ANNUAL REPORT 2004

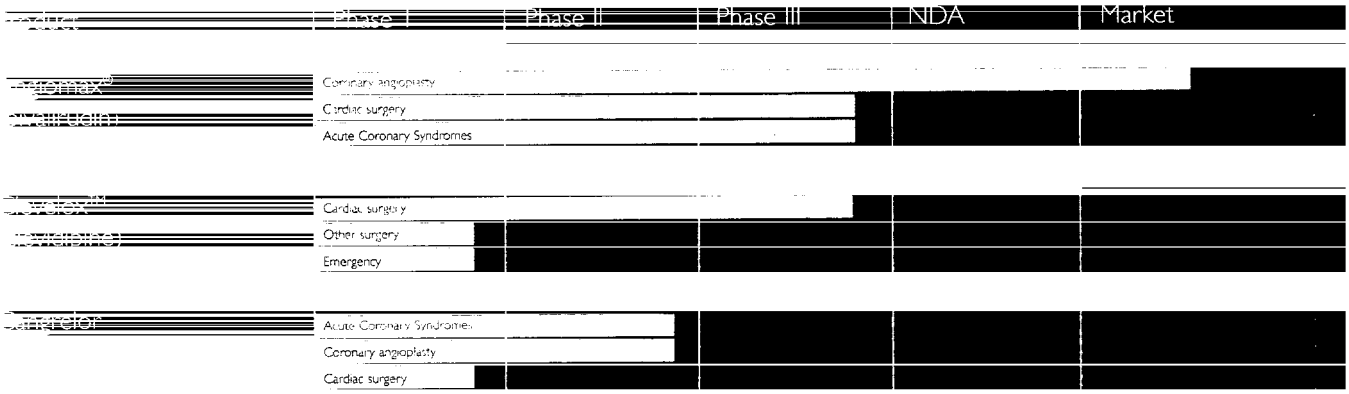
THE MEDICINES COMPANY®

THE MEDICINES COMPANY:

Meeting the demands of the world's most advanced medical practitioners

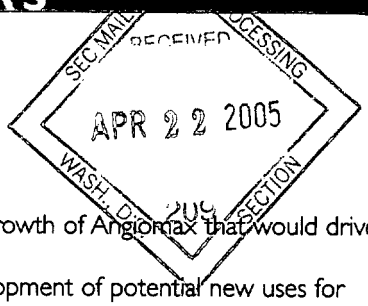
- **Develops acute care hospital pharmaceutical products** to improve patient care and hospital operations and economics.
- **Markets Angiomax® (bivalirudin),** an anticoagulant approved for use in patients undergoing coronary angioplasty.
- **Creates value using a range of clinical and commercial skills** to develop products acquired from leading life science innovators.

PIPELINE*



*Other potential uses

DEAR FELLOW STOCKHOLDERS



ENTERING 2004, our plans called for revenue growth of Angiomax that would drive our first year of profitability. We also hoped to progress late-stage development of potential new uses for Angiomax, as well as to advance Clevelox and cangrelor.

Our strategic focus remains on addressing acute care hospital customers. We believe we can compete in the U.S. hospital market by serving the needs of these high-end customers.

Our 2004 PERFORMANCE was strong.

We grew revenue by 68 percent and turned a profit. This was accomplished within nine years of starting The Medicines Company. A good result by any standards in life sciences.

We strengthened our capacity and capability. The addition of John Kelley from Aventis as President and Chief Operating Officer, coupled with the addition and promotion of senior managers in the second half of 2004, increased the depth and expertise of our organization considerably. We continue to attract high-level pharmaceutical industry talent.

We organized our business units to meet customer demands. The following pages examine the promise and progress of our Interventional and Emergency Medicines Business Unit and our Surgery Business Unit.

CLIVE MEANWELL
Chairman and Chief Executive Officer

PROMISE

INTERVENTIONAL AND EMERGENCY MEDICINES

Medicines are needed for interventions on diseased arteries. Interventions involve the threading of catheters through the vascular system to alleviate blockages and other abnormalities. In emergencies, chest pain that may indicate a heart attack is treated early with medicines while physicians decide the optimal treatment strategy.

