

GENTA INC DE/
Form 424B5
March 06, 2006

PRELIMINARY PROSPECTUS SUPPLEMENT, subject to completion, dated March 6, 2006
(To Prospectus dated May 11, 2004)

Filed pursuant to Rule 424(b)(5)
Registration No. 333-114151

The information in this preliminary prospectus supplement is not complete and may be changed. The prospectus supplement and the accompanying prospectus are part of a Registration Statement filed with the United States Securities and Exchange Commission. This prospectus supplement and accompanying prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

[19,000,000] Shares

Genta Incorporated
Common Stock

We are offering [19,000,000] shares of common stock (including the related preferred share purchase rights) in this offering.

Our common stock is quoted on the Nasdaq National Market under the symbol GNTA. On March [], 2006, the last reported sale price of our common stock was \$[] per share.

Our business and an investment in our common shares involve significant risks. These risks are described under the caption Risk Factors beginning on page [] of this prospectus supplement.

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

We are offering these shares of common stock on a best efforts basis primarily to institutional investors. We have retained Cowen & Co., LLC and Rodman & Renshaw, LLC to act as co-placement agents in connection with this offering.

	<u>Per Share</u>	<u>Maximum Offering Amount</u>
Public offering price	\$	\$
Placement agents fees	\$	\$
Proceeds, before expenses, to us	\$	\$

We estimate the total expenses of this offering, excluding the placement agents fee, will be approximately [\$_____]. Because there is no minimum offering amount required as a condition to closing in this offering, the actual public offering amount, placement agents fee and net proceeds to us, if any, in this offering are not presently determinable and may be substantially less than the maximum offering amounts set forth above. The placement agents are not required to sell a minimum number or dollar amount of shares but will use their best efforts to sell the shares offered. Pursuant to an escrow agreement among us, the placement agents and an escrow agent, certain funds received in payment for the shares sold in this offering will be deposited into an interest-bearing escrow account and held until we and the placement agents notify the escrow agent that the offering has closed, indicating the date on which the shares are to be delivered to the purchasers and the proceeds are to be delivered to us.

Cowen & Company
March [], 2006

Rodman & Renshaw, LLC

TABLE OF CONTENTS

Prospectus Supplement	Page	Prospectus	Page
About This Prospectus Supplement	S-2	The Company	2
Information Incorporated by Reference	S-3	Where You Can Find More Information	2
The Offering	S-4	Special Note on Forward-Looking Statements	2
Genta Incorporated	S-5	Use of Proceeds	4
Risk Factors	S-12	Description of Capital Stock	5
Use of Proceeds	S-24	Plan of Distribution	7
Dilution	S-25	Validity of Common Stock	8
Description of Capital Stock	S-26	Experts	8
Plan of Distribution	S-29		
Legal Matters	S-30		
Experts	S-30		

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is a supplement to the accompanying prospectus that is also a part of this document. This prospectus supplement and the accompanying prospectus are part of a shelf registration statement that we filed with the Securities and Exchange Commission. Under the shelf registration process, we may offer from time to time shares of our common stock up to an aggregate amount of \$141,600,000, of which this offering is a part. In the accompanying prospectus, we provide you with a general description of the securities we may offer from time to time under our shelf registration statement. In this prospectus supplement, we provide you with specific information about the shares of our common stock that we are selling in this offering. This prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein and therein include important information about us, our common stock being offered and other information you should know before investing. This prospectus supplement also adds, updates and changes information contained in the accompanying prospectus. You should read both this prospectus supplement and the accompanying prospectus as well as the additional information described under **Where You Can Find More Information** in the accompanying prospectus before investing in shares of our common stock.

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference into the accompanying prospectus and this prospectus supplement. We have not authorized anyone to provide you with information that is different. We are offering to sell and seeking offers to buy shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock.

In this prospectus supplement, unless the context otherwise indicates, the terms **we**, **our**, **us**, **the company** and **Genta** refer to Genta Incorporated.

INFORMATION INCORPORATED BY REFERENCE

The Securities and Exchange Commission, or the SEC, allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus supplement and the accompanying prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until all of the securities that we may offer with this prospectus supplement and the accompanying prospectus are sold:

- o Our Annual Report on Form 10-K for the fiscal year ended December 31, 2003.
- o Our Annual Report on Form 10-K for the fiscal year ended December 31, 2004.
- o Our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2005, June 30, 2005 and September 30, 2005.
- o Our Definitive Proxy Statement on Schedule 14A filed on April 28, 2005.
- o Our Current Reports on Form 8-K filed on January 11, 2005, February 17, 2005, March 15, 2005, April 19, 2005, April 28, 2005, May 5, 2005, May 10, 2005, May 13, 2005, May 16, 2005, May 17, 2005, June 13, 2005, June 23, 2005, June 30, 2005, August 8, 2005, August 9, 2005, September 16, 2005, September 19, 2005, September 21, 2005, January 3, 2006, January 20, 2006, January 27, 2006, February 2, 2006, February 13, 2006, February 17, 2006 and March 1, 2006.

You may request a copy of these filings at no cost, by writing or telephoning Controller, Genta Incorporated, Two Connell Drive, Berkeley Heights, NJ 07922, (908) 286-9800.

The Offering

Common stock offered by us: [19,000,000] shares

Common stock outstanding before the offering: [114,549,543] shares

Common stock to be outstanding after the offering: [133,549,543] shares

Use of proceeds: We currently anticipate that the net proceeds from the sale of the common stock will be used primarily for the creation of a sales and marketing team and capabilities and for general corporate purposes. We may also use such proceeds for research and development, for commercialization expenses and for potential licenses and acquisitions of complementary products, technologies or businesses. See Use of Proceeds.

Nasdaq National Market Symbol: GNTA

The information above is based on [114,549,543] shares of our common stock outstanding as of [December 31, 2005]. It does not include:

- o [10,795,222] shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2005 at a weighted average exercise price of \$[5.22] per share;
- o [296,260] shares of our common stock issuable upon the exercise of warrants outstanding as of September 30, 2005 at a weighted average exercise price of \$[2.45] per share;
- o [95,125] shares of our common stock issuable upon the conversion of Series A Preferred Stock; and
- o [4,858,933] shares of our common stock reserved for future awards under our stock incentive plan and stock purchase plan as of September 30, 2005.

GENTA INCORPORATED

This summary highlights information contained elsewhere in our filings with the Securities and Exchange Commission. You should read the entire prospectus supplement, the accompanying prospectus and all of our filings with the Securities and Exchange Commission carefully, including the Risk Factors section included in this prospectus supplement, before making an investment decision.

We were incorporated in Delaware on February 4, 1988. We are a biopharmaceutical company engaged in pharmaceutical (drug) research and development, its sole reportable segment. We are dedicated to the identification, development and commercialization of novel drugs for the treatment of cancer and related diseases. The Company's research portfolio consists of two major programs: DNA/RNA Medicines and Small Molecules .

The DNA/RNA Medicines program includes drugs that are based on using modifications of either DNA or RNA as drugs that can be used to treat disease. This program includes technologies such as antisense, decoys, aptamers and small interfering or micro RNA. Our lead drug from this program is an investigational antisense compound known as Genasense® (oblimersen sodium injection). Genasense® is designed to block the production of a protein known as Bcl-2. Current science suggests that Bcl-2 is a fundamental (although not sole) cause of the inherent resistance of cancer cells to current anticancer treatments, such as chemotherapy, radiation, or monoclonal antibodies. While Genasense® has displayed some anticancer activity when used by itself, we are developing the drug primarily as a means of amplifying the cytotoxic effects of other anticancer treatments.

Genasense® has been studied in combination with a wide variety of anticancer drugs in a number of different cancer indications. We have reported results from three randomized Phase 3 trials of Genasense® in malignant melanoma, chronic lymphocytic leukemia, or CLL, and multiple myeloma. Under our own sponsorship or in collaboration with the U.S. National Cancer Institute, or NCI, we are currently conducting a number of additional clinical trials.

The Small Molecules program currently includes drugs that are based on gallium-containing compounds. The lead drug from this program is Ganite® (gallium nitrate injection), which was approved by the FDA in October 2003 for the treatment of patients with symptomatic cancer-related hypercalcemia that is resistant to hydration. In Phase 2 studies, Ganite® has demonstrated direct anticancer activity at somewhat higher doses than are used for hypercalcemia treatment, particularly in patients with malignant lymphoma and bladder cancer. Following the adverse outcome of the FDA's Oncology Drug Advisory Committee, or ODAC, meeting in May 2004 for the Genasense® NDA in melanoma, we markedly reduced spending on the development, sale and marketing of Ganite®, which has resulted in significantly lower sales of Ganite®. A number of side effects have been reported related to treatment with Ganite®. These side effects are described in the product insert for the drug. We have also been engaged in developing new formulations of gallium-containing compounds that may be orally absorbed; to date, however, these efforts have not yielded a compound that we have advanced into late-stage preclinical testing.

Summary of Business and Research and Development Programs

Our goal is to establish Genta as a biopharmaceutical leader and preferred partner in the oncology market and as direct marketers of our products in the United States. Our key strategies in this regard are:

- o *Build on our core competitive strength of oncology development expertise to establish a leadership position in providing biopharmaceutical products for the treatment of cancer;*
- o *Expand our pipeline of products in two therapeutic categories, DNA/RNA Medicines and Small Molecules, through internal development, licensing and acquisition;*
- o *Establish our lead antisense compound, Genasense®, as the preferred chemosensitizing drug for use in combination with other cancer therapies in a variety of human cancer types; and*
- o *Establish a sales and marketing presence in the U.S. oncology market.*

Research and Development Programs

DNA/RNA Medicines

A number of technologies have been developed using modifications of DNA or RNA. These agents have been used as scientific tools for laboratory use to identify gene function, as diagnostic probes to evaluate diseases, and more recently as potential drugs to treat human diseases. Collectively, these technologies include methods known as antisense, RNA interference, decoys and gene therapy. Founded in 1988, we were one of the first companies established to exploit these new technologies for use as potential drugs and we remain broadly committed to research and development of these compounds with a specific focus on cancer medicine (oncology). Our most advanced drugs in our DNA/RNA Medicines program involve the use of antisense technology.

Antisense Technology

Most cellular functions, including whether cells live or die, are carried out by proteins. The genetic code for a protein is contained in DNA, which is made up of bases known as nucleotides that are arranged in a specific sequence. The specificity of the sequence accounts for the production of a specific protein. In order for DNA to produce a protein, an intermediate step is required. In this step, DNA is transcribed into messenger RNA, or mRNA. The sequence of mRNA that encodes a protein is oriented in only one direction, which is known as the sense orientation.

Antisense drugs are short sequences of chemically modified DNA bases that are called oligonucleotides, or oligos. The oligos are engineered in a sequence that is exactly opposite (hence anti) to the sense coding orientation of mRNA. Because antisense drugs bind only short regions of the mRNA (rather than the whole message itself), they contain far fewer nucleotides than the whole gene. Moreover, since they are engineered to bind only to the matching sequence on a specific mRNA, antisense drugs have both high selectivity and specificity, which can be used to attack production of a single, disease-causing protein. Our lead antisense compound, Genasense®, is an antisense oligo that is designed to block the production of Bcl-2.

We have devoted significant resources towards the development of antisense oligos that contain a phosphorothioate backbone, which is the nucleotide chain comprised of ribose and phosphate groups. However, we also have patents and technologies covering later generation technologies that involve mixed backbone structures, as well as sterically fixed chemical bonds, that may further enhance the molecule's ability to bind to the intended target. Moreover, we have developed certain formulations that can be used to more efficiently increase the uptake of oligos into cells. Some of these advanced technologies may be incorporated into future products from our DNA/RNA Medicines program.

Genasense® as a Regulator of Apoptosis, or Programmed Cell Death

The programmed death of cells, also known as apoptosis, is necessary to accommodate the billions of new cells that are produced daily and also to eliminate aged or damaged cells. However, abnormal regulation of the apoptotic process can result in disease.

Cancer is commonly associated with the over- or under-production of many types of proteins. These proteins may be directly cancer-causing (i.e., oncogenic) or they may contribute to the malignant nature of cancer (for instance, by increasing the longevity of cancer cells or making them more likely to spread throughout the body). The ability to selectively halt the production of certain proteins may make the treatment of certain diseases more effective. Apoptosis is regulated by a large number of proteins, particularly members of the Bcl-2 protein family. In

an effort to make existing cancer therapy more effective, we are developing Genasense® to target and block the production of Bcl-2, a protein that is central to the process of apoptosis.

Bcl-2 as an Inhibitor of Programmed Cell Death

Normally, when a cancer cell is exposed to treatment, such as with chemotherapy, radiation or immunotherapy, a death signal is sent to an organelle within the cell called the mitochondrion. The mitochondrion then releases a factor known as cytochrome C that activates a series of enzymes called caspases. These enzymes cause widespread fragmentation of cellular proteins and DNA, which ultimately causes cell death.

Bcl-2 is normally found in the mitochondrial membrane where it regulates the release of cytochrome C. High levels of Bcl-2 are associated with most types of human cancer, including major hematologic cancers such as lymphomas, myeloma, and leukemia, and solid tumors such as melanoma and cancers of the lung, colon, breast and prostate. In these diseases, Bcl-2 inhibits the release of cytochrome C that would ordinarily be triggered by cancer therapy. Thus, Bcl-2 appears to be a major contributor to both inherent and acquired resistance to cancer treatments. Overcoming resistance to chemotherapy poses a major challenge for cancer treatment.

