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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, DC 20549**

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**FORM 10-K**

**FOR ANNUAL AND TRANSITION REPORTS  
PURSUANT TO SECTIONS 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

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

For the fiscal year ended **DECEMBER 31, 2004**

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 0-24274

**LA JOLLA PHARMACEUTICAL COMPANY**

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction  
of Incorporation of Organization)

**33-0361285**  
(I.R.S. Employer  
Identification No.)

**6455 Nancy Ridge Drive, San Diego, CA 92121**  
(Address of Principal Executive Offices, including Zip Code)

Registrant's telephone number, including area code: (858) 452-6600

Securities registered pursuant to Section 12(b) of the Act: None

Securities registered pursuant to Section 12(g) of the Act: Common Stock, par value \$0.01 per share

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of the Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2).  
Yes  No

The aggregate market value of the common stock of the registrant held by non-affiliates as of June 30, 2004 (the last trading day of the second fiscal quarter) was \$148,978,836, based on a closing price of \$2.43 on the Nasdaq stock market on such date. The number of shares of the registrant's common stock, \$0.01 par value per share, outstanding at February 25, 2005 was 73,758,850.

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## DOCUMENTS INCORPORATED BY REFERENCE

Part II, Item 5 and Part III of this report incorporate information by reference from the registrant's proxy statement for its annual meeting of stockholders to be held on May 19, 2005, which proxy statement will be filed with the Securities and Exchange Commission no later than 120 days after the close of the fiscal year ended December 31, 2004.

## FORWARD-LOOKING STATEMENTS

The forward-looking statements in this report involve significant risks and uncertainties, and a number of factors, both foreseen and unforeseen, could cause actual results to differ materially from our current expectations. Forward-looking statements include those that express a plan, belief, expectation, estimation, anticipation, intent, contingency, future development or similar expression. The analyses of clinical results of Riquent® (abetimus sodium), previously known as LJP 394, our drug candidate for the treatment of systemic lupus erythematosus ("SLE" or "lupus") renal disease, including the results of any trials that are ongoing or that we may initiate in the future, could result in a finding that this drug candidate is not effective in large patient populations, does not provide a meaningful clinical benefit, or may reveal a potential safety issue requiring us to develop new candidates. The analysis of the data from our Phase 3 trial of Riquent showed that the trial did not reach statistical significance with respect to its primary endpoint, time to renal flare, or with respect to its secondary endpoint, time to treatment with high-dose corticosteroids or cyclophosphamide. The results from our clinical trials of Riquent, including the results of any trials that are ongoing or that we may initiate in the future, may not ultimately be sufficient to obtain regulatory clearance to market Riquent either in the United States or Europe, and we may be required to conduct additional clinical studies to demonstrate the safety and efficacy of Riquent in order to obtain marketing approval. There can be no assurance, however, that we will have the necessary resources to complete any additional trial or that any additional trial will sufficiently demonstrate the safety and efficacy of Riquent. Many of the analyses of data from our clinical trials of Riquent were conducted on a retrospective basis and the p values reported are nominal, without adjustment for multiple comparisons. Our blood test to measure patient's binding affinity for Riquent is experimental, has not been validated by independent laboratories and will likely be reviewed as part of the Riquent approval process. Our other potential drug candidates are at earlier stages of development and involve comparable risks. Analysis of data from our ongoing, or any future, clinical trials could have negative or inconclusive results. Any positive results observed to date may not be indicative of future results. In any event, regulatory authorities may require clinical trials in addition to our current clinical trial, or may not approve our drugs. Our ability to develop and sell our products in the future may be adversely affected by the intellectual property rights of third parties. Additional risk factors include the uncertainty and timing of: our clear need for additional financing; obtaining required regulatory approvals, including delays associated with any approvals that we may obtain; our ability to pass all necessary FDA or other regulatory authorities inspections; the increase in capacity of our manufacturing capabilities for possible commercialization; successfully marketing and selling our products; our lack of manufacturing, marketing and sales experience; our ability to make use of the orphan drug designation for Riquent; generating future revenue from product sales or other sources such as collaborative relationships; future profitability; and our dependence on patents and other proprietary rights. Readers are cautioned to not place undue reliance upon forward-looking statements, which speak only as of the date hereof, and we undertake no obligation to update forward-looking statements to reflect events or circumstances occurring after the date hereof. Interested parties are urged to review the risks described below under the "Risk Factors" and elsewhere in this report and in other reports and registration statements filed with the Securities and Exchange Commission from time to time.

## PART I

In this report, all references to “we,” “our,” and “us” refer to La Jolla Pharmaceutical Company, a Delaware corporation.

### Item 1. Business

#### Overview

La Jolla Pharmaceutical Company was incorporated in Delaware in 1989. In October 2004 the Company established a subsidiary, La Jolla Limited, which was organized in England in connection with the potential development efforts for Riquent in Europe. We are a biopharmaceutical company focused on the research and development of highly specific therapeutic products for the treatment of certain life-threatening antibody-mediated diseases. These diseases, including autoimmune conditions such as lupus, are caused by abnormal B cell production of antibodies that attack healthy tissues. Current treatments for these autoimmune disorders often address only symptoms of the disease, or nonspecifically suppress the normal operation of the immune system, which can result in severe, negative side effects and hospitalization. We believe that our drug candidates, called Toleragens®, have the potential to treat the underlying cause of many antibody-mediated diseases without these severe, negative side effects.

#### Developments in 2004 to Date

On February 16, 2004, we announced that our New Drug Application (“NDA”) for Riquent® (abetimus sodium), our clinical drug candidate for the treatment of lupus renal disease, had been accepted for review by the United States Food and Drug Administration (the “FDA”). Our NDA submission was prepared on our understanding that the FDA could potentially approve Riquent on the basis of our clinical trial results or under the accelerated approval regulation known as Subpart H. Under Subpart H, drugs in development for serious, life-threatening diseases with an unmet medical need can be approved on an accelerated basis if the FDA determines that the effect of the drug on a surrogate endpoint is reasonably likely to predict clinical benefit and that a post-marketing clinical trial can be successfully completed following drug approval which confirms the clinical benefit. As previously announced, in our Phase 3 and Phase 2/3 trials, patients treated with Riquent had significantly reduced levels of antibodies to double-stranded DNA (“dsDNA”) compared with patients treated with placebo.

On August 2, 2004, we announced that we had reached a written agreement with the Cardio-Renal Division of the FDA under a special protocol assessment concerning a trial that is designed to meet the requirements of a post-marketing clinical benefit trial which would have to be conducted if Riquent were to be approved under Subpart H and that we had initiated the trial. The special protocol assessment process is a formal procedure that results in a written agreement between a company and the FDA that documents the design and planned analysis of a study used in support of a regulatory submission. Agreements reached under the special protocol assessment process are generally binding except in circumstances where public health concerns are raised or when there are significant changes in medical science or practice.

Based on the data that we submitted in our NDA, we expected that the FDA would notify us in mid-October of its decision regarding the approvability of Riquent. On October 14, 2004, we announced that we had received a letter from the FDA indicating that Riquent is approvable, but that an additional, randomized, double-blind study demonstrating the clinical benefit of Riquent would need to be completed prior to approval. The FDA letter indicated that the

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successful completion of the clinical trial that we initiated in August 2004 would appear to satisfy this requirement.

On November 23, 2004, we provided an update on our clinical and regulatory activities concerning Riquent. We announced that the clinical trial that we initiated in August 2004 was evaluating doses of 100 mg and 300 mg of Riquent over a 12-month period in lupus patients with a history of renal disease. We are currently recruiting patients in 37 of approximately 60 planned clinical trial sites in the United States. We also announced that we were conducting an additional study to evaluate higher doses of Riquent for use in the multi-dose study. To date, this additional study, conducted in healthy volunteers, has evaluated single doses of 600 mg in one group and 1200 mg in another group treated with Riquent or placebo. Both dose levels of Riquent appeared to be well tolerated and we may test additional dose levels in connection with this trial. Based on previous studies of Riquent, we believe that some lupus patients may benefit from higher doses of Riquent. Once the dosing study is completed, we plan to review the data from the study with the FDA and may choose to study additional doses of Riquent in the trial that we initiated in August 2004.

Our November 2004 announcement also noted that we had met with the European Agency for the Evaluation of Medicinal Products (the "EMA") which had designated two countries to lead the review of our European regulatory filing and that, due to the efforts involved in our ongoing discussions with the FDA, we anticipated a delay in filing our Marketing Authorization Application ("MAA") for Riquent in Europe. We also announced that, while our discussions with the FDA were ongoing, we had taken steps to control certain costs associated with our research, development and other activities. Finally, we announced that, since receiving the approvable letter from the FDA in October 2004, we and the FDA had met twice to discuss the approvable letter and data concerning Riquent and that we had two additional meetings scheduled.

Since our November 2004 announcement, we completed three additional meetings with the FDA regarding the approvable letter and whether the FDA would consider approving Riquent under Subpart H. During our discussions with the FDA, we have provided the FDA with additional evidence in support of the potential efficacy of Riquent and with information that we believe supports a determination that antibodies to dsDNA are an appropriate surrogate endpoint for lupus renal disease and that the magnitude of the effect of Riquent on antibodies to dsDNA is reasonably likely to predict clinical benefit, which is a requirement for any potential approval under Subpart H. Many of the analyses of data from our clinical trials of Riquent were conducted on a retrospective basis and the p values reported are nominal, without adjustment for multiple comparisons. While we are in discussions with the FDA regarding the possibility of approval under Subpart H, we are continuing the clinical benefit study that we initiated in August 2004 in order to satisfy the additional trial requirement set forth in the FDA's October 2004 approvable letter. In the event that the FDA approves Riquent under Subpart H, we expect that we would continue the ongoing trial as a post-marketing benefit trial, which would need to be completed after approval.

We currently expect to continue our discussions with the FDA regarding possible Subpart H approval, although there can be no guarantee that any future meetings with the FDA can be held in a timely manner, or at all, or that our meetings with the FDA will eliminate or change the current FDA requirement that we conduct an additional trial for Riquent prior to any further consideration of possible approval.

On February 2, 2005, we announced that we had completed a public offering of 12,250,000 shares of our common stock. The net proceeds to us, after expenses, were approximately \$15.8 million.

## **Antibody-Mediated Diseases**

The immune system is the major biological defense mechanism responsible for recognizing and fighting disease. The immune system identifies antigens, such as bacteria, viruses and other disease-causing substances, and seeks to rid the body of these antigens. There are two fundamental types of immune responses: cell-mediated and antibody-mediated. These immune responses are controlled by the activities of white blood cells called T cells and B cells. T cells provide cell-mediated immunity and regulate B cells. B cells provide antibody-mediated immunity by producing antibodies that recognize and help to eliminate antigens.

Each B cell produces antibodies against a specific structure on the antigen's surface called an epitope. The B cell is triggered to produce antibodies when the specific epitope is recognized by and binds to the antibody receptors on the surface of the B cell, and only when the B cell receives an appropriate signal from a T cell. When an epitope binds to the B cell with no corresponding T cell signal, the B cell may become "tolerized," and cease to produce antibodies.

A properly functioning immune system distinguishes between foreign, or "non-self," antigens and the body's own healthy tissues. In a malfunctioning immune system, healthy tissue may trigger an immune response that causes B cells to produce disease-causing antibodies, resulting in antibody-mediated autoimmune disease. For example, B cells can produce disease-causing antibodies that are associated with the impairment of kidney function and can result in the need for dialysis in people with lupus and with the development of blood clots that can result in stroke, heart attack, deep vein thrombosis and recurrent fetal loss in people with antibody-mediated thrombosis, also known as Antiphospholipid Syndrome. Other antibody-mediated disorders include the wasting of muscles in myasthenia gravis, organ rejection in xenotransplantation and Rh hemolytic disease in newborns.

Many currently available therapies for antibody-mediated diseases have significant shortcomings, including the potential for causing severe side effects and a lack of specificity. Mild forms of antibody-mediated diseases are generally treated with drugs that address only the disease symptoms and fail to suppress disease progression because such drugs do not affect the causative factors of the disease itself. Exacerbations of antibody-mediated diseases like lupus are generally treated with high levels of corticosteroids and/or immunosuppressive therapy (primarily anti-cancer or chemotherapy drugs and drugs designed to reduce the risk of organ transplant rejection), which can broadly suppress the normal function of the entire immune system. These therapies can leave patients susceptible to potentially life-threatening infections that may require hospitalization. Repeated administration of high doses of corticosteroids may cause other serious conditions, including diabetes, hypertension, cataracts, osteonecrosis and psychosis, and an increased risk of severe infections that may limit the use of this therapy. The use of chemotherapy may lead to a wide range of problems that can include weight loss, nausea, an increased risk of severe infections, sterility and an increased risk of malignancies.

## **Tolerance Technology®**

Our Tolerance Technology program focuses on the discovery and development of proprietary therapeutics, called Toleragens, which are intended to target and suppress the production of specific disease-causing antibodies without affecting the protective functions of the immune system. We believe that Toleragens have the potential to treat the underlying causes of antibody-mediated diseases, and that our Tolerance Technology has the potential to be applied broadly wherever specific antibodies are involved in causing diseases.

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Since the 1970s, hundreds of papers have been published by the scientific community describing laboratory studies and a Nobel Prize was awarded for research in tolerance. The underlying science supporting our Tolerance Technology is based on these discoveries as well as on our own research.

Toleragens are composed of disease-specific epitopes and a carrier platform, which are proprietary chemical structures that we have developed and synthesized. To mimic the unique epitopes on an antigen's surface, we identify and synthesize epitopes specific to particular antibody-mediated diseases and attach or conjugate these epitopes to the carrier platform, which serves as a vehicle for presenting the epitopes to the antibody receptors on the targeted B cell. When the epitope binds to the antibody receptors on the B cell in the absence of a T cell signal, the B cell may become tolerized and cease to produce disease-causing antibodies.

We design our Toleragens to bind selectively to *disease-causing* B cells without affecting the function of *disease-fighting* B cells. This process involves: collecting and purifying the disease-causing antibodies from patients with the targeted disease; generating and selecting an epitope that strongly binds to the purified antibodies; modifying the epitope's structure to maximize its binding properties while eliminating, if necessary, structures that can activate a patient's T cells (this process is called "optimization"); and linking the optimized epitope to the carrier platform. We believe this process enables us to create Toleragens that will preferentially tolerize and shut down B cells that generate antibodies with the highest binding affinity, and which are believed to be the most harmful.

### **Business Strategy**

Our objective is to become the leading developer of highly specific therapeutics for the treatment of life-threatening antibody-mediated diseases such as lupus and antibody-mediated thrombosis, and acute and chronic inflammatory disorders. Our strategy includes the following key elements:

*Complete any clinical studies to satisfy regulatory requirements.* Based on the FDA's approvable letter we received in October 2004, we are required to complete an additional, randomized, double-blind study that demonstrates the clinical benefit of Riquent prior to any potential approval. The letter indicated that the successful completion of the clinical trial we initiated in August 2004 would appear to satisfy this requirement. Our primary goal is to complete this study in order to satisfy the requirement set forth in the FDA's letter. In the event that the FDA approves Riquent under Subpart H, we expect that we would continue the ongoing trial as a post-marketing benefit trial, which we would need to complete after approval.

*Continue discussions with the FDA regarding the possibility of obtaining accelerated approval for Riquent under Subpart H.* We have had several meetings with the FDA since we received the approvable letter regarding Riquent. We have also provided the FDA with additional evidence in support of the potential efficacy of Riquent and with information that we believe supports a determination that antibodies to dsDNA are an appropriate surrogate endpoint for lupus renal disease and that the magnitude of the effect of Riquent on antibodies to dsDNA is reasonably likely to predict clinical benefit. We expect to continue our discussions with the FDA regarding Subpart H approval and provide the FDA with any additional analyses of Riquent data if requested. However, there can be no guarantee that any future meetings with the FDA can be held in a timely manner, or at all, or that our meetings with the FDA will eliminate or change the current FDA requirement that we conduct an additional trial for Riquent prior to any further consideration of possible approval.

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*Seek additional funding, including through collaborative arrangements and through public and private financings, to develop and commercialize product candidates.* In order to continue our development of Riquent and other product candidates, including our ongoing clinical trial, we will need significant additional funding. Our choice of financing alternatives may vary depending on a number of factors, including the outcome of our discussions with the FDA regarding the possibility of Subpart H approval for Riquent, the interest of other entities in strategic transactions with us, the market price of our securities and conditions in the financial markets. There can be no guarantee that additional financing will be available on favorable terms, if at all, whether through collaborative arrangements, the issuance of securities, or otherwise.

*Develop additional therapeutics for other life-threatening antibody-mediated diseases and inflammatory disorders.* Substantially all of our resources are currently devoted to the development of Riquent. Nevertheless, we are conducting other, limited research and development activities, that are currently focused on chronic, life-threatening diseases and conditions caused by antibodies or inflammation for which current therapies have significant limitations. We intend to use our Tolerance Technology and scientific research to design therapeutics that specifically target other autoimmune diseases, without adversely affecting normal immune system function, as well as acute and chronic inflammatory disorders.

*Possibly initiate commercialization activities.* If Riquent is ultimately approved in the United States, as to which we can provide no assurance, we currently anticipate marketing Riquent ourselves using a specialty pharmaceutical sales force which would target the rheumatology and nephrology specialists who treat the majority of lupus patients with renal disease. If Riquent is approved in Europe, as to which we can provide no assurance, we currently expect to either market Riquent ourselves or seek a marketing collaboration with a European partner. We believe that the majority of European patients are treated at a limited number of major hospitals, and, as is the case in the United States, that a specialty pharmaceutical sales force could successfully market Riquent to the physicians at a majority of these sites.

*Expand intellectual property position.* As of December 31, 2004, we owned 100 issued patents and 85 pending patent applications covering various technologies and drug candidates, including Riquent. Our goal is to expand our intellectual property position with future discoveries and additional patent filings.

### **Products Under Development**

We have focused our product development efforts on our programs for lupus, antibody-mediated thrombosis and other antibody-mediated diseases, and anti-inflammatory approaches. In each of the years ended December 31, 2004, 2003 and 2002, we incurred expenses of approximately \$33.2 million, \$32.4 million and \$37.7 million, respectively, for product research and development on these programs.

#### *The Lupus Program*

Lupus is a life-threatening, antibody-mediated disease in which disease causing antibodies damage various tissues. According to recent statistics compiled by the Lupus Foundation of America, epidemiological studies and other sources, the number of lupus patients in the United States is estimated to be between 500,000 and 1,000,000, and approximately 16,000 new cases are diagnosed each year. Approximately nine out of 10 lupus patients are women, who usually develop the disease during their childbearing years. Lupus is characterized by a multitude of symptoms that can include chronic kidney inflammation, which can lead to kidney failure, serious episodes of cardiac and central-nervous-system inflammation, as well as extreme fatigue,



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arthritis and rashes. Approximately 80% of all lupus patients progress to serious symptoms. Approximately 50% of lupus patients will develop kidney disease.

Antibodies to double stranded DNA (“dsDNA”) can be detected in approximately 90% of lupus patients who are not receiving immunosuppressive therapy. Antibodies to dsDNA are widely believed to cause kidney disease (nephritis), often resulting in morbidity and mortality in lupus patients. Episodes of potentially life-threatening kidney inflammation — called “renal flares” — often require intensive care, treatment with high-dose corticosteroids and immunosuppressive agents, and hospitalization. Lupus nephritis can lead to deterioration of kidney function and to end-stage kidney disease, requiring long-term renal dialysis or kidney transplantation to sustain a patient’s life.

Current treatments for lupus patients that have a renal flare often involve repeated administration of corticosteroids, often at high levels, that, when used long-term, can lead to serious side effects. Many patients with renal flares are also treated with immunosuppressive therapy, including anti-cancer drugs, that can have a general suppressive effect on the immune system and may be carcinogenic. Treatment with immunosuppressive therapies can leave patients vulnerable to serious infection, which is a significant cause of sickness and death.

We have designed Riquent to suppress the production of antibodies to dsDNA in lupus patients without suppressing the normal function of the immune system. The design of Riquent is based on scientific evidence of the role of antibodies to dsDNA in lupus. Published studies of lupus patients indicate that a rise in the level of antibodies to dsDNA may be predictive of renal flares in lupus patients with renal involvement, and that reducing antibodies to dsDNA by treating with corticosteroids can prevent relapse. In a mouse model of lupus nephritis that generates elevated levels of antibodies to dsDNA, administration of Riquent reduced the production of antibodies to dsDNA, reduced the number of antibody-forming cells, reduced kidney disease and extended the life of the animals. We believe that our own and other studies provide evidence that reducing levels of antibodies to dsDNA may provide an effective therapy for lupus nephritis.

Some studies of lupus patients indicate that antibodies to dsDNA with the highest binding affinity are associated with the most damage to the kidneys. We believe that Riquent preferentially targets these antibodies.

### *Riquent Clinical Trial History*

#### Phase 1 trial

Based on our pre-clinical findings, we filed an Investigational New Drug application for Riquent with the FDA in August 1994. In a double-blind, placebo-controlled Phase 1 clinical trial conducted in December 1994, healthy volunteers received Riquent and displayed no drug-related adverse effects. Upon completion of our Phase 1 trial, we began four Phase 2 clinical trials.

#### Phase 2 trials

Our Phase 2 clinical trials included a single-dose trial, a repeat dose-escalating trial and two dose-ranging trials.

In 1994, the single-dose clinical trial was initiated to evaluate the safety of a single, 100 mg intravenous dose of Riquent in four female lupus patients. We monitored antibody levels, blood chemistry, vital signs and complement (inflammation-promoting proteins) levels for 28 days after dosing. Riquent was well tolerated by all four patients, with no drug-related adverse

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clinical symptoms and no clinically significant complement level changes. In addition, no clinically significant immune complex formation (inflammation-promoting accumulation of antibodies and antigens) was observed, indicating there was no significant adverse immune response to Riquent. A transient reduction in antibodies to dsDNA levels was also observed. These results were presented at the Annual Scientific Meeting of the American College of Rheumatology in October 1995.

In 1995, the repeat dose-escalating clinical trial was initiated in which two female lupus patients each received doses of 10, 10, 50, 50, 100 and 100 mg of Riquent at two-week intervals. After the 10-week dosing regimen was completed, the patients were monitored for six weeks. Riquent was well tolerated by both patients with no drug-related adverse clinical symptoms, no clinically significant complement changes and no significant immune complex formation. Six weeks after the last dose, the antibodies to dsDNA levels in both patients remained suppressed below baseline levels.

Also in 1995, we conducted our first double-blind, placebo-controlled dose-ranging trial, in which 58 lupus patients (53 females and five males) with mild lupus symptoms were treated for a four-month period with Riquent or placebo, and then were monitored for two months. Patients were enrolled who were clinically stable and had antibodies to dsDNA levels exceeding those generally found in healthy individuals. The patients were organized into nine treatment groups at three dose levels (1 mg, 10 mg and 50 mg) and three frequencies (once per week, once every two weeks and once every four weeks). Patients were randomized to one of the nine treatment groups so that at each dose and frequency four to seven patients received Riquent and one patient received placebo.

Patients in the weekly treatment groups showed a dose-response correlation between increasing doses of Riquent and reductions of levels of antibodies to dsDNA. In patients treated weekly with 10 mg or 50 mg doses of Riquent, antibodies to dsDNA were reduced by statistically significant levels and remained suppressed in certain patients for up to two months after the last dose. In this trial, patients treated weekly with 50 mg of Riquent exhibited a trend toward normalization of C3 complement levels in parallel to the reduction in antibodies to dsDNA. C3 is an important inflammation-related complement protein. Throughout this first dose-ranging trial, the drug was well tolerated with no clinically significant dose-related adverse reactions observed.

In 1999, we completed a second double-blind, placebo-controlled dose-ranging trial, in which 74 lupus patients received weekly injections of 10, 50 or 100 mg of Riquent or placebo for a 12-week period. In patients treated weekly with placebo, 10 mg or 50 mg of Riquent, antibodies to dsDNA increased by 100%, 53% and 10%, respectively, while in patients treated weekly with 100 mg of Riquent, antibodies to dsDNA decreased by 43%, a statistically significant difference from placebo. Seven Riquent-treated patients had serious adverse events, but none were considered related to Riquent treatment.

