topical uses of PTH (1-34). The topical application of PTH (1-34) for the treatment of hyperproliferative skin disorders (including psoriasis) is protected by US patents 5,527,772, 5,840,690, and 6,066,618 and European Patent Specification PCT/US88/03639.

2. Novasome Delivery Technology: In April 2004, Tarpan entered into a non-exclusive, non-royalty bearing, world-wide License Agreement with IGI Inc., for the rights to use the Novosome delivery technology for the development, commercialization and sale of PTH (1-34). IGI will supply product utilizing the Novasome Technology at IGI's cost.

Manufacturing

We do not have any manufacturing capabilities. We have been in contact with several contract "Good Manufacturing Process" (GMP) manufacturers for the supply of oleoyl-estrone, lingual spray propofol, and PTH(1-34) that will be necessary to conduct Phase I and Phase II human clinical trials. A method has been identified for synthesizing oleoyl-estrone, and can be done through simple reactions that produce the substance at above 99 percent purity. We believe that the production of oleoyl-estrone will involve one contract manufacturer for clinical trials. In addition, we will be outsourcing the manufacture of lingual spray propofol and PTH(1-34) as well.

Government Regulation

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

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

- preclinical laboratory tests, animal studies, and formulation studies,
- submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may begin,

Table of Contents

- adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug for each indication,
- submission to the FDA of an NDA,
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current good manufacturing practices, or "cGMPs," and
- FDA review and approval of the NDA.

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

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

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

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

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

should be approved. The FDA is not bound by the recommendations of the advisory committee.

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

Table of Contents

Section 505b2 of the FDCA allows the FDA to approve a follow-on drug on the basis of data in the scientific literature or data used by FDA in the approval of other drugs. This procedure potentially makes it easier for generic drug manufacturers to obtain rapid approval of new forms of drugs based on proprietary data of the original drug manufacturer.

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

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

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

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

Non-United States Regulation. Before our products can be marketed outside of the United States, they are subject to regulatory approval similar to that required in the United States, although the requirements governing the conduct of clinical trials, including additional clinical trials that may be required, product licensing, pricing and reimbursement

vary widely from country to country. No action can be taken to market any product in a country until an appropriate application has been approved by the regulatory authorities in that country. The current approval process varies from country to country, and the time spent in gaining approval varies from that required for FDA approval. In certain countries, the sales price of a product must also be approved. The pricing review period often begins after market approval is granted. Even if a product is approved by a regulatory authority, satisfactory prices may not be approved for such product.

Table of Contents

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

Employees

We currently have 7 employees, including 3 persons devoted to research and development and 4 persons in administration and finance, including our senior management.

Table of Contents

MANAGEMENT

Directors and Executive Officers

Name	Age	Position
Douglas Abel	44	President and Chief Executive Officer and Director
Nicholas J. Rossettos	40	Chief Financial Officer, Chief Operating Officer and Secretary
Neil Herskowitz	48	Director
Malcolm Hoenlein	61	Director
Timothy McInerney	44	Director
Joan Pons	55	Director
Richard I. Steinhart	48	Director
Michael Weiser, M.D., Ph.D.	42	Director

Douglas Abel has been our President and Chief Executive Officer since April 2005, when we completed our acquisition of Tarpan Therapeutics, where Mr. Abel had been President and CEO since November 2004. Prior to joining Tarpan, Mr. Abel served as Vice President of the Dermatology Business Unit at Biogen Idec where he worked from August 2000 to November 2004. While at Biogen, he led the creation of the U.S. dermatology commercial operation, building the team from two to more than 100 employees to support the launch of AMEVIVE®. Before that, Mr. Abel was at Allergan Pharmaceuticals from December 1987 to August of 2000, with his most recent position being Director of BOTOX® Marketing. Mr. Abel received his A.B. in chemistry from Lafayette College and an M.B.A. from Temple University.

Nicholas J. Rossettos has been our Chief Financial Officer and Treasurer since April 2000 and our Chief Operating Officer since February 2003. From February 1999 until joining our company, Mr. Rossettos was Manager of Finance for Centerwatch, a pharmaceutical trade publisher headquartered in Boston, Massachusetts, that is a wholly owned subsidiary of Thomson Corporation of Toronto, Canada. Prior to that, from 1994, he was Director of Finance and Administration for EnviroBusiness, Inc., an environmental and technical management-consulting firm headquartered in Cambridge, Massachusetts. Mr. Rossettos is a certified public accountant and holds an M.S. in Accounting and M.B.A. from Northeastern University.

Neil Herskowitz was appointed to our board of directors in July 2004. Since 1998, Mr. Herskowitz has been a Managing Member of ReGen Partners LLC, an New York investment fund, and is also President of its affiliate, Riverside Claims LLC. Mr. Herskowitz currently serves on the board of directors of Starting Point Services for Children a not-for-profit corporation, and on the board of directors of Vacation Village, a 220-unit development in Sullivan County, New York. Mr. Herskowitz holds a B.B.A. in Finance from Bernard M. Baruch College.