In cancer cells, Bcl-2 inhibits the process of programmed cell death, thereby allowing cells to survive for much longer than normal cells. Genasense® has been developed as a chemosensitizing drug to block production of Bcl-2, thereby dramatically increasing the sensitivity of cancer cells to standard cancer treatment.

Genasense®

Genasense® has been designed to block the production of Bcl-2. Current science suggests that Bcl-2 is a fundamental although not sole - cause of the inherent resistance of cancer cells to most types of existing anticancer treatments, such as chemotherapy, radiation or monoclonal antibodies. Blocking Bcl-2, therefore, may enable cancer treatments to be more effective. While Genasense® has displayed some anticancer activity when used by itself, we believe the drug can be optimally used as a means of amplifying the effectiveness of other cancer therapies, most of which function by triggering apoptosis, which as noted is relatively blocked in cancer cells due to over-production of Bcl-2.

Overview of Preclinical and Clinical studies of Genasense®

Preclinical Studies

A number of pre-clinical studies in cell lines and in animals have shown enhancement of tumor cell killing when Bcl-2 antisense was used in combination with standard cancer therapies, including anti-metabolites, alkylating agents, corticosteroids, other cytotoxic chemotherapy, radiation and monoclonal antibodies. Several studies have demonstrated enhanced antitumor activity and durable tumor regression in animals engrafted with human cancers that were treated with Bcl-2 antisense followed by antitumor agents that induce programmed cell death. These studies include human lymphoma, melanoma, breast cancer and prostate cancers, which were treated with Genasense® in combination with cyclophosphamide, dacarbazine, docetaxel and paclitaxel, respectively.

Clinical Studies

Genasense® has been in clinical trials since 1995. We currently have efficacy and safety data on over 1,500 patients in Phase 1, Phase 2 and Phase 3 clinical trials that have been conducted in the U.S., Europe, South America and Australia. These studies have included patients with a wide variety of tumor types, including advanced melanoma, several types of acute and chronic leukemia, non-Hodgkin's lymphoma, or NHL, multiple myeloma and cancers of the prostate, colon, lung, breast and other tumor types. Since 2001, we and the NCI have jointly approved the initiation of approximately twenty clinical trials. In addition to making Genasense® available to more physicians and patients, these trials enable the evaluation of Genasense® in certain diseases (and in combination with other chemotherapy drugs) that would otherwise be outside our initial development priorities. The overall results of clinical trials performed to date suggest that Genasense® can be administered to cancer patients with acceptable side-effects and that such treatment may reduce the level of Bcl-2 protein in cancer cells. We believe the clinical safety and efficacy results in patients with advanced melanoma and relapsed or refractory CLL have been sufficiently promising to warrant marketing approval in these indications. Accordingly, we currently have marketing applications pending in Europe (for melanoma) and the U.S. (for CLL).

The following chart sets forth the progress of our clinical trials with respect to various potential indications for Genasense®:

Indication	Status
Malignant Melanoma	Phase 3 completed; completed a Marketing Authorization Application (MAA) to the EMEA
Chronic Lymphocytic Leukemia	Phase 3 completed; results of trial met primary endpoint; NDA submitted to the FDA
Multiple Myeloma	Phase 3 completed; trial did not meet primary endpoint
Acute Myelocytic Leukemia	Phase 3 (randomized)
Non-Small-Cell Lung Cancer	Phase 2 (randomized), fully enrolled
Prostate Cancer	Phase 2 (randomized)
Small-Cell Lung Cancer	Phase 2 (randomized), fully enrolled
Breast Cancer	Phase 1-2
Colorectal Cancer	Phase 1-2
Non-Hodgkin's lymphoma	Phase 1-2 and Phase 2
Kidney Cancer	Phase 2
Pancreatic Cancer (and other solid tumors)	Phase 1-2
Waldenstrom's macroglobulinemia	Phase 1-2
Hepatocellular Carcinoma	Phase 1-2
Childhood Solid Tumors	Phase 1

Highlights of the randomized trials sponsored directly by us are as follows:

Phase 3 Trial of Genasense® Plus Chemotherapy in Patients with Malignant Melanoma

In late 2003, we filed an NDA for Genasense® to be used in combination with dacarbazine for the treatment of patients with advanced melanoma who had not previously received chemotherapy. On May 3, 2004, a majority of the ODAC members voted that while the increased number of clinical responses was indicative of clinical activity, the evidence presented did not provide substantial evidence of effectiveness, to outweigh the increased toxicity of administering Genasense®. On May 13, 2004, we announced that we were withdrawing our NDA. Subsequent to the withdrawal in the U.S., we continued to track data from patients enrolled in its Phase 3 trial and to analyze our results.

Data that emerged from extended follow-up of patients who entered into this trial were analyzed in 2005 and were informally reviewed with certain regulatory authorities. Encouraged by the study results, on January 3, 2006, we announced that we had completed a MAA to the EMEA for use of Genasense® plus dacarbazine for the treatment of patients with advanced melanoma who have not previously received chemotherapy. On February 1, 2006, we announced that we had received notice from the EMEA that our MAA had been validated for review by the Agency, which signals the start of formal scientific assessment.

Phase 3 Trial of Genasense® Plus Chemotherapy in Patients with Chronic Lymphocytic Leukemia

In December 2004, we presented results from our third randomized trial, which was conducted in patients with relapsed or refractory CLL. In this trial, 241 patients who had relapsed or had not responded to prior therapy were treated with standard chemotherapy using fludarabine and cyclophosphamide, or Flu/Cy. After stratifying patients using conventional criteria, they were randomly assigned to receive Genasense® or no additional treatment. Initial results showed that the trial achieved its primary endpoint: the proportion of patients who achieved a complete or nodular partial response, or CR/nPR, was improved with the addition of Genasense® to Flu/Cy chemotherapy (17% vs. 7%; P=0.025). The response required independent confirmation by an external clinical reviewer who was blinded to treatment assignment and who reviewed clinical, laboratory and radiologic data. A second independent reviewer evaluated bone marrow biopsies. Agreement between the clinical and bone marrow reviews was required in order to determine response in this study.

The CLL trial also showed that the duration of CR/nPR was significantly improved for patients treated with Genasense® plus chemotherapy. To date, six of the eight patients (75%) who achieved CR/nPR with chemotherapy

alone have relapsed compared with five of twenty patients (25%) in the Genasense® treatment group. The median duration of CR/nPR was 22 months in the chemotherapy-alone group; the median has not been reached in the Genasense® group (P=0.03). All CR/nPR responses have been durable (i.e., exceeding six months duration). Additional analysis showed that patients who achieved CR/nPR also experienced substantial clinical benefit, especially with respect to improvement of disease-related symptoms. Several secondary endpoints were not improved by the addition of Genasense®. For example, no difference was observed in overall response rate (i.e., the percentage of patients who achieved CR/nPR plus partial response, or PR, or in time-to-disease progression. Overall survival will be formally evaluated in mid-2006 after all patients have completed a minimum of two years of follow-up. Adverse events (irrespective of relation to study drugs) during treatment or within 30 days from last dose of treatment that resulted in death occurred in nine patients treated with Genasense® plus chemotherapy compared with five patients treated with chemotherapy alone. The percentage of patients who experienced serious adverse events was increased in the Genasense® arm; however, the percentages of patients who discontinued treatment due to adverse events were equal in the treatment arms. The incidence of certain serious adverse reactions, including but not limited to nausea, fever and catheter-related complications, was increased in patients treated with Genasense®.

On December 28, 2005, we completed submission of an NDA to the FDA that sought accelerated approval for the use of Genasense® in combination with fludarabine plus cyclophosphamide for the treatment of patients with relapsed or refractory CLL who have previously received fludarabine. Genasense® has received Fast Track designation by the FDA in CLL, meaning that the indication represents an unmet medical need. Genasense® has also been granted designation as an Orphan Drug by FDA. On March 1, 2006, we announced that the NDA had been accepted for review by FDA with a target action date of October 28, 2006. One requirement for Accelerated Approval is that we will be required to conduct a confirmatory trial. We have formulated a design for such a trial and have submitted a proposal to FDA for review as a Special Protocol Assessment, or SPA. We expect to receive initial comments from FDA on the SPA request during the first half of 2006. Formal initiation of the trial will depend upon resolution of trial design issues with FDA, among other factors. Although Fast Track designation, Orphan Drug designation and Accelerated Approval provisions are beneficial, we cannot assure you that the NDA will be approved.

In December 2005, we also announced preliminary clinical results regarding the use of Genasense® in combination with fludarabine plus rituximab (Rituxan®; Genentech/IDEC) in patients with CLL. Two clinical studies have explored the use of Genasense® plus rituximab, with and without cytotoxic chemotherapy, in patients with NHL. The goals of these Phase 1 and 2 studies have primarily been to evaluate safety and tolerability of Genasense® when used in combination with rituximab, along with obtaining preliminary evidence of activity.

Phase 3 Trial of Genasense® Plus Chemotherapy in Patients with Multiple Myeloma

In November 2004, we reported that our randomized Phase 3 clinical trial of Genasense® in patients with multiple myeloma did not meet its primary endpoint. The trial had been designed to evaluate whether the addition of Genasense® to standard therapy with high-dose dexamethasone could increase the time to development of progressive disease in patients who previously had received extensive therapy. Based on the results of the Phase 3 trial, we have no plans to submit an NDA in this indication at the current time. We have not yet determined what additional clinical trials, if any, may be undertaken in patients with multiple myeloma.

Other Trials

Other randomized trials are being conducted either by us or by oncology cooperative groups. These trials materially differ from previous studies noted above in that they were not prospectively reviewed by FDA for registration suitability prior to initiation. Details of these trials are as follows:

A large U.S. cooperative oncology group, the Cancer and Leukemia Group B, or CALGB, is running a Phase 3 trial in patients with acute myelocytic leukemia, or AML, over the age of 60 who have not previously received chemotherapy. All patients in this trial receive standard chemotherapy with daunorubicin and cytarabine and they are randomly assigned to receive additional treatment with Genasense® or no other treatment. This trial is currently projected to enroll up to approximately 500 patients. In January 2006, the CALGB informed our collaborators in NCI that it expected to complete enrollment in this trial during 2006. While the primary endpoint of the AML trial is overall survival, a variety of secondary endpoints (such as complete remission, or CR, rate and remission duration) will be sequentially examined during the analysis of this trial. We believe that if the CR results are significantly superior for patients treated with Genasense®, results from this trial may prove sufficient for filing marketing applications in this indication on a global basis. The initial CR data may become available as early as

2007. However, we have no control over the conduct or analysis of this trial and thus no reliance can be placed upon these timelines at this time.

During June 2004, we completed enrollment in a randomized Phase 2 trial of Genasense® plus docetaxel in patients with non-small cell lung cancer. Patients who met a variety of eligibility criteria and who had failed front-line platinum-containing chemotherapy were eligible. Patients were randomly assigned to receive a standard dose of docetaxel with or without Genasense®. A total of 298 patients were enrolled into this study. The primary endpoint of the study was to increase overall survival in patients treated with Genasense® plus chemotherapy compared with patients treated with chemotherapy alone. Key secondary endpoints include comparisons of progression-free survival and objective response. A minimum follow-up period prior to analysis was specified in this trial, which concluded in December 2005. Depending upon our ability to defend the global marketing applications that are already pending, we currently project that we will be able to analyze and release initial results from this trial during 2006. However, since this trial will not, by itself, suffice for regulatory approval, the priority for analysis of this trial will be subordinate to other logistical considerations within the Company.

Two oncology cooperative groups, including the European Organization for Research and Treatment of Cancer, or EORTC, and the CALGB, are conducting exploratory randomized trials, as follows:

During the fourth quarter of 2004, the CALGB completed enrollment in a randomized trial of Genasense® in patients with small cell lung cancer. The trial evaluated patients with extensive disease who had not previously received chemotherapy. The trial included approximately 65 patients who were randomly assigned to receive Genasense® plus chemotherapy with carboplatin and etoposide or chemotherapy alone. The primary endpoint of the trial was to determine the proportion of patients who survived at least twelve months from the date of randomization. The minimum follow-up period concluded in October 2005 and data from this trial are reasonably expected to be available in 2006.

In January 2006, the EORTC completed enrollment into a randomized study of Genasense® in patients with hormone-refractory prostate cancer who had not previously received chemotherapy. In this study, all patients received standard chemotherapy with docetaxel and were randomly assigned to receive Genasense® or no other treatment. We were recently informed that enrollment into this trial was completed with the accrual of 118 patients. The primary endpoint of this study was to compare response rates, as measured by a decrease of prostate specific antigen, or PSA. While data from this trial may be available in 2006, we have no control over the conduct or analysis of this trial, and thus no reliance can be placed upon these timelines at this time.

In addition to these randomized trials, we, either under our own sponsorship or in collaboration with the NCI are also conducting a number of non-randomized clinical trials in patients with various types of cancer.

For additional background information on the drug application process and clinical trials, see *Government Regulation* contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2004.

Ganite®

Ganite® as a Treatment for Cancer-Related Hypercalcemia

On October 6, 2003, we began marketing Ganite® for the treatment of cancer-related hypercalcemia. Ganite® is our first drug to receive marketing approval.