### Phase 2/3 trial

In December 1996, we initiated a double-blind, placebo-controlled, multi-center Phase 2/3 clinical trial of Riquent in which lupus patients with a history of lupus nephritis received Riquent or placebo and were in the trial for up to 18 months. The purpose of the Phase 2/3 trial was to evaluate the safety of the drug and its potential to delay the time to or reduce the incidence of renal flares, to reduce antibodies to dsDNA, to reduce the need for cyclophosphamide or corticosteroids, and to improve patients' health-related quality of life ("HRQOL"). More than 200 patients at more than 50 sites in North America and Europe enrolled in the trial which we conducted with Abbott Laboratories as part of our joint development agreement.

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In May 1999, an interim analysis of the Phase 2/3 trial indicated that the trial was unlikely to reach statistical significance for the primary endpoint, time to renal flare, and the trial was stopped. Although patients in both the drug- and placebo-treated groups exhibited serious adverse events, there were no statistically significant differences in the number of events in the two groups. In September 1999, our joint development agreement for Riquent with Abbott Laboratories was terminated.

In November 1999, we announced encouraging initial results from retrospective analyses of the data from the Phase 2/3 clinical trial which showed that a certain group of patients treated with Riquent had fewer renal flares and longer time to treatment with high dose corticosteroids and/or cyclophosphamide (“HDCC”). These results were based on an analysis of the trial using a blood test that we developed and that appears to predict which patients will respond to treatment with Riquent. Developed in 1998, the blood test measures the strength of the binding between Riquent and a patient’s antibodies. Prior to using the blood test in the Phase 2/3 trial, we used it retrospectively to evaluate patient samples from the 1995 Phase 2 dose-ranging trial and found that the blood test predicted which patients would respond to drug treatment as measured by changes in antibody affinity to Riquent following drug treatment.

In May 2000, we completed our analysis of the Phase 2/3 clinical trial data after testing more than 99% of the North American patient samples from the trial. The blood test showed that 89% of the patients in the trial had high-affinity antibodies to Riquent (the “high-affinity patients”). The high-affinity patients treated with Riquent experienced significantly longer time to renal flare ( $p=0.007$ ), the primary endpoint of the trial, fewer renal flares ( $p=0.008$ ), longer time to treatments with HDCC ( $p=0.0003$ ) and fewer exposures to HDCC ( $p<0.001$ ) when compared to the placebo-treated group.

Also in the Phase 2/3 trial, mean levels of circulating antibodies to dsDNA in patients treated with Riquent were reduced by a statistically significant amount relative to placebo during drug treatment ( $p<0.0001$ ). Levels of C3 improved when antibodies were reduced. In lupus patients, it is generally observed that complement C3 levels decrease during active renal disease and increase with clinical improvement. The concurrent reduction of antibodies to dsDNA and increase in C3 complement levels is biologically consistent. As discussed above, this effect had been observed in the 1995 Phase 2 dose-ranging study of Riquent in 58 lupus patients.

The Phase 2/3 trial design included periods during which patients received no drug for approximately two months (the “off” periods) and weekly doses of 50 mg over three months (the “on” periods). When patients were on Riquent, mean levels of antibodies to dsDNA decreased. When patients were off Riquent, mean levels of antibodies to dsDNA increased. During the first four months of the trial, when patients were treated with 100 mg per week, there were nine renal flares in the placebo-treated group and four in the Riquent-treated group — approximately a 2:1 ratio in favor of drug treatment. Furthermore, in high-affinity patients, during the first four months of the trial, there were eight renal flares in the placebo-treated group and only one renal flare in the Riquent-treated group ( $p=0.035$ ) — an 8:1 ratio in favor of Riquent treatment.

The results of the Phase 2/3 clinical trial were published in *Arthritis & Rheumatism*, Vol. 48, No. 2, February 2003, pp. 442-454 by Alarcon-Segovia, D., et al.

In patients with impaired renal function at baseline (defined as serum creatinine  $\geq 1.5$  mg/dL), there were more renal flares in the patients treated with placebo than in the patients treated with Riquent ( $p=0.095$ ). In a group of high-affinity patients with impaired renal function, there were six renal flares in 11 patients treated with placebo and no renal flares in 11 patients treated with drug ( $p=0.012$ ).

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In January 2001, we announced that approximately 90% of patients in each of three previous clinical trials from whom blood serum specimens were available had high-affinity antibodies to Riquent prior to drug treatment. The ratios for the trials were: 89% of the 213 patients in the Phase 2/3 trial, 94% of the 31 patients in the Phase 2 trial completed in 1996, and 90% of the 60 patients in the Phase 2 trial completed in 1999. Patients in the Phase 2/3 trial had moderate to severe disease and a history of renal flares. Patients in the two dose-ranging Phase 2 trials had mild to moderate disease. Placebo- and drug-treated groups had similar percentages of patients with high-affinity antibodies at baseline in each clinical trial. These data suggest that the percentage of high-affinity patients in a larger population of lupus patients may be 90%, but a larger population of patients would need to be evaluated to confirm this result.

The Phase 2/3 trial also showed that 83% of patients in the trial who had a renal flare also had a treatment with HDCC and that 48% were hospitalized during the trial. In patients who entered the trial with impaired renal function and who experienced renal flare, serum creatinine levels worsened significantly and increased from an average of 1.9 mg/dL at baseline to 5.0 mg/dL at final visit.

Additional data from the Phase 2/3 trial indicated that treatment with Riquent appeared to be as effective as treatment with HDCC in reducing antibodies to dsDNA. Patients on placebo who were treated with HDCC were compared to patients who received Riquent. Following treatment with HDCC, levels of antibodies to dsDNA in 38 patients receiving placebo were reduced within four weeks by a mean of 25%. In 100 patients treated weekly with 100 mg of Riquent, but not HDCC, antibodies to dsDNA were reduced within four weeks by an average of 36%. In patients requiring HDCC, mean levels of antibodies to dsDNA decreased 37% in 22 patients receiving Riquent treatment compared with 25% in 38 patients receiving placebo. In patients receiving HDCC, the median dose of corticosteroids was 50 mg per day.

Additional data from the Phase 2/3 trial indicated that treatment with Riquent had a positive impact on HRQOL in patients with lupus renal disease following 16 weeks of treatment and following renal flares, when compared to placebo. HRQOL is a measure of a patient's sense of mental and physical well-being, or how the patient feels, and was measured by using a standard scoring instrument called the Medical Outcomes Study 36-Item Short Form, or SF-36<sup>®</sup>, that categorizes results in eight domains: physical functioning, role physical, bodily pain, general health, vitality, social functioning, role emotional and mental health, as well as mental and physical composite summary scores. Riquent-treated patients had better scores in certain domains when compared to baseline than did placebo-treated patients.

Results from the Phase 2/3 lupus study suggested three ways to improve the clinical trial design of a Phase 3 trial: (i) eliminate "off" periods during which patients are not treated with either drug or placebo; (ii) increase the dosing to 100 mg per week throughout the study; and (iii) evaluate the efficacy of the drug in high-affinity patients.

### Phase 3 trial

Based on the observations from our Phase 2/3 trial and following discussions with the FDA, we initiated a Phase 3 clinical trial in September 2000 to further evaluate the safety and efficacy of Riquent in the treatment of lupus renal disease. The double-blind, placebo-controlled study was conducted at 91 sites in North America and Europe and was designed to evaluate the potential of Riquent to delay and reduce the number of renal flares and to delay and reduce the need for treatment with HDCC and/or other immunosuppressive drugs in high-affinity patients. Patients in the trial were treated weekly with either 100 mg of Riquent or placebo for a period of up to 22 months. The trial design eliminated the "off" periods from the Phase 2/3 trial during which patients were not treated with either drug or placebo.

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The prospectively defined analysis groups in the Phase 3 trial were the high-affinity patients (the “intent-to-treat population”) and high-affinity patients with impaired renal function. Patients with impaired renal function were defined as those who had a serum creatinine level of  $\geq 1.5$  mg/dL at baseline. In general, patients with impaired renal function are considered to be at greater risk of progressing to renal flare, kidney failure and dialysis.

The primary endpoint in the Phase 3 trial was time to renal flare. A renal flare was defined as a significant, reproducible increase in serum creatinine, urine protein or blood in the urine. The secondary endpoint was time to treatment with HDCC. Treatment with HDCC was defined as any dose of cyclophosphamide or an increase in prednisone of 15 mg/day or higher resulting in a final dose greater than 20 mg/day for greater than two days or any dose greater than 200 mg/day.

Other prospectively defined endpoints included time to Major SLE flare, changes in HRQOL, decreases in antibodies to dsDNA and increases in complement C3 levels. A Major SLE flare was defined as the occurrence of any one of the following due to SLE: treatment with HDCC or initiation or increase in treatment with the following immunosuppressive agents: azathioprine, mycophenolate mofetil, methotrexate, cyclosporin and leflunomide; hospitalization; or death. This definition of Major SLE flare was designed to assess the effect of Riquent on a broader spectrum of SLE manifestations than just renal flare.

Complement protein changes were evaluated by determining the mean change from baseline in the complement protein C3, which measure indicates overall complement consumption due to active inflammation. Antibody changes were evaluated by determining the mean percent change of antibodies to dsDNA from baseline. Patients’ assessments of disease activity and HRQOL were measured on a regular basis, including at the time of, and seven days following, a documented renal flare.

In February 2003, we announced our preliminary findings from the Phase 3 trial. The study results indicated that Riquent appeared to be well tolerated with no apparent differences in the overall incidence of serious adverse events or adverse events between Riquent-treated and placebo-treated patients. The trial data indicated that treatment with Riquent did not increase length of time to renal flare, the primary endpoint, or time to treatment with HDCC, the secondary endpoint, in a statistically significant manner when compared with placebo through the end of the study. There were 298 patients in the intent-to-treat population of high-affinity patients, 145 on Riquent and 153 on placebo. Patients were treated for up to 92 weeks with a median of 46 weeks.

In the intent-to-treat population, there were fewer renal flares, fewer treatments with HDCC and fewer Major SLE flares in Riquent-treated patients compared with placebo-treated patients. The estimated median time to renal flare was 123 months in the Riquent-treated group and 89 months in the placebo-treated group. There were 41 renal flares, 17 (12%) in Riquent-treated patients and 24 (16%) in placebo-treated patients. There were 69 treatments with HDCC, 33 (23%) in the Riquent-treated group and 36 (24%) in the placebo-treated group. There were 82 Major SLE flares in the trial, 35 (24%) in patients on Riquent and 47 (31%) in patients on placebo. None of these differences were statistically significant.

There was a statistically significant reduction in antibodies to dsDNA in the Riquent-treated group compared with the placebo-treated group ( $p < 0.0001$ ). Antibodies to dsDNA are believed to result in renal flares and other clinical manifestations of lupus. Riquent was designed to reduce antibodies to dsDNA and this effect has been demonstrated in all clinical studies of Riquent to date.

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In the Phase 3 trial, reductions in antibodies to dsDNA strongly correlated with increases in complement C3 levels ( $p < 0.001$ ). Inverse correlations between antibody levels and complement C3 were observed in the previous Phase 2/3 trial ( $p < 0.001$ ). Complement C3 levels below normal at baseline correlated with an increased risk of renal flare ( $p = 0.0001$ ) in the Phase 3 trial although a statistically significant correlation was not demonstrated in the Phase 2/3 trial. Together, these data support the pathogenic nature of these antibodies to dsDNA in lupus patients.

A review of the Phase 3 trial results for time to renal flare and for the increases in antibody levels showed that the Riquent and placebo groups were separating in favor of Riquent until week 48 of the trial. In the first 48 weeks, 22 of 24 (90%) renal flares occurred in the study in the placebo patients compared with 11 of 17 (65%) in the Riquent-treated patients. At weeks 44, 46, and 48, the incidence of renal flares in the placebo-treated group compared with the Riquent-treated group (placebo-treated: Riquent-treated) was: 20:10 ( $p = 0.085$ ), 22:10 ( $p = 0.041$ ) and 22:11 ( $p = 0.067$ ), respectively, in favor of Riquent. At weeks 44, 46 and 48, the incidence of renal and/or Major SLE flares was 43:27 ( $p = 0.057$ ), 46:28 ( $p = 0.033$ ) and 46:29 ( $p = 0.061$ ), respectively, in favor of Riquent.

In a prospectively defined subpopulation with impaired renal function at baseline, defined as a serum creatinine level of  $\geq 1.5$  mg/dl at baseline, there were 43 patients, 20 on Riquent and 23 on placebo. Riquent-treated patients had fewer renal flares, treatments with HDCC and Major SLE flares compared with patients on placebo, but the sample size of this subgroup was small and the differences were not statistically significant. There were eight renal flares, two (10%) in patients on Riquent and six (26%) in patients on placebo. There were 10 treatments with HDCC, four (20%) in patients on Riquent and six (26%) in patients on placebo. There were 11 Major SLE flares, four (20%) in patients on Riquent and seven (30%) in patients on placebo. There were 14 renal flares and/or Major SLE flares, five (25%) in patients on Riquent and nine (39%) in patients on placebo. Similar results in the same group were observed for renal flares in the Phase 2/3 trial: no renal flares (0%) were observed in the 11 Riquent-treated high-affinity patients compared with six of 11 (55%) of the placebo-treated high-affinity patients. We believe that a delay in time to, or a decrease in, the incidence of renal flares and/or Major SLE flares in this high-risk population would be considered by clinicians in the lupus field to be medically meaningful.

### Additional findings from the Phase 3 and Phase 2/3 trials

On March 31, 2003, we announced additional retrospective analyses of data from our Phase 3 and Phase 2/3 trials of Riquent. The data showed a statistically significant correlation between reductions in antibodies to dsDNA and a reduced risk of renal flare in lupus patients (Phase 3:  $p < 0.0001$ ; Phase 2/3:  $p = 0.0004$ ). These results were presented at the Biomarkers for the Assessment of Systemic Lupus Erythematosus Conference in March 2003.

In the Phase 3 trial, renal flares occurred approximately one fifth as often in patients with sustained reductions in antibodies to dsDNA compared with patients with unchanged or increasing antibodies. In both the Phase 3 and Phase 2/3 trials, patients with sustained reductions were defined as those who had at least a 10% reduction in antibodies to dsDNA from baseline for at least two-thirds of all measurements of antibodies to dsDNA during the trial, unless they were treated with high-dose corticosteroids and/or cyclophosphamide. Because HDCC suppresses antibodies to dsDNA, antibody values subsequent to HDCC treatment were adjusted to have a value equivalent to baseline. Patients meeting the criteria for sustained reductions in antibodies to dsDNA are referred to below as “responders.” The analyses on sustained reductions were conducted after the trial was unblinded.

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In the Phase 3 trial, renal flares occurred in only 4% of patients (five of 121) with sustained reductions whereas renal flares occurred in 20% of patients (36 of 177) who did not experience sustained reductions ( $p < 0.0001$ ). Twice as many Riquent-treated patients had sustained reductions (80 of 145, or 55%) compared with placebo-treated patients (41 of 153, or 27%).

In the Phase 2/3 trial, renal flares occurred in only 3% of patients (two of 67) with sustained reductions whereas renal flares occurred in 21% of patients (26 of 122) who did not experience sustained reductions ( $p = 0.0004$ ). Four times as many Riquent-treated patients had sustained reductions (54 of 92, or 59%) compared with placebo-treated patients (13 of 97, or 13%).

The results from both studies also confirm the correlation between increasing levels of antibodies to dsDNA and the occurrence of renal flares in lupus patients (Phase 3:  $p < 0.0001$ ; Phase 2/3:  $p < 0.0007$ ).

The number of Major SLE flares was also significantly reduced in patients with sustained reductions in antibodies to dsDNA in the Phase 3 and Phase 2/3 trials. Patients with sustained reductions in antibodies to dsDNA had a 68% reduction in the risk of Major SLE flare in the Phase 3 trial and a 73% reduction in risk in the Phase 2/3 trial when compared with patients who did not have sustained reductions ( $p < 0.0001$  for each trial).

The majority of Major SLE flares were observed in patients who did not have a sustained reduction in antibodies to dsDNA. This group included 68 of 82 (83%) total Major SLE flares in the Phase 3 trial and 55 of 63 (87%) total Major SLE flares in the Phase 2/3 trial.

On November 17, 2003, we presented additional analyses at the American Society of Nephrology Annual Meeting of data using Cox's Proportional Hazards Regression Model that predicts that a 50% reduction in antibodies to dsDNA from baseline is associated with a 52% lower risk of renal flare in the Phase 2/3 trial ( $p = 0.0007$ ) and a 53% lower risk in the Phase 3 trial ( $p < 0.0001$ ). These findings are consistent with previously released data showing that patients with sustained reductions in antibodies to dsDNA had fewer renal flares.

On March 11, 2004, we announced additional analyses of data from our Phase 3 and Phase 2/3 trials of Riquent. The data showed that after one year of treatment, the number of lupus patients with a reduction in proteinuria of at least 50% from baseline was greater in the Riquent-treated group than in the placebo-treated group. Proteinuria, or protein in the urine, results from ongoing kidney inflammation. The reduction of proteinuria is one of the goals for the treatment of lupus patients with renal disease. Monitoring the level of a patient's proteinuria is a routine and important way to help determine the severity and progression of renal disease.

In patients who had 24-hour urine protein measured at both baseline and at week 52 during the Phase 3 trial, 41% (26 of 63) of patients in the Riquent-treated group with high-affinity antibodies to Riquent achieved a 50% or greater reduction from baseline in the amount of protein in their urine at week 52, compared with 28% (23 of 81) of patients in the placebo-treated group with high-affinity antibodies ( $p = 0.047$ ). In patients who had 24-hour urine protein measured at both baseline and at approximately week 52 during the Phase 2/3 trial, 44% (23 of 52) of patients in the Riquent-treated group with high-affinity antibodies had a 50% or greater reduction from baseline in the amount of protein in their urine at approximately week 52, compared with 18% (11 of 61) of patients in the placebo-treated group with high-affinity antibodies ( $p = 0.002$ ). The measurement of 24-hour urine protein was specified in each protocol at defined time points, but the analysis of the reduction in proteinuria was conducted on a retrospective basis.

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### Health-related quality of life

Results from the Phase 3 and Phase 2/3 trials were consistent among patients who had sustained reductions in antibodies to dsDNA, so called “responders.” Responders reported improved or maintained HRQOL compared with patients without sustained reductions in antibodies to dsDNA, regardless of treatment group. Similar analyses within each treatment group demonstrated that responders reported improved or maintained HRQOL compared with non-responders. This evidence supports the conclusion that decreases in levels in antibodies to dsDNA result in improvements in, or maintenance of, patient-reported HRQOL, as assessed by SF-36, whether sustained reductions in antibodies to dsDNA are due to spontaneous improvement or to treatment with Riquent. In the Phase 2/3 trial, responders at visit 18 (week 16) showed improvement in all domains relative to non-responders. In the Phase 3 trial, responders at visits 27 (week 24) and 51 (week 48) showed improvement in all domains relative to non-responders and in six of eight domains at their last visit.

In the Phase 2/3 trial, approximately four times as many patients in the Riquent-treated group were responders than in the placebo group. In the Phase 3 trial, approximately twice as many patients in the Riquent-treated group were responders than in the placebo group.

Although the sample size was small, a potentially important finding in the Riquent-treated group was that, following a renal flare, compared to pre-flare assessments, patients reported improvement or less deterioration in all domain scores compared with no change or deterioration in the placebo-treated group. These findings were also seen when seven patients receiving HDCC prior to a flare were excluded, suggesting that deterioration in reported HRQOL due to administration of HDCC did not account for the differences between the treatment groups. In an analysis of SF-36 scores pre- and post-renal flare in the Phase 3 trial (41 patients), Riquent-treated patients reported less deterioration than placebo-treated patients in six of eight domains. When eight patients receiving HDCC prior to renal flare were excluded, Riquent-treated patients reported less deterioration than placebo-treated patients in five of eight domains, suggesting that deterioration in reported HRQOL due to administration of HDCC did not account for the differences between treatment groups.

The differences in HRQOL between the Riquent-treated and placebo-treated groups were not significantly different during the Phase 3 trial, and mirror the renal flare results reported for the Phase 3 trial.

### Comments on trial data

Several observations may help to explain the results from our Phase 3 trial. These are only observations and their potential impact on the trial results have not been confirmed.

Changes in medical practice since the completion of the Phase 2/3 trial as evidenced by a difference in prescribing regimens for immunosuppressive drugs may impact the ability of our study to assess treatment efficacy. In particular, it appears there were differences in baseline treatments in the patient population in the Phase 3 trial compared with the Phase 2/3 trial. A higher percentage of patients were receiving immunosuppressive treatments at study entry: 73 of 145 (50%) in the Riquent-treated group versus 63 of 153 (41%) in the placebo-treated group in the Phase 3 trial compared to 35 of 114 (31%) in the Riquent-treated group versus 40 of 116 (34%) in the placebo-treated group in the Phase 2/3 trial.

Reviewing a graph of the Phase 3 trial results showed that the curves of Riquent and placebo for time to renal flare and for the changes in antibody levels were separating until week 48.



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After week 48, the placebo flare rate decreased significantly. In the placebo-treated group, those who remained in the study after week 48 showed continuing reduction in antibodies to dsDNA compared with levels observed at the baseline.

It is possible that the high percentage of patients coming into the study on concomitant immunosuppressive drugs reduced the ability of the study to discriminate the clinical effect of drug from placebo.

### Orphan drug designation for Riquent

In September 2000, the FDA granted us orphan drug designation for Riquent for the treatment of lupus nephritis. The Orphan Drug Act potentially enables us to obtain research funding, tax credits for certain research expenses and a waiver of the application user fees. In addition, the Orphan Drug Act allows for seven years of exclusive marketing rights to a specific drug for a specific orphan indication. Exclusivity is conferred upon receipt of marketing approval from the FDA. The marketing exclusivity prevents FDA approval during the seven year period of the “same” drug from another company for the same orphan indication. Two drugs with substantially similar characteristics are considered to be the same, and exclusivity granted to one drug will block approval of the subsequent drug for the same indication. However, one may overcome the exclusivity designation by demonstrating that, despite the similarity of the drugs, a subsequent drug is clinically superior in terms of increased effectiveness and adequate safety, increased safety and adequate effectiveness or represents a major contribution to patient care, and therefore is not barred by the exclusivity. In the course of the FDA’s initial review of our NDA, the FDA indicated that the indication for Riquent proposed in our NDA may be broader than the indication identified in our orphan drug designation. Accordingly, we were required to pay the filing fee for the NDA for Riquent. However, we subsequently received a refund of the full filing fee under the FDA’s small business regulations. Whether we will be able to take advantage of the benefits afforded by the orphan drug designation will ultimately be determined by the FDA only after further review of our NDA.

In November 2001, the European Commission granted us orphan medicinal product designation in the European Union for Riquent for treatment of lupus nephritis. Orphan designation in Europe provides for 10 years of marketing exclusivity in the European Union and enables us to receive significant fee reductions for scientific advice from the Committee for Orphan Medicinal Products, marketing authorization and inspections.

### Continuing risks

The continued development of Riquent involves a number of risks and uncertainties. There can be no assurance that any previous clinical results can be replicated in further clinical testing or that Riquent will be effective in inducing and sustaining antibody suppression; will prove to be clinically safe or effective; will receive required regulatory approvals; or will not require further FDA or other regulatory mandated clinical testing. In addition, there can be no assurances that regulatory authorities will accept as evidence of efficacy the retrospective analyses that are contained within the NDA and that are a key part of the arguments for FDA approval. If the continued development of Riquent is significantly delayed or if additional trials produce negative or inconclusive results, our business and financial condition will be adversely affected and it may be difficult or impossible for us to survive. Our blood test to measure the binding affinity for Riquent has not been validated by independent laboratories and is likely to require regulatory review as part of the Riquent approval process.

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### *Antibody-Mediated Thrombosis, Including Stroke, Heart Attack, Deep Vein Thrombosis and Recurrent Fetal Loss*

As further described below, we have been developing a drug for the treatment of antibody-mediated thrombosis. However, substantially all of our resources are currently devoted to the development of Riquent. Whether we will again devote substantial resources to this program depends on a number of factors, including the progress of our Riquent development program and the availability of capital.