MISSION:

We aim to provide the best products in interventional and emergency medicine, to:

- Prevent unwanted clotting
- Get patients safely home quicker
- Minimize the bleeding associated with these procedures and other anticoagulant products
- Minimize the overall cost of treatment

PRODUCTS:

Angiomax for coronary angioplasty (approved): an anticoagulant that specifically targets the clotting factor thrombin

Angiomax for acute coronary syndromes (Phase III): in late-stage development to potentially treat patients who come to the hospital emergency department with chest pain

Cangrelor (Phase II): inhibits the aggregation of platelets

PROGRESS

INTERVENTIONAL AND EMERGENCY MEDICINES

2004 DEVELOPMENTS:

- Increased Angiomax sales by 68%
- Enrolled more than 6,000 patients in the landmark ACUITY clinical trial evaluating Angiomax in patients with acute coronary syndromes
- Published long-term results of the REPLACE-2 clinical trial that reported lower mortality among Angiomax-treated patients at high risk of death
- Completed manufacturing scale-up of cangrelor
- Launched Angiomax in Europe (European tradename is Angiox™)

PROMISE
SURGERY

Medicines are needed to support patients undergoing surgery, such as agents to inhibit blood clotting and agents to provide reliable control of blood pressure.

MISSION:

We aim to provide the best products to support patients during surgical procedures, to:

- Provide the surgery team with control
- Provide consistent and predictable effect
- Improve efficiency of care
- Minimize overall cost of treatment

PRODUCTS:

Angiomax for cardiac surgery (Phase III): in development to potentially address the medical need for alternatives to heparin, a widely used anticoagulant, in cardiac surgery

Clevelox (Phase III): A fast-on, fast-off blood pressure control agent being studied in cardiac surgery

PROGRESS
SURGERY

2004 DEVELOPMENTS:

- Completed Phase III safety clinical trials of Angiomax in cardiac surgery
- Completed Phase III efficacy clinical trials of Clevelox in cardiac surgery
- Progressed with patient enrollment in Phase III efficacy clinical trials of Angiomax in cardiac surgery
- Progressed with patient enrollment in Phase III safety trials of Clevelox in cardiac surgery*

*voluntarily suspended in 2005

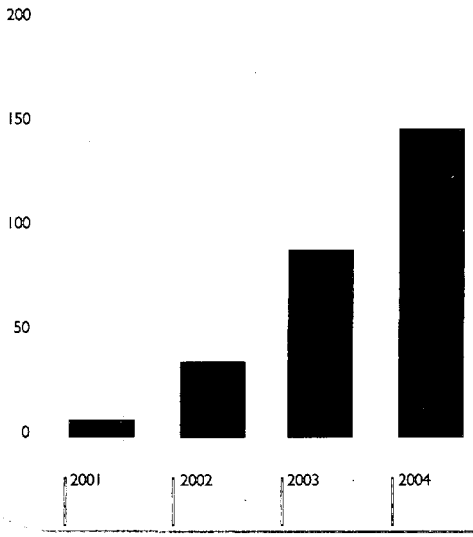
FINANCIAL OVERVIEW

BALANCE SHEET DATA	December 31, 2004	2003
Cash and cash equivalents, available for sale securities and accrued interest receivable	**$ 161,224**	$ 136,855
Working Capital	**$ 173,349**	$ 139,725
Total assets	**$ 210,044**	$ 166,662
Accumulated deficit	**$ (297,145)**	$ (314,145)
Total stockholders' equity	**$ 171,671**	$ 140,165

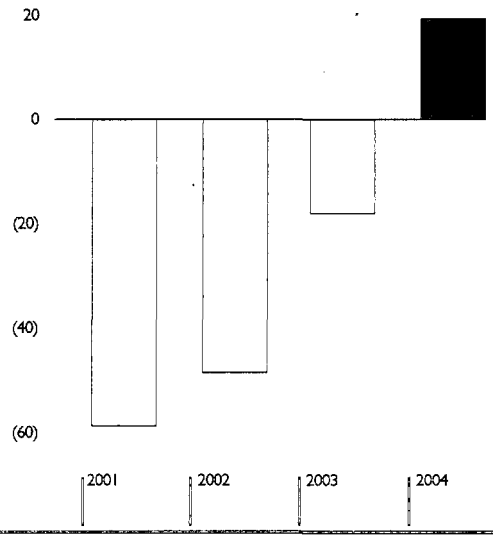
Derived from audited financials

FINANCIAL HIGHLIGHTS

REVENUE ($mm net per annum)



NET INCOME/LOSS ($mm per annum)



SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

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

(Mark One)

☒ **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 000-31191

THE MEDICINES COMPANY

(Exact name of registrant as specified in its charter)

Delaware	**04-3324394**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
8 Campus Drive Parsippany, New Jersey	**07054**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(973) 656-1616**

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

Securities registered pursuant to Section 12(g) of the Act:

Common Stock, $.001 Par Value Per Share
(Title of each class)

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 this 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 voting Common Stock held by non-affiliates of the registrant on June 30, 2004 was approximately $1,450,655,217, based on the last reported sale price of the Common Stock on the Nasdaq National Market on June 30, 2004 of $30.51 per share.