Hypercalcemia is a life-threatening condition caused by excessive buildup of calcium in the bloodstream, which may occur in up to 20% of cancer patients. Gallium nitrate was originally studied by the NCI as a new type of cancer chemotherapy. More than 1,000 patients were treated in Phase 1 and Phase 2 trials, and the drug showed promising antitumor activity against NHL, bladder cancer and other diseases. In the course of these studies, gallium nitrate was also shown to inhibit bone resorption. Gallium nitrate underwent additional clinical testing and was approved by the FDA in 1991 as a treatment for cancer-related hypercalcemia. Lower doses of Ganite® were also tested in patients with less severe bone loss, including bone metastases, a cancer that has spread to bone, Paget's disease, an affliction of older patients that causes pain and disability, and osteoporosis.

Side effects of Ganite® include nausea, diarrhea and kidney damage. A complete listing of Ganite®'s side effects is contained in the product's Package Insert that has been reviewed and approved by the FDA. The principal patent covering the use of Ganite® for its approved indication, including potential extensions under Hatch-Waxman

provisions in the U.S., expired in April 2005. In May 2004, we eliminated our sales force and significantly reduced our marketing support for Ganite®. Since then, we have continued only minimal marketing support of the product.

Ganite® as a Treatment for Non-Hodgkin's Lymphoma and Other Cancer Types

Based on previously published data, we believe that Ganite® may also be a useful treatment for patients with certain types of cancer, particularly NHL. Approximately 54,000 new cases of NHL are diagnosed in the United States each year. We have been granted an investigational new drug exemption, or IND, and we have commenced clinical trials of Ganite® for the treatment of patients with relapsed NHL. In December 2004, we announced the results of a Phase 2 clinical trial in patients with NHL. The results showed that Ganite® displayed antitumor activity in patients with various types of advanced NHL who had failed to respond or had relapsed from other types of treatment. However, the use of Ganite® for these indications entailed the use of higher doses than were used in the hypercalcemia trials and as a result, an increased number of serious adverse events were recorded in this trial. In particular, several patients experienced optic neuritis and optic atrophy associated with visual loss, along with other side effects. As a result of the cost savings actions announced in May 2004, spending on the clinical development of Ganite® as a chemotherapy agent was also reduced. When sufficient resources become available, we may resume clinical development of Ganite® in NHL and other indications by initiating new clinical trials. Previous clinical trials of Ganite® showed that the drug has not been associated with significant myelosuppression, a decrease of bone marrow activity often associated with cancer therapy, which can cause increased susceptibility to bleeding and infection. We believe this feature may allow Ganite® to be incorporated into combination chemotherapy regimens that employ other drugs that cause myelosuppression, thereby potentially increasing the utility of such therapy for patients.

RISK FACTORS

Investment in our common stock involves a high degree of risk. You should carefully consider the following risks and all of the other information set forth in this prospectus supplement and the accompanying prospectus before deciding to invest in shares of our common stock. The risks described below are not the only ones facing our company. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations.

If any of the following risks actually occurs, our business, financial condition or results of operations would likely suffer. In such case, the market price of our common stock would likely decline due to the occurrence of any of these risks, and you may lose all or part of your investment.

Risks Related to Our Business

We may be unsuccessful in our efforts to obtain approval from the US Food and Drug Administration, or FDA, or European Medicines Agency, or EMEA, and commercialize Genasense® (oblimersen sodium) Injection or our other pharmaceutical products.

The commercialization of our pharmaceutical products involves a number of significant challenges. In particular, our ability to commercialize products, such as Ganite® (gallium nitrate injection) and Genasense®, depends, in large part, on the success of our clinical development programs, our efforts to obtain regulatory approvals and our sales and marketing efforts directed at physicians, patients and third-party payors. A number of factors could affect these efforts, including:

- o our ability to demonstrate clinically that our products are useful and safe in particular indications;
- o delays or refusals by regulatory authorities in granting marketing approvals;
- o our limited financial resources and sales and marketing experience relative to our competitors;
- o actual and perceived differences between our products and those of our competitors;
- o the availability and level of reimbursement for our products by third-party payors;
- o incidents of adverse reactions to our products;
- o side effects or misuse of our products and the unfavorable publicity that could result; and
- o the occurrence of manufacturing, supply or distribution disruptions.

We cannot assure you that Genasense® will receive FDA or EMEA approval. Our financial condition and results of operations have been and will continue to be significantly affected by FDA and EMEA action with respect to Genasense®. Any adverse events with respect to FDA and/or EMEA approvals could negatively impact our ability to obtain additional funding or identify potential partners.

For example, on January 3, 2006, we announced that we had completed a Marketing Authorization Application, or MAA, to the EMEA that seeks approval for use of Genasense® plus dacarbazine for the treatment of patients with advanced melanoma who have not previously received chemotherapy. On February 1, 2006, we announced that we had received notice from the EMEA that our MAA was validated for review by the EMEA. We anticipate receiving consolidated questions from the EMEA approximately 120 days from the date of the MAA's validation. The centralized licensing procedure provides a single marketing authorization that is valid in all 25-member states of the European Community. Review of the application is coordinated by the EMEA, and Spain and France have been appointed as rapporteur and co-rapporteur countries, respectively.

On December 28, 2005, we completed submission of an NDA to the FDA that seeks accelerated approval for the use of Genasense® in combination with fludarabine plus cyclophosphamide for the treatment of patients with relapsed or refractory CLL who have previously received fludarabine. Genasense® has received Fast Track designation by the FDA in CLL, meaning that the indication represents an unmet medical need. Genasense® has also been granted designation as an Orphan Drug by the FDA. On March 1, 2006, we announced that the NDA had been

accepted for review by the FDA with a target action date of October 28, 2006. However, acceptance of this NDA does not necessarily lead to FDA approval. Following its review of all our information concerning Genasense®, the FDA may refuse to approve altogether, or may ask for more data to be obtained, so that approval can be reconsidered. Either of these two decisions by the FDA would have a material adverse effect on our business. One requirement for Accelerated Approval is that we will be required to conduct a confirmatory trial. We have formulated a design for such a trial and have submitted a proposal to the FDA for review as a Special Protocol Assessment, or SPA. The submitted proposal incorporated initial comments received from the FDA. Final comments on the submission are expected during the first half of 2006. Formal initiation of the trial will depend upon resolution of trial design issues with the FDA, among other factors. Although Fast Track designation, Orphan Drug designation and Accelerated Approval provisions are beneficial, we cannot assure you that the NDA will be approved. In particular, the FDA may not be satisfied that achievement of the primary endpoint used in our recent clinical trial, which was an increased proportion of complete responses/nodular partial responses compared to patients treated with standard chemotherapy, is a sufficient basis for approval. Further, increased symptom-free time may not be considered to be sufficient demonstration of clinical benefit.

Ultimately, our efforts may not prove to be as effective as those of our competitors. In the United States and elsewhere, our products will face significant competition. The principal conditions on which our product development efforts are focused and some of the other disorders for which we are conducting additional studies, are currently treated with several drugs, many of which have been available for a number of years or are available in inexpensive generic forms. Thus, even if we obtain regulatory approvals, we will need to demonstrate to physicians, patients and third-party payors that the cost of our products is reasonable and appropriate in light of their safety and efficacy, the price of competing products and the relative health care benefits to the patient. If we are unable to demonstrate that the costs of our products are reasonable and appropriate in light of these factors, we will likely be unsuccessful in commercializing our products.

We intend to be a direct marketer of some products in the United States. This effort will consume large amounts of our resources and management time and we may not be successful in our efforts.

Currently, we do not have a sales force. Our sales force was eliminated in 2004 following our decision to withdraw the NDA for Genasense® for the treatment of advanced melanoma. We intend to build a sales force throughout the second and third quarters of 2006. In January 2006, we announced that we had appointed W. Lloyd Sanders as Vice-President of Sales and Marketing. Most recently, Mr. Sanders was Vice President, Oncology Sales, at sanofi-aventis Group. If we are unable to build a sales force capable of marketing our products, our sales will be adversely affected, and the commercial success of our products will be limited.

On May 10, 2005, we announced that we and Aventis Pharmaceuticals Inc., part of sanofi-aventis Group, or Aventis, had signed an agreement to terminate their development and commercialization collaboration for Genasense®. We lost a significant source of funding for Genasense® as a result of this termination.

In April 2002, we entered into a series of agreements relating to the development and commercialization of Genasense®, to which we refer collectively as the Collaborative Agreement, with Aventis and its affiliates. On November 8, 2004, we received from Aventis a notice of termination of the Collaborative Agreement. On May 10, 2005, we announced that we had signed an agreement with Aventis to terminate our development and commercialization collaboration for Genasense®. The termination agreement provided for no future financial obligations by either party. Aventis also returned its then current inventory of Genasense® drug supply to us. In addition, we assumed responsibility for the randomized clinical trial of Genasense® in combination with docetaxel (Taxotere®; sanofi-aventis) in patients with hormone-refractory prostate cancer, which recently completed accrual. Among other provisions, the Standstill and Voting Agreement and Registration Rights Agreement that were established pursuant to the Aventis investment in our common stock in 2002, did not terminate at this time.

We are seeking a new partner for the development and commercialization of Genasense®, and if we are unable to do so, we may not have sufficient resources to fully develop and commercialize Genasense®.

If we are unable to identify a partner, we will be solely responsible for the development and commercialization of Genasense®, including the costs associated therewith. We may not have sufficient resources to do so. Even if we are able to identify a partner, we may not be able to enter into an agreement on acceptable terms or at all.

We have relied on and intend to continue to rely on our contractual collaborative arrangements with research institutions and corporate partners for development and commercialization of our products. Our business could

suffer if we are not able to enter into suitable arrangements, maintain existing relationships, or if our collaborative arrangements are not successful in developing and commercializing products.

We have entered into collaborative relationships relating to the conduct of clinical research and other research activities in order to augment our internal research capabilities and to obtain access to specialized knowledge and expertise. Our business strategy depends in part on our continued ability to develop and maintain relationships with leading academic and research institutions and with independent researchers. The competition for these relationships is intense, and we can give no assurances that we will be able to develop and maintain these relationships on acceptable terms.

We also seek strategic alliances with corporate partners, primarily pharmaceutical and biotechnology companies, to help us develop and commercialize drugs. Various problems can arise in strategic alliances. A partner responsible for conducting clinical trials and obtaining regulatory approval may fail to develop a marketable drug. A partner may decide to pursue an alternative strategy or focus its efforts on alliances or other arrangements with third parties. A partner that has been granted marketing rights for a certain drug within a geographic area may fail to market the drug successfully. Consequently, strategic alliances that we may enter into may not be scientifically or commercially successful. In this regard, in April 2002, we entered into a series of agreements relating to the development and commercialization of Genasense® with Aventis and its affiliates. On November 8, 2004, we received from Aventis a notice of termination of the Collaborative Agreement. On May 10, 2005, we announced that we and Aventis had signed an agreement to terminate our development and commercialization collaboration for Genasense® as described above.

We cannot control the resources that any collaborator may devote to our products. Any of our present or future collaborators may not perform their obligations as expected. These collaborators may breach or terminate their agreements with us, for instance upon changes in control or management of the collaborator, or they may otherwise fail to conduct their collaborative activities successfully and in a timely manner.

In addition, our collaborators may elect not to develop products arising out of our collaborative arrangements or to devote sufficient resources to the development, regulatory approval, manufacture, marketing or sale of these products. If any of these events occur, we may not be able to develop our products or commercialize our products.

An important part of our strategy involves conducting multiple product development programs. We may pursue opportunities in fields that conflict with those of our collaborators. In addition, disagreements with our collaborators could develop over rights to our intellectual property. The resolution of such conflicts and disagreements may require us to relinquish rights to our intellectual property that we believe we are entitled to. In addition, any disagreement or conflict with our collaborators could reduce our ability to obtain future collaboration agreements and negatively impact our relationship with existing collaborators. Such a conflict or disagreement could also lead to delays in collaborative research, development, regulatory approval or commercialization of various products or could require or result in litigation or arbitration, which would be time consuming and expensive, divert the attention of our management and could have a significant negative impact on our business, financial condition and results of operations.

We anticipate that we will incur additional losses and we may never be profitable.

We have never been profitable. We have incurred substantial annual operating losses associated with ongoing research and development activities, pre-clinical testing, clinical trials, regulatory submissions and manufacturing activities. From the period since our inception to September 30, 2005, we have incurred a cumulative net loss of \$348.0 million. We may never achieve revenue sufficient for us to attain profitability. Achieving profitability is unlikely unless Genasense® receives approval from the FDA for commercial sale in one or more indications.

Our business will suffer if we fail to obtain timely funding.

Our operations to date have required significant cash expenditures. As a result of Aventis' termination of the Collaborative Agreement, after May 8, 2005, we became solely responsible for all Genasense® related costs. Our future capital requirements will depend on the results of our research and development activities, pre-clinical studies and clinical trials, competitive and technological advances, and regulatory activities of the FDA and other regulatory authorities. In order to commercialize our products, we will need to raise additional funds. On August 11, 2005, we sold 19.1 million shares of common stock at a price of \$0.92 per share raising \$16.3 million, net of

fees and expenses. With the completion of the financing contemplated by this prospectus supplement, although no assurances can be expressed, management believes that at the projected rate of spending, including building our sales and marketing team and capabilities, we should have sufficient cash funds to maintain our present operations through 2006. We will need to obtain more funding in the future through collaborations or other arrangements with research institutions and corporate partners or public and private offerings of our securities, including debt or equity financing. We may not be able to obtain adequate funds for our operations from these sources when needed or on acceptable terms. Future collaborations or similar arrangements may require us to license valuable intellectual property to, or to share substantial economic benefits with, our collaborators. If we raise additional capital by issuing additional equity or securities convertible into equity, our stockholders may experience dilution and our share price may decline. Any debt financing may result in restrictions on our spending.