Researchers believe that antibodies called “antiphospholipid” antibodies promote arterial and venous blood clots, which can cause a variety of recurring and potentially life-threatening medical problems. For example, blood clots that lodge in the brain may cause stroke and those that lodge in the legs may cause deep vein thrombosis. There are multiple conditions associated with these antibodies that we collectively refer to as antibody-mediated thrombosis: antibody-mediated stroke, heart attack, deep vein thrombosis, recurrent fetal loss and complications following cardiovascular surgery. We believe that our program to develop a Toleragen to treat antibody-mediated thrombosis could be helpful in preventing these problems. Based on data from the medical literature, we estimate that there are up to 2,000,000 patients in the United States and Europe with antibody-mediated thrombosis.

Stroke is a leading cause of death in the United States. In 2003, there were approximately 4,600,000 stroke patients in the United States and approximately 750,000 new episodes are expected to occur each year. In 2003, approximately 175,000 people died from stroke in the United States. This debilitating condition results from acute neurological injury caused by the blockage or rupture of blood vessels in the brain. Many of the blockages are caused by thromboses, or blood clots, which many clinicians believe may be caused by a number of factors, including antiphospholipid antibodies. We believe that these antibodies may contribute to approximately 10% of strokes in the United States. Antibody-mediated stroke is thought to occur in younger individuals and with greater frequency than non-antibody-mediated stroke. The cost of treatment to provide hospitalization and home nursing care for a survivor of a serious stroke is approximately \$40,000 per year for life.

Antibody-mediated thrombosis is also associated with recurrent fetal loss, a syndrome of repeated miscarriage. Published clinical reports estimate that many women with elevated antiphospholipid antibody levels experience multiple miscarriages, delayed fetal development or premature childbirth. Recent academic research suggests that elevated levels of these antibodies are also found in approximately 10% to 30% of patients with other clotting disorders, including myocardial infarction (heart attack), deep vein thrombosis and cardiac valve lesion, as well as in approximately 30% of lupus patients. In myocardial infarction, recent research suggests the relative risk of a thrombotic event or death is approximately twice as high in people with high antiphospholipid antibodies, and this risk is independent of other risk factors. In deep vein thrombosis, research indicates antiphospholipid antibody-positive patients have recurring deep vein thromboses about twice as often as antiphospholipid antibody-negative patients.

Current treatments for antibody-mediated thrombosis involve the use of chronic, potentially life-long anticoagulant therapy with drugs such as heparin or warfarin to prevent the formation of blood clots. Patients must be carefully monitored to minimize serious bleeding episodes that can occur because of the therapy. If patients are removed from anticoagulant therapy, they are at an increased risk of stroke or another thrombotic episode. Warfarin is not recommended in the treatment of recurrent fetal loss because it is toxic to the developing fetus.

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We believe that a Toleragen to treat antibody-mediated thrombosis would be a major step forward in specifically targeting the cause of this clotting disorder, thereby minimizing or avoiding the side effects of current therapies.

Our research supports the finding that specific antibodies in antibody-mediated thrombosis enhance blood-clot formation by interfering with the natural breakdown of a blood component — Factor Va — that accelerates clotting. The true target of these clot-promoting antibodies is not cardiolipin, but a region on a blood protein called beta 2-glycoprotein I (“beta 2 GPI”). To date, our scientists have shown that approximately 90% of patients studied with antibody-mediated thrombosis have antibodies that bind to this region. The identification of a disease target for antibody-mediated thrombosis has allowed us to begin building new drug candidates that bind to these antibodies with high-affinity and are designed to tolerize, or shut down, the B cells that produce them.

We have synthesized a family of candidate antibody-mediated thrombosis Toleragens for testing. We have also developed a mouse model of the disease in which animals produce antibodies to beta 2 GPI. In this animal model, several candidate molecules have been shown to reduce the production of antibodies to beta 2 GPI, a key step in the development of a drug to treat this disorder.

### *LJP 1082 Clinical Trial History*

In July 2000, we selected LJP 1082 as our clinical drug candidate for the treatment of antibody-mediated thrombosis. Based on positive pre-clinical results in mice, rats and primates, we chose this candidate for toxicology studies required for the filing of an Investigational New Drug application. In September 2000, at the 9<sup>th</sup> International Symposium on Antiphospholipid Antibodies in Tours, France, we presented results that showed LJP 1082 reduced disease-causing antibodies and the B cells involved in antibody-mediated thrombosis in an animal model of the disease.

In September 2001, we announced that we had filed an Investigational New Drug application with the FDA to begin a Phase 1/2 clinical trial of LJP 1082. In November 2001, we announced the initiation of the Phase 1/2 clinical trial. The objective of the study was to evaluate the safety of LJP 1082 and its ability to reduce disease-causing antibody levels in patients with antibody-mediated thrombosis. The Phase 1/2 trial was a randomized, placebo-controlled dose escalating study designed to evaluate the safety and activity of a single dose of LJP 1082 in a small group of patients. In the Phase 1/2 trial, five different groups, each consisting of four or five patients, were treated with a single intravenous dose of LJP 1082 of 1, 3, 10, 50 or 200 mg and then monitored for 30 days. One patient in each group received placebo. In order to participate in the trial, patients were required to have elevated levels of antibodies to beta 2 GPI, the target of the antibodies involved in antibody-mediated thrombosis.

In October 2002, we announced preliminary results from the Phase 1/2 clinical trial. Based on an initial assessment of the trial data, the drug appeared to be well tolerated at the five dose levels used in the study. LJP 1082 had an elimination half-life of at least 12 hours following intravenous administration. Following treatment with a single 50 mg or 200 mg dose, antibodies to LJP 1082 appeared to be reduced in some patients. In total, 20 patients with a history of antibody-mediated thrombosis participated in the trial period.

Standard safety assessments, including physical exams, lab values and vital signs, and immunology specific measurements were taken during the 30 days following a single dose of LJP 1082. All adverse events observed were categorized as mild to moderate and were deemed to have no or an unlikely relationship to LJP 1082. The adverse event profiles appeared similar

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between drug-treated and placebo-treated groups. There were no serious adverse events reported. We observed no significant increase in circulating immune complexes, changes in complement protein C3 or activation of patient T cells following drug treatment.

This study is the first of several that may be required to establish appropriate dose regimens and the observed reductions may not be large enough to affect patient health or reduce antibodies to beta 2 GPI in a majority of patients. Additional analyses are ongoing. Potential drug interference in some of the antibody assays is also being evaluated. This study was not designed to evaluate the ability of LJP 1082 to tolerize B cells that produce antibodies to beta 2 GPI and additional studies will be needed for this purpose.

### *SSAO Inflammation Program*

On December 2, 2003, we announced the discovery of novel, orally-active small molecules for the treatment of autoimmune diseases and acute and chronic inflammatory disorders. Our scientists have generated highly selective inhibitors of semicarbazide-sensitive amine oxidase ("SSAO"), an enzyme that has been implicated in inflammatory responses in many tissues and organs. SSAO, also known as vascular adhesion protein-1 or VAP-1, was recently discovered to be a dual-function molecule with enzymatic and adhesion activities. SSAO contributes to the adhesion of white blood cells to endothelial cells and is amplified in inflamed blood vessels. The enzyme also contributes to the production of molecules that exacerbate inflammation. Increases in the levels of plasma or membrane-associated SSAO have been reported for many inflammation-associated diseases including rheumatoid arthritis, inflammatory bowel disease, diabetes, atherosclerosis and chronic heart failure.

Preclinical studies in animal models of multiple sclerosis, rheumatoid arthritis, stroke, systemic inflammation and acute inflammation have shown that treatment with the inhibitors both maintained function and reduced disease activity compared with placebo treatment. The impact of these lead compounds on animal models of multiple sclerosis and rheumatoid arthritis was similar to that of methotrexate, a widely used anti-inflammatory agent. Although we are currently devoting substantially all of our resources to the development of Riquent, we expect to continue to explore the potential to use inhibitors of SSAO to provide a novel approach to treating a number of debilitating diseases. These results were presented at the 2<sup>nd</sup> International Inflammatory & Immune Diseases World Summit on March 8-10, 2004 in Baltimore, Maryland.

### *Other Antibody-Mediated Diseases*

We believe our Tolerance Technology may be applicable to additional diseases and conditions caused by the production of disease-causing antibodies, including myasthenia gravis and Rh hemolytic disease in newborns.

Myasthenia gravis is a form of muscular paralysis in which neuromuscular receptors are attacked by antibodies, which can lead to a wasting of muscles, progressive loss of strength and life-threatening respiratory arrest. This disease currently affects an estimated 25,000 people in the United States.

Rh hemolytic disease in newborns is a life-threatening fetal condition characterized by the hemolysis, or destruction, of fetal red blood cells. This condition occurs in Rh-incompatible pregnancies in which maternal antibodies to Rh cross the placenta, bind to fetal red blood cells and cause their destruction. Each year approximately 500,000 women in the United States have Rh-incompatible pregnancies. We believe that a Toleragen that binds to the appropriate maternal B cells will suppress Rh antibody production, and that once the level of antibodies to Rh(+) red blood cells is reduced, the risk of life-threatening hemolysis will be reduced.

## **Collaborative Arrangements**

In circumstances where we believe that a collaborative agreement is necessary or strategically beneficial to us, we intend to pursue collaborative arrangements with other pharmaceutical companies to assist in our research programs and the clinical development and commercialization of our drug candidates and to access their research, drug development, manufacturing, marketing and financial resources. There can be no assurance that we will be able to negotiate arrangements with any collaborative partner on acceptable terms, or at all. If a collaborative relationship is established, there can be no assurance that the collaborative partner will continue to fund any particular program or that it will not pursue alternative technologies or develop alternative drug candidates, either individually or in collaboration with others, including our competitors, as a means for developing treatments for the diseases we have targeted. Furthermore, competing products, either developed by a collaborative partner or to which a collaborative partner has rights, may result in the withdrawal of support by the collaborative partner with respect to all or a portion of our technology.

Failure to establish or maintain collaborative arrangements will require us to fund our own research and development activities, resulting in significant expenditure of our own capital, and will require us to develop our own marketing capabilities for any drug candidate that may receive regulatory approval. The failure of any collaborative partner to continue funding any particular program of ours, or to commercialize successfully any product, could delay or halt the development or commercialization of any products involved in such program. As a result, the failure to establish or maintain collaborative arrangements could hurt our business, financial condition and results of operations.

## **Manufacturing**

We currently operate a production facility that we believe provides sufficient capacity to exceed our anticipated requirements for research, clinical trial and any initial commercial launch of Riquent. If Riquent is approved, we expect to have the capacity to manufacture approximately 100 kg of Riquent per year, which, based on our current projections, we believe would be sufficient to treat approximately 20,000 patients per year at a weekly dose of 100mg. If Riquent is approved, and if future demand for Riquent exceeds our current capacity, we expect to increase our manufacturing capacity by improving our manufacturing processes, making capital investments in our current facilities and/or engaging third party contract manufacturers.

We are required to comply with the FDA's and other regulatory agencies' current Good Manufacturing Practices ("cGMPs") when we manufacture our drug candidates for clinical trials. We will also be required to comply with the cGMPs if Riquent, or our other drug candidates, are manufactured for commercial purposes. We have limited manufacturing experience and we can provide no assurance that we will be able to successfully transition to commercial production if Riquent is approved.

In order to meet the demand for any of our drugs that may be approved or to attempt to improve our manufacturing efficiency, we may enter into arrangements with third party contract manufacturers. If we choose to contract for manufacturing services, the FDA and comparable foreign regulators will have to approve the contract manufacturers prior to our use, and these contractors would be required to comply with strictly enforced manufacturing standards. We also enter into agreements with contractors to prepare our drug candidates for use by patients. If we encounter delays or difficulties in establishing or maintaining relationships with contractors to produce, package or distribute finished products, clinical trials, market introduction and subsequent sales of such products would be adversely affected. Our dependence on others for

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production, packaging or distribution of our products may adversely affect our profit margins and our ability to develop and deliver our products on a timely and competitive basis.

There are currently a limited number of suppliers that produce the raw materials that are necessary to make our drug candidates, including Riquent. In order to manufacture Riquent and our other drug candidates in sufficient quantities for our clinical trials and possible commercialization, our suppliers will be required to provide us with an adequate supply of chemicals and reagents. If we are unable to obtain sufficient quantities of chemicals or reagents, our ability to develop and deliver products on a timely and competitive basis will be negatively affected.

### **Marketing and Sales**

If we obtain FDA approval in the United States, we currently anticipate that we would market Riquent ourselves using a specialty pharmaceutical sales force of 40 to 50 sales representatives who would initially target the rheumatology and nephrology specialists who treat the majority of lupus patients with renal disease. We estimate that the majority of these patients are treated at approximately 1,000 clinical centers. If we obtain approval in Europe, we currently expect to seek a marketing collaboration with a European partner or to market Riquent ourselves. We believe that the majority of European patients are treated at around 300 major hospitals and, as is the case in the United States, that a specialty pharmaceutical sales force could successfully market Riquent to the majority of these sites.

We currently have no arrangements with others for the marketing of any of our drug candidates. There can be no assurance that we will be able to enter into any marketing agreements on favorable terms, if at all, or that any such agreements that we may enter into will result in payments to us. Under any co-promotion or other marketing and sales arrangements that we may enter into with other companies, any revenues that we may receive will be dependent on the efforts of others and there can be no assurance that such efforts will be successful.

To the extent that we choose to attempt to develop our own marketing and sales capability (whether domestic or international), we will compete with other companies that have experienced and well-funded marketing and sales operations. Furthermore, there can be no assurance that we, or any collaborative partner, will be able to establish sales and distribution capabilities without undue delays or expenditures, or gain market acceptance for any of our drug candidates. The ultimate size of the markets for our products is uncertain and difficult to estimate. Moreover, we may not earn as much income as we hope due to possible changes in healthcare reimbursement policies by governments and other third party payors.

### **Patents and Proprietary Technologies**

We file patent applications in the United States and in foreign countries for the protection of our proprietary technologies and drug candidates as we deem appropriate. We currently own 100 issued patents and have 85 pending patent applications (including three allowed patent applications) covering various technologies and drug candidates, including our lupus and antibody-mediated stroke drug candidates (Toleragens), our Tolerance Technology, our carrier platform and linkage technologies for our Toleragens. Our issued patents include:

- Lupus Toleragens — four issued United States patents, one issued Australian patent, one granted Portuguese patent, one granted Norwegian patent, one granted European patent (which has been unbundled as 13 European national patents), two granted Canadian patents, one granted Finnish patent and one

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granted Irish patent (expiring in 2010, 2011, 2013, 2014, 2011, 2013, 2011, 2011, 2011, 2011, 2011 and 2011, respectively);

- Tolerance Technology — two issued United States patents, one issued Australian patent, one granted European patent (which has been unbundled as 15 European national patents), one granted Japanese patent, two granted Canadian patents, one granted South Korean patent and one granted Irish patent (expiring in 2011, 2011, 2012, 2012, 2012, 2012, 2012 and 2012, respectively);
- Carrier Platform and Linkage Technologies for our Toleragens — seven issued United States patents, six issued Australian patents, one granted European patent (which has been unbundled as 15 European national patents), three issued Japanese patents, one granted Hong Kong patent, one granted Portuguese patent, one granted South Korean patent, and one granted Irish patent (expiring in 2012, 2014, 2015, 2015, 2015, 2016, 2019, 2014, 2012, 2012, 2012, 2017, 2019, 2012, 2012, 2012, 2012, 2012, 2014, 2014 and 2012, respectively); and
- Antibody-Mediated Thrombosis Drug Candidates two issued United States patents and two issued Australian patents (expiring in 2016, 2015 2016, and 2019, respectively).

We have received Notices of Allowance from the U.S. Patent and Trademark Office for one patent application for our lupus Toleragen technology, one patent application for our carrier and platform linkage technology for our Toleragens, and one patent application for our antibody-mediated stroke drug candidate technology.

## **Competition**

The biotechnology and pharmaceutical industries are subject to rapid technological change. Competition from domestic and foreign biotechnology companies, large pharmaceutical companies and other institutions is intense and expected to increase. A number of companies are pursuing the development of pharmaceuticals in our targeted areas. These include companies that are conducting clinical trials and pre-clinical studies for the treatment of lupus, thrombosis and other antibody-mediated diseases.

In addition, there are a number of academic institutions, both public and private, engaged in activities relating to the research and development of therapeutics for autoimmune, inflammatory and other diseases. Most of these companies and institutions have substantially greater facilities, resources, research and development capabilities, regulatory compliance expertise, and manufacturing and marketing capabilities than we do. In addition, other technologies may in the future be the basis of competitive products. There can be no assurance that our competitors will not develop or obtain regulatory approval for products more rapidly than we can, or develop and market technologies and products that are more effective than those we are developing or that would render our technology and proposed products obsolete or noncompetitive.

We believe that our ability to compete successfully will depend on our ability to attract and retain experienced scientists, develop patented or proprietary technologies and products, obtain regulatory approvals, manufacture and market products either alone or through third parties, and secure additional capital resources to fund anticipated net losses for at least the next several years. We expect that competition among products approved for marketing will be based in large part on product safety, efficacy, reliability, availability, price and patent position.

## **Government Regulation**

### United States

Our research and development activities and the future manufacturing and marketing of any products we develop are subject to significant regulation by numerous government authorities in the United States and other countries. In the United States, the Federal Food, Drug and Cosmetic Act and the Public Health Service Act govern the testing, manufacture, safety, efficacy, labeling, storage, record keeping, approval, advertising and promotion of our drug candidates and any products we may develop. In addition to FDA regulations, we are subject to other federal, state and local regulations, such as the Occupational Safety and Health Act and the Environmental Protection Act, as well as regulations governing the handling, use and disposal of radioactive and other hazardous materials used in our research activities. Product development and approval within this regulatory framework takes a number of years and involves the expenditure of substantial resources. In addition, this regulatory framework is subject to changes that may adversely affect approval, delay an application or require additional expenditures.

The steps required before a pharmaceutical compound may be marketed in the United States include: pre-clinical laboratory and animal testing; submission to the FDA of an Investigational New Drug application, which must become effective before clinical trials may commence; conducting adequate and well-controlled clinical trials to establish the safety and efficacy of the drug; submission to the FDA of an NDA or Biologic License Application (“BLA”); and FDA approval of the NDA or BLA prior to any commercial sale or shipment of the drug. In addition to obtaining FDA approval for each product, each drug manufacturing establishment must be registered with the FDA and be operated in conformity with cGMPs. Drug product manufacturing facilities located in California also must be licensed by the State of California in compliance with separate regulatory requirements.

Pre-clinical testing includes laboratory evaluation of product chemistry and animal studies to assess the safety and efficacy of the product and its formulation. The results of pre-clinical testing are submitted to the FDA as part of an Investigational New Drug application and, unless the FDA objects, the Investigational New Drug application becomes effective 30 days following its receipt by the FDA.

Clinical trials involve administration of the drug to healthy volunteers and to patients diagnosed with the condition for which the drug is being tested under the supervision of a qualified clinical investigator. Clinical trials are conducted in accordance with protocols that detail the objectives of the study, the parameters to be used to monitor safety, and the efficacy criteria to be evaluated. Each protocol is submitted to the FDA as part of the Investigational New Drug application. Each clinical trial is conducted under the auspices of an independent Institutional Review Board (“IRB”) or Ethics Committee (“EC”). The IRB or EC considers, among other matters, ethical factors and the safety of human subjects.

Clinical trials are typically conducted in three sequential phases, but the phases may overlap. In Phase 1, the phase in which the drug is initially introduced into healthy human subjects, the drug is tested for adverse effects, dosage tolerance, metabolism, distribution, excretion and clinical pharmacology. Phase 2 trials involve the testing of a limited patient population in order to characterize the actions of the drug in targeted indications, to determine drug tolerance and optimal dosage, and to identify possible adverse side effects and safety risks. When a compound appears to be effective and to have an acceptable safety profile in Phase 2 clinical trials, Phase 3 clinical trials are undertaken to further evaluate and confirm clinical efficacy and safety within an expanded patient population at multiple clinical trial sites. The FDA



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reviews the clinical plans and monitors the results of the trials and may discontinue the trials at any time if significant safety issues arise.

The results of pre-clinical testing and clinical trials are submitted to the FDA in the form of an NDA or BLA for marketing approval. The testing and approval process is likely to require substantial time and effort and there can be no assurance that any approval will be granted on a timely basis, if at all, or that conditions of any approval, such as warnings, contraindications, or scope of indications will not materially impact the potential profitability of the drug product. The approval process is affected by a number of factors, including the severity of the disease, the availability of alternative treatments, and the risks and benefits of the product demonstrated in clinical trials.

Additional pre-clinical testing or clinical trials may be requested during the FDA review period and may delay any marketing approval. After FDA approval for the initial indications, further clinical trials may be necessary to gain approval for the use of the product for additional indications. The FDA mandates that adverse effects be reported to the FDA and may also require post-marketing testing to monitor for adverse effects, which can involve significant expense. Adverse effects observed during the commercial use of a drug product or which arise in the course of post-marketing testing can result in the need for labeling revisions, including additional warnings and contraindications, and, if the findings significantly alter the risk/benefit assessment, the potential withdrawal of the drug from the market.

Among the conditions for FDA approval is the requirement that the prospective manufacturer's quality control and manufacturing procedures conform to the FDA's cGMP requirements. Domestic manufacturing facilities are subject to biannual FDA inspections and foreign manufacturing facilities are subject to periodic inspections by the FDA or foreign regulatory authorities. If the FDA finds that a company is not operating in compliance with cGMPs, the continued availability of the product can be interrupted until compliance is achieved and, if the deficiencies are not corrected within a reasonable time frame, the drug could be withdrawn from the market. Failure to conform to requirements relating to licensing, manufacturing, and promoting drug products can result in informal or formal sanctions, including warning letters, injunctions, seizures, civil and criminal penalties, adverse publicity, and product withdrawal.

## Foreign

We are also subject to numerous and varying foreign regulatory requirements governing the design and conduct of clinical trials and marketing approval for pharmaceutical products to be marketed outside of the United States. The approval process varies among countries and regions and can involve additional testing, and the time required to obtain approval may differ from that required to obtain FDA approval. Foreign regulatory approval processes include all of the risks associated with obtaining FDA approval, and approval by the FDA does not ensure approval by the health authorities of any other country.

## **Employees**

As of February 25, 2005, we employed 151 full-time employees (including 15 people who have a Ph.D. and one person who has an M.D.), 109 of whom are involved full-time in research, development and manufacturing activities. All of our senior management has had prior experience with pharmaceutical, biotechnology or medical product companies. We believe that we have been successful in attracting skilled and experienced personnel, but competition for personnel is intense and there can be no assurance that we will be able to attract and retain the

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individuals needed. None of our employees are covered by collective bargaining agreements and management considers relations with our employees to be good.

### **Executive Officers of the Registrant**

Our executive officers and key employees and their ages are set forth below.

<u>Name</u>	<u>Age</u>	<u>Title</u>
Steven B. Engle	50	Chairman of the Board and Chief Executive Officer
Matthew D. Linnik, Ph.D.	45	Chief Scientific Officer, Executive Vice President of Research and Assistant Secretary
Bruce K. Bennett, Jr.	53	Vice President of Manufacturing
Josefina T. Elchico	58	Vice President of Quality Systems
Kenneth R. Heilbrunn, M.D.	47	Vice President of Clinical Development
Paul C. Jenn, Ph.D.	54	Vice President of Product Development
Theodora Reilly	55	Vice President of Human Resources
Gail A. Sloan, CPA	42	Vice President of Finance and Secretary
William J. Welch	43	Vice President of Sales and Marketing
Andrew Wiseman, Ph.D.	56	Senior Director of Business Development and Investor Relations

**Steven B. Engle**, Chairman of the Board and Chief Executive Officer, joined us in 1993 as Executive Vice President and Chief Operating Officer. He assumed the offices of President, Director and Secretary in 1994, became Chief Executive Officer in 1995, and Chairman of the Board in 1997. From 1991 to 1993, Mr. Engle served as Vice President of Marketing at Cygnus Inc., a publicly held company that develops drug-delivery systems for therapeutic drugs, including Nicotrol®, a smoking cessation transdermal patch. From 1987 to 1991, he was Chief Executive Officer of Quantum Management Company, a privately held management consulting firm serving pharmaceutical and other industries. From 1984 to 1987, he was Vice President of Marketing and Divisional General Manager for Micro Power Systems, Inc., a privately held company that manufactures high technology products, including medical devices. From 1979 to 1984, he was a management consultant at Strategic Decisions Group and SRI International, where he advised pharmaceutical, high technology and other companies. Mr. Engle is a former Chairman of BIOCOM, a regional trade association for the biotechnology and medical devices industries. Mr. Engle holds an M.S.E.E. and a B.S.E.E. with a focus in biomedical engineering from the University of Texas.