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

Timothy McInerney has been a director of our company since July 2004. Since 1992, Mr. McInerney has been a Managing Director of Paramount BioCapital, Inc. where he oversees the overall distribution of Paramount's private equity product. Prior to 1992, Mr. McInerney was a research analyst focusing on the biotechnology industry at

Ladenburg, Thalman & Co. Prior to that, Mr. McInerney held equity sales positions at Bear, Stearns & Co. and Shearson Lehman Brothers, Inc. Mr. McInerney also has worked in sales and marketing for Bristol-Myers Squibb. He received his B.S. in pharmacy from St. John's University at New York. He also completed a post-graduate residency at the New York University Medical Center in drug information systems.

Joan Pons has been a director of our company since February 21, 2003, the date of our merger with Manhattan Research Development. Prior to the merger, he served as a director of Manhattan Research Development from 2002. Since 2002, Mr. Pons has served chief executive officer of Oleoyl-Estrone Developments S.L., a spin-off of the University of Barcelona. Pursuant to a January 2002 license agreement, we hold an exclusive worldwide license to several patents and patent applications relating to oleoyl-estrone, which are owned by Oleoyl-Estrone Developments. From 1999 until joining Oleoyl-Estrone Developments, Mr. Pons has served as Director of Franchising of Pans & Company, a fast-food company. From 1972 until 1999, Mr. Pons was employed in various finance and sales capacities by Gallina Blanca Purina S.A., a joint venture between St. Louis, Missouri based Ralston Purina Co. and Spanish based Agrolimen S.A., most recently serving as its National Sales & Marketing Director.

Table of Contents

Richard I. Steinhart has been a director of our company since July 2004. Since May 1992, Mr. Steinhart has been principal of Forest Street Capital, a boutique investment banking, venture capital, and management consulting firm. Prior to Forest Street Capital, from May 1991 to May 1992, he was the Vice President and Chief Financial Officer of Emisphere Technologies, Inc., a publicly held biopharmaceutical company that is working to develop and commercialize a proprietary oral drug delivery system. Prior to joining Emisphere Technologies, Mr. Steinhart spent seven years at CW Group, Inc., a venture capital firm focused on medical and healthcare investments, where he was a General Partner and Chief Financial Officer. Mr. Steinhart has previously served as a director of a number of privately-held companies, including ARRIS Pharmaceuticals, Inc., a biotechnology company involved with rational drug design; Membrex, Inc., a laboratory equipment manu-facturing company; and, Photest, Inc., a diagnostics company. He began his career working as a certified public accountant and continues to be a New York State Certified Public Accountant. Mr. Steinhart holds a Bachelors of Business Administration and Masters of Business Administration from Pace University.

Michael Weiser, M.D., Ph.D., has been a director of our company since the completion of our merger transaction with Manhattan Research Development, Inc. in February 2003. He served as a director of Manhattan Research Development since December 2001 and as its Chief Medical Officer from its inception until August 2001. Dr. Weiser is currently also the Director of Research of Paramount BioCapital Asset Management. Dr. Weiser is also a member of Orion Biomedical GP, LLC, and serves on the board of directors of several privately held companies. Dr. Weiser also serves as a director of Chiral Quest, Inc. (OTCBB: CQST) since February 2003. Dr. Weiser received an M.D. from New York University School of Medicine and a Ph.D. in Molecular Neurobiology from Cornell University Medical College. Dr. Weiser completed a Postdoctoral Fellowship in the Department of Physiology and Neuroscience at New York University School of Medicine and performed his post-graduate medical training in the Department of Obstetrics and Gynecology and Primary Care at New York University Medical Center.

There are no family relationships among our executive officers or directors.

Table of Contents

Compensation of Executive Officers

The following table sets forth, for the last three fiscal years, the compensation earned for services rendered in all capacities by our chief executive officer and the other highest-paid executive officers serving as such at the end of 2004 whose compensation for that fiscal year was in excess of $100,000. The individuals named in the table will be hereinafter referred to as the "Named Officers." No other executive officer of Manhattan received compensation in excess of $100,000 during fiscal year 2004.

Summary Compensation Table

		Annual Compensation			Long-Term Compensation Awards	
Name and Principal Position	**Year**	**Salary($)**	**Bonus($)**	**Other Annual Compensation ($)**	**Securities Underlying Options/SARs(#)**	**All Other Compensation ($)**
Leonard Firestone (1)				(3)		
Chief Executive	2004	325,000	73,750	12,300	600,000	—
Officer and	2003	250,000	200,000	—	584,060	—
President	2002	—	—	—	—	—
Nicholas J.	2004	150,000	22,500	7,500(3)	150,000	—
Rossettos	2003	142,788	25,000	22,397(2)	292,030	—
Chief Operating	2002	107,645	25,000	10,000(3)	55,000	—
Officer, Chief Financial Officer, Treasurer & Secretary						

(1) Dr. Firestone became chief executive officer of Manhattan Research Development, Inc. in January 2003 and, following the merger with Atlantic Technology Ventures, Inc. on February 21, 2003, he was appointed chief executive officer of the Registrant. The above table reflects Dr. Firestone's combined compensation received from Manhattan Research Development and our company during fiscal 2003. Dr. Firestone's employment with the Company ended in January 2005.

(2) Represents salary deferred from the prior fiscal year and prior to February 24, 2003.

(3)