If we are unable to raise additional funds, we will need to do one or more of the following:

- o delay, scale back or eliminate some or all of our research and product development programs;
- o license third parties to develop and commercialize products or technologies that we would otherwise seek to develop and commercialize ourselves;
- o attempt to sell our company;
- o cease operations; or
- o declare bankruptcy.

Our business depends heavily on a small number of products.

We currently market and sell one product, Ganite® and the principal patent covering its use for the approved indication expired in April 2005. We do not expect to expand our marketed product portfolio significantly in the short term unless Genasense® receives marketing approval. If Genasense® is not approved, if approval is significantly delayed, or if, in the event of approval, the product is commercially unsuccessful, we do not expect significant sales of other products to offset this loss of potential revenue.

To diversify our product line in the long term, it will be important for us to identify suitable technologies and products for acquisition or licensing and development. If we are unable to identify suitable technologies and products, or if we are unable to acquire or license products we identify, we may be unable to diversify our product line and to generate long-term growth.

We may be unable to obtain or enforce patents, other proprietary rights and licenses to protect our business; we could become involved in litigation relating to our patents or licenses that could cause us to incur additional costs and delay or prevent our introduction of new drugs to market.

Our success will depend to a large extent on our ability to:

- o obtain U.S. and foreign patent or other proprietary protection for our technologies, products and processes;
- o preserve trade secrets; and
- o operate without infringing the patent and other proprietary rights of third parties.

Legal standards relating to the validity of patents covering pharmaceutical and biotechnological inventions and the scope of claims made under these types of patents are still developing, and they involve complex legal and factual questions. As a result, our ability to obtain and enforce patents that protect our drugs is highly uncertain. If we are unable to obtain and enforce patents and licenses to protect our drugs, our business, results of operations and financial condition could be adversely affected.

We hold numerous U.S., foreign and international patents covering various aspects of our technology, which include novel compositions of matter, methods of large-scale synthesis and methods of controlling gene expression and methods of treating disease. In the future, however, we

may not be successful in obtaining additional

S-15

patents despite pending or future applications. Moreover, our current and future patents may not be sufficient to protect us against competitors who use similar technology. Additionally, our patents, the patents of our business partners and the patents for which we have obtained licensing rights may be challenged, narrowed, invalidated or circumvented. Furthermore, rights granted under our patents may not be broad enough to cover commercially valuable drugs or processes and therefore may not provide us with sufficient competitive advantage with respect thereto.

The pharmaceutical and biotechnology industries have been greatly affected by time-consuming and expensive litigation regarding patents and other intellectual property rights. We may be required to commence, or may be made a party to, litigation relating to the scope and validity of our intellectual property rights or the intellectual property rights of others. Such litigation could result in adverse decisions regarding the patentability of our inventions and products, the enforceability, validity or scope of protection offered by our patents or our infringement of patents held by others. Such decisions could make us liable for substantial money damages, or could bar us from the manufacture, sale or use of certain products. Moreover, an adverse decision may also compel us to seek a license from a third party. The costs of any license may be prohibitive, and we may not be able to enter into any required licensing arrangement on terms acceptable to us.

The cost to us of any litigation or proceeding relating to patent or license rights, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of complex patent or licensing litigation more effectively than we can because of their substantially greater resources. Uncertainties resulting from the initiation and continuation of any patent or related litigation could have a material adverse effect on our ability to compete in the marketplace.

We also may be required to participate in interference proceedings declared by the U.S. Patent and Trademark Office, in opposition or similar proceedings before foreign patent offices and in International Trade Commission proceedings aimed at preventing the importation of drugs that would compete unfairly with our drugs. These types of proceedings could cause us to incur considerable costs.

The principal patent covering the use of Ganite® for its approved indication expired, including Hatch-Waxman extensions, in April 2005.

We have licensed a portfolio of U.S. patents and applications from the University of Pennsylvania and the NIH relating to Genasense® and its backbone chemistry that expire between 2008 and 2015. Corresponding patent applications have been filed in Canada, Europe and Japan. The claims of these patents cover our proprietary antisense oligonucleotide molecules which target the Bcl-2 mRNA and methods employing them. We also hold several U.S. patent applications relating to methods of using Genasense® that expire in 2020, with approximately 45 corresponding foreign patent applications.

Most of our products are in an early stage of development, and we may never receive regulatory approval for these products.

Most of our resources have been dedicated to the research and development of potential antisense pharmaceutical products such as Genasense®, based upon oligonucleotide technology. While we have demonstrated the activity of antisense oligonucleotide technology in model systems in vitro and in animals, Genasense® is our only antisense product to have been tested in humans. Several of our other technologies that serve as a possible basis for pharmaceutical products are only in pre-clinical testing. Results obtained in pre-clinical studies or early clinical investigations are not necessarily indicative of results that will be obtained in extended human clinical trials. Our products may prove to have undesirable and unintended side effects or other characteristics that may prevent our obtaining FDA or foreign regulatory approval for any indication. In addition, it is possible that research and discoveries by others will render our oligonucleotide technology obsolete or noncompetitive.

We will not be able to commercialize our product candidates if our pre-clinical studies do not produce successful results or if our clinical trials do not demonstrate safety and efficacy in humans.

Our success will depend on the success of our currently ongoing clinical trials and subsequent clinical trials that have not yet begun. It may take several years to complete the clinical trials of a product, and a failure of one or more of our clinical trials can occur at any stage of testing. We believe that the development of each of our product candidates involves significant risks at each stage of testing. If clinical trial difficulties and failures arise, our product candidates may never be approved for sale or become commercially viable. We do not believe that any of our product candidates have alternative uses if our current development activities are unsuccessful.

There are a number of difficulties and risks associated with clinical trials. These difficulties and risks may result in the failure to receive regulatory approval to sell our product candidates or the inability to commercialize any of our product candidates. The possibility exists that:

- o we may discover that a product candidate does not exhibit the expected therapeutic results in humans, may cause harmful side effects or have other unexpected characteristics that may delay or preclude regulatory approval or limit commercial use if approved;
- o the results from early clinical trials may not be statistically significant or predictive of results that will be obtained from expanded, advanced clinical trials;
- o institutional review boards or regulators, including the FDA, may hold, suspend or terminate our clinical research or the clinical trials of our product candidates for various reasons, including noncompliance with regulatory requirements or if, in their opinion, the participating subjects are being exposed to unacceptable health risks;
- o subjects may drop out of our clinical trials;
- o our pre-clinical studies or clinical trials may produce negative, inconsistent or inconclusive results, and we may decide, or regulators may require us, to conduct additional pre-clinical studies or clinical trials; and
- o the cost of our clinical trials may be greater than we currently anticipate.

For example, in November 2004, we reported that our randomized Phase 3 clinical trial of Genasense® in patients with multiple myeloma did not meet its primary endpoint. The trial had been designed to evaluate whether the addition of Genasense® to standard therapy with high-dose dexamethasone could increase the time to development of progressive disease in patients who previously had received extensive therapy. Based on the results of the Phase 3 trial, we have no plans to submit an NDA in this indication to the FDA at the current time. We have not yet determined what additional clinical trials, if any, may be undertaken in patients with multiple myeloma.

We cannot assure you that our ongoing pre-clinical studies and clinical trials will produce successful results in order to support regulatory approval of Genasense® in any territory or for any indication. Failure to obtain approval, or a substantial delay in approval of Genasense® for these or any other indications, would have a material adverse effect on our results of operations and financial condition.

Clinical trials are costly and time consuming and are subject to delays; our business would suffer if the development process relating to our products were subject to meaningful delays.

Clinical trials are very costly and time-consuming. The length of time required to complete a clinical study depends upon many factors, including but not limited to the size of the patient population, the ability of patients to get to the site of the clinical study, the criteria for determining which patients are eligible to join the study and other issues. Delays in patient enrollment and other unforeseen developments could delay completion of a clinical study and increase its costs, which could also delay any eventual commercial sale of the drug that is the subject of the clinical trial.

Our commencement and rate of completion of clinical trials also may be delayed by many other factors, including the following:

- o inability to obtain sufficient quantities of materials for use in clinical trials;
- o inability to adequately monitor patient progress after treatment;
- o unforeseen safety issues;
- o the failure of the products to perform well during clinical trials; and
- o government or regulatory delays.

If we fail to obtain the necessary regulatory approvals, we cannot market and sell our products in the United States or in other countries.

The FDA and comparable regulatory agencies in foreign countries (such as the EMEA) impose substantial pre-market approval requirements on the introduction of pharmaceutical products. These requirements involve lengthy and detailed pre-clinical and clinical testing and other costly and time-consuming procedures. Satisfaction of these requirements typically takes several years or more depending upon the type, complexity and novelty of the product. We cannot apply for FDA approval to market any of our products under development until pre-clinical and clinical trials on the product are successfully completed. Several factors could prevent successful completion or cause significant delays of these trials, including an inability to enroll the required number of patients or failure to demonstrate adequately that the product is safe and effective for use in humans. If safety concerns develop, the FDA could stop our trials before completion. We may not market or sell any product for which we have not obtained regulatory approval. In May 2004, the application failed to gain a majority vote for marketing approval from ODAC. As a consequence, we withdrew the NDA, which allows us to potentially resubmit the application.

We cannot assure you that the FDA, the EMEA or other regulatory agencies will ever approve the use of our products that are under development. If the patient populations for which our products are approved are not sufficiently broad, or if approval is accompanied by unanticipated labeling restrictions, the commercial success of our products could be limited and our business, results of operations and financial condition could consequently be materially adversely affected.

If the third party manufacturers upon which we rely fail to produce our products in the volumes that we require on a timely basis, or to comply with stringent regulations applicable to pharmaceutical drug manufacturers, we may face delays in the commercialization of, or be unable to meet demand for, our products and may lose potential revenues.

We do not manufacture any of our products or product candidates and we do not plan to develop any capacity to do so. We have contracted with third-party manufacturers to manufacture Ganite® and Genasense®. The manufacture of pharmaceutical products requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of pharmaceutical products often encounter difficulties in production, especially in scaling up initial production. These problems include difficulties with production costs and yields, quality control and assurance and shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. Our third-party manufacturers may not perform as agreed or may terminate their agreements with us.

In addition to product approval, any facility in which Genasense® is manufactured or tested for its ability to meet required specifications must be approved by the FDA and/or the EMEA before it can manufacture Genasense®. Failure of the facility to be approved could delay the approval of Genasense®.

We do not currently have alternate manufacturing plans in place. The number of third-party manufacturers with the expertise, required regulatory approvals and facilities to manufacture bulk drug substance on a commercial scale is limited, and it would take a significant amount of time to arrange for alternative manufacturers. If we need to change to other commercial manufacturers, the FDA and comparable foreign regulators must approve these manufacturers' facilities and processes prior to our use, which would require new testing and compliance inspections, and the new manufacturers would have to be educated in or independently develop the processes necessary for the production of our products.

Any of these factors could cause us to delay or suspend clinical trials, regulatory submissions, required approvals or commercialization of our products or product candidates, entail higher costs and result in our being unable to effectively commercialize our products. Furthermore, if our third-party manufacturers fail to deliver the required commercial quantities of bulk drug substance or finished product on a timely basis and at commercially reasonable prices, and we were unable to promptly find one or more replacement manufacturers capable of production at a substantially equivalent cost, in substantially equivalent volume and on a timely basis, we would likely be unable to meet demand for our products and we would lose potential revenues.

Even if we obtain regulatory approval, we will be subject to ongoing regulation, and any failure by us or our manufacturers to comply with such regulation could suspend or eliminate our ability to sell our products.

Ganite®, Genasense®, if it obtains regulatory approval, and any other product we may develop will be subject to ongoing regulatory oversight, primarily by the FDA. Failure to comply with post-marketing requirements,

such as maintenance by us or by the manufacturers of our products of current Good Manufacturing Practices as required by the FDA, or safety surveillance of such products or lack of compliance with other regulations could result in suspension or limitation of approvals or other enforcement actions. Current Good Manufacturing Practices are FDA regulations that define the minimum standards that must be met by companies that manufacture pharmaceuticals and apply to all drugs for human use including those to be used in clinical trials as well as those produced for general sale after approval of an application by the FDA. These regulations define requirements for personnel, buildings and facilities, equipment, control of raw materials and packaging components, production and process controls, packaging and label controls, handling and distribution, laboratory controls and recordkeeping. Furthermore, the terms of any product candidate approval, including the labeling content and advertising restrictions, may be so restrictive that they could adversely affect the marketability of our product candidates. Any such failure to comply or the application of such restrictions could limit our ability to market our product candidates and may have a material adverse effect on our business, results of operations and financial condition. Such failures or restrictions may also prompt regulatory recalls of one or more of our products, which could have material and adverse effects on our business.

The raw materials for our products are produced by a limited number of suppliers, and our business could suffer if we cannot obtain needed quantities at acceptable prices and qualities.

The raw materials that we require to manufacture our drugs, particularly oligonucleotides, are available from only a few suppliers. If these suppliers cease to provide us with the necessary raw materials or fail to provide us with an adequate supply of materials at an acceptable price and quality, we could be materially adversely affected.