**Matthew D. Linnik, Ph.D.**, Chief Scientific Officer, Executive Vice President of Research and Assistant Secretary, joined us in 1998 as Director of Research and Development, was promoted to Vice President of Research in February 1999, to Executive Vice President of Research in June 1999 and to Chief Scientific Officer and Executive Vice President of Research

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in 2002. He was appointed Assistant Secretary in 1999. Prior to joining the Company, from 1989 to 1998, Dr. Linnik served as Senior Pharmacologist, Scientist, Research Scientist and Project Leader for Hoechst Marion Roussel, formerly Marion Merrell Dow and Marion Laboratories, a publicly held pharmaceutical company. From 1996 to 1998, he also served as Adjunct Associate Professor of Neurosurgery at the University of Cincinnati School of Medicine. From 1986 to 1988, he served as Postdoctoral Fellow, then Instructor, in the Departments of Neurology and Neurosurgery at Massachusetts General Hospital and Harvard Medical School. Dr. Linnik holds a B.A. in Physiology from Southern Illinois University and a Ph.D. in Physiology and Pharmacology from Southern Illinois University School of Medicine.

**Bruce K. Bennett, Jr.**, Vice President of Manufacturing, joined us in 2002. Prior to joining us, from 2000 to 2001, Mr. Bennett was Vice President of Operations at Provasis Therapeutics, Inc., a privately held medical device company. From 1997 to 2000, he served as Vice President of Operations, Regulatory Affairs/Quality Assurance and Commercial Development at VIA Medical Corporation, a privately held medical device company. From 1995 to 1996, he was Vice President of Manufacturing at Mulay Plastic, Inc., a privately held injection molding company. From 1992 to 1995, Mr. Bennett served as Vice President of Operations at Cygnus Therapeutic Systems, Inc., a publicly held company that develops drug-delivery systems for therapeutic drugs. From 1989 to 1992, he was Vice President of Manufacturing at Progress Lighting, a privately held manufacturer of decorative lighting fixtures. From 1987 to 1989, he was Vice President of Manufacturing at Sulzer Intermedics, Inc., a publicly held medical device company. From 1986 to 1987, Mr. Bennett served as Director of Manufacturing at Kendall Respiratory Care, Inc., a medical device division of Kendall — a subsidiary of Colgate-Palmolive Company. From 1979 to 1986, he was Operations Director at Kendall McGaw Laboratories, a medical device division of Kendall, and held several other positions. Mr. Bennett holds a B.S. in Industrial Technology from California State University, Long Beach and an M.B.A. from Pepperdine University.

**Josefina T. Elchico**, Vice President of Quality Systems, joined us in October 2004. Prior to joining us, from 2002 to 2004, Ms. Elchico was a consultant with Jeff Yuen and Associates, a privately held consulting firm, where she worked with biopharmaceutical companies in implementing quality systems worldwide, validating facilities, processes and systems, conducting audits, preparing for pre-approval inspections and supporting regulatory submissions. From 1991 to 2002, she was Vice President, Quality Assurance for the BioPharmaceutical Division at Chiron Corporation, a publicly held company with businesses in biopharmaceuticals, vaccines and blood testing. From 1984 to 1991, Ms. Elchico advanced to Director of Quality Assurance at Cetus Corporation (now part of Chiron Corporation). From 1974 to 1984, she held various management positions at the Lancer Division of Sherwood Medical, a subsidiary of American Home Products, a publicly held manufacturer and marketer of health care and food products (now part of Wyeth). Ms. Elchico received her B.S. in Medical Technology from the University of San Agustin, Philippines and completed an internship in medical technology at St. Peter's General Hospital in New Brunswick, New Jersey. She is a licensed Medical Technologist and a member of the Parenteral Drug Association and the American Society for Clinical Pathologists.

**Kenneth R. Heilbrunn, M.D.**, Vice President of Clinical Development, joined us in 2002. Prior to joining us, from 1998 to 2002, he advanced to Vice President of Clinical Research at Advanced Tissue Sciences, Inc., a publicly held tissue engineering company, where he was responsible for a multicenter Phase 3 clinical trial which led to the FDA approval of Dermagraft®, a bioengineered human tissue. From 1997 to 1998, Dr. Heilbrunn served as Vice President of Medical Affairs at Hepatix, Inc., a privately held company engaged in the development of a bioengineered liver (extracorporeal liver assist device). From 1994 to 1996, he served as Staff Vice President of Medical Affairs at C.R. Bard, Inc., a publicly held manufacturer of healthcare products. From 1989 to 1994, he served as Medical Affairs Director for

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Cardiovascular and Pulmonary Drugs at Ciba-Geigy Pharmaceuticals Division, a manufacturer of health-care products, where he participated in the launch of the nicotine patch, Habitrol®, and the antihypertensive drug, Lotensin®. From 1986 to 1989, Dr. Heilbrunn served as Staff Internist and, ultimately, Director of the Critical Care unit at the 31st Tactical Air Force Hospital in Homestead, Florida. Dr. Heilbrunn completed his residency in internal medicine at Baystate Medical Center in Springfield, Massachusetts after receiving his M.D. from New York Medical College and his B.A. from Brown University.

**Paul C. Jenn, Ph.D.**, Vice President of Product Development, joined us in 1994 as Associate Director of Production and Process Development. Dr. Jenn was promoted to Director of Operations in 1999, Senior Director of Operations in 2000, Vice President of Operations in 2001, and Vice President of Product Development in 2002. Prior to joining the Company, from 1992 to 1994, Dr. Jenn was Director of Peptide Manufacturing at Telios Pharmaceuticals, Inc., a publicly held pharmaceutical company, and held several other positions. From 1988 to 1992, he served as Senior Research Associate at Mallinckrodt Specialty Chemicals Company, a publicly held specialty chemical company. From 1984 to 1988, Dr. Jenn served as a Research Scientist at International Minerals and Chemical Corporation, a publicly held chemical company. From 1982 to 1984, he performed his post-doctoral research at the Lawrence Berkeley Laboratory at the University of California, Berkeley. Dr. Jenn holds a B.S. in Chemistry from Fu-Jen Catholic University, Taipei, Taiwan and a Ph.D. in Chemistry from State University of New York at Buffalo.

**Theodora Reilly**, Vice President of Human Resources, joined us in 1998 as Director of Human Resources and was promoted to Vice President of Human Resources in 2001. Prior to joining us, from 1997 to 1998, Ms. Reilly was Director of Human Resources at ThermoLase Corporation, a public subsidiary of Thermo Electron Corporation, which developed laser-based systems for skin resurfacing. From 1994 to 1997, Ms. Reilly served as Director of Human Resources at Solecetek Corporation, a privately held high technology manufacturer of wireless interconnectivity products. Prior to 1994, Ms. Reilly was a management consultant in human resources, executive coaching, employee relations, and strategic organizational development. Ms. Reilly holds a B.S. in Psychology from the Christian Bible College and Seminary, Independence, Missouri; a B.S. in Business Management from the University of Phoenix, Phoenix, Arizona; and a certificate in Human Resource Management from the American Electronics Association, Santa Clara, California.

**Gail A. Sloan, CPA**, Vice President of Finance and Secretary, joined us in 1996 as Assistant Controller, was promoted to Controller in 1997, to Senior Director of Finance in 2002 and to Vice President of Finance in 2004. She was appointed Secretary in 1999. Prior to joining us, from 1993 to 1996, Ms. Sloan served as Assistant Controller at Affymax Research Institute, a publicly held drug-discovery research company and a part of the Glaxo Wellcome Group. From 1985 to 1993, she progressed to the position of Audit Manager with Ernst & Young LLP. Ms. Sloan holds a B.S. in Business Administration from California Polytechnic State University, San Luis Obispo and is a Certified Public Accountant.

**William J. Welch**, Vice President of Sales and Marketing, joined us in 1998 as Vice President of Business Development. After leaving us in 1999, he rejoined us in 2001 as Vice President of Marketing and was promoted to his current position in 2002. Prior to rejoining us, Mr. Welch was Vice President of Global Marketing at Dade Behring, a privately held global diagnostic company. From 1993 until 1998, Mr. Welch worked for Abbott Laboratories, a publicly held global healthcare company, as General Manager of Abbott Ambulatory Infusion Systems, Senior Marketing Manager of Abbott Renal Care and as Manager of Strategic Planning, Corporate Planning and Development. From 1991 to 1993, Mr. Welch was Director of Business Development for In-Process Technology, a privately held company that manufactured processing systems for the pharmaceutical industry. From 1989 to 1991, Mr. Welch was Senior Associate for D'Accord, Inc., a global investment banking company. Mr. Welch holds a B.S. in Chemical Engineering from the University of California, Berkeley and an M.B.A. from Harvard University.

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**Andrew Wiseman, Ph.D.**, Senior Director of Business Development and Investor Relations, joined us in 1989 as Director of Business Development and was one of our original founders. Dr. Wiseman has also served as head of investor relations since 1994. From 1983 to 1989, Dr. Wiseman held several positions with Quidel Corporation, a publicly held manufacturer of diagnostic tests, including Manager of Business Development, Project Manager in Diagnostic Research and Development and Senior Research Scientist. Dr. Wiseman was an Assistant Professor at the Medical Biology Institute and an Assistant Member at the Scripps Clinic and Research Foundation. He received a B.S. in Zoology and a Ph.D. in Genetics from Duke University.

### **Available Information**

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed with or furnished to the Securities and Exchange Commission pursuant to Section 13(a) or 15(d) of the Exchange Act of 1934, as amended, are available free of charge through our website at [www.ljpc.com](http://www.ljpc.com) as soon as reasonably practicable after we electronically file or furnish the reports with or to the Securities and Exchange Commission.

## **RISK FACTORS**

### **I. Risk Factors Relating To La Jolla Pharmaceutical And The Industry In Which We Operate**

**In order to complete our ongoing clinical trial of Riquent, we will need additional funding. If we are unable to successfully complete the trial, our business and financial condition will be adversely affected and it may be difficult or impossible for us to survive.**

We will need to successfully complete the clinical trial of Riquent that we commenced in August 2004. We expect that the trial will involve approximately 500 to 600 patients, cost at least \$60 million, and take several years to complete. In order to complete this trial, we will require significant additional funding. There is no guarantee that we will be able to obtain additional funds from the sale of additional securities, from a collaborative partner, or otherwise. If we are unable to timely raise additional funding, we will not have the financial resources to complete the ongoing trial or to continue the research and development of Riquent, and it may be difficult or impossible for us to survive.

**In order to complete our ongoing clinical trial of Riquent, we will need to enroll a sufficient number of patients who meet the trial criteria. If we are unable to successfully complete the trial, our business and financial condition will be adversely affected and it may be difficult or impossible for us to survive.**

We expect that the ongoing clinical trial of Riquent will involve approximately 500 to 600 patients, which is significantly more than were involved in our Phase 3 trial. In order to complete this trial, we will need to locate and enroll a sufficient number of patients who meet the criteria for the trial. We may have difficulty enrolling patients because, among other matters, there are specific limitations on the medications that a patient may be taking upon entry into the trial. If we are unable to timely enroll a sufficient number of patients, we will not be able to complete successfully the ongoing trial. As a result, it may be difficult or impossible for us to survive.

**If we do not obtain Subpart H approval for Riquent and we do not raise additional funds in the near future, we will need to take significant cost reducing measures.**

If the FDA does not approve Riquent under Subpart H and we do not raise additional funds in the near future, either through the sale of additional securities or a collaborative agreement with a corporate partner, we will need to take significant additional cost-cutting measures to continue our operations into the first quarter of 2006. These measures may include, among other matters, ceasing the enrollment of additional patients in, or halting, the ongoing multi-dose trial of Riquent that we initiated in August 2004, further reducing the expenses associated with our other current drug development programs, or significantly reducing our workforce. If we do not receive a final Subpart H decision from the FDA in the near term, we may elect to initiate some or all of these cost reducing efforts as early as the second quarter of 2005.

**Results from our clinical trials may not be sufficient to obtain approval to market Riquent or our other drug candidates in the United States or Europe on a timely basis, or at all.**

Our drug candidates are subject to extensive government regulations related to development, clinical trials, manufacturing and commercialization. In order to sell our products that are under development, we must first receive regulatory approval. To obtain regulatory approval, we must conduct clinical trials and toxicology studies that demonstrate that our drug candidates are safe and effective. The process of obtaining FDA and other regulatory approvals is costly, time consuming, uncertain and subject to unanticipated delays. The FDA and foreign regulatory authorities have substantial discretion in the approval process and may not agree that we have demonstrated that Riquent is safe and effective. If Riquent is ultimately not found to be safe and effective, we would be unable to obtain regulatory approval to manufacture, market and sell Riquent. Although we have received an approvable letter from the FDA, the analysis of the data from our Phase 3 trial of Riquent showed that the trial did not reach statistical significance with respect to its primary endpoint, time to renal flare, or with respect to its secondary endpoint, time to treatment with high-dose corticosteroids or cyclophosphamide. We can provide no assurances that the FDA will ultimately approve Riquent or, if approved, what the indication for Riquent will be.

Because Riquent is our only drug candidate for which we have completed a Phase 3 clinical trial, and because there is no guarantee that we would be able to develop an alternate drug candidate, our inability to obtain regulatory approval of Riquent would have a severe negative effect on our business, and we may not have the financial resources to continue research and development of Riquent or any other potential drug candidates.

**Our discussions with the FDA may not result in us obtaining accelerated approval for Riquent under the Subpart H regulation.**

Although we and the FDA are currently discussing the possibility of obtaining accelerated approval for Riquent under Subpart H, there can be no assurance that reductions in levels of antibodies to dsDNA will be deemed by the FDA to be a surrogate endpoint that is reasonably likely to predict clinical benefit, that the demonstrated effect of Riquent on antibody levels, or any other results from our previous clinical trials, will be sufficient for the FDA to grant approval under Subpart H, or that we will be able to successfully complete any post-marketing clinical trial. The success of the clinical trial that we initiated in August 2004, whether conducted as part of a Subpart H approval process or otherwise, will depend, in part, on our ability to locate and enroll patients meeting the criteria specified for such a trial and the availability of a sufficient amount of funding. We may be required to complete patient enrollment milestones in the ongoing clinical trial prior to obtaining any approval under Subpart H. The enrollment process may take a

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significant amount of time and may require significant funding. Any delay in meeting patient enrollment requirements may impact our ability to obtain timely regulatory approval for Riquent, if at all. The current clinical trial involves significantly more patients than were involved in the Phase 3 trial of Riquent and will require significant time to complete. Even if the FDA approves Riquent under Subpart H, we believe that it will take at least nine months from the date of approval for us to build our inventory and to expand our operations in order to bring Riquent to market. In addition, if we fail to successfully complete a post-marketing clinical trial, the FDA would have the authority to remove Riquent from the market. Because Riquent is our only drug candidate for which we have completed a Phase 3 clinical trial, and because there is no guarantee that we would be able to develop an alternate drug candidate, our inability to obtain or maintain regulatory approval of Riquent would have a severe negative effect on our business, and we may not have the financial resources to continue research and development of Riquent or any other potential drug candidates.

### **We will need additional funds to support our operations.**

Our operations to date have consumed substantial capital resources, and we expect to expend substantial amounts of capital resources for additional research, product development, pre-clinical testing and clinical trials of drug candidates. We may also devote substantial additional capital resources to establish commercial-scale manufacturing capabilities and to market and sell potential products. These expenses may be incurred prior to or after any regulatory approvals that we may receive. We will need to raise additional funds to finance our future operations. Our future capital requirements will depend on many factors, including:

- the scope and results of pre-clinical testing and clinical trials,
- our ability to obtain regulatory approval for Riquent,
- continued scientific progress in our research and development programs,
- the size and complexity of our research and development programs,
- the time and costs involved in applying for regulatory approvals,
- the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims,
- competing technological and market developments,
- our ability to establish and maintain collaborative research and development arrangements,
- our need to establish commercial manufacturing capabilities, and
- our ability to develop effective marketing and sales programs.

We expect to incur substantial losses each year for at least the next several years as we continue our planned clinical trial, research, clinical development and manufacturing activities. If we ultimately receive regulatory approval for Riquent, or any of our other drug candidates, our manufacturing, marketing and sales activities are likely to substantially increase our expenses and our need for additional working capital. We anticipate that our existing cash and cash investments, including the net proceeds of \$15.8 million that we received from the sale of 12,250,000 shares of our common stock in February 2005, and interest earned thereon, will be

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sufficient to fund our operations as currently planned into the first quarter of 2006. This projection is based on the assumption that we do not obtain Subpart H approval, that we do not raise any additional funds, either through the sale of additional securities or a collaborative agreement with a corporate partner, that we do not engage in any significant commercialization activities, and that we take one or more significant cost-reducing measures, including ceasing the enrollment of additional patients in, or halting, the ongoing multi-dose trial of Riquent that we initiated in August 2004, further reducing the expenses associated with our other current drug development programs and/or significantly reducing our workforce. However, the amounts we expend may vary significantly, and it is possible that our cash requirements will exceed current projections and that we will therefore need additional financing sooner than currently expected. In the future, it is possible that we will not have adequate resources to support continuation of our business activities.

### **We may need to sell stock or assets, enter into collaborative agreements, reduce our operations, or merge with another entity to continue operations.**

Our business is highly cash-intensive. Therefore, regardless of whether we obtain Subpart H approval for Riquent, we will need to actively seek additional funding, including through public and private financings and collaborative arrangements. Our choice of financing alternatives may vary from time to time depending on various factors, including the market price of our securities, conditions in the financial markets and the interest of other entities in strategic transactions with us. There can be no guarantee that additional financing will be available on favorable terms, if at all, whether through issuance of securities, collaborative arrangements, or otherwise. If adequate funds are not available, we may be required to delay, scale back or eliminate one or more of our research and development programs, reduce the size of our workforce, sell or license our technologies, or obtain funds through other arrangements with collaborative partners or others that require us to relinquish rights to our technologies or potential products. We also may be required to merge with another entity to continue our operations. Any one of these outcomes could have a negative impact on our ability to develop products or achieve profitability if our products are brought to market. If, and to the extent, we obtain additional funding through sales of securities, your investment in us will be diluted, and dilution can be particularly substantial when the price of our common stock is low.

### **Our freedom to operate our business or profit fully from sales of our products may be limited if we enter into collaborative agreements.**

We may seek to collaborate with pharmaceutical companies to gain access to their research, drug development, manufacturing, marketing, sales and financial resources. However, we may not be able to negotiate arrangements with any collaborative partners on favorable terms, if at all. Any collaborative relationships that we enter into may include restrictions on our freedom to operate our business or may limit the sales of potential products. If a collaborative arrangement is established, the collaborative partner may discontinue funding any particular program or may, either alone or with others, pursue alternative technologies or develop alternative drug candidates for the diseases we are targeting. Competing products, developed by a collaborative partner or to which a collaborative partner has rights, may result in the collaborative partner withdrawing support as to all or a portion of our technology.

Without collaborative arrangements, we must fund our own research, development, manufacturing, marketing and sales activities, which would accelerate the depletion of our cash and require us to develop our own manufacturing, marketing and sales capabilities. Therefore, if we are unable to establish and maintain collaborative arrangements and if other sources of cash are not available, we could experience a material adverse effect on our ability to develop products and, if developed and approved, to manufacture, market and sell them successfully.



**We may be required to design and conduct additional trials.**

We may be required to design and conduct additional studies to further demonstrate the safety and efficacy of our drug candidates, which may result in significant expense and delay. The FDA and foreign regulatory authorities may require new or additional clinical trials because of inconclusive results from current or earlier clinical trials, including the Phase 2/3 and Phase 3 trials of Riquent, a possible failure to conduct clinical trials in complete adherence to FDA good clinical practice standards and similar standards of foreign regulatory authorities, the identification of new clinical trial endpoints, or the need for additional data regarding the safety or efficacy of our drug candidates. It is possible that the FDA or foreign regulatory authorities may not ultimately approve Riquent or our other drug candidates for commercial sale in any jurisdiction, even if future clinical results are positive.

**Current and future clinical trials may be delayed or halted.**

Current and future clinical trials of Riquent, trials of drugs related to Riquent, or clinical trials of other drug candidates may be delayed or halted. During the development of Riquent, our Phase 2/3 clinical trial, in collaboration with Abbott Laboratories, was terminated before planned patient enrollment was completed. Current and future trials may be delayed or halted for various reasons, including:

- the lack of available funding,
- patients do not enroll in the studies at the rate we expect,
- the products are not effective,
- patients experience severe side effects during treatment,
- the trials are not conducted in accordance with applicable clinical practices, or
- supplies of drug product are not sufficient to treat the patients in the studies.

If any current or future trials are delayed or halted, we may incur significant additional expenses, which could have a severe negative effect on our business.

**Our blood test to measure the binding affinity for Riquent has not been validated by independent laboratories and is likely to require regulatory review as part of the Riquent approval process.**

In 1998, we developed a blood test that we believe can identify the lupus patients who are most likely to respond to Riquent. The blood test is designed to measure the strength of the binding between Riquent and a patient's antibodies. This affinity assay was used to identify, prospectively in the Phase 3 trial and retrospectively in the Phase 2/3 trial, the patients included in the efficacy analyses. Independent laboratories have not validated the assay, and the results of the affinity assay observed in our clinical trials of Riquent may not be observed in the broader lupus patient population. Although the FDA has reviewed the blood assay as part of the approval process of Riquent, the FDA's review of the assay will not be complete until after Riquent is approved, if ever, and we and the FDA agree upon the label for Riquent. In addition, foreign regulatory agencies may require that the assay be reviewed as part of their approval process for Riquent. Even if Riquent and the assay are approved by the FDA or foreign regulatory agencies, we may have to conduct additional studies on the assay post-approval. The testing laboratory that will conduct the assay if Riquent is approved may also require additional regulatory approval. If

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the FDA or foreign regulatory agencies do not concur with the use of the assay to identify potential patients for treatment with Riquent, or if any of them requires additional studies on the assay or additional regulatory approval of the testing laboratory, the approval and possible commercialization of Riquent may be delayed or prevented, which would have a severe negative effect on our business.

### **If we are to obtain regulatory approval of Riquent, we must validate our manufacturing facilities and processes.**

Although a successful pre-approval inspection was conducted by the FDA in July 2004, we have never operated a commercial manufacturing facility and we have not yet validated our manufacturing facilities or processes. If we are unable to validate our manufacturing facilities and processes to the satisfaction of the FDA, the FDA will not approve Riquent for commercial use.

### **We are currently devoting nearly all of our resources to the development and approval of Riquent. Accordingly, our efforts with respect to other drug candidates have significantly diminished.**

For fiscal year 2005, we have currently budgeted a very limited amount of funds for our continued development of LJP 1082, our drug candidate for the treatment of antibody-mediated thrombosis. In addition, we have budgeted only a limited amount of funds for the development of small molecules for the treatment of autoimmune diseases and acute and chronic inflammatory disorders. As a result, significant progress with respect to drug candidates other than Riquent, if any, will be significantly delayed and our success and ability to survive depends on whether we obtain FDA approval to market Riquent.

### **We may not be able to take advantage of the orphan drug designation for Riquent.**

In September 2000, the FDA granted us orphan drug designation for Riquent for the treatment of lupus nephritis. The Orphan Drug Act potentially enables us to obtain research funding, tax credits for certain research expenses and a waiver of the application user fees. In addition, the Orphan Drug Act allows for seven years of exclusive marketing rights to a specific drug for a specific orphan indication. Exclusivity is conferred upon receipt of marketing approval from the FDA. The marketing exclusivity prevents FDA approval during the seven year period of the “same” drug from another company for the same orphan indication. Two drugs with substantially similar characteristics are considered to be the same, and exclusivity granted to one drug will block approval of the subsequent drug for the same indication. However, one may overcome the exclusivity designation by demonstrating that, despite the similarity of the drugs, a subsequent drug is clinically superior in terms of increased effectiveness and adequate safety, increased safety and adequate effectiveness or represents a major contribution to patient care, and therefore is not barred by the exclusivity. In the course of the FDA’s initial review of our NDA, the FDA indicated that the indication for Riquent proposed in our NDA may be broader than the indication identified in our orphan drug designation. Accordingly, we were required to pay the filing fee for the NDA for Riquent. However, we subsequently received a refund of the full filing fee under the FDA’s small business regulations. Whether we will be able to take advantage of the benefits afforded by the orphan drug designation will ultimately be determined by the FDA only after further review of our NDA.