Number of shares of the registrant's class of Common Stock outstanding as of March 4, 2005: 49,350,713.

THE MEDICINES COMPANY

ANNUAL REPORT ON FORM 10-K

For the Fiscal Year Ended December 31, 2004

TABLE OF CONTENTS

PART I

Item 1. Business

Overview

Company

We are a pharmaceutical company that specializes in acute care hospital products. We acquire, develop and commercialize pharmaceutical products in late stages of their development. Our first acute care hospital product, Angiomax® (bivalirudin), is a direct thrombin inhibitor approved for use as an anticoagulant in patients undergoing coronary angioplasty. We are currently conducting clinical trials to expand the indications for which Angiomax is approved, including trials evaluating Angiomax for use in hospital emergency departments in the treatment of acute coronary syndromes, and for use in surgical departments in cardiac surgery. We are currently developing two additional late development stage pharmaceutical products as potential acute care hospital products. The first of these, Clevelox™ (clevidipine), is an intravenous drug intended for the short-term control of blood pressure in surgical patients, including patients undergoing cardiac surgery. The second potential product, cangrelor, is an antiplatelet agent that prevents platelet aggregation, which we believe has potential advantages in the treatment of vascular disease. Our revenues to date have been generated principally from sales of Angiomax in the United States. We had net revenue of $144.3 million, and net income of $17.0 million, in 2004. For additional information about our financial performance for each of the past three years, including our net revenues, net income or loss and total assets, we refer you to the audited financial statements attached as Appendix A to this annual report on Form 10-K.

We focus our commercial and product development resources primarily on the U.S. hospital market. We believe we can successfully address acute care hospital markets without a large sales force, because of the concentration of hospitals that conduct a large percentage of acute care procedures in the United States. Our core strategy is to develop and commercialize products that we believe will help hospitals alleviate the growing pressure to treat patients more efficiently, including the need to improve the effectiveness and safety of treatment while minimizing cost. We believe that cost of treatment in hospitals is predominantly driven by length of patient stay, while length of stay is often driven by the occurrence of treatment complications. Products that are effective, safe and predictable, or that require shorter periods of treatment or are easier to use than current products, may reduce the length of hospital stay and lower total costs. We believe that products with these attributes positively impact the care of patients and are attractive to the decision-makers who comprise our current and potential customers, including hospital management, physicians, hospital pharmacists, nurses and other care staff. We believe that the products we are developing have these attributes and, as a result, have the potential to be successful in the acute care hospital marketplace.

As a result of our experience commercializing Angiomax, we have developed in-depth know-how related to the practice of acute hospital care and gained valuable insights into procurement processes, usage patterns, caregiver preferences and the evaluation of products by our hospital customers. Our current and potential hospital customers are proficient in acute patient care and demand a high level of specialized service for the products they use. They practice in such areas of the hospital as the cardiac catheterization laboratory, where coronary angioplasties are performed, the emergency department and the operating room.

In order to best address hospital customer demands, we have organized the company into two types of business units focused on specialized market segments and business needs. Our first type of business unit addresses the commercial and scientific needs of hospital market customers by interacting directly with these customers and potential customers in the cardiac catheterization laboratory, the emergency department and the operating room. Our second type of business unit delivers internal resources and

support, and includes a product manufacturing unit, a product infrastructure unit and a corporate infrastructure unit. This business structure differs from most pharmaceutical companies, which are generally organized into company-wide pharmaceutical business function departments such as marketing, research and development, sales, logistics and human resources. We believe that our structure enables business units to remain in close contact with their customers whether those customers are external clients who might use our products, or internal clients who interact with our external customers.