If third-party payors do not provide coverage and reimbursement for use of our products, we may not be able to successfully commercialize our products.

Our ability to commercialize drugs successfully will depend in part on the extent to which various third-party payors are willing to reimburse patients for the costs of our drugs and related treatments. These third-party payors include government authorities, private health insurers and other organizations, such as health maintenance organizations. Third-party payors often challenge the prices charged for medical products and services. Accordingly, if less costly drugs are available, third-party payors may not authorize or may limit reimbursement for our drugs, even if they are safer or more effective than the alternatives. In addition, the federal government and private insurers have changed, and continue to consider ways to change, the manner in which health care products and services are provided and paid for in the United States. In particular, these third-party payors are increasingly attempting to contain health care costs by limiting both coverage and the level of reimbursement for new therapeutic products. In the future, it is possible that the government may institute price controls and further limits on Medicare and Medicaid spending. These controls and limits could affect the payments we collect from sales of our products. Internationally, medical reimbursement systems vary significantly, with some countries requiring application for, and approval of, government or third-party reimbursement. In addition, some medical centers in foreign countries have fixed budgets, regardless of levels of patient care. Even if we succeed in bringing therapeutic products to market, uncertainties regarding future health care policy, legislation and regulation, as well as private market practices, could affect our ability to sell our products in quantities, or at prices, that will enable us to achieve profitability.

Our business exposes us to potential product liability that may have a negative effect on our financial performance and our business generally.

The administration of drugs to humans, whether in clinical trials or commercially, exposes us to potential product and professional liability risks, which are inherent in the testing, production, marketing and sale of human therapeutic products. Product liability claims can be expensive to defend and may result in large judgments or settlements against us, which could have a negative effect on our financial performance and materially and adversely affect our business. We maintain product liability insurance (subject to various deductibles), but our insurance coverage may not be sufficient to cover claims. Furthermore, we cannot be certain that we will always be able to maintain or increase our insurance coverage at an affordable price. Even if a product liability claim is not successful, the adverse publicity and time and expense of defending such a claim may interfere with or adversely affect our business and financial performance.

We may incur a variety of costs to engage in future acquisitions of companies, products or technologies, and the anticipated benefits of those acquisitions may never be realized.

As a part of our business strategy, we may make acquisitions of, or significant investments in, complementary companies, products or technologies, although no significant acquisition or investments are currently pending. Any future acquisitions would be accompanied by risks such as:

- o difficulties in assimilating the operations and personnel of acquired companies;
- o diversion of our management's attention from ongoing business concerns;
- o our potential inability to maximize our financial and strategic position through the successful incorporation of acquired technology and rights into our products and services;
- o additional expense associated with amortization of acquired assets;
- o maintenance of uniform standards, controls, procedures and policies; and
- o impairment of existing relationships with employees, suppliers and customers as a result of the integration of new management personnel.

We cannot guarantee that we will be able to successfully integrate any business, products, technologies or personnel that we might acquire in the future, and our failure to do so could harm our business.

We face substantial competition from other companies and research institutions that are developing similar products, and we may not be able to compete successfully.

In many cases, our products under development will be competing with existing therapies for market share. In addition, a number of companies are pursuing the development of antisense technology and controlled-release formulation technology and the development of pharmaceuticals utilizing such technologies. We compete with fully integrated pharmaceutical companies that have more substantial experience, financial and other resources and superior expertise in research and development, manufacturing, testing, obtaining regulatory approvals, marketing and distribution. Smaller companies may also prove to be significant competitors, particularly through their collaborative arrangements with large pharmaceutical companies or academic institutions. Furthermore, academic institutions, governmental agencies and other public and private research organizations have conducted and will continue to conduct research, seek patent protection and establish arrangements for commercializing products. Such products may compete directly with any products that may be offered by us.

Our competition will be determined in part by the potential indications for which our products are developed and ultimately approved by regulatory authorities. For certain of our potential products, an important factor in competition may be the timing of market introduction of our or our competitors' products. Accordingly, the relative speed with which we can develop products, complete the clinical trials and approval processes and supply commercial quantities of the products to the market are expected to be important competitive factors. We expect that competition among products approved for sale will be based, among other things, on product efficacy, safety, reliability, availability, price, patent position and sales, marketing and distribution capabilities. The development by others of new treatment methods could render our products under development non-competitive or obsolete.

Our competitive position also depends upon our ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary products or processes and secure sufficient capital resources for the often substantial period between technological conception and commercial sales. We cannot assure you that we will be successful in this regard.

We are dependent on our key executives and scientists, and the loss of key personnel or the failure to attract additional qualified personnel could harm our business.

Our business is highly dependent on our key executives and scientific staff. The loss of key personnel or the failure to recruit necessary additional or replacement personnel will likely impede the achievement of our development objectives. There is intense competition for qualified personnel in the pharmaceutical and

biotechnology industries, and there can be no assurances that we will be able to attract and retain the qualified personnel necessary for the development of our business.

Risks Related to Outstanding Litigation

The outcome of and costs relating to pending shareholder class action and shareholder derivative actions are uncertain.

In 2004, numerous complaints were filed in the United States District Court for the District of New Jersey against us and certain of our principal officers on behalf of purported classes of our shareholders who purchased our securities during several class periods. The complaints have been consolidated into a single action and allege that we and certain of our principal officers violated the federal securities laws by issuing materially false and misleading statements regarding Genasense® for the treatment of malignant melanoma that had the effect of artificially inflating the market price of our securities. The shareholder class action complaint in the various actions seeks monetary damages in an unspecified amount and recovery of plaintiffs' costs and attorneys' fees. On September 30, 2005, the court granted in part and denied in part our motion to dismiss the plaintiffs' complaint. The court dismissed plaintiffs' claim that the defendants engaged in a scheme or artifice to defraud plaintiffs, but allowed plaintiffs' claims to proceed with respect to their allegations that defendants issued false and misleading public statements about Genasense®. The parties commenced nonbinding mediation in March 2006. If mediation is unsuccessful, the case is expected to proceed to discovery.

In addition, two separate shareholder derivative actions were filed against our directors and certain of our officers in New Jersey State and Federal courts. The Federal shareholder derivative action was consolidated with the securities action. The Federal derivative plaintiffs have not yet filed a consolidated amended complaint asserting their claims. Instead, the Federal shareholder derivative action has been stayed, pending developments in the Federal securities action.

Based on facts substantially similar to those asserted in the shareholder class actions, the state derivative plaintiffs claim that defendants have breached their fiduciary duties to the shareholders and committed other violations of New Jersey law. On February 9, 2006, the Superior Court of New Jersey dismissed the plaintiffs' derivative complaint in the New Jersey State case based in part on plaintiffs' failure to make a pre-suit demand on our Board of Directors and in part based on plaintiffs' failure to state a cause of action. Plaintiffs served a motion for reconsideration on February 27, 2006.

We believe these litigations are without merit and will continue to vigorously defend against these suits.

Risks Related to Our Common Stock

Provisions in our restated certificate of incorporation and bylaws and Delaware law may discourage a takeover and prevent our stockholders from receiving a premium for their shares.

Provisions in our restated certificate of incorporation and bylaws may discourage third parties from seeking to obtain control of us and, therefore, could prevent our stockholders from receiving a premium for their shares. Our restated certificate of incorporation gives our board of directors the power to issue shares of preferred stock without approval of the holders of common stock. Any preferred stock that is issued in the future could have voting rights, including voting rights that could be superior to that of our common stock. The affirmative vote of 66-2/3% of our voting stock is required to approve certain transactions and to take certain stockholder actions, including the amendment of certain provisions of our certificate of incorporation. Our bylaws contain provisions that regulate how stockholders may present proposals or nominate directors for election at annual meetings of stockholders.

In addition, we are subject to Section 203 of the Delaware General Corporation Law, which contains restrictions on stockholder action to acquire control of us.

On September 16, 2005, we announced that our Board of Directors approved a Stockholder Rights Plan and declared a dividend of one preferred stock purchase right, or Right, for each share of our common stock held of record as of the close of business on September 27, 2005. In addition, Rights shall be issued in respect of all shares of common stock issued after such date, including the shares issued hereunder, pursuant to the Plan. The Rights contain provisions to protect stockholders in the event of an unsolicited attempt to acquire us, including an accumulation of shares in the open market, a partial or two-tier tender offer that does not treat all stockholders

equally and other activities that the Board believes are not in the best interests of shareholders. The Rights may discourage a takeover and prevent our stockholders from receiving a premium for their shares.

We have not paid, and do not expect to pay in the future, dividends on our common stock.

We have never paid cash dividends on our common stock and do not anticipate paying any such dividends in the foreseeable future. We currently intend to retain our earnings, if any, for the development of our business.

Our stock price is volatile.

The market price of our common stock, like that of the common stock of many other biopharmaceutical companies, has been and likely will continue to be highly volatile. Factors that could have a significant impact on the future price of our common stock include but are not limited to:

- o the results of pre-clinical studies and clinical trials by us or our competitors;
- o announcements of technological innovations or new therapeutic products by us or our competitors;
- o government regulation;
- o developments in patent or other proprietary rights by us or our respective competitors, including litigation;
- o fluctuations in our operating results; and
- o market conditions for biopharmaceutical stocks in general.

At December 31, 2005, we had 114.5 million shares of common stock outstanding, 11.0 million additional shares reserved for the conversion of convertible preferred stock and the exercise of outstanding options and warrants and 5.1 million additional shares of common stock authorized for issuance and remaining to be granted under our stock option plans.

Risks Related to This Offering

Our use of the offering proceeds may not yield a favorable return on your investment.

We currently anticipate that the net proceeds from this offering will be used primarily for the creation of a sales and marketing team and capabilities and for general corporate purposes. We may also use such proceeds for research and development, for commercialization expenses and for potential licenses and acquisitions of complementary products, technologies or businesses. Our management has broad discretion over how these proceeds are used and could spend the proceeds in ways with which you may not agree. Pending the use of the proceeds in this offering, we will invest them. However, the proceeds may not be invested in a manner that yields a favorable or any return.

As a new investor, you will incur substantial dilution as a result of this offering and future equity issuances, and as a result, our stock price could decline.

The offering price will be substantially higher than the net tangible book value per share of our outstanding common stock. As a result, based on our capitalization as of September 30, 2005, investors purchasing common stock in this offering will incur immediate dilution of \$[_____] per share, based on the offering price of \$[_____] per share. We believe that following this offering, our current cash, cash equivalents and short-term investments, together with the anticipated proceeds from this offering, will be sufficient to fund our operations through 2006; however, our projected revenue may decrease or our expenses may increase and that would lead to our cash resources being consumed earlier than currently anticipated. In addition to this offering, subject to market conditions and other factors, we likely will pursue raising additional funds in the future, as we continue to build our business. In future years, we will likely need to raise significant additional funding to finance our operations and to fund clinical trials, regulatory submissions and the development, manufacture and marketing of other products under development and new product opportunities. Accordingly, we may conduct substantial future offerings of equity or debt securities. The exercise of outstanding options and warrants and future equity issuances, including future public

offerings or future private placements of equity securities and any additional shares issued in connection with acquisitions, will also result in dilution to investors. In addition, the market price of our common stock could fall as a result of resales of any of these shares of common stock due to an increased number of shares available for sale in the market.

S-23

USE OF PROCEEDS

We currently anticipate that the net proceeds from the sale of the common stock will be used primarily for the creation of a sales and marketing team and capabilities and for general corporate purposes. We may also use such proceeds for research and development, for commercialization expenses and for potential licenses and acquisitions of complementary products, technologies or businesses.

S-24

DILUTION

The net tangible book value of our common stock on September 30, 2005 was approximately \$[], or approximately \$[] per share, based on [] shares of our common stock outstanding as of September 30, 2005. Net tangible book value per share represents the amount of our total tangible assets, less our total tangible liabilities, divided by the total number of shares of our common stock outstanding. Dilution in net tangible book value per share to new investors represents the difference between the amount per share paid by purchasers of shares of our common stock in this offering and the net tangible book value per share of our common stock immediately afterwards. Without taking into account any other changes in net tangible book value after September 30, 2005, other than the sale of the [] shares of common stock offered by us under this prospectus supplement and the accompanying prospectus at a price of \$[] per share and after deducting the estimated placement agents' fees and estimated offering expenses payable by us, our net tangible book value at September 30, 2005 would have been approximately \$[] million, or approximately \$[] per share. This represents an immediate increase in net tangible book value of approximately \$[] per share to existing stockholders and an immediate dilution in net tangible book value of \$([]) per share to investors in this offering. The following table illustrates this per share dilution:

Public offering price per share		\$
Net tangible book value per share as of September 30, 2005	\$	
Increase per share attributable to this offering	\$	
As adjusted net tangible book value per share after this offering		\$
Dilution per share to investors in this offering		\$ ()

This table excludes shares of common stock issuable upon exercise of options, warrants and other rights, and the effect of shares of common stock issued, except as indicated above, since September 30, 2005.

DESCRIPTION OF CAPITAL STOCK

General

Our authorized capital stock consists of 150,000,000 shares of common stock and 5,000,000 shares of preferred stock.

The following descriptions are summaries of the material terms of our restated certificate of incorporation and bylaws. Reference is made to the more detailed provisions of, and the descriptions are qualified in their entirety by reference to, the restated certificate of incorporation and bylaws and applicable law. Our restated certificate of incorporation, as amended and our amended and restated bylaws are incorporated by reference and copies are available upon request. See [Where You Can Find More Information](#) in the accompanying prospectus.