**Our limited manufacturing capabilities and experience could result in shortages of products for clinical studies and future sale, and our revenues and profit margin could be negatively affected.**

We have never operated a commercial manufacturing facility and we will be required to manufacture Riquent pursuant to applicable FDA good manufacturing practices. Our inexperience could result in manufacturing delays or interruptions and higher manufacturing costs. This could negatively affect our ability to produce products for clinical studies and, therefore, to introduce products into the market on a timely and competitive basis. The subsequent sales of our products, if any, and our profit margins may also be negatively affected. In addition, substantial capital investment in the expansion and build-out of our manufacturing facilities will be required to enable us to manufacture Riquent, if approved, in significant commercial quantities. We have limited manufacturing experience, and we may be unable to successfully transition to commercial production.

We may enter into arrangements with contract manufacturing companies to expand our own production capacity in order to meet demand for our products or to attempt to improve manufacturing efficiency. If we choose to contract for manufacturing services, the FDA and comparable foreign regulators would have to approve the contract manufacturers prior to our use, and these contractors would be required to comply with strictly enforced manufacturing standards. We also enter into agreements with contractors to prepare our drug candidates for use by patients. If we encounter delays or difficulties in establishing or maintaining relationships with contractors to produce, package or distribute our finished products, if they are unable to meet our needs, if they are not approved by the regulatory authorities, or if they fail to adhere to applicable manufacturing standards, the introduction of our products into the market and the subsequent sales of these products would be negatively affected, and our profit margins and our ability to develop and deliver products on a timely and competitive basis may be negatively affected.

**Our suppliers may not be able to provide us with sufficient quantities of materials that we may need to manufacture our products.**

We rely on outside suppliers to provide us with specialized chemicals and reagents that we use to manufacture our drugs. In order to manufacture Riquent and our other drug candidates in sufficient quantities for our clinical trials and possible commercialization, our suppliers will be required to provide us with an adequate supply of chemicals and reagents. Our ability to obtain these chemicals and reagents is subject to the following risks:

- our suppliers may not be able to increase their own manufacturing capabilities in order to provide us with a sufficient amount of material for our use,
- some of our suppliers may be required to pass FDA inspections or validations or to obtain other regulatory approvals of their manufacturing facilities or processes, and they may be delayed or unable to do so,
- the materials that our suppliers use to manufacture the chemicals and reagents that they provide us may be costly or in short supply, and
- there are a limited number of suppliers that are able to provide us with the chemicals or reagents that we use to manufacture our drugs.

If we are unable to obtain sufficient quantities of chemicals or reagents, our ability to produce products for clinical studies and, therefore, to introduce products into the market on a

timely and competitive basis, will be impeded. The subsequent sales of our products, if any, and our profit margins may also be negatively affected.

**An interruption in the operation of our sole manufacturing facility could disrupt our operations.**

We have only one drug manufacturing facility. A significant interruption in the operation of this facility, whether as a result of a natural disaster or other causes, could significantly impair our ability to manufacture drugs for our clinical trials or possible commercialization.

**Even if we receive regulatory approval for our product candidates, we will be subject to ongoing regulatory obligations and review.**

Following any regulatory approval of our product candidates, we will be subject to continuing regulatory obligations such as safety reporting requirements and additional post-marketing obligations, including regulatory oversight of the promotion and marketing of our products. In addition, we and any third-party manufacturers will be required to adhere to regulations setting forth current good manufacturing practices. These regulations cover all aspects of the manufacturing, testing, quality control and record keeping relating to our product candidates. Furthermore, we and any third-party manufacturers will be subject to periodic inspection by regulatory authorities. These inspections may result in compliance issues that would require the expenditure of financial or other resources to address. If we or any third-party manufacturers that we may engage fail to comply with applicable regulatory requirements, we may be subject to fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

**The size of the market for our potential products is uncertain.**

We estimate that the number of people who suffer from lupus in the United States and Europe is potentially more than 1,000,000 and that those with renal impairment, which Riquent is designed to treat, is approximately 300,000. However, there is limited information available regarding the actual size of these patient populations. In addition, it is uncertain whether the results from previous or future clinical trials of our drug candidates will be observed in broader patient populations, and the number of patients who may benefit from our drug candidates may be significantly smaller than the estimated patient populations. Furthermore, management of patients with renal disease by specialists other than nephrologists and immunologists is likely to reduce our ability to access patients who may benefit from Riquent.

**Any regulatory approvals that we may obtain for our product candidates may be limited and subsequent issues regarding safety or efficacy could cause us to remove products from the market.**

If the FDA or foreign regulatory authorities grant approval of any of our drug candidates, the approval may be limited to specific conditions or patient populations, or limited with respect to its distribution, including to specified facilities or physicians with special training or experience. The imposition of any of these restrictions or other restrictions on the marketing and use of Riquent could adversely affect any future sales of Riquent. Furthermore, even if a drug candidate is approved, it is possible that a subsequent issue regarding its safety or efficacy would require us to remove the drug from the market.

**Our drugs may not achieve market acceptance.**

Even if Riquent or our other drug candidates receive regulatory approval, patients and physicians may not readily accept our proposed methods of treatment. In order for Riquent or our other drug candidates to be commercially successful, we will need to increase the awareness and acceptance of our drug candidates among physicians, patients and the medical community. Riquent is designed to be administered weekly by intravenous injection. It is possible that providers and patients may resist an intravenously administered therapeutic. It is also possible that physician treatment practices may change and that the use of other drugs, either newly approved or currently on the market for other conditions, may become widely utilized by clinicians for the treatment of patients with lupus and reduce the potential use of Riquent in this patient population. In addition, if we are unable to manufacture drugs at an acceptable cost, physicians may not readily prescribe drugs that we may manufacture due to cost-benefit considerations when compared to other methods of treatment. If we are unable to achieve market acceptance for approved products, our revenues and potential for profitability will be negatively affected.

**We lack experience in marketing products for commercial sale.**

In order to commercialize any drug candidate approved by the FDA, we must either develop marketing and sales programs or enter into marketing arrangements with others. If we cannot do either of these successfully, we will not generate meaningful sales of any products that may be approved. If we develop our own marketing and sales capabilities, we will be required to employ a sales force, establish and staff a customer service department, and create or identify distribution channels for our drugs. We will compete with other companies that have experienced and well-funded marketing and sales operations. In addition, if we establish our own sales and distribution capabilities, we may experience delays and expenditures and have difficulty in gaining market acceptance for our drug candidates. We currently have no marketing arrangements with others. There can be no guarantee that, if we desire to, we will be able to enter into any marketing agreements on favorable terms, if at all, or that any such agreements will result in payments to us. If we enter into co-promotion or other marketing and sales arrangements with other companies, any revenues that we may receive will be dependent on the efforts of others. There can be no guarantee that these efforts will be successful.

**We may not earn as much income as we hope due to possible changes in healthcare reimbursement policies.**

The continuing efforts of government and healthcare insurance companies to reduce the costs of healthcare may reduce the amount of income that we can generate from sales of future products, if any. For example, in certain foreign markets, pricing and profitability of prescription drugs are subject to government control. In the United States, we expect that there will continue to be a number of federal and state proposals to implement similar government controls. In addition, an increasing emphasis on managed care in the United States will continue to put pressure on drug manufacturers to reduce prices. Price control initiatives could reduce the revenue that we receive for any products we may develop and sell in the future.

**We have a history of losses and may not become profitable.**

We have incurred operating losses each year since our inception in 1989 and had an accumulated deficit of approximately \$232.9 million as of December 31, 2004. We expect to incur substantial losses each year for at least the next several years as we conduct additional clinical trials of our drug candidates, seek regulatory approval, and continue our research, clinical development, and manufacturing activities. In addition, assuming we ultimately receive FDA approval for Riquent or our other drug candidates, we will be required to develop commercial manufacturing capabilities and marketing and sales programs which may result in substantial additional losses. To achieve profitability we must, among other matters, complete the development of our products, obtain all necessary regulatory approvals and establish commercial manufacturing, marketing and sales capabilities. The amount of losses and the time required by us to reach sustained profitability are highly uncertain and we may never achieve profitability. We do not expect to generate revenues from the sale of Riquent, if approved, or our other products, if any, in the near term, and we may never generate product revenues.

**Our success in developing and marketing our drug candidates depends significantly on our ability to obtain patent protection for Riquent and any other developed products. In addition, we will need to successfully preserve our trade secrets and operate without infringing on the rights of others.**

We depend on patents and other unpatented intellectual property to prevent others from improperly benefiting from products or technologies that we may have developed. As of December 31, 2004, we owned 100 issued patents and 85 pending patent applications, covering various technologies and drug candidates including Riquent. There can be no assurance, however, that any additional patents will be issued, that the scope of any patent protection will be sufficient to protect us or our technology, or that any current or future issued patent will be held valid if subsequently challenged. There is a substantial backlog of biotechnology patent applications at the United States Patent and Trademark Office that may delay the review and issuance of any patents. The patent position of biotechnology firms like ours is highly uncertain and involves complex legal and factual questions, and no consistent policy has emerged regarding the breadth of claims covered in biotechnology patents or the protection afforded by these patents. Currently, we have a number of patent applications pending in the United States relating to our technology, as well as foreign counterparts to some of our United States patent applications. We intend to continue to file applications as believed appropriate for patents covering both our products and processes. There can be no assurance that patents will be issued from any of these applications, or that the scope of any issued patents will protect our technology.

We do not necessarily know if others, including competitors, have patents or patent applications pending that relate to compounds or processes that overlap or compete with our intellectual property or which may affect our freedom to operate. We are aware of certain families of patents and patent applications that contain claims covering subject matter that may affect our ability to develop, manufacture and sell our products in the future. We have conducted investigations into the patent families to determine what impact, if any, the patent families could have on our continued development, manufacture and, if approved by the FDA, sale of our drug candidates, including Riquent. Based on our investigations to date, we currently do not believe that these patent families are likely to impede the advancement of our drug candidates, including Riquent. However, there can be no assurance that upon our further investigation, these patent families or other patents will not ultimately be found to impact the advancement of our drug candidates, including Riquent. If the United States Patent and Trademark Office or any foreign counterpart issues or has issued patents containing competitive or conflicting claims, and if these claims are valid, the protection provided by our existing patents or any future patents that may be issued could be significantly reduced, and our ability to prevent competitors from developing

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products or technologies identical or similar to ours could be negatively affected. In addition, there can be no guarantee that we would be able to obtain licenses to these patents on commercially reasonable terms, if at all, or that we would be able to develop or obtain alternative technology. Our failure to obtain a license to a technology or process that may be required to develop or commercialize one or more of our drug candidates may have a material adverse effect on our business. In addition, we may have to incur significant expenses and management time in defending or enforcing our patents.

We also rely on unpatented intellectual property such as trade secrets and improvements, know-how, and continuing technological innovation. While we seek to protect these rights, it is possible that:

- others, including competitors, will develop inventions relevant to our business,
- our confidentiality agreements will be breached, and we may not have, or be successful in obtaining, adequate remedies for such a breach, or
- our trade secrets will otherwise become known or be independently discovered by competitors.

We could incur substantial costs in defending suits that others might bring against us for infringement of intellectual property rights or in prosecuting suits that we might bring against others to protect our intellectual property rights.

### **The technology underlying our products is uncertain and unproven.**

All of our product development efforts are based on unproven technologies and therapeutic approaches that have not been widely tested or used. To date, no products that use our technology have been commercialized. The FDA has not determined that we have proven Riquent to be safe and effective in humans, and the technology on which it is based has been used only in our pre-clinical tests and clinical trials. Application of our technology to antibody-mediated diseases other than lupus is in earlier research stages. Clinical trials of Riquent may be viewed as a test of our entire approach to developing therapies for antibody-mediated diseases. If Riquent does not work as intended, or if the data from our clinical trials indicates that Riquent is not safe and effective, the applicability of our technology for successfully treating antibody-mediated diseases will be highly uncertain. As a result, there is a significant risk that our therapeutic approaches will not prove to be successful, and there can be no guarantee that our drug discovery technologies will result in any commercially successful products.

### **Our research and development and operations depend in part on key employees. Losing these employees would have a negative effect on our product development and operations.**

We are highly dependent on the principal members of our scientific and management staff, the loss of whose services would delay the achievement of our research and development objectives. This is because our key personnel, including Steven Engle, Dr. Matthew Linnik, Dr. Paul Jenn and Dr. Andrew Wiseman, have been involved in the development of Riquent and other drug candidates for several years and have unique knowledge of our drug candidates and of the technology on which they are based. In addition, we will be required to rely on other key members of our senior management team, including Dr. Kenneth Heilbrunn, Bruce Bennett, Josefina Elchico and William Welch, to assist us with growth and expansion into areas requiring additional expertise, such as clinical trials, manufacturing, marketing and sales. We expect that we will continue to require additional management personnel, and that our existing management personnel will be required to develop additional expertise.

**Retaining our current personnel and recruiting additional personnel will be critical to our success.**

Retaining our current key personnel and recruiting additional qualified personnel to perform research and development, clinical development, manufacturing, marketing and sales will be critical to our success. Because competition for experienced scientific, clinical, manufacturing, marketing and sales personnel among numerous pharmaceutical and biotechnology companies and research and academic institutions is intense, we may not be able to attract and retain these people. If we cannot attract and retain qualified people, our ability to conduct necessary clinical trials and to develop and sell potential products may be negatively affected because, for instance, the trials may not be conducted properly, or the manufacturing or sales of our products may be delayed. In addition, we rely on consultants and advisors to assist us in formulating our research and development, clinical, regulatory, manufacturing, marketing and sales strategies. All of our consultants and advisors have outside employment and may have commitments or consulting or advisory contracts with other entities that may limit their ability to contribute to our business.

**Because a number of companies compete with us, many of which have greater resources than we do, and because we face rapid changes in technology in our industry, we cannot be certain that our products will be accepted in the marketplace or capture market share.**

Competition from domestic and foreign biotechnology companies, large pharmaceutical companies and other institutions is intense and is expected to increase. A number of companies and institutions are pursuing the development of pharmaceuticals in our targeted areas, many of which are very large, and have financial, technical, sales and distribution and other resources substantially greater than ours. The greater resources of these competitors could enable them to develop competing products more quickly than we are able to, and to market any competing product more quickly or effectively so as to make it extremely difficult for us to develop a share of the market for our products. These competitors also include companies that are conducting clinical trials and pre-clinical studies for the treatment of lupus. Our competitors may develop or obtain regulatory approval for products more rapidly than we do. If, before the FDA approves Riquent, if ever, the FDA were to approve a drug other than Riquent for the same indication that Riquent is designed to treat, and such drug therefore received marketing exclusivity under the Orphan Drug Act, the FDA may be prevented from approving Riquent. Also, the biotechnology and pharmaceutical industries are subject to rapid changes in technology. Our competitors may develop and market technologies and products that are more effective or less costly than those being developed by us, or that would render our technology and proposed products obsolete or noncompetitive.

**The use of Riquent or other potential products in clinical trials, as well as the sale of any approved products, may expose us to lawsuits resulting from the use of these products.**

The use and possible sale of Riquent or other potential products may expose us to legal liability and negative publicity if we are subject to claims that our products harmed people. These claims might be made directly by patients, pharmaceutical companies, or others. We currently maintain \$10.0 million of product liability insurance for claims arising from the use of our products in clinical trials. However, product liability insurance is becoming increasingly expensive. In addition, in the event of any commercialization of any of our products, we will likely need to obtain additional insurance, which will increase our insurance expenses. There can be no guarantee that we will be able to maintain insurance or that insurance can be acquired at a reasonable cost, in sufficient amounts, or with broad enough coverage to protect us against possible losses. Furthermore, it is possible that our financial resources would be insufficient to



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satisfy potential product liability or other claims. A successful product liability claim or series of claims brought against us could negatively impact our business and financial condition.

### **We face environmental liabilities related to certain hazardous materials used in our operations.**

Due to the nature of our manufacturing processes, we are subject to stringent federal, state and local laws governing the use, handling and disposal of certain materials and wastes. We may have to incur significant costs to comply with environmental regulations if and when our manufacturing increases to commercial volumes. Current or future environmental laws may significantly affect our operations because, for instance, our production process may be required to be altered, thereby increasing our production costs. In our research and manufacturing activities, we use radioactive and other materials that could be hazardous to human health, safety or the environment. These materials and various wastes resulting from their use are stored at our facility pending ultimate use and disposal. The risk of accidental injury or contamination from these materials cannot be eliminated. In the event of such an accident, we could be held liable for any resulting damages, and any such liability could exceed our resources. Although we maintain general liability insurance, we do not specifically insure against environmental liabilities.

## **II. Risk Factors Related Specifically To Our Stock**

### **Our common stock price is volatile and may decline even if our business is doing well.**

The market price of our common stock has been and is likely to continue to be highly volatile. Recent corporate events have caused our stock price to be particularly volatile. Market prices for securities of biotechnology and pharmaceutical companies, including ours, have historically been highly volatile, and the market has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. The following factors, among others, can have a significant effect on the market price of our securities:

- actions or decisions by the FDA and other comparable agencies,
- our clinical trial results,
- announcements of technological innovations or new therapeutic products by us or others,
- developments in patent or other proprietary rights,
- public concern as to the safety of drugs discovered or developed by us or others,
- future sales of significant amounts of our common stock by us or our stockholders,
- developments concerning potential agreements with collaborators,
- comments by securities analysts and general market conditions, and
- government regulation, including any legislation that may impact the price of any commercial products that we may seek to sell.

The realization of any of the risks described in these “Risk Factors” could have a negative effect on the market price of our common stock.

**In the future, our stock may be removed from listing on the Nasdaq quotation system and may not qualify for listing on any stock exchange, in which case it may be difficult to find a market in our stock.**

If our stock is no longer traded on a national trading market, it may be more difficult for you to sell shares that you own, and the price of the stock may be negatively affected. Currently, our securities are traded on the Nasdaq National Market. Nasdaq has several continued listing requirements, including a minimum-trading price. Previously, we have received notice from Nasdaq that our stock price fell below this minimum trading price which is subject to change from time to time. Although we have since come back into compliance with this Nasdaq requirement, it is possible that we will fall out of compliance with this or other Nasdaq continued listing criteria at some point in the future. Failure to comply with any one of several Nasdaq requirements may cause our stock to be removed from listing on Nasdaq. Should this happen, we may not be able to secure listing on other exchanges or quotation systems. This would have a negative effect on the price and liquidity of our stock.

**Future sales of our stock by our stockholders could negatively affect the market price of our stock.**

Sales of our common stock in the public market, or the perception that such sales could occur, could result in a drop in the market price of our securities. As of February 16, 2005, there were:

- Approximately 73,686,547 shares of common stock that have been issued in registered offerings or were otherwise freely tradable in the public markets.
- Approximately 72,303 shares of common stock eligible for resale in the public market pursuant to SEC Rule 144.
- 8,904,328 shares of common stock that may be issued on the exercise of outstanding stock options granted under our various stock option plans at a weighted average exercise price of \$4.43 per share.
- Approximately 876,266 shares of common stock reserved for future issuance pursuant to awards granted under our equity incentive and employee stock purchase plans, which shares are covered by effective registration statements under the Securities Act of 1933, as amended (the "Securities Act").
- Pursuant to a registration statement on Form S-3 filed on December 10, 2002, we registered an aggregate amount of \$125,000,000 of our common stock for issuance from time to time. As of February 16, 2005, there was \$53,937,500 of our common stock available for future issuance.

We cannot estimate the number of shares of common stock that may actually be resold in the public market because this will depend on the market price for our common stock, the individual circumstances of the sellers and other factors. We also have a number of institutional stockholders that own significant blocks of our common stock. If these stockholders sell significant portions of their holdings in a relatively short time, for liquidity or other reasons, the market price of our common stock could drop significantly.

**Failure to achieve and maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on our business and stock price.**

Section 404 of the Sarbanes-Oxley Act requires us to evaluate annually the effectiveness of our internal controls over financial reporting as of the end of each fiscal year beginning in 2004 and to include a management report assessing the effectiveness of our internal controls over financial reporting in all annual reports beginning with this annual report on Form 10-K for the fiscal year ended December 31, 2004. Section 404 also requires our independent registered public accounting firm to attest to, and report on, management's assessment of our internal controls over financial reporting. We have evaluated our internal controls over financial reporting as of December 31, 2004 in order to comply with Section 404 and have concluded that our disclosure controls and procedures are effective. In addition, our independent registered public accounting firm has reported on our assertion with respect to the effectiveness of our internal controls over financial reporting as of December 31, 2004. However, if we fail to maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time, we cannot assure you that we will be able to conclude in the future that we have effective internal controls over financial reporting in accordance with Section 404. If we fail to achieve and maintain a system of effective internal controls, it could have a material adverse effect on our business and stock price.

**Anti-takeover devices may prevent changes in our management.**

We have in place several anti-takeover devices, including a stockholder rights plan, which may have the effect of delaying or preventing changes in our management or deterring third parties from seeking to acquire significant positions in our common stock. For example, one anti-takeover device provides for a board of directors that is separated into three classes, with their terms in office staggered over three year periods. This has the effect of delaying a change in control of our board of directors without the cooperation of the incumbent board. In addition, our bylaws require stockholders to give us written notice of any proposal or director nomination within a specified period of time prior to the annual stockholder meeting, establish certain qualifications for a person to be elected or appointed to the board of directors during the pendency of certain business combination transactions, and do not allow stockholders to call a special meeting of stockholders.

We may also issue shares of preferred stock without further stockholder approval and upon terms that our board of directors may determine in the future. The issuance of preferred stock could have the effect of making it more difficult for a third party to acquire a majority of our outstanding stock, and the holders of such preferred stock could have voting, dividend, liquidation and other rights superior to those of holders of our common stock.

**We do not pay dividends and this may negatively affect the price of our stock.**

We have not paid any cash dividends since our inception and do not anticipate paying any cash dividends in the foreseeable future. The future price of our common stock may be negatively affected by the fact that we have not paid dividends.

**Item 2. Properties.**

We lease two adjacent buildings in San Diego, California covering a total of approximately 54,000 square feet. One building contains our research and development laboratories and clinical manufacturing facilities and the other contains our corporate offices and warehouse. Both building leases expire in July 2009. Each lease is subject to an escalation clause that provides for annual rent increases. We also lease approximately 1,500 square feet of

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laboratory space in San Diego, California for research and development purposes. This lease, which was extended in February 2005, expires in November 2005. We believe that these facilities will be adequate to meet our needs for the near term. Over the longer term, management believes that additional space can be secured at commercially reasonable rates.

**Item 3. Legal Proceedings.**

We are not currently a party to any legal proceedings.

**Item 4. Submission of Matters to a Vote of Security Holders.**

No matters were submitted to a vote of security holders during the three-month period ended December 31, 2004.

**PART II****Item 5. Market For Registrant's Common Equity and Related Stockholder Matters.****Information About Our Common Stock**

Our common stock trades on the Nasdaq National Market under the symbol "LJPC." Set forth below are the high and low sales prices for our common stock for each full quarterly period within the two most recent fiscal years.

	Prices	
	High	Low
Year Ended December 31, 2004		
First Quarter	\$ 4.34	\$ 2.59
Second Quarter	3.63	2.41
Third Quarter	3.75	1.63
Fourth Quarter	3.88	1.05

## Year Ended December 31, 2003

First Quarter	\$ 8.88	\$ 1.12
Second Quarter	4.31	1.45
Third Quarter	5.21	2.80
Fourth Quarter	4.50	2.82

We have never paid dividends on our common stock and we do not anticipate paying dividends in the foreseeable future. The number of record holders of our common stock as of February 25, 2005 was approximately 356.

**Information About Our Equity Compensation Plans**

Information regarding the securities authorized for issuance under our equity compensation plans required by Item 5 is incorporated by reference from our definitive proxy statement for the 2005 annual meeting of stockholders, which will be filed with the Securities and Exchange Commission no later than 120 days after the end of the fiscal year ended December 31, 2004.

[Table of Contents](#)**Item 6. Selected Financial Data.**

The following Selected Financial Data should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in Item 7 beginning at page 46 and the consolidated financial statements of the Company and related notes thereto beginning at page F-2 of this report.