We market, distribute and sell Angiomax outside the United States through third-party distributors. In order to market our products in the European Union and many other foreign jurisdictions, we or our third-party distributors must obtain separate regulatory approvals. In September 2004, we received marketing authorization from the European Commission for Angiomax, which is marketed in Europe under the trade name Angiox™ (bivalirudin), for use as an anticoagulant in patients undergoing percutaneous coronary interventions. Angiox is also approved for sale in Australia and countries in North America, South America and the Middle East for indications similar to that approved by the United States Food and Drug Administration, or FDA. Except where otherwise indicated, or where the context may otherwise require, references to "Angiomax" in this annual report on Form 10-K mean Angiomax and Angiox collectively.

Products

Angiomax. Our first product acquisition was Angiomax, which we exclusively licensed from Biogen in 1997. Since acquiring Angiomax, we have invested in manufacturing, clinical and regulatory development of the product. In December 2000, we received marketing approval from the FDA for Angiomax for use as an anticoagulant in combination with aspirin in patients with unstable angina undergoing coronary angioplasty, and we began selling the product in the United States in January 2001. We believe that Angiomax has the potential to replace heparin, the anticoagulant that historically has been used in the United States in the treatment of arterial thrombosis, a condition involving the formation of blood clots in arteries. Arterial thrombosis is associated with life-threatening conditions such as ischemic heart disease, peripheral vascular disease and stroke. We believe that Angiomax has the potential to become a broadly applied intravenous anticoagulant in the treatment of arterial thrombosis.

There are three main areas of the hospital where heparin is used for acute treatment of arterial thrombosis: the cardiac catheterization laboratory, where angioplasties are performed; the emergency department, where patients with acute coronary syndromes, including chest pain and heart attacks, are initially treated; and the operating room, where coronary artery bypass graft surgery, or CABG surgery, is performed.

To date, we have concentrated our commercial efforts on replacing heparin in the cardiac catheterization laboratory, where the procedure for which Angiomax is approved is performed. We have conducted several clinical trials in angioplasty to evaluate the use of Angiomax compared to heparin in this setting. In these trials, Angiomax use has resulted in fewer ischemic complications and fewer bleeding events, including a reduction in the need for blood transfusion. In addition, Angiomax demonstrated in these trials that its therapeutic effect is more predictable than heparin, which enables simplified dosing. We believe that Angiomax use replaced heparin use in approximately one-third of the coronary angioplasty procedures conducted in the United States in 2004.

We are evaluating Angiomax in the operating room for use in open vascular surgery such as CABG surgery and in the emergency department in medical conditions that require urgent treatment such as acute coronary syndromes. We are also studying Angiomax in patients with heparin allergy and in peripheral angioplasty.

Clevelox. We acquired Clevelox in March 2003 from AstraZeneca AB. Under terms of our agreement with AstraZeneca, we acquired exclusive license rights to develop, market and sell Clevelox

worldwide excluding Japan. We acquired this license after conducting development work pursuant to the study and exclusive option agreement with AstraZeneca entered into in March 2002.

Clevelox is an intravenous drug intended for the short-term control of blood pressure in surgical patients, including patients undergoing cardiac surgery. We are developing Clevelox in a clinical trial program comprised of five Phase III clinical trials to evaluate its potential for lowering blood pressure before, during and after cardiac surgery. The two efficacy clinical trials are complete and both met their protocol-defined objectives. The three safety clinical trials are all enrolling patients, and we expect to complete these trials in 2005.

Together with our contract manufacturer, we have completed manufacturing development work for Clevelox. We believe our contract manufacturer currently has the capability to manufacture and package Clevelox on a commercial scale appropriate for launch of the drug when and if Clevelox is approved for sale by the FDA.

Cangrelor. We acquired cangrelor in December 2003 from AstraZeneca. Under terms of our agreement with AstraZeneca, we acquired exclusive license rights to develop, market and sell cangrelor worldwide excluding Japan, China, Korea, Taiwan and Thailand.

Cangrelor is a short-acting injectable antiplatelet agent that prevents platelet aggregation in the clotting process. We believe that cangrelor will fit into our acute care hospital product portfolio because of its potential advantages in the treatment of vascular disease.

In 2004, we conducted manufacturing development activity to begin the scaling of cangrelor manufacturing for Phase III clinical trials and potential commercial launch when and if cangrelor is approved for sale by the FDA. We are currently conducting a 40-patient clinical trial in healthy volunteers to identify a dosing strategy for use of cangrelor, and we intend to commence Phase III clinical testing of cangrelor in 2005.