Common Stock

Except as required by law or by the restated certificate of incorporation, holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Subject to preferences that may be applicable to any then outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by the Board of Directors out of funds legally available therefor. In the event of a liquidation, dissolution or winding up of Genta, holders of the common stock and the preferred stock are entitled to share ratably on an as-converted basis in all assets remaining after payment of liabilities and the liquidation preference of any then outstanding preferred stock. Holders of common stock have no right to convert their common stock into any other securities. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and non-assessable.

In September 2005, the Board of Directors adopted a Stockholder Rights Plan and declared a dividend of one preferred stock purchase right, or Right, for each outstanding share of our common stock, payable to holders of record as of the close of business on September 27, 2005. In addition, Rights shall be issued in respect of all shares of common stock issued after such date, including the shares issued hereunder, pursuant to the Plan. Generally, the rights become exercisable upon the earlier of the close of business on the tenth business day following the first public announcement that any person or group has become a beneficial owner of 15% or more of our common stock and the close of business on the tenth business day after the date of the commencement of a tender or exchange offer by any person which would, if consummated, result in such person becoming a beneficial owner of 15% or more of our common stock. Each Right shall be exercisable to purchase, for \$25.00, subject to adjustment, one one-hundredth of a newly registered share of Series G Participating Cumulative Preferred Stock, par value \$0.001 per share of the Company. The terms and conditions of the Rights are set forth in a Rights Agreement dated September 20, 2005 between the Company and Mellon Investor Services, LLC, as Rights Agent.

Preferred Stock

The Board of Directors has the authority, without further action by the stockholders, to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and the number of shares constituting any series or the designation of such series. The issuance of preferred stock could adversely affect the voting power of holders of common stock and could have the effect of delaying, deferring or preventing a change in control of Genta without further action by the stockholders and may adversely affect the voting and other rights of the holders of our common stock.

Series A Convertible Preferred Stock

General

We are authorized to issue 600,000 shares of Series A Convertible Preferred Stock. At December 31, 2005 and December 31, 2004, we had 9,700 shares of Series A Convertible Preferred Stock issued and outstanding.

Each share of Series A Convertible Preferred Stock is immediately convertible, into shares of our common stock, at a rate determined by dividing the aggregate liquidation preference of the series A convertible preferred stock by the conversion price. The conversion price is subject to adjustment for antidilution.

In the event of a liquidation of Genta, the holders of Series A Convertible Preferred Stock are entitled to a liquidation preference equal to \$50.00 per share.

Series G Preferred Stock

We have authorized 5.0 million shares of preferred stock of which 2.0 million shares have been designated Series G Participating Cumulative Preferred.

Delaware Anti-Takeover Law

Under Section 203 of the Delaware General Corporation Law certain business combinations between a Delaware corporation, whose stock generally is publicly traded or held of record by more than 2,000 stockholders, and an interested stockholder are prohibited for a three-year period following the date that such stockholder became an interested stockholder, unless:

- o the corporation has elected in its certificate of incorporation not to be governed by Section 203 (we have not made such an election);
- o either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder was approved by the board of directors of the corporation before the other party to the business combination became an interested stockholder;
- o upon consummation of the transaction that made it an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the commencement of the transaction excluding voting stock owned by directors who are also officers or held in employee benefit plans in which the employees do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer;
- o on or subsequent to such date the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66-2/3% of the outstanding voting stock which is not owned by the interested stockholder.

The three-year prohibition also does not apply to certain business combinations proposed by an interested stockholder following the announcement or notification of certain extraordinary transactions involving the corporation and a person who had not been an interested stockholder during the previous three years or who became an interested stockholder with the approval of a majority of the corporation's directors. A business combination is defined to include mergers, asset sales and other transactions resulting in financial benefit to a stockholder. In general, an interested stockholder is a person who, together with affiliates and associates, owns (or within three years, did own) 15% or more of a corporation's voting stock.

The statute could prohibit or delay mergers or other takeover or change in control attempts with respect to us and, accordingly, may discourage attempts to acquire us even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

Advance Notice Requirements for Stockholder Proposals

Our amended and restated bylaws provide that stockholders seeking to bring business before an annual meeting of stockholders, or to nominate candidates for election as directors at an annual meeting of stockholders, must provide timely notice thereof in writing. To be timely, a stockholder's notice must be delivered to the secretary at our principal executive offices not less than 50 calendar days nor more than 75 calendar days prior to the meeting; provided, that if less than 65 days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be received not later than the close of business on the 15th day following the day on which notice of the date of the annual meeting was mailed or such public disclosure was made. Our amended and restated bylaws also specify requirements as to the form and content of a stockholder's notice. These provisions may discourage stockholders from bringing matters before an annual meeting of stockholders or from making nominations for directors at an annual meeting of stockholders.

Limits on Special Meetings

Our restated certificate of incorporation, as amended, and our amended and restated bylaws provide that special meetings of our stockholders may be called only by our Chairman of the Board or our Chief Executive Officer or by a resolution adopted by the affirmative vote of a majority of the Board of Directors.

Super-majority Requirements

We have specified provisions in our restated certificate of incorporation, as amended and our amended and restated bylaws that require a super-majority vote of our stockholders to amend, revise or repeal provisions that may have an anti-takeover effect.

Listing

Our common stock is listed on the Nasdaq National Market under the symbol GNTA.

Transfer Agent and Registrar

The Transfer Agent and Registrar for the common stock is Mellon Investor Services, LLC.

PLAN OF DISTRIBUTION

We are offering our common stock through placement agents. Subject to the terms and conditions contained in the placement agent agreement dated March [___], 2006, Cowen & Co., LLC and Rodman & Renshaw, LLC have agreed to act as the placement agents for the sale of up to [_____] shares of common stock. The placement agents are not purchasing or selling any shares by this prospectus supplement or accompanying base prospectus, nor are they required to arrange for the purchase or sale of any specific number or dollar amount of shares, but have agreed to use best efforts to arrange for the sale of all [_____] shares.

The placement agent agreement provides that the obligations of the placement agents and the investors are subject to certain conditions precedent, including the absence of any material adverse change in our business and the receipt of certain opinions, letters and certificates from our counsel, our independent auditors and us.

Confirmations and definitive prospectuses will be distributed to all investors who agree to purchase the common stock, informing investors of the closing date as to such shares. We currently anticipate that closing of the sale of [_____] shares of common stock will take place on or about March [___], 2006. Investors will also be informed of the date and manner in which they must transmit the purchase price for their shares.

On the scheduled closing date, the following will occur:

- o we will receive funds in the amount of the aggregate purchase price; and
- o Cowen & Co., LLC will receive the placement agents' fee on behalf of the placement agents in accordance with the terms of the placement agent agreement.

We will pay the placement agents an aggregate commission equal to 6.5% of the gross proceeds of the sale of common stock in the offering. We may also reimburse the placement agents for certain legal expenses incurred by them. In no event will the total amount of compensation paid to the placement agents and other securities brokers and dealers upon completion of this offering exceed 8.0% of the maximum gross proceeds of the offering. The estimated offering expenses payable by us, in addition to the placement agents' fee of \$[_____] , are approximately \$[_____] , which includes legal, accounting and printing costs and various other fees associated with registering and listing the common stock. After deducting certain fees due to the placement agents and our estimated offering expenses, we expect the net proceeds from this offering to be up to approximately \$[_____] million.

We have agreed to indemnify the placement agents against certain liabilities, including liabilities under the Securities Act of 1933, as amended, and liabilities arising from breaches of representations and warranties contained in the placement agent agreement. We have also agreed to contribute to payments the placement agents may be required to make in respect of such liabilities.

We, along with our executive officers and directors, have agreed to certain lock-up provisions with regard to future sales of our common stock for a period of 90 days after the offering as set forth in the placement agent agreement.

The placement agent agreement is included as an exhibit to our Current Report on Form 8-K that will be filed with the Securities and Exchange Commission in connection with the consummation of this offering.

LEGAL MATTERS

Certain legal matters in connection with the legality of the offering of the common stock hereby will be passed upon for us by Morgan, Lewis & Bockius LLP, Princeton, New Jersey. The placement agents are being represented in connection with this offering by Brown Raysman Millstein Felder & Steiner LLP, New York, New York.

EXPERTS

The consolidated financial statements incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the years ended December 31, 2004 and 2003, and management's report on the effectiveness of internal control over financial reporting incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2004, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference (which reports (1) express an unqualified opinion on the consolidated financial statements and include an explanatory paragraph referring to the receipt from Aventis of a notice of termination of the agreements between Aventis and the Company in November 2004 as discussed in Note (1) to the consolidated financial statements, (2) express an unqualified opinion on management's assessment regarding the effectiveness of internal control over financial reporting, and (3) express an unqualified opinion on the effectiveness of internal control over financial reporting), and have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

PROSPECTUS

15,000,000 Shares

GENTA INCORPORATED

COMMON STOCK

We may offer from time to time common stock. Specific terms of these securities will be provided in supplements to this prospectus. You should read this prospectus and any supplement carefully before you invest.

Our common stock is listed on the Nasdaq National Market under the symbol GNTA .

Investing in our common stock involves certain risks, which we describe in our periodic reports and which we will describe in supplements to this prospectus.

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

The date of this prospectus is May 11, 2004

You should rely only on the information contained in or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information contained in or incorporated by reference in this prospectus is accurate as of any date other than the date on the front of this prospectus. The terms Genta, we, us, and our refer to Genta Incorporated.

TABLE OF CONTENTS

	<u>Page</u>
The Company	2
Where You Can Find More Information	2
Special Note on Forward-Looking Statements	2
Use of Proceeds	4
Description of Capital Stock	5
Plan of Distribution	7
Validity of Common Stock	8
Experts	8

THE COMPANY

Genta is a biopharmaceutical company dedicated to the identification, development and commercialization of novel drugs for cancer and related diseases. Our research portfolio consists of two major areas of focus:

- o DNA/RNA Medicines, which are drugs based on chemical modifications of either deoxyribonucleic acid, or DNA, or ribonucleic acid, or RNA; and
- o I Small Molecules.

We began marketing our first commercial product, Ganite, which is part of our Small Molecule program, in October 2003. Ganite has been approved by the U.S. Food and Drug Administration, or FDA, for treatment of cancer-related hypercalcemia that is resistant to hydration. The drug is being marketed and sold exclusively by Genta in the United States by our dedicated sales force.

Our lead investigational antisense drug is called Genasense (oblimersen sodium), a molecule that is designed to block the production of a protein known as Bcl-2. Current science suggests that Bcl-2 is a fundamental (although not sole) cause of the inherent resistance of cancer cells to current anticancer treatments, such as chemotherapy, radiation, or monoclonal antibodies. While Genasense has displayed some anticancer activity when used by itself, we are developing the drug solely as a means of amplifying the effects of other anticancer therapy by pre-treating patients with Genasense.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document that we file at the Public Reference Room of the SEC at 450 Fifth Street, NW, Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site at <http://www.sec.gov>, from which interested persons can electronically access the registration statement including the exhibits and schedules thereto.

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934 until all of the securities offered by this prospectus have been sold:

Annual Report on Form 10-K for the year ended December 31, 2003.

You may request a copy of these filings at no cost, by writing or telephoning Controller, Genta Incorporated, Two Connell Drive, Berkeley Heights, NJ 07922, (908) 286-9800.

SPECIAL NOTE ON FORWARD-LOOKING STATEMENTS

This prospectus includes forward-looking statements. We have based these forward-looking statements on our current expectations and projections about future events. These forward-looking statements are subject to risks, uncertainties, and assumptions about our business, including, among other things:

- o FDA approval or failure to approve Genasense;
- o our ability to develop, manufacture and sell our products or enter into collaborative arrangements with third parties to manufacture or sell our products;
- o the safety and efficacy of our products;
- o the commencement and completion of pre-clinical and clinical trials;

- o our ability to obtain necessary regulatory approvals;
- o our contractual collaborative arrangements;

- o the adequacy of our capital resources;
- o the ability to obtain sufficient financing to maintain our planned operations;
- o the possibility and effect of patent infringement claims; and
- o the impact of competitive products and market conditions.

We have no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or risks. New information, future events or risks may cause the forward-looking events we discuss in this prospectus not to occur.

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, the net proceeds from the sale of the common stock will be used for research and development, for commercialization expenses, for potential licenses and acquisitions of complementary products, technologies or businesses and for general corporate purposes.

DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 120,000,000 shares of common stock, par value \$.001 per share, and 5,000,000 shares of preferred stock, par value \$.001 per share.

The following descriptions are summaries of the material terms of our restated certificate of incorporation and bylaws. Reference is made to the more detailed provisions of, and the descriptions are qualified in their entirety by reference to, the restated certificate of incorporation and bylaws and applicable law. Our restated certificate of incorporation and bylaws are incorporated by reference and copies are available upon request. See [Where You Can Find More Information](#).

General

The authorized capital stock of Genta consists of 120,000,000 shares of common stock and 5,000,000 shares of preferred stock.

Common Stock

Except as required by law or by the restated certificate of incorporation, holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Subject to preferences that may be applicable to any then outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by the Board of Directors out of funds legally available therefor. In the event of a liquidation, dissolution or winding up of Genta, holders of the common stock and the preferred stock are entitled to share ratably on an as-converted basis in all assets remaining after payment of liabilities and the liquidation preference of any then outstanding preferred stock. Holders of common stock have no right to convert their common stock into any other securities. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and non-assessable.