	Years Ended December 31,				
	2000	2001	2002	2003	2004
(In thousands, except per share data)					
<b>Consolidated Statements of Operations Data:</b>					
Expenses:					
Research and development	\$ 12,933	\$ 23,228	\$ 37,696	\$ 32,385	\$ 33,169
General and administrative	2,706	4,268	6,944	6,908	7,568
Loss from operations	(15,639)	(27,496)	(44,640)	(39,293)	(40,737)
Interest expense	(6)	(30)	(51)	(210)	(190)
Interest income	1,846	2,843	1,373	665	383
Net loss	<u>\$ (13,799)</u>	<u>\$ (24,683)</u>	<u>\$ (43,318)</u>	<u>\$ (38,838)</u>	<u>\$ (40,544)</u>
Basic and diluted net loss per share	<u>\$ (0.53)</u>	<u>\$ (0.71)</u>	<u>\$ (1.03)</u>	<u>\$ (0.85)</u>	<u>\$ (0.68)</u>
Shares used in computing basic and diluted net loss per share	<u>26,138</u>	<u>34,604</u>	<u>42,046</u>	<u>45,804</u>	<u>59,704</u>
<b>Balance Sheet Data:</b>					
Working capital	\$ 37,215	\$ 44,387	\$ 46,490	\$ 28,914	\$ 17,539
Total assets	\$ 43,016	\$ 51,686	\$ 61,864	\$ 41,944	\$ 33,026
Noncurrent portion of obligations under capital leases and notes payable	\$ —	\$ —	\$ 1,111	\$ 1,341	\$ 716
Stockholders’ equity	\$ 39,742	\$ 48,545	\$ 53,799	\$ 36,427	\$ 26,001

[Table of Contents](#)**Quarterly Results of Operations**

The following is a summary of the unaudited quarterly results of operations for the years ended December 31, 2004 and 2003 (in thousands except per share data):

	Quarters Ended			
	Mar. 31,	Jun. 30,	Sept. 30,	Dec. 31,
<b>2004</b>				
Expenses:				
Research and development	\$ 6,801	\$ 6,811	\$ 10,656	\$ 8,901
General and administrative	1,518	1,654	2,280	2,116
Loss from operations	(8,319)	(8,465)	(12,936)	(11,017)
Interest (expense) income, net	(56)	97	104	48
Net loss	\$ (8,375)	\$ (8,368)	\$ (12,832)	\$ (10,969)
Basic and diluted net loss per share	\$ (0.15)	\$ (0.14)	\$ (0.21)	\$ (0.18)
Shares used in computing basic and diluted net loss per share	54,747	61,213	61,310	61,402
<b>2003</b>				
Expenses:				
Research and development	\$ 11,920	\$ 8,417	\$ 5,633	\$ 6,415
General and administrative	1,801	1,598	1,413	2,096
Loss from operations	(13,721)	(10,015)	(7,046)	(8,511)
Interest income, net	180	92	112	71
Net loss	\$ (13,541)	\$ (9,923)	\$ (6,934)	\$ (8,440)
Basic and diluted net loss per share	\$ (0.32)	\$ (0.23)	\$ (0.15)	\$ (0.17)
Shares used in computing basic and diluted net loss per share	42,480	42,569	47,089	50,970

**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.**

**Developments in 2004 to Date**

On February 16, 2004, we announced that our New Drug Application ("NDA") for Riquent® (abatumumab sodium), our clinical drug candidate for the treatment of lupus renal disease, had been accepted for review by the United States Food and Drug Administration (the "FDA"). Our NDA submission was prepared on our understanding that the FDA could potentially approve Riquent on the basis of our clinical trial results or under the accelerated approval regulation known as Subpart H. Under Subpart H, drugs in development for serious, life-threatening diseases with an unmet medical need can be approved on an accelerated basis if the FDA determines that the effect of the drug on a surrogate endpoint is reasonably likely to predict clinical benefit and that a post-marketing clinical trial can be successfully completed following drug approval which confirms the clinical benefit. As previously announced, in our Phase 3 and Phase 2/3 trials, patients treated with Riquent had significantly reduced levels of antibodies to double-stranded DNA ("dsDNA") compared with patients treated with placebo.

On August 2, 2004, we announced that we had reached a written agreement with the Cardio-Renal Division of the FDA under a special protocol assessment concerning a trial that is designed to meet the requirements of a post-marketing clinical benefit trial which would have to be conducted if Riquent were to be approved under Subpart H and that we had initiated the trial. The special protocol assessment process is a formal procedure that results in a written agreement between a company and the FDA that documents the design and planned analysis of a study used in support of a regulatory submission. Agreements reached under the special protocol assessment process are generally binding except in circumstances where public health concerns are raised or when there are significant changes in medical science or practice.

Based on the data that we submitted in our NDA, we expected that the FDA would notify us in mid-October of its decision regarding the approvability of Riquent. On October 14, 2004, we announced that we had received a letter from the FDA indicating that Riquent is approvable, but that an additional, randomized, double-blind study demonstrating the clinical benefit of Riquent would need to be completed prior to approval. The FDA letter indicated that the successful completion of the clinical trial that we initiated in August 2004 would appear to satisfy this requirement.

On November 23, 2004, we provided an update on our clinical and regulatory activities concerning Riquent. We announced that the clinical trial that we initiated in August 2004 was evaluating doses of 100 mg and 300 mg of Riquent over a 12-month period in lupus patients with a history of renal disease. We are currently recruiting patients in 37 of approximately 60 planned clinical trial sites in the United States. We also announced that we were conducting an additional study to evaluate higher doses of Riquent for use in the multi-dose study. To date, this additional study, conducted in healthy volunteers, has evaluated single doses of 600 mg in one group and 1200 mg in another group treated with Riquent or placebo. Both dose levels of Riquent appeared to be well tolerated and we may test additional dose levels in connection with this trial. Based on previous studies of Riquent, we believe that some lupus patients may benefit from higher doses of Riquent. Once the dosing study is completed, we plan to review the data from the study with the FDA and may choose to study additional doses of Riquent in the trial that we initiated in August 2004.

Our November 2004 announcement also noted that we had met with the European Agency for the Evaluation of Medicinal Products (the "EMA") which had designated two countries to lead the review of our European regulatory filing and that, due to the efforts involved



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in our ongoing discussions with the FDA, we anticipated a delay in filing our Marketing Authorization Application (“MAA”) for Riquent in Europe. We also announced that, while our discussions with the FDA were ongoing, we had taken steps to control certain costs associated with our research, development and other activities. Finally, we announced that, since receiving the approvable letter from the FDA in October 2004, we and the FDA had met twice to discuss the approvable letter and data concerning Riquent and that we had two additional meetings scheduled.

Since our November 2004 announcement, we completed three additional meetings with the FDA regarding the approvable letter and whether the FDA would consider approving Riquent under Subpart H. During our discussions with the FDA, we have provided the FDA with additional evidence in support of the potential efficacy of Riquent and with information that we believe supports a determination that antibodies to dsDNA are an appropriate surrogate endpoint for lupus renal disease and that the magnitude of the effect of Riquent on antibodies to dsDNA is reasonably likely to predict clinical benefit, which is a requirement for any potential approval under Subpart H. Many of the analyses of data from our clinical trials of Riquent were conducted on a retrospective basis and the p values reported are nominal, without adjustment for multiple comparisons. While we are in discussions with the FDA regarding the possibility of approval under Subpart H, we are continuing the clinical benefit study that we initiated in August 2004 in order to satisfy the additional trial requirement set forth in the FDA’s October 2004 approvable letter. In the event that the FDA approves Riquent under Subpart H, we expect that we would continue the ongoing trial as a post-marketing benefit trial, which would need to be completed after approval.

We currently expect to continue our discussions with the FDA regarding possible Subpart H approval, although there can be no guarantee that any future meetings with the FDA can be held in a timely manner, or at all, or that our meetings with the FDA will eliminate or change the current FDA requirement that we conduct an additional trial for Riquent prior to any further consideration of possible approval.

On February 2, 2005, we announced that we had completed a public offering of 12,250,000 shares of our common stock. The net proceeds to us, after expenses, were approximately \$15.8 million.

## **Overview**

Since our inception in May 1989, we have devoted substantially all of our resources to the research and development of technology and potential drugs to treat antibody-mediated diseases. We have never generated any revenue from product sales and have relied on public and private offerings of securities, revenue from collaborative agreements, equipment financings and interest income on invested cash balances for our working capital. Based on the results of the FDA’s recent review of our NDA, and depending on the outcome of our further discussions with the FDA and other regulatory agencies and our continuing analysis of the data from our clinical trials of Riquent, our research and development expenses may increase significantly in the future. For example, we have initiated a clinical trial of Riquent that the FDA has indicated appears to satisfy the requirement that we conduct an additional randomized, double-blind study. In addition, our research and development expenses may increase if we initiate any additional clinical studies of Riquent or if we increase our activities related any additional drug candidates. If we obtain Subpart H approval, our expenses may significantly increase if we increase our commercial-scale manufacturing capabilities or our marketing and sales activities. Our activities to date are not as broad in depth or scope as the activities we may undertake in the future, and our historical operations and the financial information included in this report are not necessarily indicative of our future operating results or financial condition.

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We expect our net loss to fluctuate from quarter to quarter as a result of the timing of expenses incurred and the revenues earned from any potential collaborative arrangements we may establish. Some of these fluctuations may be significant. As of December 31, 2004, our accumulated deficit was approximately \$232.9 million.

Our business is subject to significant risks, including, but not limited to, our clear need for additional financing, the risks inherent in research and development efforts, including clinical trials, the lengthy, expensive and uncertain process of seeking regulatory approvals, uncertainties associated with both obtaining and enforcing patents, the potential enforcement of the patent rights of others against us, uncertainties regarding government reforms regarding product pricing and reimbursement levels, technological change, competition, manufacturing uncertainties, our lack of marketing experience, the uncertainty of receiving future revenue from product sales or other sources such as collaborative relationships, and the uncertainty of future profitability. Even if our product candidates appear promising at an early stage of development, they may not reach the market for numerous reasons, including the possibilities that the products will be ineffective or unsafe during clinical trials, will fail to receive necessary regulatory approvals, will be difficult to manufacture on a large scale, will be uneconomical to market or will be precluded from commercialization by the proprietary rights of third parties or competing products.

### **Critical Accounting Policies and Estimates**

The discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We evaluate our estimates on an ongoing basis, including those related to patent costs and income taxes. We base our estimates on historical experience and on other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from these estimates under different assumptions or conditions.

We believe the following critical accounting policy affects the significant judgments and estimates used in the preparation of our consolidated financial statements (see Note 1 to our consolidated financial statements).

#### *Impairment and useful lives of long-lived assets.*

We regularly review our long-lived assets for impairment. Our long-lived assets include costs incurred to file our patent applications. We evaluate the recoverability of long-lived assets by measuring the carrying amount of the assets against the estimated undiscounted future cash flows associated with them. At the time such evaluations indicate that the future undiscounted cash flows of certain long-lived assets are not sufficient to recover the carrying value of such assets, the assets are adjusted to their fair values. The estimation of the undiscounted future cash flows associated with long-lived assets requires judgment and assumptions that could differ materially from the actual results. While we believe our current and historical operating and cash flow losses are indicators of impairment, we believe the future cash flows to be received from the long-lived assets will exceed the assets' carrying value, and accordingly we have not recognized any material impairment losses through December 31, 2004.

Costs related to successful patent applications are amortized using the straight-line method over the lesser of the remaining useful life of the related technology or the remaining

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patent life, commencing on the date the patent is issued. Legal costs and expenses incurred in connection with pending patent applications have been capitalized. We expense all costs related to abandoned patent applications. If we elect to abandon any of our currently issued or unissued patents, the related expense could be material to our results of operations for the period of abandonment. The estimation of useful lives for long-lived assets requires judgment and assumptions that could differ materially from the actual results. In addition, our results of operations could be materially impacted if we begin amortizing the costs related to unissued patents.

### **Results of Operations**

#### ***Years Ended December 31, 2004, 2003 and 2002***

*Research and Development Expense.* Our research and development expense increased slightly to \$33.2 million for the year ended December 31, 2004 from \$32.4 million in 2003 and decreased from \$37.7 million in 2002. The increase in research and development expenses in 2004 from 2003 was primarily due to the purchase of raw materials, which we expect to use in the production of validation lots of Riquent in 2005. We expect to use the validation lots in connection with our ongoing clinical trial and for other purposes. This increase was mostly offset by decreases in costs incurred for clinical studies of Riquent, including the open-label follow-on clinical trial of Riquent which was closed in April 2003 and the unblinding and analysis of the data from the Phase 3 trial of Riquent in the first quarter of 2003. The decrease in research and development expense in 2004 from 2002 was primarily due to a decrease in expenses related to the Phase 3 clinical trial of Riquent which was completed in December 2002, the open-label follow-on clinical trial of Riquent which was initiated in July 2002 and closed in April 2003, and the Phase 1/2 clinical trial of LJP 1082 which was completed in October 2002. These decreases were partially offset by an increase in personnel costs as well as the increase from the purchase of raw materials noted above.

Research and development expense of \$33.2 million for the year ended December 31, 2004 consisted of \$29.0 million for lupus research and development related expense, \$1.6 million for thrombosis research and development related expense and \$2.6 million for other research and development related expense. Total lupus related research and development expense consisted primarily of salaries and other costs related to research, manufacturing and clinical personnel, raw materials for the production of Riquent for validation lots, fees for consulting and professional outside services, clinical research organization fees, depreciation expense and lease expense. Total thrombosis related research and development expense consisted primarily of salaries for research and development personnel, raw materials for the production of LJP 1082 for research purposes and depreciation expense. Total other research and development expense consisted primarily of salaries for research and development personnel, research supplies, lease expense and fees for consulting and professional outside services.

Our research and development expense may increase significantly in the future. For example, we have initiated a clinical trial of Riquent that the FDA has indicated appears to satisfy the requirement that we conduct an additional randomized, double-blind study. This study is expected to involve approximately 500 to 600 patients, cost at least \$60 million, and take several years to complete. Additionally, our research and development expenses may increase significantly if we initiate any additional clinical studies of Riquent, if we increase our activities related to the development of additional drug candidates or, if we obtain Subpart H approval, we increase our commercial-scale manufacturing capabilities.

*General and Administrative Expense.* Our general and administrative expense increased to \$7.6 million for the year ended December 31, 2004 from \$6.9 million in 2003 and 2002. The

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increase in general and administrative expense in 2004 as compared to 2003 and 2002 was due to an increase in consulting and professional fees for pre-marketing, intellectual property and other administrative activities. General and administrative expense may increase in the future to support clinical trials and possible increases in research and development, manufacturing and commercialization activities.

*Interest Income and Expense.* Our interest income decreased to \$0.4 million for the year ended December 31, 2004 from \$0.7 million in 2003 and \$1.4 million in 2002. The decrease in interest income in 2004 was due to lower average interest rates on our investments and lower average balances of cash and short-term investments as compared to 2003 and 2002. Interest expense was \$0.2 million for the year ended December 31, 2004, \$0.2 million in 2003 and \$51,000 in 2002. The higher interest expense in 2004 and 2003 as compared to 2002 was due to new notes payable obligations entered into in 2004 and 2003 to finance equipment purchases.

*Net Operating Loss and Research Tax Credit Carryforwards.* At December 31, 2004, we had available net operating loss carryforwards and research tax credit carryforwards of approximately \$220.8 million and \$11.7 million, respectively, for federal income tax purposes, which will begin to expire in 2005 unless utilized. Approximately \$2.2 million of the federal net operating loss carryforward is set to expire in 2005 unless utilized and approximately \$0.1 million of the federal research tax credit carryforward is set to expire in 2005 unless utilized. At December 31, 2004, we had available net operating loss carryforwards and research tax credit carryforwards of approximately \$93.4 million and \$6.2 million, respectively, for California income tax purposes, which will begin to expire in 2009 unless utilized. Approximately \$0.3 million of the California net operating loss carryforward is set to expire in 2009 unless utilized.

## **Liquidity and Capital Resources**

From inception through December 31, 2004, we have incurred a cumulative net loss of approximately \$232.9 million and have financed our operations through public and private offerings of securities, revenues from collaborative agreements, equipment financings and interest income on invested cash balances. From inception through December 31, 2004, we had raised \$258.1 million in net proceeds from sales of equity securities.

At December 31, 2004, we had \$23.1 million in cash, cash equivalents and short-term investments, as compared to \$32.1 million at December 31, 2003. Our working capital at December 31, 2004 was \$17.5 million, as compared to \$28.9 million at December 31, 2003. The decrease in cash, cash equivalents and short-term investments resulted from the use of our financial resources to fund our manufacturing and clinical trial activities and research and development efforts, and for other general corporate purposes, partially offset by net proceeds of \$29.4 million we received from the sale of an aggregate of 10,000,000 shares of our common stock in February and March 2004. We invest our cash in United States government-backed securities, money market funds and debt instruments of financial institutions and corporations with strong credit ratings. As of December 31, 2004, we classified all of our investments as available-for-sale securities because we expect to sell them in order to support our current operations regardless of their maturity dates. As of December 31, 2004, available-for-sale securities and cash equivalents of \$11.5 million have stated maturity dates of one year or less and \$10.2 million have maturity dates after one year.

As of December 31, 2004, we had acquired an aggregate of \$15.1 million in property and equipment, of which \$0.1 million and \$3.5 million of equipment is financed under capital lease and notes payable obligations, respectively. In addition, we lease our office and laboratory facilities and certain equipment under operating leases. We have also entered into a \$1.4 million purchase commitment with a potential third party manufacturer of materials for Riquent. The

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purpose of the agreement is to qualify the manufacturer as a manufacturer that we could use in the commercial production of Riquent if we obtain regulatory approval. The agreement includes a cancellation fee of \$0.4 million. We have also entered into non-cancelable purchase commitments for an aggregate of \$0.8 million with third-party manufacturers of materials to be used in the production of our validation lots of Riquent. In addition, in December 2004, we entered into an agreement with a third-party to provide clinical trial services, requiring a \$0.2 million advance upon execution of the agreement. We intend to use our current financial resources to fund our obligations under these purchase commitments. In the future, we may increase our investments in property and equipment if we expand our research and development and manufacturing facilities and capabilities.

During the period ended December 31, 2004, we entered into three additional note payable obligations for \$189,000, \$132,000, and \$157,000, the proceeds of which we used to finance the purchase of equipment. In June 2004, we exercised an option to extend a lease for additional research space for nine months, which we extended for an additional nine months in February 2005. In July 2004, we exercised an option to extend the leases for our research and development laboratories, clinical manufacturing facilities and office space for an additional five years. The following table summarizes our contractual obligations at December 31, 2004. Long-term debt and capital lease obligations include interest.

	Payment due by period (in thousands)				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Long-Term Debt Obligations	\$ 1,780	\$ 1,024	\$ 756	\$ —	\$ —
Capital Lease Obligations	14	14	—	—	—
Operating Lease Obligations	3,987	1,025	2,463	499	—
Purchase Obligations	2,526	2,526	—	—	—
Total	\$ 8,307	\$ 4,589	\$ 3,219	\$ 499	\$ —

We intend to use our financial resources to fund our research and development efforts, the current clinical trial of Riquent, possible future clinical trials, manufacturing and commercialization activities, and for working capital and other general corporate purposes. The amounts that we actually spend for each purpose may vary significantly depending on numerous factors, including the timing of any regulatory applications and approvals, the outcome of our meetings with regulatory authorities, the continued analysis of the clinical trial data of Riquent, results from current and future clinical trials, and technological developments. Expenditures also will depend on any establishment of collaborative arrangements and contract research as well as the availability of other funding or financings. If our cash requirements exceed our current projections, we may need additional financing sooner than currently expected. There can be no assurance that future funds will be available to us on acceptable terms, if at all. In the future, it is possible that we will not have adequate resources to support continuation of our business activities.

We anticipate that our existing cash, cash investments, including the net proceeds of \$15.8 million that we received from the sale of 12,250,000 shares of our common stock in February 2005, and interest earned thereon, will be sufficient to fund our operations as currently planned into the first quarter of 2006. This projection is based on the assumption that we do not obtain Subpart H approval, that we do not raise any additional funds, either through the sale of additional securities or a collaborative agreement with a corporate partner, that we do not engage in any significant commercialization activities, and that we take one or more significant cost reducing measures, including ceasing the enrollment of additional patients in, or halting, the ongoing multi-dose trial of Riquent that we initiated in August 2004, further reducing the expenses associated with our other current drug development programs and/or significantly reducing our workforce.

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We have no current means of generating cash flow from operations. Our lead drug candidate, Riquent, will not generate revenues, if at all, until it has received regulatory approval and has been successfully manufactured, marketed and sold. This process, if completed, could take a significant amount of time. Our other drug candidates are much less developed than Riquent. There can be no assurance that our product development efforts with respect to Riquent or any other drug candidate will be successfully completed, that required regulatory approvals will be obtained or that any product, if introduced, will be successfully marketed or achieve commercial acceptance. Accordingly, we must continue to rely on outside sources of financing to meet our capital needs for the foreseeable future.

We will continue to seek capital through any number of means, including by issuing our equity securities and by establishing one or more collaborative arrangements. However, there can be no assurance that additional financing will be available to us on acceptable terms, if at all, and our negotiating position in capital-raising efforts may worsen as we continue to use existing resources or if the development of Riquent is delayed or terminated. There is also no assurance that we will be able to enter into further collaborative relationships.

### **Item 7A. Quantitative and Qualitative Disclosures About Market Risk.**

We invest our excess cash in interest-bearing investment-grade securities which we sell from time to time to support our current operations. We do not utilize derivative financial instruments, derivative commodity instruments or other market risk sensitive instruments, positions or transactions in any material fashion. Although the investment-grade securities which we hold are subject to changes in the financial standing of the issuer of such securities, we do not believe that we are subject to any material risks arising from the maturity dates of the debt instruments or changes in interest rates because the interest rates of the securities in which we invest that have a maturity date greater than one year are reset periodically within time periods not exceeding 49 days. We currently do not invest in any securities that are materially and directly affected by foreign currency exchange rates or commodity prices.

### **Item 8. Financial Statements and Supplementary Data.**

The financial statements and supplementary data required by this item is set forth above under the caption "Quarterly Results of Operations" on page 45 and at the end of this report beginning on page F-2 and is incorporated herein by reference.

### **Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.**

None.

### **Item 9A. Controls and Procedures.**

Our management, with the participation of our principal executive and principal financial officers, has evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2004. Based on this evaluation, our principal executive and principal financial officers concluded that our disclosure controls and procedures are effective. The evaluation did not identify any change in our internal controls over financial reporting that occurred during the quarter ended December 31, 2004 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## **Management Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) or 15d-15(f) promulgated under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2004. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework.

Based on our assessment, management concluded that, as of December 31, 2004, our internal control over financial reporting is effective based on those criteria.

Our independent registered public accounting firm that audited our consolidated financial statements included in this annual report on Form 10-K has issued an audit report on our assessment of our internal control over financial reporting. This report appears below.

## **Item 9B. Other Information.**

### **Report Of Independent Registered Public Accounting Firm On Internal Control Over Financial Reporting**

The Board of Directors and Stockholders  
La Jolla Pharmaceutical Company

We have audited management's assessment, included in the accompanying Management Report on Internal Control over Financial Reporting, that La Jolla Pharmaceutical Company maintained effective internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring

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Organizations of the Treadway Commission (the COSO criteria). La Jolla Pharmaceutical Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that La Jolla Pharmaceutical Company maintained effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, La Jolla Pharmaceutical Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of La Jolla Pharmaceutical Company as of December 31, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2004 of La Jolla Pharmaceutical Company and our report dated February 28, 2005 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

San Diego, California  
February 28, 2005



**PART III**

**Item 10. Directors and Executive Officers of the Registrant.**

Except for information concerning our executive officers, which is included under the caption "Executive Officers of the Registrant" beginning on page 24 of this report, the information required by Item 10 is incorporated by reference to our definitive proxy statement for our 2005 annual meeting of stockholders, which will be filed with the Securities and Exchange Commission no later than 120 days after the close of the fiscal year ended December 31, 2004.

**Item 11. Executive Compensation.**

The information required by Item 11 is incorporated by reference to our definitive proxy statement for our 2005 annual meeting of stockholders, which will be filed with the Securities and Exchange Commission no later than 120 days after the close of the fiscal year ended December 31, 2004.