Organization

We believe that we can best address hospital customer demands for a high level of service by organizing our company into business units that address specialized market segments and business needs, instead of organizing by pharmaceutical business function. We have organized our company with two types of business units. The first type of business unit addresses the commercial and scientific needs of hospital market customers by interacting directly with these customers and potential customers. The second type of business unit addresses our internal needs, including the needs of our business units that interact with customers.

Our business units that address the commercial and scientific needs of our hospital market customers include:

- Our sales operations unit, which sells Angiomax for use in patients undergoing coronary angioplasty.
- Our interventional and emergency medicines unit, which develops and markets products for interventional cardiology customers, and plans to market products for potential emergency room cardiology customers. Our interventional cardiology customers practice in the cardiac catheterization laboratory of the hospital, where coronary angioplasties are performed, and our potential emergency room cardiology customers practice in the emergency department of the hospital, where patients with acute coronary syndromes, including chest pain and heart attacks, are initially treated.

- Our surgery unit, which develops and plans to market products for potential surgical and intensive care customers. These potential customers practice in hospital operating rooms, as well as the pre-operative and post-operative intensive care units, where surgical patients are treated.

The interventional and emergency medicines unit and the surgery unit are multidisciplinary, as the individuals within the units typically have some level of experience in marketing, regulatory affairs, clinical trials, financial management and medical practice. If we acquire additional products, we believe that we can create additional business units to develop and market the products.

Our business units that address internal needs include:

- Our product manufacturing unit, which oversees manufacturing development, product manufacturing by third party manufacturers and product distribution by third party distributors.
- Our product infrastructure unit, which monitors our products' safety, analyzes statistical data from clinical trials and provides clinical data management support, pre-clinical and scientific affairs resources and our medical writing capabilities.
- The corporate infrastructure unit, which addresses our corporate finance, business development, human resources, legal and information technology needs.

Sales Operations Unit

Background. Coronary angioplasty has transformed the management of symptomatic arterial disease in the last 10 years. The procedure is used to restore normal blood flow in arteries that supply blood to the heart. In the year 2003, we believe that approximately one million angioplasty procedures with or without stenting were performed in the United States. Stenting is often performed as part of coronary angioplasty, and is a procedure in which a tube, or stent, made of metal or plastic, is inserted into an artery to keep it open. Anticoagulation therapy is routinely administered to patients undergoing angioplasty because the use of catheters and other devices in the procedure increases the risk of clots forming in the coronary arteries or in other arteries of the body.

Sales Force. Our sales operations business unit sells Angiomax in the United States with a hospital sales force of 93 sales representatives and managers, as of March 1, 2005. Our sales force has been configured to target, as potential hospital customers, those hospitals with cardiac catheterization laboratories in the United States that perform 500 or more coronary angioplasties per year. These hospitals conduct a significant percentage of the total number of the coronary angioplasties performed each year in the United States. Several of our most experienced representatives target the hospitals with cardiac catheterization laboratories that perform 2,000 or more coronary angioplasties per year. We believe these hospitals perform close to half of the coronary angioplasties conducted in the United States each year.

If Angiomax is approved for use in other indications, we intend to market Angiomax for these indications in the United States by supplementing our commercial organization, or by collaborating with other health care companies.

In support of sales efforts, we focus our Angiomax marketing efforts on interventional cardiologists and other key clinical decision-makers in cardiac catheterization laboratories. We use educational programs, in leading medical centers, publications, and other targeted techniques in efforts to educate physicians and other healthcare providers regarding the advantages of Angiomax use. We believe our ability to deliver relevant, advanced and reliable educational programs to our customers and our concentrated customer base provides us with significant market presence even in the highly competitive sub-segments of the hospital market such as cardiology. We believe that in each of the four years we have sold Angiomax, we have gained market share versus heparin in coronary angioplasty.

We sell Angiomax primarily to a limited number of national medical and pharmaceutical distributors and wholesalers with distribution centers located throughout the United States and to several international distribution partners. These wholesalers and distributors then sell to hospitals. In the United States, AmerisourceBergen Drug Corporation, McKesson Corporation and Cardinal Health, Inc. each accounted for more than 20% of our revenues for the year ended December 31, 2004.