Preferred Stock

The Board of Directors has the authority, without further action by the stockholders, to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and the number of shares constituting any series or the designation of such series. The issuance of preferred stock could adversely affect the voting power of holders of common stock and could have the effect of delaying, deferring or preventing a change in control of Genta without further action by the stockholders and may adversely affect the voting and other rights of the holders of our common stock.

Series A Convertible Preferred Stock

General

We are authorized to issue 600,000 shares of series A convertible preferred stock.

Each share of series A convertible preferred stock is immediately convertible, into shares of our common stock, at a rate determined by dividing the aggregate liquidation preference of the series A convertible preferred stock by the conversion price. The conversion price is subject to adjustment for antidilution.

In the event of a liquidation of Genta, the holders of series A convertible preferred stock are entitled to a liquidation preference equal to \$50 per share.

Delaware Anti-Takeover Law

Under Section 203 of the Delaware General Corporation Law certain business combinations between a Delaware corporation, whose stock generally is publicly traded or held of record by more than 2,000 stockholders, and an interested stockholder are prohibited for a three-year period following the date that such stockholder became an interested stockholder, unless:

- o the corporation has elected in its certificate of incorporation not to be governed by Section 203 (we have not made such an election);
- o the business combination was approved by the board of directors of the corporation before the other party to the business combination became an interested stockholder;
- o upon consummation of the transaction that made it an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the commencement of the transaction (excluding voting stock owned by directors who are also officers or held in employee benefit plans in which the employees do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- o on or subsequent to such date the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66% of the outstanding voting stock which is not owned by the interested stockholder. The three-year prohibition also does not apply to certain business combinations proposed by an interested stockholder following the announcement or notification of certain extraordinary transactions involving the corporation and a person who had not been an interested stockholder during the previous three years or who became an interested stockholder with the approval of a majority of the corporation's directors. A business combination is defined to include mergers, asset sales and other transactions resulting in financial benefit to a stockholder. In general, an interested stockholder is a person who, together with affiliates and associates, owns (or within three years, did own) 15% or more of a corporation's voting stock. The statute could prohibit or delay mergers or other takeover or change in control attempts with respect to Genta and, accordingly, may discourage attempts to acquire Genta even though such a transaction may offer Genta's stockholders the opportunity to sell their stock at a price above the prevailing market price.

Advance Notice Requirements for Stockholder Proposals

The bylaws provide that stockholders seeking to bring business before an annual meeting of stockholders, or to nominate candidates for election as directors at an annual meeting of stockholders, must provide timely notice thereof in writing. To be timely, a stockholder's notice must be delivered to the secretary at our principal executive offices not less than 50 calendar days nor more than 75 calendar days prior to the meeting; provided, that if less than 65 days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be received not later than the close of business on the 15th day following the day on which notice of the date of the annual meeting was mailed or such public disclosure was made. The bylaws also specify requirements as to the form and content of a stockholder's notice. These provisions may discourage stockholders from bringing matters before an annual meeting of stockholders or from making nominations for directors at an annual meeting of stockholders.

Limits on Special Meetings

Genta's restated certificate of incorporation and bylaws provide that special meetings of the stockholders of Genta may be called only by the Chairman of the Board or the Chief Executive Officer of Genta or by a resolution adopted by the affirmative vote of a majority of the Board of Directors.

Super-majority Requirements

We have specified provisions in our restated certificate of incorporation and bylaws that require a super-majority vote of the stockholders to amend, revise or appeal provisions that may have an anti-takeover effect.

Listing

Our common stock is listed on the Nasdaq National Market under the symbol GNTA .

Transfer Agent and Registrar

The Transfer Agent and Registrar for the common stock is Mellon Investor Services.

PLAN OF DISTRIBUTION

We may sell the common stock in any of three ways (or in any combination):

- o through underwriters or dealers;
- o directly to a limited number of purchasers or to a single purchaser; or
- o through agents.

The prospectus supplement will set forth the terms of the offering of such common stock, including

- (a) the name or names of any underwriters, dealers or agents and the amounts of common stock underwritten or purchased by each of them,
- (b) the initial public offering price of the common stock and the proceeds to us and any discounts, commissions or concessions allowed or reallocated or paid to dealers, and
- (c) any securities exchanges on which the common stock may be listed.

Any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time.

If underwriters are used in the sale of any common stock, the common stock will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The common stock may be either offered to the public through underwriting syndicates represented by managing underwriters, or directly by underwriters. Generally, the underwriters' obligations to purchase the common stock will be subject to certain conditions precedent. The underwriters will be obligated to purchase all of the common stock if they purchase any of the common stock. Such underwriters may include, among others, Goldman, Sachs & Co.

We may sell the common stock through agents from time to time. The prospectus supplement will name any agent involved in the offer or sale of the common stock and any commissions we pay to them. Generally, any agent will be acting on a best efforts basis for the period of its appointment.

We may authorize underwriters, dealers or agents to solicit offers by certain purchasers to purchase the common stock from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The contracts will be subject only to those conditions set forth in the prospectus supplement, and the prospectus supplement will set forth any commissions we pay for solicitation of these contracts.

Agents and underwriters may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which the agents or underwriters may be required to make in respect thereof. Agents and underwriters may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

We may enter into derivative transactions with third parties, or sell common stock not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell common stock covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use common stock pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use common stock received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be identified in the applicable prospectus supplement (or a post-effective amendment).

VALIDITY OF COMMON STOCK

The validity of the common stock in respect of which this prospectus is being delivered will be passed on for us by Davis Polk & Wardwell.

EXPERTS

The consolidated financial statements incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2003 have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report, which is incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

SUBSCRIPTION AGREEMENT

Genta Incorporated
Two Connell Drive
Berkeley Heights, New Jersey 07922

Gentlemen:

The undersigned (the *Investor*) hereby confirms its agreement with you as follows:

1. This Subscription Agreement (this *Agreement*) is made as of the date set forth below between Genta Incorporated, a Delaware corporation (the *Company*), and the Investor.
2. The Company has authorized the sale and issuance to certain investors of up to [_____] shares (the *Shares*) of its Common Stock, par value \$0.001 per share, together with associated preferred stock purchase rights (the *Common Stock*), subject to adjustment by the Company's Board of Directors, or a committee thereof, for a purchase price of \$[_____] per share (the *Purchase Price*).
3. The offering and sale of the Shares (the *Offering*) are being made pursuant to (1) an effective Registration Statement on Form S-3 (including the Prospectus contained therein (the *Base Prospectus*), the *Registration Statement*) filed by the Company with the Securities and Exchange Commission (the *Commission*), (2) if applicable, certain free writing prospectuses (as that term is defined in Rule 405 under the Securities Act of 1933, as amended), that have or will be filed with the Commission and delivered to the Investor on or prior to the date hereof and (3) a Prospectus Supplement (the *Prospectus Supplement* and together with the Base Prospectus, the *Prospectus*) containing certain supplemental information regarding the Shares and terms of the Offering that will be filed with the Commission and delivered to the Investor along with the Company's counterpart to this Agreement.
4. The Company and the Investor agree that the Investor will purchase from the Company and the Company will issue and sell to the Investor the Shares of Common Stock set forth below for the aggregate purchase price set forth below. The Shares shall be purchased pursuant to the Terms and Conditions for Purchase of Shares attached hereto as Annex I and incorporated herein by this reference as if fully set forth herein. The Investor acknowledges that the offering is not being underwritten by the placement agents (the *Placement Agents*) named in the Prospectus Supplement and that there is no minimum offering amount.
5. The manner of settlement of the Shares purchased by the Investor shall be determined by such Investor as follows (check one):

[_____] A. Delivery by electronic book-entry at The Depository Trust Company (*DTC*), registered in the Investor's name and address as set forth below, and released by Mellon Investor Services, the Company's transfer agent (the *Transfer Agent*), to the Investor at the Closing.
NO LATER THAN ONE (1) BUSINESS DAY AFTER THE EXECUTION OF THIS AGREEMENT BY THE INVESTOR AND THE COMPANY, THE INVESTOR SHALL:

(I) DIRECT THE BROKER-DEALER AT WHICH THE ACCOUNT OR ACCOUNTS TO BE CREDITED WITH THE SHARES ARE MAINTAINED TO SET UP A DEPOSIT/WITHDRAWAL AT CUSTODIAN (*DWAC*) INSTRUCTING THE TRANSFER AGENT TO CREDIT SUCH ACCOUNT OR ACCOUNTS WITH THE SHARES, AND

(II) REMIT BY WIRE TRANSFER THE AMOUNT OF FUNDS EQUAL TO THE AGGREGATE PURCHASE PRICE FOR THE SHARES BEING PURCHASED BY THE INVESTOR TO THE FOLLOWING ACCOUNT:

THE CITIBANK PRIVATE BANK
666 Fifth Avenue, 5th Floor
New York, NY 10103
ABA # 021-000-089
Account Name: Genta Incorporated
Account Number: 64-588-309

OR

B. Delivery versus payment (*DVP*) through DTC (i.e., the Company shall deliver Shares registered in the Investor's name and address as set forth below and released by the Transfer Agent to the Investor at the Closing directly to the account(s) at Cowen & Co., LLC identified by the Investor and simultaneously therewith payment shall be made from such account(s) to the Company through DTC). **NO LATER THAN ONE (1) BUSINESS DAY AFTER THE EXECUTION OF THIS AGREEMENT BY THE INVESTOR AND THE COMPANY, THE INVESTOR SHALL:**

- (I) NOTIFY COWEN & CO., LLC OF THE ACCOUNT OR ACCOUNTS AT COWEN & CO., LLC TO BE CREDITED WITH THE SHARES BEING PURCHASED BY SUCH INVESTOR, AND**
- (II) CONFIRM THAT THE ACCOUNT OR ACCOUNTS AT COWEN & CO., LLC TO BE CREDITED WITH THE SHARES BEING PURCHASED BY THE INVESTOR HAVE A MINIMUM BALANCE EQUAL TO THE AGGREGATE PURCHASE PRICE FOR THE SHARES BEING PURCHASED BY THE INVESTOR.**

IT IS THE INVESTOR'S RESPONSIBILITY TO (A) MAKE THE NECESSARY WIRE TRANSFER OR CONFIRM THE PROPER ACCOUNT BALANCE IN A TIMELY MANNER AND (B) ARRANGE FOR SETTLEMENT BY WAY OF DWAC OR DVP IN A TIMELY MANNER. IF THE INVESTOR DOES NOT DELIVER THE AGGREGATE PURCHASE PRICE FOR THE SHARES OR DOES NOT MAKE PROPER ARRANGEMENTS FOR SETTLEMENT IN A TIMELY MANNER, THE SHARES MAY NOT BE DELIVERED AT CLOSING TO THE INVESTOR OR THE INVESTOR MAY BE EXCLUDED FROM THE CLOSING ALTOGETHER.

6. The Investor represents that, except as set forth below, (a) it has had no position, office or other material relationship within the past three years with the Company or persons known to it to be affiliates of the Company, (b) it is not a NASD member or an Associated Person (as such term is defined under the NASD Membership and Registration Rules Section 1011) as of the Closing, and (c) neither the Investor nor any group of Investors (as identified in a public filing made with the Commission) of which the Investor is a part in connection with the offering of the Shares, acquired, or obtained the right to acquire, 20% or more of the Common Stock (or securities convertible into or exercisable for Common Stock) or the voting power of the Company on a post-transaction basis. Exceptions:

(If no exceptions, write "none." If left blank, response will be deemed to be "none.")

7. The Investor represents that it has received the final Base Prospectus, dated May 11, 2004, which is a part of the Company's Registration Statement, and any free writing prospectus, prior to or in connection with the receipt of this Agreement and the Prospectus Supplement along with the Company's counterpart to this Agreement (collectively, the *Disclosure Package*).

Number of Shares: _____

Purchase Price Per Share: \$ _____

Aggregate Purchase Price: \$ _____

Please confirm that the foregoing correctly sets forth the agreement between us by signing in the space provided below for that purpose.

Dated as of: March __, 2006

INVESTOR

By: _____

Print Name: _____

Title: _____

Address: _____

Agreed and Accepted
this __ day of March, 2006:

GENTA INCORPORATED

By: _____

Title:

ANNEX I

TERMS AND CONDITIONS FOR PURCHASE OF SHARES

1. Authorization and Sale of the Shares. Subject to the terms and conditions of this Agreement, the Company has authorized the sale of the Shares.

2. Agreement to Sell and Purchase the Shares; Placement Agents.

2.1 At the Closing (as defined in Section 3.1), the Company will sell to the Investor, and the Investor will purchase from the Company, upon the terms and conditions set forth herein, the number of Shares set forth on the last page of the Agreement to which these Terms and Conditions for Purchase of Shares are attached as Annex I (the *Signature Page*) for the aggregate purchase price therefor set forth on the Signature Page.

2.2 The Company proposes to enter into substantially this same form of Subscription Agreement with certain other investors (the *Other Investors*) and expects to complete sales of Shares to them. The Investor and the Other Investors are hereinafter sometimes collectively referred to as the *Investors*, and this Agreement and the Subscription Agreements executed by the Other Investors are hereinafter sometimes collectively referred to as the *Agreements*.

2.3 Investor acknowledges that the Company intends to pay Cowen & Co., LLC and Rodman & Renshaw, LLC (the *Placement Agents*) a fee (the *Placement Fee*) in respect of the sale of Shares to the Investor.