**Item 12. Security Ownership of Certain Beneficial Owners and Management.**

The information required by Item 12 is incorporated by reference to our definitive proxy statement for our 2005 annual meeting of stockholders, which will be filed with the Securities and Exchange Commission no later than 120 days after the close of the fiscal year ended December 31, 2004.

**Item 13. Certain Relationships and Related Transactions.**

None.

**Item 14. Principal Accountant Fees and Services.**

The information required by Item 14 is incorporated by reference to our definitive proxy statement for our 2005 annual meeting of stockholders, which will be filed with the Securities and Exchange Commission no later than 120 days after the close of the fiscal year ended December 31, 2004.

**PART IV**

**Item 15. Exhibits and Financial Statement Schedules.**

(a) Documents filed as part of this report.

1. Consolidated financial statements.

The following consolidated financial statements of La Jolla Pharmaceutical Company are included in Item 8:

Report Of Independent Registered Public Accounting Firm	F-1
Consolidated Balance Sheets at December 31, 2004 and 2003	F-2
Consolidated Statements of Operations for the years ended December 31, 2004, 2003 and 2002	F-3
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2004, 2003 and 2002	F-4
Consolidated Statements of Cash Flows for the years ended December 31, 2004, 2003 and 2002	F-5
Notes to consolidated financial statements	F-6

2. Financial Statement Schedules.

These schedules are omitted because they are not required, or are not applicable, or the required information is shown in the consolidated financial statements or notes thereto.

3. Exhibits.

The exhibit index attached to this report is incorporated by reference herein.

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**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

LA JOLLA PHARMACEUTICAL COMPANY

By: /s/ Steven B. Engle

March 9, 2005

Steven B. Engle  
Chairman of the Board and  
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Steven B. Engle</u> Steven B. Engle	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	March 9, 2005
<u>/s/ Gail A. Sloan</u> Gail A. Sloan	Vice President of Finance and Secretary (Principal Financial and Accounting Officer)	March 9, 2005
<u>/s/ Thomas H. Adams</u> Thomas H. Adams, Ph.D.	Director	March 9, 2005
<u>/s/ William E. Engbers</u> William E. Engbers	Director	March 9, 2005
<u>/s/ Robert A. Fildes</u> Robert A Fildes, Ph.D.	Director	March 9, 2005
<u>/s/ Stephen M. Martin</u> Stephen M. Martin	Director	March 9, 2005
<u>/s/ Craig R. Smith</u> Craig R. Smith, M.D.	Director	March 9, 2005

Report Of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders  
La Jolla Pharmaceutical Company

We have audited the accompanying consolidated balance sheets of La Jolla Pharmaceutical Company as of December 31, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of La Jolla Pharmaceutical Company at December 31, 2004 and 2003, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2004, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of La Jolla Pharmaceutical Company's internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2005 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Diego, California  
February 28, 2005

## La Jolla Pharmaceutical Company

## Consolidated Balance Sheets

(In thousands, except share and per share data)

	December 31,	
	2004	2003
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 2,861	\$ 4,021
Short-term investments	20,204	28,112
Other current assets	783	957
Total current assets	23,848	33,090
Property and equipment, net	6,059	6,206
Patent costs and other assets, net	3,119	2,648
	<u>\$ 33,026</u>	<u>\$ 41,944</u>
<b>Liabilities and stockholders' equity</b>		
Current liabilities:		
Accounts payable	\$ 1,455	\$ 278
Accrued clinical/regulatory expenses	647	524
Accrued expenses	2,061	865
Accrued payroll and related expenses	1,210	1,692
Current portion of obligations under capital leases	14	66
Current portion of obligations under notes payable	922	751
Total current liabilities	6,309	4,176
Noncurrent portion of obligations under capital leases	—	29
Noncurrent portion of notes payable	716	1,312
Commitments:		
Stockholders' equity:		
Preferred stock, \$0.01 par value; 8,000,000 shares authorized, no shares issued or outstanding	—	—
Common stock, \$0.01 par value; 100,000,000 shares authorized, 61,508,850 and 51,124,533 shares issued and outstanding at December 31, 2004 and 2003, respectively	615	511
Additional paid-in capital	258,358	228,394
Other comprehensive loss	(23)	(73)
Accumulated deficit	(232,949)	(192,405)
Total stockholders' equity	26,001	36,427
	<u>\$ 33,026</u>	<u>\$ 41,944</u>

*See accompanying notes.*

La Jolla Pharmaceutical Company  
Consolidated Statements of Operations

(In thousands, except per share data)

	Years Ended December 31,		
	2004	2003	2002
Expenses:			
Research and development	\$ 33,169	\$ 32,385	\$ 37,696
General and administrative	7,568	6,908	6,944
Total expenses	40,737	39,293	44,640
Loss from operations	(40,737)	(39,293)	(44,640)
Interest expense	(190)	(210)	(51)
Interest income	383	665	1,373
Net loss	\$ (40,544)	\$ (38,838)	\$ (43,318)
Basic and diluted net loss per share	\$ (0.68)	\$ (0.85)	\$ (1.03)
Shares used in computing basic and diluted net loss per share	59,704	45,804	42,046

*See accompanying notes.*

La Jolla Pharmaceutical Company  
Consolidated Statements of Stockholders' Equity

(In thousands)  
For the Years Ended December 31, 2002, 2003 and 2004

	Common stock		Additional paid-in capital	Other comprehensive income (loss)	Accumulated deficit	Total stockholders' equity
	Shares	Amount				
Balance at December 31, 2001	35,282	\$ 353	\$ 158,223	\$ 218	\$ (110,249)	\$ 48,545
Issuance of common stock, net	7,000	70	48,230	—	—	48,300
Issuance of common stock under Employee Stock Purchase Plan	77	1	284	—	—	285
Exercise of stock options	102	1	168	—	—	169
Net loss	—	—	—	—	(43,318)	(43,318)
Net unrealized losses on available-for-sale securities	—	—	—	(182)	—	(182)
Comprehensive loss						(43,500)
Balance at December 31, 2002	42,461	425	206,905	36	(153,567)	53,799
Issuance of common stock, net	8,150	81	20,824	—	—	20,905
Issuance of common stock under Employee Stock Purchase Plan	313	3	462	—	—	465
Exercise of stock options	201	2	203	—	—	205
Net loss	—	—	—	—	(38,838)	(38,838)
Net unrealized losses on available-for-sale securities	—	—	—	(109)	—	(109)
Comprehensive loss						(38,947)
Balance at December 31, 2003	51,125	511	228,394	(73)	(192,405)	36,427
Issuance of common stock, net	10,000	100	29,263	—	—	29,363
Issuance of common stock under Employee Stock Purchase Plan	379	4	571	—	—	575
Exercise of stock options	5	—	12	—	—	12
Stock compensation expense	—	—	118	—	—	118
Net loss	—	—	—	—	(40,544)	(40,544)
Net unrealized gains on available-for-sale securities	—	—	—	50	—	50
Comprehensive loss						(40,494)
Balance at December 31, 2004	61,509	\$ 615	\$ 258,358	\$ (23)	\$ (232,949)	\$ 26,001

See accompanying notes.

La Jolla Pharmaceutical Company  
Consolidated Statements of Cash Flows  
(In thousands)

	Years Ended December 31,		
	2004	2003	2002
<b>Operating activities</b>			
Net loss	\$ (40,544)	\$ (38,838)	\$ (43,318)
Adjustments to reconcile net loss to net cash used for operating activities:			
Depreciation and amortization	2,083	1,918	1,391
Loss on write-off/disposal of patents and property and equipment	198	176	–
Stock compensation expense	118	–	–
Accretion of interest income	26	74	426
Changes in operating assets and liabilities:			
Other current assets	174	(238)	(151)
Accrued clinical/regulatory expenses	123	(1,930)	1,751
Accounts payable and accrued expenses	2,373	(1,531)	854
Accrued payroll and related expenses	(482)	360	881
Net cash used for operating activities	<u>(35,931)</u>	<u>(40,009)</u>	<u>(38,166)</u>
<b>Investing activities</b>			
Purchases of short-term investments	(37,365)	(56,152)	(71,333)
Sales of short-term investments	45,297	69,385	29,942
Maturities of short-term investments	–	5,587	30,696
Additions to property and equipment	(1,882)	(1,809)	(5,143)
Increase in patent costs and other assets	(723)	(549)	(348)
Net cash provided by (used for) investing activities	<u>5,327</u>	<u>16,462</u>	<u>(16,186)</u>
<b>Financing activities</b>			
Net proceeds from issuance of common stock	29,950	21,575	48,754
Proceeds from issuance of notes payable	478	1,161	1,656
Payments on notes payable	(903)	(643)	(111)
Payments on obligations under capital leases	(81)	(135)	(269)
Net cash provided by financing activities	<u>29,444</u>	<u>21,958</u>	<u>50,030</u>
Decrease in cash and cash equivalents	(1,160)	(1,589)	(4,322)
Cash and cash equivalents at beginning of period	4,021	5,610	9,932
Cash and cash equivalents at end of period	<u>\$ 2,861</u>	<u>\$ 4,021</u>	<u>\$ 5,610</u>
<b>Supplemental disclosure of cash flow information:</b>			
Interest paid	<u>\$ 190</u>	<u>\$ 210</u>	<u>\$ 51</u>
<b>Supplemental schedule of noncash investing and financing activities:</b>			
Capital lease obligations incurred for property and equipment	<u>\$ –</u>	<u>\$ 170</u>	<u>\$ 162</u>

See accompanying notes.



La Jolla Pharmaceutical Company

Notes to Consolidated Financial Statements

**1. Organization and Summary of Significant Accounting Policies**

**Organization and Business Activity**

La Jolla Pharmaceutical Company (the "Company") is a biopharmaceutical company focused on the research and development of highly specific therapeutic products for the treatment of certain life-threatening antibody-mediated diseases. These diseases, including autoimmune conditions such as lupus, are caused by abnormal B cell production of antibodies that attack healthy tissues. Current therapies for these autoimmune disorders address only symptoms of the disease, or nonspecifically suppress the normal operation of the immune system, which often results in severe, negative side effects and hospitalization. The Company believes that its drug candidates, called Toleragens®, have the potential to treat the underlying cause of many antibody-mediated diseases without these severe, negative side effects. The Company's primary clinical drug candidate is known as Riquent®, previously referred to as LJP 394, a drug for the treatment of lupus. The Company completed its Phase 3 clinical trial for Riquent in December 2002 and submitted a New Drug Application with the FDA for Riquent on December 14, 2003. In October 2004, the Company received a letter from the FDA indicating that Riquent is approvable but that an additional randomized, double-blind study demonstrating the clinical benefit of Riquent would need to be completed prior to approval. Since the Company received its approvable letter from the FDA, the Company has had several meetings with the FDA regarding the approvable letter and whether the FDA would consider approving Riquent under Subpart H. Under Subpart H, drugs in development for serious, life-threatening diseases with an unmet medical need can be approved on an accelerated basis if the FDA determines that the effect of the drug on a surrogate endpoint is reasonably likely to predict clinical benefit and that a post-marketing clinical trial can be successfully completed following drug approval which confirms the clinical benefit.

The Company actively seeks additional financing to fund its research and development efforts and to commercialize its technologies. There is no assurance such financing will be available to the Company when needed or that such financing would be available under favorable terms.

The Company believes that patents and other proprietary rights are important to its business. The Company's policy is to file patent applications to protect its technology, inventions and improvements to its inventions that are considered important to the development of its business. The patent positions of biotechnology firms, including the Company, are uncertain and involve complex legal and factual questions for which important legal principles are largely unresolved. There can be no assurance that any additional patents will be issued, that the scope of any patent protection will be sufficient, or that any current or future issued patent will be held valid if subsequently challenged.

**Basis of Presentation**

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. This basis of accounting contemplates the recovery of the Company's assets and the satisfaction of liabilities in the normal course of business. The Company has incurred operating losses since its inception and has an accumulated deficit of \$232.9 million at December 31, 2004. The Company believes its available cash, cash investments, including the net proceeds of \$15.8 million received by the Company from the sale of 12,250,000 shares of its common stock in February 2005 (see Note 9), and interest earned thereon, will be sufficient to fund its operations as currently planned into the first quarter of 2006. This projection is based on the assumption that the Company does not obtain Subpart H approval, that it does not raise any additional funds, either through the sale of additional securities or a collaborative agreement with a corporate partner, that it does not engage in any significant

La Jolla Pharmaceutical Company

Notes to Consolidated Financial Statements

**1. Organization and Summary of Significant Accounting Policies (continued)**

commercialization activities, and that it takes one or more significant cost reducing measures, including ceasing the enrollment of additional patients in, or halting, the ongoing multi-dose trial of Riquent that it initiated in August 2004, further reducing the expenses associated with its other current drug development programs and/or significantly reducing its workforce.

**Principles of Consolidation**

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiary, La Jolla Limited, which was incorporated in England in October 2004.

The consolidation of foreign subsidiaries requires financial statement translation in accordance with Statement of Financial Accounting Standard ("SFAS") No. 52. Assets and liabilities are translated into U.S. dollars at year-end exchange rates. Statements of operations and cash flows are translated at the average exchange rates for the year.

**Use of Estimates**

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and disclosures made in the accompanying notes to the consolidated financial statements. Actual results could differ materially from those estimates.

**Cash, Cash Equivalents and Short-Term Investments**

Cash and cash equivalents consist of cash and highly liquid investments which include money market funds and debt securities with maturities from purchase date of three months or less and are stated at market. Short-term investments mainly consist of debt securities with maturities from purchase date of greater than three months. In accordance with Financial Accounting Standards Board ("FASB") SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, management has classified the Company's cash equivalents and short-term investments as available-for-sale securities in the accompanying consolidated financial statements. Available-for-sale securities are stated at fair market value, with unrealized gains and losses reported in other comprehensive income (loss). Realized gains and losses and declines in value judged to be other-than-temporary on available-for-sale securities are

La Jolla Pharmaceutical Company

Notes to Consolidated Financial Statements

**1. Organization and Summary of Significant Accounting Policies (continued)**

included in interest income and have been immaterial for each of the years presented. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in interest income.

**Fair Value of Financial Instruments**

Financial instruments, including cash and cash equivalents, accounts payable and accrued expenses, are carried at cost, which management believes approximates fair value because of the short-term maturity of these instruments. Short-term investments are carried at fair value. None of the Company's debt instruments that were outstanding at December 31, 2004 have readily ascertainable market values; however, the carrying values are considered to approximate their fair values.

**Concentration of Risk**

Cash, cash equivalents and short-term investments are financial instruments which potentially subject the Company to concentrations of credit risk. The Company deposits its cash in financial institutions. At times, such deposits may be in excess of insured limits. The Company invests its excess cash in United States government-backed securities, debt instruments of financial institutions and corporations with strong credit ratings and money market funds. The Company has established guidelines relative to the diversification of its cash investments and their maturities in an effort to maintain safety and liquidity. These guidelines are periodically reviewed and modified to take advantage of trends in yields and interest rates. To date, the Company has not experienced any impairment losses on its cash, cash equivalents and short-term investments.

**Impairment of Long-Lived Assets and Assets to Be Disposed Of**

In accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, if indicators of impairment exist, the Company assesses the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through the undiscounted future operating cash flows. If impairment is indicated, the Company measures the amount of such impairment by comparing the carrying value of the asset to the fair value of the asset and records the impairment as a reduction in the carrying value of the related asset and a charge to operating results. Although the Company's current and historical operating and cash flow losses are indicators of impairment, the Company believes the future cash flows to be received from the long-lived assets will exceed the assets' carrying value, and accordingly the Company has not recognized any material impairment losses through December 31, 2004.

**Property and Equipment**

Property and equipment is stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets (primarily five years). Leasehold improvements and equipment under capital leases are stated at cost and depreciated on a straight-line basis over the shorter of the estimated useful life or the lease term.

## La Jolla Pharmaceutical Company

## Notes to Consolidated Financial Statements

**1. Organization and Summary of Significant Accounting Policies (continued)**

Property and equipment is comprised of the following (in thousands):

	December 31,		—
	2004	2003	
Laboratory equipment	\$ 6,636	\$ 6,174	
Computer equipment and software	4,818	4,121	
Furniture and fixtures	473	428	
Leasehold improvements	3,139	2,596	
	15,066	13,319	
Less: Accumulated depreciation	(9,007)	(7,113)	
	<u>\$ 6,059</u>	<u>\$ 6,206</u>	

Depreciation expense for the years ending December 31, 2004, 2003 and 2002 was \$1,978,000, \$1,807,000 and \$1,192,000, respectively.

**Patents**

The Company has filed numerous patent applications with the United States Patent and Trademark Office and in foreign countries. Legal costs and expenses incurred in connection with pending patent applications have been capitalized. Costs related to successful patent applications are amortized using the straight-line method over the lesser of the remaining useful life of the related technology or the remaining patent life, commencing on the date the patent is issued. Total cost and accumulated amortization were \$3,412,000 and \$545,000 at December 31, 2004 and \$2,905,000 and \$488,000 at December 31, 2003, respectively. Capitalized costs related to patent applications are charged to operations at the time a determination is made not to pursue such applications.

**Stock-Based Compensation**

As allowed under SFAS No. 123, *Accounting and Disclosure of Stock-Based Compensation*, the Company has elected to continue to account for stock option grants in accordance with Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* and related interpretations ("APB 25"). The Company generally grants stock options for a fixed number of shares to employees and directors with an exercise price equal to the fair value of the shares at the date of grant and therefore, under APB 25, recognizes no compensation expense for such stock option grants.

Pro forma information regarding net loss and net loss per share is required by SFAS No. 123. SFAS No. 123 requires that the information be determined as if the Company has accounted for its employee stock plans granted after December 31, 1994 under the fair value method prescribed by SFAS No. 123. The fair value of the options granted was estimated at the date of grant using a Black-Scholes option pricing model with the following weighted-average assumptions:

## La Jolla Pharmaceutical Company

## Notes to Consolidated Financial Statements

**1. Organization and Summary of Significant Accounting Policies (continued)**

	2004	December 31,		2002
		2003		
(i) Risk-free interest rate	3.9 %	2.7 %		3.0 %
(ii) Volatility factor of the expected market price of the Company's common stock	1.279	1.225		1.056
(iii) Weighted-average expected life	5.9	4.9		4.9
(iv) Dividend yield	0.0 %	0.0 %		0.0 %

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including the expected stock price volatility. Because the Company's stock options have characteristics significantly different from those of traded options and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion the existing models do not necessarily provide a reliable single measure of the fair value of its stock options.

For purposes of pro forma disclosures, the estimated fair value of the options is expensed over the options' vesting period. The Company's pro forma information follows (in thousands except for net loss per share information):

	Years Ended December 31,		
	2004	2003	2002
Net loss as reported	\$ (40,544)	\$ (38,838)	\$ (43,318)
Less: Stock-based compensation expense determined under fair value based method for all awards	(6,895)	(7,046)	(5,154)
Pro forma net loss	<u>\$ (47,439)</u>	<u>\$ (45,884)</u>	<u>\$ (48,472)</u>
Basic and diluted net loss per share as reported	\$ (0.68)	\$ (0.85)	\$ (1.03)
Pro forma basic and diluted net loss per share	<u>\$ (0.79)</u>	<u>\$ (1.00)</u>	<u>\$ (1.15)</u>

The effects of applying SFAS No. 123 for either recognizing compensation expense or providing pro forma disclosures may not be representative of the effects on reported net loss for future years.

Options or stock awards issued to non-employees have been determined in accordance with SFAS No. 123 and Emerging Issues Task Force 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*. Deferred charges for options granted to non-employees are periodically remeasured as the options vest.

In both October 2003 and October 2002, the Company granted a non-qualified stock option to purchase 5,000 shares of common stock to a consultant at an exercise price equal to fair market value of the stock at the date of each grant. The Company recognized approximately \$12,000, \$14,000 and \$3,000 in compensation expense for these stock option grants for the years ended December 31, 2004, 2003, and 2002, respectively.

La Jolla Pharmaceutical Company

Notes to Consolidated Financial Statements

**1. Organization and Summary of Significant Accounting Policies (continued)**

In May 2004, in connection with the retirement of a member of the board of directors, the Company accelerated the vesting of certain options held by the retiring director and extended the period of time in which certain options held by him could be exercised. In accordance with FASB Interpretation No. 44, *Accounting for Certain Transactions Involving Stock Compensation—an interpretation of APB Opinion No. 25*, the Company recorded approximately \$106,000 in compensation expense in connection with the extension of the exercise period for the year ended December 31, 2004.

**Net Loss Per Share**

Basic and diluted net loss per share is computed using the weighted-average number of common shares outstanding during the periods in accordance with SFAS No. 128, *Earnings per Share*. As the Company has incurred a net loss for all three years presented in the Consolidated Statements of Operations, stock options are not included in the computation of net loss per share because their effect is anti-dilutive.

**Comprehensive Loss**

In accordance with SFAS No. 130, *Reporting Comprehensive Income (Loss)*, unrealized gains and losses on available-for-sale securities are included in other comprehensive income (loss).

**Segment Information**

In accordance with SFAS No. 131, *Segment Information*, the Company has determined that it operates in one business segment.

**Recently Issued Accounting Standards**

In December 2004, the FASB issued SFAS No. 123R, *Share-Based Payment*, which is a revision of SFAS No. 123. SFAS No. 123R supersedes APB 25 and amends SFAS No. 95, *Statement of Cash Flows*. Generally, the approach in SFAS No. 123R is similar to the approach described in SFAS No. 123. However, SFAS No. 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values and requires the use of an option pricing model for estimating fair value, which is amortized to expense over the service periods. Pro forma disclosure is no longer an alternative. SFAS No. 123R must be adopted no later than July 1, 2005, although early adoption will be permitted in periods in which financial statements have not yet been issued. The Company expects to adopt SFAS No. 123R on July 1, 2005. The impact of adoption of SFAS No. 123R cannot be predicted at this time because it will depend on levels of share-based payments granted in the future. However, had the Company adopted SFAS No. 123R for the period ended December 31, 2004, the net loss would have been increased by approximately \$6.9 million. SFAS No. 123R allows for either prospective recognition of compensation expense or retrospective recognition, which may be back to the original issuance of SFAS No. 123 or only to interim periods in the year of adoption. The Company is currently evaluating these transition methods.

## La Jolla Pharmaceutical Company

## Notes to Consolidated Financial Statements

**2. Cash Equivalents and Short-term Investments**

The following is a summary of the Company's available-for-sale securities (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
<b>December 31, 2004</b>				
Money market accounts	\$ 1,505	\$ —	\$ —	\$ 1,505
United States corporate debt securities	9,097	—	18	9,079
Government-asset-backed securities	10,012	—	—	10,012
United States Treasury securities and obligations of United States government agencies	1,118	—	5	1,113
	<u>\$ 21,732</u>	<u>\$ —</u>	<u>\$ 23</u>	<u>\$ 21,709</u>
<b>December 31, 2003</b>				
Money market accounts	\$ 8,613	\$ —	\$ —	\$ 8,613
United States corporate debt securities	12,140	—	71	12,069
Government-asset-backed securities	9,005	—	—	9,005
United States Treasury securities and obligations of United States government agencies	1,006	—	2	1,004
	<u>\$ 30,764</u>	<u>\$ —</u>	<u>\$ 73</u>	<u>\$ 30,691</u>

The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. The amortization and accretion, interest income and realized gains and losses are included in interest income in the Consolidated Statements of Operations. The cost of securities sold is based on the specific identification method. Realized gains and losses and declines in value judged to be other-than-temporary on available-for-sale securities are included in interest income and have been immaterial for each of the years presented. The net adjustment to unrealized holding gains (losses) on available-for-sale securities included in comprehensive income (loss) totaled \$50,000 and (\$109,000) in 2004 and 2003, respectively. Included in cash and cash equivalents at December 31, 2004 and 2003 were \$1,505,000 and \$2,579,000, respectively, of securities classified as available-for-sale as the Company expects to sell them in order to support its current operations regardless of their maturity date. As of December 31, 2004, available-for-sale securities and cash equivalents of \$11,496,000 mature in one year or less and \$10,213,000 are due after one year.

**3. Commitments****Leases**

In July 1992, the Company entered into a non-cancelable operating lease for the rental of its research and development laboratories and clinical manufacturing facilities. In October 1996, the Company entered into an additional non-cancelable operating lease for additional office space. In 2004, the Company exercised its options to extend these leases until July 2009.