We market, sell and distribute Angiomax outside of the United States through third-party distributors. We received marketing authorization for Angiox in the European Union in September 2004 for use as an anticoagulant in patients undergoing percutaneous coronary interventions.

Nycomed Danmark A/S is our exclusive distributor of Angiox in all countries of the European Union other than Greece, Portugal and Spain, including those countries that we believe have the highest potential for Angiox sales. Upon execution of our sales, marketing and distribution agreement with Nycomed in 2002, Nycomed paid a distributor fee of $1.5 million and purchased from us common stock having an aggregate purchase price of $1.0 million. Nycomed paid us an additional $2.5 million under the agreement in 2004, upon Angiox receiving marketing authorization in the European Union. Our agreement requires Nycomed to make minimum purchases of Angiox following regulatory approval of Angiox for marketing and continues on a country-by-country basis until the later of (1) the expiration of the last patent (and any extensions thereof) covering the product in a country, or (2) 10 years after launch of the product in the country. Either party may terminate the agreement for material breach upon notice to other party, if the breach is not cured within the applicable cure period.

To meet anticipated European launch demands, we fulfilled purchase orders from Nycomed in the third quarter of 2004. Nycomed will not commence sales of Angiox until packaging approval and any required pricing and reimbursement approval are obtained on a country-by-country basis. As of the date of this annual report on Form 10-K, Angiox packaging and pricing and reimbursement approvals have been granted in Austria, Denmark, Estonia, Finland, Germany, Latvia, Lithuania, the Netherlands, Norway, Poland, Sweden and the United Kingdom. Nycomed is currently selling in these countries. As packaging and pricing and reimbursement approvals are granted in other individual member states of the European Union, Nycomed will begin selling in such countries.

We have an agreement with Grupo Ferrer Internacional for the distribution of Angiox in Greece, Portugal and Spain and for countries in Latin America and South America. We also have agreements with other third-parties for other countries outside of the United States.

Our revenues from international sales were $8.6 million in 2004, $0.6 million in 2003, and $0.1 million in 2002.

Interventional and Emergency Medicines Unit

Our interventional and emergency medicines business unit develops and markets products to address interventional cardiology customers and plans to market to potential emergency room cardiology customers. The business unit is primarily responsible for the following:

- supporting Angiomax marketing for its approved use for coronary angioplasty;
- developing Angiomax for use in the emergency department, where patients with acute coronary syndromes, including chest pain and heart attacks, are initially treated;
- developing Angiomax for additional interventional cardiology uses; and
- developing cangrelor for use in the treatment of vascular disease.

Anticoagulation therapy

In interventional cardiology, coronary angioplasty procedures inherently increase the risk of clots forming in the coronary arteries or in other arteries of the body, potentially leading to heart attacks, also known as a myocardial infarction or MI, the need for additional procedures, including surgical procedures, or death. Clots form in a process called coagulation, as the body reacts to the manipulation of the artery as a result of, for example, the use of catheters and other devices in connection with the angioplasty procedure. Accordingly, anticoagulation therapy is routinely administered to patients undergoing angioplasty to slow the clotting process and avoid unwanted clotting in the coronary artery and the potential growth of clots or the movement of a clot or portions of it downstream in the blood vessels to new sites.

Anticoagulation therapy attempts to modify actions of the components in the blood system that activate three proteins, thrombin, platelets and fibrin, which lead to the formation of blood clots. Anticoagulation therapy has typically involved the use of drugs to inhibit one or more components of the clotting process, thereby reducing the risk of clot formation. Drugs that target one component of the clotting process, however, may have effects on the other components, and we believe that there will be continued clinical work to determine the best combination of drugs for anticoagulation therapy. Anticoagulation therapy is usually started immediately after a diagnosis of blood clots, or after risk factors for clotting are identified. Because anticoagulation therapy reduces clotting, it also may cause excessive bleeding.

Current anticoagulation therapy focuses on the principal factors of the clotting process: thrombin, platelets and fibrin.