2.4 The Company has entered into a Placement Agent Agreement, dated March __, 2006 (the *Placement Agreement*) and indemnities with the Placement Agents that contains certain representations, warranties, covenants, agreements of the Company that may be relied upon by the Investor, which shall be a third party beneficiary thereof. A copy of the Placement Agreement is available upon request.

3. Closings and Delivery of the Shares and Funds.

3.1 Closing. The completion of the purchase and sale of the Shares (the *Closing*) shall occur at a place and time (the *Closing Date*) to be specified by the Company and the Placement Agents, and of which the Investors will be notified in advance by the Placement Agents, in accordance with Rule 15c6-1 promulgated under the Securities Exchange Act of 1934, as amended (the *Exchange Act*). At the Closing, (a) the Company shall cause the Transfer Agent to deliver to the Investor the number of Shares set forth on the Signature Page registered in the name of the Investor or, if so indicated on the Investor Questionnaire attached hereto as Exhibit A, in the name of a nominee designated by the Investor and (b) the aggregate purchase price for the Shares being purchased by the Investor will be delivered by or on behalf of the Investor to the Company.

3.2 (a) Conditions to the Company's Obligations. The Company's obligation to issue and sell the Shares to the Investor shall be subject to: (a) the receipt by the Company of the purchase price for the Shares being purchased hereunder as set forth on the Signature Page and (b) the accuracy of the representations and warranties made by the Investor and the fulfillment of those undertakings of the Investor to be fulfilled prior to the Closing Date.

(b) Conditions to the Investor's Obligations. The Investor's obligation to purchase the Shares will be subject to the accuracy of the representations and warranties made by the Company and the fulfillment of those undertakings of the Company to be fulfilled prior to the Closing Date, including without limitation, those contained in the Placement Agreement, and to the condition that the Placement Agents shall not have: (a) terminated the Placement Agreement pursuant to the terms thereof or (b) determined that the

conditions to the closing in the Placement Agreement have not been satisfied. The Investor's obligations are expressly not conditioned on the purchase by any or all of the Other Investors of the Shares that they have agreed to purchase from the Company.

3.3 Delivery of Funds.

(a) Delivery by Electronic Book-Entry at The Depository Trust Company. If the Investor elects to settle the Shares purchased by such Investor through delivery by electronic book-entry at DTC, **no later than one (1) business day after the execution of this Agreement by the Investor and the Company**, the Investor shall remit by wire transfer the amount of funds equal to the aggregate purchase price for the shares being purchased by the Investor to the following account designated by the Company and the Placement Agents pursuant to the terms of that certain Escrow Agreement (the *Escrow Agreement*) dated as of March __, 2006, by and among the Company, the Placement Agents and Brown Raysman Millstein Felder & Steiner LLP (the *Escrow Agent*):

THE CITIBANK PRIVATE BANK
666 Fifth Avenue, 5th Floor
New York, NY 10103
ABA # 021-000-089
Account Name: Genta Incorporated
Account Number: 64-588-309

Such funds shall be held in escrow until the Closing and delivered by the Escrow Agent on behalf of the Investors to the Company upon the satisfaction, in the sole judgment of the Placement Agents, of the conditions set forth in Section 3.2(b) hereof. The Placement Agents shall have no rights in or to any of the escrowed funds, unless the Placement Agents and the Escrow Agent are notified in writing by the Company in connection with the Closing that a portion of the escrowed funds shall be applied to the Placement Fee. The Company and the Investor agree to indemnify and hold the Escrow Agent harmless from and against any and all losses, costs, damages, expenses and claims (including, without limitation, court costs and reasonable attorneys fees) (*Losses*) arising under this Section 3.3 or otherwise with respect to the funds held in escrow pursuant hereto or arising under the Escrow Agreement, unless it is finally determined that such Losses resulted directly from the willful misconduct or gross negligence of the Escrow Agent. Anything in this Agreement to the contrary notwithstanding, in no event shall the Escrow Agent be liable for any special, indirect or consequential loss or damage of any kind whatsoever (including but not limited to lost profits), even if the Escrow Agent has been advised of the likelihood of such loss or damage and regardless of the form of action.

Investor shall also furnish to the Placement Agents a completed W-9 form (or, in the case of an Investor who is not a United States citizen or resident, a W-8 form).

Investor acknowledges that the Escrow Agent acts as counsel to the Placement Agents, and shall have the right to continue to represent the Placement Agents, in any action, proceeding, claim, litigation, dispute, arbitration or negotiation in connection with the Offering, and Investor hereby consents thereto and waives any objection to the continued representation of the Placement Agents by the Escrow Agent in connection therewith based upon the services of the Escrow Agent under the Escrow Agreement, without waiving any duty or obligation the Escrow Agent may have to any other person.

(b) Delivery Versus Payment through The Depository Trust Company. If the Investor elects to settle the Shares purchased by such Investor by delivery versus payment through DTC, **no later than one (1) business day after the execution of this Agreement by the Investor and the Company**, the Investor shall confirm that the account or accounts at Cowen & Co., LLC to be credited with the Shares

being purchased by the Investor have a minimum balance equal to the aggregate purchase price for the Shares being purchased by the Investor.

3.4 Delivery of Shares.

(a)Delivery by Electronic Book-Entry at The Depository Trust Company. If the Investor elects to settle the Shares purchased by such Investor through delivery by electronic book-entry at DTC, **no later than one (1) business day after the execution of this Agreement by the Investor and the Company**, the Investor shall direct the broker-dealer at which the account or accounts to be credited with the Shares being purchased by such Investor are maintained, which broker/dealer shall be a DTC participant, to set up a Deposit/Withdrawal at Custodian (DWAC) instructing Mellon Investor Services, the Company's transfer agent, to credit such account or accounts with the Shares by means of an electronic book-entry delivery. Such DWAC shall indicate the settlement date for the deposit of the Shares, which date shall be provided to the Investor by the Placement Agents. Simultaneously with the delivery to the Company by the Escrow Agent of the funds held in escrow pursuant to Section 3.3 above, the Company shall direct its transfer agent to credit the Investor's account or accounts with the Shares pursuant to the information contained in the DWAC.

(b)Delivery Versus Payment through The Depository Trust Company. If the Investor elects to settle the Shares purchased by such Investor by delivery versus payment through DTC, **no later than one (1) business day after the execution of this Agreement by the Investor and the Company**, the Investor shall notify Cowen & Co., LLC of the account or accounts at Cowen & Co., LLC to be credited with the Shares being purchased by such Investor. On the Closing Date, the Company shall deliver the Shares to the Investor directly to the account(s) at Cowen & Co., LLC identified by Investor and simultaneously therewith payment shall be made from such account(s) to the Company through DTC.

4. Representations, Warranties and Covenants of the Investor.

4.1 The Investor represents and warrants to, and covenants with, the Company that (a) the Investor is knowledgeable, sophisticated and experienced in making, and is qualified to make decisions with respect to, investments in shares presenting an investment decision like that involved in the purchase of the Shares, including investments in securities issued by the Company and investments in comparable companies, and has requested, received, reviewed and considered all information it deemed relevant in making an informed decision to purchase the Shares, (b) the Investor has answered all questions on the Signature Page and the Investor Questionnaire for use in preparation of the Prospectus Supplement and the answers thereto are true and correct as of the date hereof and will be true and correct as of the Closing Date and (c) the Investor, in connection with its decision to purchase the number of Shares set forth on the Signature Page, is relying only upon the Disclosure Package, the documents incorporated by reference therein and the representations and warranties of the Company contained herein.

4.2 The Investor acknowledges, represents and agrees that no action has been or will be taken in any jurisdiction outside the United States by the Company or any Placement Agent that would permit an offering of the Shares, or possession or distribution of offering materials in connection with the issue of the Shares in any jurisdiction outside the United States where action for that purpose is required. Each Investor outside the United States will comply with all applicable laws and regulations in each foreign jurisdiction in which it purchases, offers, sells or delivers Shares or has in its possession or distributes any offering material, in all cases at its own expense. The Placement Agents are not authorized to make and have not made any representation or use of any information in connection with the issue, placement, purchase and sale of the Shares, except as set forth or incorporated by reference in the Base Prospectus or the Prospectus Supplement.

4.3 The Investor further represents and warrants to, and covenants with, the Company that (a) the Investor has full right, power, authority and capacity to enter into this Agreement and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and

performance of this Agreement, and (b) this Agreement constitutes a valid and binding obligation of the Investor enforceable against the Investor in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law) and except as the indemnification agreements of the Investors herein may be legally unenforceable.

4.4 The Investor understands that nothing in this Agreement, the Prospectus or any other materials presented to the Investor in connection with the purchase and sale of the Shares constitutes legal, tax or investment advice. The Investor has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of Shares.

4.5 Each Investor represents, warrants and agrees that, since the date on which any of the Company or the Placement Agents first contacted such Investor about the potential sale of the Shares, it has not engaged in any transactions in the securities of the Company (including, without limitation, any Short Sales involving the Company's securities). Each Investor covenants that it will not engage in any transactions in the securities of the Company (including Short Sales) prior to the time that the transactions contemplated by this Agreement are publicly disclosed, which disclosure shall occur on the business day of, or immediately following, the Closing Date of this Offering. Each Investor agrees that it will not use any of the Shares acquired pursuant to this Agreement to cover any short position in the Common Stock if doing so would be in violation of applicable securities laws. For purposes hereof, Short Sales include, without limitation, all short sales as defined in Rule 200 promulgated under Regulation SHO under the Exchange Act, whether or not against the box, and all types of direct and indirect stock pledges, forward sales contracts, options, puts, calls, short sales, swaps, put equivalent positions (as defined in Rule 16a-1(h) under the Exchange Act) and similar arrangements (including on a total return basis), and sales and other transactions through non-US broker dealers or foreign regulated brokers.

5. Survival of Representations, Warranties and Agreements. Notwithstanding any investigation made by any party to this Agreement or by the Placement Agents, all covenants, agreements, representations and warranties made by the Company and the Investor herein will survive the execution of this Agreement, the delivery to the Investor of the Shares being purchased and the payment therefor.

6. Notices. All notices, requests, consents and other communications hereunder will be in writing, will be mailed (a) if within the domestic United States by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, or by facsimile or (b) if delivered from outside the United States, by International Federal Express or facsimile, and will be deemed given (i) if delivered by first-class registered or certified mail domestic, three business days after so mailed, (ii) if delivered by nationally recognized overnight carrier, one business day after so mailed, (iii) if delivered by International Federal Express, two business days after so mailed and (iv) if delivered by facsimile, upon electric confirmation of receipt and will be delivered and addressed as follows:

if to the Company, to:

Genta Incorporated
Two Connell Drive
Berkeley Heights, New Jersey 07922
Attention Richard J. Moran, C.F.O.
Facsimile: (908) 464-1701

with copies to:

Morgan, Lewis & Bockius LLP
502 Carnegie Center
Princeton, New Jersey 08540
Attention: Andrew P. Gilbert, Esq.
Facsimile: (609) 919-6701

if to the Investor, at its address on the Signature Page hereto, or at such other address or addresses as may have been furnished to the Company in writing.

7. Changes. This Agreement may not be modified or amended except pursuant to an instrument in writing signed by the Company and the Investor.

8. Headings. The headings of the various sections of this Agreement have been inserted for convenience of reference only and will not be deemed to be part of this Agreement.

9. Severability. In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein will not in any way be affected or impaired thereby.

10. Governing Law. This Agreement will be governed by, and construed in accordance with, the internal laws of the State of New York, without giving effect to the principles of conflicts of law that would require the application of the laws of any other jurisdiction.

11. Counterparts. This Agreement may be executed in two or more counterparts, each of which will constitute an original, but all of which, when taken together, will constitute but one instrument, and will become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties. The Company and the Investor acknowledge and agree that the Company shall deliver its counterpart to the Investor along with the Prospectus Supplement.

12. Confirmation of Sale. The Investor acknowledges and agrees that such Investor's receipt of the Company's counterpart to this Agreement, together with the Prospectus Supplement, shall constitute written confirmation of the Company's sale of Shares to such Investor.

13. Press Release. The Company and the Investor agree that the Company shall issue a press release announcing the Offering prior to the opening of the financial markets in New York City on the business day immediately after the date hereof.

14. Termination. In the event that the Placement Agreement is terminated by the Placement Agents pursuant to the terms thereof, this Agreement shall terminate without any further action on the part of the parties hereto.

Exhibit A

GENTA INCORPORATED

INVESTOR QUESTIONNAIRE

Pursuant to Section 3 of Annex I to the Agreement, please provide us with the following information:

1. The exact name that your Shares are to be registered in. You may use a nominee name if appropriate: _____
2. The relationship between the Investor and the registered holder listed in response to item 1 above: _____
3. The mailing address of the registered holder listed in response to item 1 above: _____
4. The Social Security Number or Tax Identification Number of the registered holder listed in the response to item 1 above: _____
5. Name of DTC Participant (broker-dealer at which the account or accounts to be credited with the Shares are maintained): _____
6. DTC Participant Number: _____
7. Name of Account at DTC Participant being credited with the Shares: _____
8. Account Number at DTC Participant being credited with the Shares: _____

[19,000,000] Shares

Genta Incorporated

Common Stock

**PROSPECTUS
SUPPLEMENT**

Cowen & Company

Rodman & Renshaw, LLC

March [], 2006