La Jolla Pharmaceutical Company  
Notes to Consolidated Financial Statements

**3. Commitments (continued)**

In September 2002, the Company entered into an additional non-cancelable operating lease for additional research space. In February 2005, the Company extended the term of this lease to November 2005.

In July 2003, the Company entered into a capital lease agreement for \$111,000 to finance the purchase of certain equipment. The agreement is secured by the equipment, bears interest at 7.00% per annum, and is payable in quarterly installments of principal and interest of approximately \$15,000 for eight quarters.

Annual future minimum lease payments as of December 31, 2004 are as follows (in thousands):

Years ended December 31,	Operating Leases	Capital Leases
2005	\$ 1,025	\$ 14
2006	805	—
2007	813	—
2008	845	—
2009	499	—
Total	<u>\$ 3,987</u>	14
Less amount representing interest		—
Present value of net minimum lease payments		14
Less current portion		<u>(14)</u>
Noncurrent portion of capital lease obligations		<u>\$ —</u>

Rent expense under all operating leases totaled \$1,205,000, \$1,415,000 and \$1,718,000 for the years ended December 31, 2004, 2003 and 2002, respectively. Equipment acquired under capital leases included in property and equipment totaled \$86,000 and \$134,000 (net of accumulated amortization of \$34,000 and \$45,000) at December 31, 2004 and 2003, respectively. Amortization expense associated with these assets is included in depreciation and amortization expense for each of the three years in the period ended December 31, 2004.



La Jolla Pharmaceutical Company  
Notes to Consolidated Financial Statements

**4. Long-Term Debt**

During 2003 and 2004, the Company entered into notes payable to finance the purchase of certain property and equipment. The following is a summary of the notes that are secured by the financed property and equipment:

Date of Note	Interest Rate (%)	Monthly Payments	Total Note Amount (in thousands)
April 23, 2003	9.70	First 36 months at \$17,000; last six months at \$11,000	\$ 583
June 27, 2003	9.70	First 36 months at \$10,000; last six months at \$6,000	345
September 26, 2003	8.27	42 months at \$4,000	150
December 18, 2003	8.27	42 months at \$2,000	83
March 31, 2004	8.27	First 36 months at \$5,000; last six months at \$4,000	189
June 25, 2004	8.77	First 36 months at \$4,000; last six months at \$2,000	132
September 28, 2004	8.44	First 36 months at \$5,000; last six months at \$1,000	157
			<u>\$ 1,639</u>

Annual future minimum notes payable payments as of December 31, 2004 are as follows (in thousands):

Years ended December 31,	Notes Payable
2005	\$ 1,024
2006	608
2007	145
2008	3
2009	—
Total	1,780
Less amount representing interest	(142)
Present value of net minimum notes payable payments	1,638
Less current portion	(922)
Noncurrent portion of notes payable	<u>\$ 716</u>

**5. Restructuring Charges**

In May 2003, the Company restructured its operations in order to reduce expenses and focus its resources on the further development of Riquent. In accordance with SFAS No. 146, *Accounting for Costs Associated with Exit or Disposal Activities*, as of December 31, 2003, the Company recorded total restructuring charges of approximately \$490,000 in connection with the termination of 24 employees. Approximately \$305,000 of the total restructuring charges is included in research and development expense and approximately \$185,000 is included in general and administrative expense. The restructuring plan was completed in February 2004 and actual charges paid were approximately \$490,000.

La Jolla Pharmaceutical Company

Notes to Consolidated Financial Statements

**6. Stockholders' Equity**

**Preferred Stock**

As of December 31, 2004, the Company's Board of Directors is authorized to issue 8,000,000 shares of preferred stock with a par value of \$0.01 per share, in one or more series.

The Company's Certificate of Designation filed with the Secretary of State of the State of Delaware designates 100,000 shares of preferred stock as nonredeemable Series A Junior Participating Preferred Stock ("Series A Preferred Stock"). Pursuant to the terms of the Company's Stockholder Rights Plan, in the event of liquidation, each share of Series A Preferred Stock is entitled to receive, subject to certain restrictions, a preferential liquidation payment of \$1,000 per share plus the amount of accrued unpaid dividends. The Series A Preferred Stock is subject to certain anti-dilution adjustments, and the holder of each share is entitled to 1,000 votes, subject to adjustments. Cumulative quarterly dividends of the greater of \$0.25 or, subject to certain adjustments, 1,000 times any dividend declared on shares of common stock, are payable when, as and if declared by the Board of Directors, from funds legally available for this purpose.

**Stock Option Plans**

In June 1994, the Company adopted the 1994 Stock Incentive Plan (the "1994 Plan"), under which 8,200,000 shares of common stock were authorized for issuance. The 1994 Plan expired in June 2004 and there were 7,633,831 options outstanding under the 1994 Plan as of December 31, 2004.

In May 2004, the Company adopted the 2004 Equity Incentive Plan (the "2004 Plan"), under which 2,000,000 shares of common stock have been authorized for issuance. The 2004 Plan provides for the grant of incentive and non-qualified stock options, as well as other stock-based awards, to employees, directors, consultants and advisors of the Company with various vesting periods as determined by the Company's Compensation Committee and/or Board of Directors, as well as automatic fixed grants to non-employee directors of the Company. There were 1,344,633 options outstanding under the 2004 Plan as of December 31, 2004.

La Jolla Pharmaceutical Company

Notes to Consolidated Financial Statements

**6. Stockholders' Equity (continued)**

A summary of the Company's stock option activity and related data follows:

	Options Available For Grant	Outstanding Options	
		Number of Shares	Weighted-Average Exercise Price
Balance at December 31, 2001	629,313	4,531,160	\$ 4.57
Additional shares authorized	1,900,000	—	—
Granted	(2,067,700)	2,067,700	\$ 5.70
Exercised	—	(102,132)	\$ 1.62
Cancelled	84,672	(84,672)	\$ 6.70
Balance at December 31, 2002	546,285	6,412,056	\$ 4.95
Additional shares authorized	1,100,000	—	—
Granted	(1,675,740)	1,675,740	\$ 3.92
Exercised	—	(200,463)	\$ 0.96
Cancelled	410,688	(410,688)	\$ 5.58
Balance at December 31, 2003	381,233	7,476,645	\$ 4.79
Additional shares authorized	2,000,000	—	—
Granted	(1,810,200)	1,810,200	\$ 2.97
Exercised	—	(4,866)	\$ 2.48
Cancelled	303,515	(303,515)	\$ 4.26
Expired	(219,181)	—	—
Balance at December 31, 2004	655,367	8,978,464	\$ 4.44

	2004		2003		2002	
	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price
Exercisable at end of year	6,064,952	\$ 4.85	4,796,296	\$ 4.72	3,605,876	\$ 4.08
Weighted-average fair value of options granted during the year	\$ 2.65		\$ 3.27		\$ 4.41	

La Jolla Pharmaceutical Company

Notes to Consolidated Financial Statements

**6. Stockholders' Equity (continued)**

Exercise prices and weighted-average remaining contractual lives for the options outstanding as of December 31, 2004 follow:

Options Outstanding	Range of Exercise Prices	Weighted-Average Remaining Contractual Life (in years)	Weighted-Average Exercise Price	Options Exercisable	Weighted-Average Exercise Price of Options Exercisable
965,833	\$ 0.34 - \$2.63	5.22	\$ 1.15	887,583	\$ 1.11
1,475,600	\$ 2.80 - \$2.96	9.39	\$ 2.96	—	—
1,172,298	\$ 2.97 - \$3.63	6.99	\$ 3.19	768,919	\$ 3.29
1,008,074	\$ 3.68 - \$4.63	5.30	\$ 4.07	869,422	\$ 4.12
1,512,178	\$ 4.69 - \$5.09	7.70	\$ 4.88	960,695	\$ 4.93
1,071,808	\$ 5.13 - \$6.88	7.27	\$ 5.80	836,728	\$ 5.78
1,143,973	\$ 6.89 - \$7.50	6.53	\$ 7.07	1,118,640	\$ 7.07
628,700	\$7.55 - \$12.06	6.40	\$ 7.77	622,965	\$ 7.76
<u>8,978,464</u>	<u>\$0.34 - \$12.06</u>	<u>7.06</u>	<u>\$ 4.44</u>	<u>6,064,952</u>	<u>\$ 4.85</u>

At December 31, 2004, the Company has reserved 9,633,831 shares of common stock for future issuance upon exercise of options granted or to be granted under the 1994 and 2004 Plans.

**Employee Stock Purchase Plan**

Effective August 1, 1995, the Company adopted the 1995 Employee Stock Purchase Plan, as amended (the "Purchase Plan"). Under the Purchase Plan, a total of 1,500,000 shares of common stock are reserved for sale to eligible employees, as defined in the Purchase Plan. Employees may purchase common stock under the Purchase Plan every three months (up to but not exceeding 10% of each employee's base salary, or hourly compensation, and any cash bonus paid) over the offering period at 85% of the fair market value of the common stock at specified dates. The offering period may not exceed 24 months. For the years ended December 31, 2004 and 2003, 379,451 and 312,744 shares of common stock were issued under the Purchase Plan, respectively. To date, 1,290,409 shares of common stock have been issued under the Purchase Plan and 209,591 shares of common stock are available for future issuance.

	Years Ended December 31,		
	2004	2003	2002
Weighted-average fair value of Employee Stock Purchase Plan purchases	\$ 1.51	\$ 1.49	\$ 4.21

La Jolla Pharmaceutical Company

Notes to Consolidated Financial Statements

**6. Stockholders' Equity (continued)**

**Stockholder Rights Plan**

The Company has adopted a Stockholder Rights Plan (the "Rights Plan") which was amended in July 2000. The Rights Plan provides for a dividend of one right (a "Right") to purchase fractions of shares of the Company's Series A Preferred Stock for each share of the Company's common stock. Under certain conditions involving an acquisition by any person or group of 15% or more of the common stock (or in the case of State of Wisconsin Investment Board, 20% or more), the Rights permit the holders (other than the 15% holder, or, in the case of State of Wisconsin Investment Board, 20% holder) to purchase the Company's common stock at a 50% discount upon payment of an exercise price of \$30 per Right. In addition, in the event of certain business combinations, the Rights permit the purchase of the common stock of an acquirer at a 50% discount. Under certain conditions, the Rights may be redeemed by the Board of Directors in whole, but not in part, at a price of \$.001 per Right. The Rights have no voting privileges and are attached to and automatically trade with the Company's common stock. The Rights expire on December 2, 2008.

**7. 401(k) Plan**

The Company has established a 401(k) defined contribution retirement plan (the "401(k) Plan"), which was amended in May 1999 to cover all employees. The 401(k) Plan was also amended in December 2003 to increase the voluntary employee contributions from a maximum of 20% to 50% of annual compensation (as defined). This increase is effective beginning January 1, 2004. The Company does not match employee contributions or otherwise contribute to the 401(k) Plan.

**8. Income Taxes**

At December 31, 2004, the Company had federal and California income tax net operating loss carryforwards of approximately \$220,756,000 and \$93,389,000, respectively. The difference between the federal and California tax loss carryforwards is primarily attributable to the capitalization of research and development expenses for California income tax purposes. The Company also had federal and California research tax credit carryforwards of approximately \$11,688,000 and \$6,161,000, respectively. The federal net operating loss and research tax credit carryforwards will continue to expire in 2005 unless previously utilized. The California net operating loss will continue to expire in 2009 unless previously utilized.

Pursuant to Sections 382 and 383 of the Internal Revenue Code, annual use of the Company's net operating loss and research tax credit carryforwards may be limited if a cumulative change in ownership of more than 50% occurs within a three-year period.

La Jolla Pharmaceutical Company  
Notes to Consolidated Financial Statements

**8. Income Taxes (continued)**

Significant components of the Company's deferred tax assets are shown below (in thousands):

	December 31,	
	2004	2003
Deferred tax assets:		
Net operating loss carryforwards	\$ 82,634	\$ 67,886
Research and development credits	15,692	13,294
Capitalized research and development	5,643	4,750
Total deferred tax assets	<u>103,969</u>	<u>85,930</u>
Net deferred tax assets	103,969	85,930
Valuation allowance for deferred tax assets	(103,969)	(85,930)
Net deferred taxes	<u>\$ —</u>	<u>\$ —</u>

A valuation allowance of \$103,969,000 has been recognized to offset the deferred tax assets as realization of such assets is uncertain.

**9. Subsequent Event**

In February 2005, the Company sold 12,250,000 shares of its common stock in a public offering for net proceeds of approximately \$15,800,000 at a discounted per share value based on the reported last sale price of the common stock on the purchase date.

**EXHIBIT INDEX**

<u>Exhibit Number</u>	<u>Description</u>
3.1	Amended and Restated Certificate of Incorporation of the Company (1)
3.2	Amended and Restated Bylaws of the Company (2)
4.1	Rights Agreement dated as of December 3, 1998 between the Company and American Stock Transfer & Trust Company (3)
4.2	Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock of the Company (4)
4.3	Amendment to Rights Agreement, effective as of July 21, 2001, between the Company and American Stock Transfer & Trust Company (5)
10.1	Stock Option Agreement dated February 4, 1993 entitling Joseph Stemler to purchase 35,000 shares of Common Stock (6)*
10.2	Steven B. Engle Employment Agreement (6)*
10.3	Amendment No. 1 to Steven B. Engle Employment Agreement (7)*
10.4	Amendment No. 2 to Steven B. Engle Employment Agreement (1)*
10.5	Amendment No. 3 to Steven B. Engle Employment Agreement (18)*
10.6	Form of Directors and Officers Indemnification Agreement (6)*
10.7	Form of Employee Invention and Confidential Information Agreement (6)
10.8	Industrial Real Estate Lease (6)
10.9	La Jolla Pharmaceutical Company 1994 Stock Incentive Plan (Amended and Restated as of May 16, 2003) (18)*
10.10	La Jolla Pharmaceutical Company 1995 Employee Stock Purchase Plan (Amended and Restated as of May 21, 2004) (25)*
10.11	Second Amendment to Lease, dated June 30, 1994, by and between the Company and BRE Properties, Inc. (9)
10.12	Third Amendment to Lease, dated January 26, 1995, by and between the Company and BRE Properties, Inc. (10)
10.13	Agreement, dated September 22, 1995, between the Company and Joseph Stemler regarding option vesting (11) *
10.14	Building Lease Agreement, effective November 1, 1996, by and between the Company and WCB II-S BRD Limited Partnership (12)
10.15	Supplement to employment offer letter for Matthew Linnik, Ph.D. (13)*
10.16	Supplement to employment offer letter for William J. Welch (14)*
10.17	Supplement to employment offer letter for Theodora Reilly (14)*
10.18	Supplement to employment offer letter for Paul Jenn, Ph.D. (14)*
10.19	Supplement to employment offer letter for Bruce K. Bennett, Jr. (15)*
10.20	Supplement to employment offer letter for Kenneth R. Heilbrunn (8)*
10.21	Supplement to employment offer letter for Josefina Elchico (26)*
10.22	Master Security Agreement, effective September 6, 2002, between the Company and General Electric Capital Corporation (16)
10.23	Promissory Note, dated as of September 26, 2002, between the Company and General Electric Capital Corporation (16)

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## Table of Contents

<u>Exhibit Number</u>	<u>Description</u>
10.24	Amendment to Promissory Note, effective as of September 27, 2002, between the Company and General Electric Capital Corporation (16)
10.25	Promissory Note, dated as of December 30, 2002, between the Company and General Electric Capital Corporation (17)
10.26	Promissory Note, dated as of April 23, 2003, between the Company and General Electric Capital Corporation (17)
10.27	Promissory Note, dated as of June 27, 2003, between the Company and General Electric Capital Corporation (18)
10.28	Promissory Note, dated as of September 26, 2003, between the Company and General Electric Capital Corporation (19)
10.29	Promissory Note, dated as of December 18, 2003, between the Company and General Electric Capital Corporation (23)
10.30	Lease Renewal Amendment, dated as of July 1, 2003, between the Company and General Electric Capital Corporation Successor In Interest to Comdisco, Inc. as of February 26, 2002 (19)
10.31	Underwriting Agreement, dated as of August 7, 2003, between the Company and Pacific Growth Equities, LLC (20)
10.32	Underwriting Agreement, dated as of February 19, 2004, between the Company and Pacific Growth Equities, LLC (22)
10.33	Form of Registration Rights Agreement, dated January 2002, between the Company and the initial purchasers (21)
10.34	Form of Stock Purchase Agreement, dated January 2002, between the Company and the initial purchasers (21)
10.35	Form of Registration Rights Agreement, dated February 5, 2001, between the Company and the initial purchasers (19)
10.36	Form of Stock Purchase Agreement, dated February 5, 2001, between the Company and the initial purchasers (19)
10.37	Form of Registration Rights Agreement, dated July 19, 2000, between the Company and the initial purchasers (19)
10.38	Form of Stock Purchase Agreement, dated July 19, 2000, between the Company and the initial purchasers (19)
10.39	Form of Registration Rights Agreement, dated February 10, 2000, between the Company and the initial purchasers (19)
10.40	Form of Stock Purchase Agreement, dated February 10, 2000, between the Company and the initial purchasers (19)
10.41	Supplement to employment offer letter for Gail A. Sloan (24)*
10.42	Promissory Note, dated as March 31, 2004, between the Company and General Electric Capital Corporation (24)
10.43	Promissory Note, dated as June 25, 2004, between the Company and General Electric Capital Corporation (25)
10.44	Fourth Amendment to Lease, dated July 8, 2004, by and between the Company and EOP-Industrial Portfolio, LLC (25)
10.45	First Amendment to Lease, dated May 4, 2001, by and between the Company and Spieker Properties, L.P. (25)
10.46	Second Amendment to Lease, dated July 8, 2004, by and between the Company and EOP-Industrial Portfolio, LLC (25)
10.47	La Jolla Pharmaceutical Company 2004 Equity Incentive Plan (25)*

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## Table of Contents

<u>Exhibit Number</u>	<u>Description</u>
10.48	Form of option grant under the La Jolla Pharmaceutical Company 2004 Equity Incentive Plan*
10.49	Promissory Note, dated as of September 28, 2004, by and between the Company and General Electric Capital Corporation (26)
10.50	Underwriting Agreement, dated January 28, 2005, by and between the Company and Pacific Growth Equities, LLC (27)
21.1	Subsidiaries of La Jolla Pharmaceutical Company
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

\* This exhibit is a management contract or compensatory plan or arrangement.

- (1) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended September 30, 1999 and incorporated by reference herein.
- (2) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended September 30, 2000 and incorporated by reference herein.
- (3) Previously filed with the Company's Registration Statement on Form 8-A (No. 000-24274) as filed with the Securities and Exchange Commission on December 4, 1998.
- (4) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended June 30, 1999 and incorporated by reference herein.
- (5) Previously filed with the Company's report on Form 8-K filed on January 26, 2001 and incorporated by reference herein. The changes effected by the Amendment are also reflected in the Amendment to Application for Registration on Form 8-A/A filed on January 26, 2001.
- (6) Previously filed with the Company's Registration Statement on Form S-1 (No. 33-76480) filed on March 16, 1994.
- (7) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended June 30, 1997 and incorporated by reference herein.
- (8) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended June 30, 2002 and incorporated by reference herein.
- (9) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended June 30, 1994 and incorporated by reference herein.
- (10) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended March 31, 1995 and incorporated by reference herein.
- (11) Previously filed with the Company's annual report on Form 10-K for the fiscal year ended December 31, 1995 and incorporated by reference herein.
- (12) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended September 30, 1996 and incorporated by reference herein.
- (13) Previously filed with the Company's annual report on Form 10-K for the fiscal year ended December 31, 1999 and incorporated by reference herein.
- (14) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended June 30, 2001 and incorporated by reference herein.
- (15) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended March 31, 2002 and incorporated by reference herein.
- (16) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended September 30, 2002 and incorporated by reference herein.
- (17) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended March 31, 2003 and incorporated by reference herein.
- (18) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended June 30, 2003 and incorporated by reference herein.
- (19) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended September 30, 2003 and incorporated by reference herein.
- (20) Previously filed with the Company's Current Report on Form 8-K filed August 12, 2003 and incorporated by reference herein.
- (21) Previously filed with the Company's Current Report on Form 8-K filed January 16, 2002 and incorporated by reference herein.
- (22) Previously filed with the Company's Current Report on Form 8-K filed February 20, 2004 and incorporated by reference herein.
- (23) Previously filed with the Company's annual report on Form 10-K for the fiscal year ended December 31, 2003 and incorporated by reference herein.
- (24) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended March 31, 2004 and incorporated by reference herein.
- (25) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended June 30, 2004 and incorporated by reference herein.

- (26) Previously filed with the Company's quarterly report on Form 10-Q for the quarter ended September 30, 2004 and incorporated by reference herein.
- (27) Previously filed with the Company's Current Report on Form 8-K filed January 28, 2005 and incorporated by reference herein.

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NOTICE OF GRANT OF STOCK OPTIONS  
AND OPTION AGREEMENT

LA JOLLA PHARMACEUTICAL CO.  
ID: 33-0361285  
6455 Nancy Ridge Drive  
San Diego, CA 92121  
(858) 452-6600  
-----

NAME  
ADDRESS

OPTION NUMBER: \_\_\_\_\_  
PLAN: 2004  
ID: \_\_\_\_\_  
-----

Effective \_\_\_\_\_, you have been granted a(n) Incentive Stock Option to buy  
\_\_\_\_\_ shares of La Jolla Pharmaceutical Co. (the Company) stock at \$ \_\_\_\_\_  
per share.

The total option price of the shares granted is \$ \_\_\_\_\_ .

Shares in each period will become fully vested on the date shown.

Shares	Vest Type	Full Vest	Expiration
-----	-----	-----	-----
_____	_____	_____	_____

-----  
By your signature and the Company's signature below, you and the Company agree  
that these options are granted under and governed by the terms and conditions of  
the Company's Stock Option Plan as amended and the Option Agreement, all of  
which are attached and made a part of this document.  
-----

\_\_\_\_\_  
La Jolla Pharmaceutical Co.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

LA JOLLA PHARMACEUTICAL COMPANY SUBSIDIARIES

La Jolla Limited

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-116233) pertaining to the La Jolla Pharmaceutical Company 2004 Equity Incentive Plan and the La Jolla Pharmaceutical Company 1995 Employee Stock Purchase Plan and the Registration Statements on Form S-3 (Nos. 333-101499, 333-31142, 333-43066, 333-55370 and 333-81432) of La Jolla Pharmaceutical Company of our reports dated February 28, 2005, with respect to: (1) the consolidated financial statements of La Jolla Pharmaceutical Company, and (2) management's assessment of the effectiveness of internal control over financial reporting, and the effectiveness of internal control over financial reporting of La Jolla Pharmaceutical Company, included in this Annual Report (Form 10-K) for the year ended December 31, 2004.

/s/ Ernst & Young LLP

San Diego, California  
March 4, 2005

## SECTION 302 CERTIFICATION

I, Steven B. Engle, certify that:

1. I have reviewed this annual report on Form 10-K of La Jolla Pharmaceutical Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statement made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the consolidated financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 9, 2005

/s/ Steven B. Engle

-----  
Steven B. Engle  
Chairman and Chief Executive Officer

## SECTION 302 CERTIFICATION

I, Gail A. Sloan, certify that:

1. I have reviewed this annual report on Form 10-K of La Jolla Pharmaceutical Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statement made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the consolidated financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 9, 2005



/s/ Gail A. Sloan

-----  
Gail A. Sloan  
Vice President of Finance  
and Secretary

CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Each of the undersigned, in his or her capacity as an officer of La Jolla Pharmaceutical Company (the "Registrant"), hereby certifies, for purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- the annual report of the Registrant on Form 10-K for the year ended December 31, 2004 (the "Report"), which accompanies this certification, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition of the Registrant at the end of such year and the results of operations of the Registrant of such year.

Dated: March 9, 2005

/s/ Steven B. Engle

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Steven B. Engle  
Chairman and Chief Executive Officer

/s/ Gail A. Sloan

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Gail A. Sloan  
Vice President of Finance and Secretary

Note: A signed original of this written statement required by Section 906 has been provided to La Jolla Pharmaceutical Company and will be retained by La Jolla Pharmaceutical Company and furnished to the Securities and Exchange Commission or its staff upon request.