- Thrombin has long been recognized as a key factor in the clotting process. The actions of thrombin in the clotting process may be inhibited by direct thrombin inhibitors, such as Angiomax, which act directly on thrombin. The actions of thrombin in the clotting process may also be inhibited by indirect thrombin inhibitors, such as heparin, which act to turn off clotting factors and turn on natural anti-clotting factors such as antithrombin, or AT.
- The aggregation of platelets in the clotting process may be inhibited by products called platelet inhibitors, which act on different pathways and receptors.
    - Specific enzyme pathways like cyclo-oxygenase are inhibited by aspirin.
    - The adenosine diphosphate, or ADP, receptor can be blocked by a class of platelet inhibitors that can be administered orally and are referred to as thienopyridines, such as clopidogrel.
    - Glycoprotein IIb/IIIa, or GP IIb/IIIa, receptors on the cell surface allow platelets to attach to fibrin and each other. Certain types of platelet inhibitors prevent the aggregation of platelets by blocking these surface receptors. The GP IIb/IIIa inhibitors, although effective at suppressing platelet aggregation, may not prevent platelet activation. In fact, many studies have suggested that use of these agents, especially at low levels, may be associated with an increase in markers of platelet activation.
- A blood clot is a collection of cross-linked strands of protein fibrin, which is made as a result of coagulation and forms a mesh around activated platelets and red blood cells. Fibrin may be dissolved after clotting has occurred by products called fibrinolytics.

Disadvantages of heparin. Heparin was historically used as an anticoagulant in virtually all patients undergoing angioplasty to indirectly inhibit thrombin. Heparin's properties as an anticoagulant were discovered in 1916, and it is prepared from the intestines of pigs or lungs of cows. Heparin is a complex mixture of animal-derived proteins with variable anticoagulant potencies. The anticoagulant effects of heparin on any given patient are difficult to predict because heparin binds non-specifically to human cells

and circulating substances in the blood. For these and other reasons, heparin, as a non-specific, indirect thrombin inhibitor, presents a variety of clinical challenges. One of these challenges is that heparin activates platelets. For instance, studies have shown that heparin enhances the clumping of platelets in unstable angina patients. Accordingly, platelet inhibitors such as aspirin, ADP inhibitors or GP IIb/IIIa inhibitors are often administered to augment heparin.

Patients who receive heparin also have a high incidence of bleeding. This is particularly the case with patients who are elderly, female or have low body weight. Recent clinical trials have shown that bleeding risk may be further increased when heparin is used in combination with intravenous platelet inhibitors, such as GP IIb/IIIa inhibitors.

Heparin use also carries a risk of clinical immune reactions. Heparin may cause the formation of antibodies, which antibodies may be associated with a clinical condition known as heparin-induced thrombocytopenia and thrombosis syndrome, or HIT/HITTS, which is characterized by reduced platelet counts and potentially by widespread, life-threatening blood clots.

Heparin derivatives, including low molecular weight heparins such as enoxapirin, were developed to attempt to diminish some of heparin's disadvantages. Low molecular weight heparins are administered once or twice daily by subcutaneous injection. Although they tend to be more predictable than heparin in their effect, low molecular weight heparins exhibit similar clinical challenges to those of heparin, including a weak effect on thrombin in a clot that has already formed and a comparable risk of bleeding. The effects of low molecular weight heparins are only partially reversible, making their use in surgery or in patients that may be candidates for surgery impractical. Low molecular weight heparins also have a longer half-life than heparin, meaning it takes the body longer to clear the drug and void its effects. This may adversely affect the ability of hospitals to move patients between acute cardiology departments such as the emergency department and cardiac catheterization laboratory or to discharge patients from the hospital.

Angiomax advantages. In contrast to heparin, Angiomax is a synthetic peptide of 20 amino acids that is a rapid-acting, direct and specific inhibitor of thrombin and is administered by intravenous injection. Angiomax is specific in that it only binds to thrombin and does not bind to or activate any other blood factors or cells.

Angiomax was engineered based on the biochemical structure of hirudin, a natural 65-amino acid protein anticoagulant. However, the binding of Angiomax to thrombin is "naturally" reversible because thrombin slowly breaks down the Angiomax molecule, releasing it from binding, while hirudin remains intact and tightly bound to thrombin. This natural reversibility results in a shorter half-life and is associated with a reduced risk of bleeding.

Angiomax has numerous other pharmacological and clinical advantages over heparin including:

- *Effective in clot-bound thrombin.* Angiomax, as a direct thrombin inhibitor, is equally effective on thrombin in the clot as well as thrombin circulating in the blood.
- *Inhibition of platelets.* Angiomax directly inhibits thrombin which also inhibits platelet activation through inhibition of platelet activating receptors, such as the PAR receptors, on the surface of platelets.
- *Reduced bleeding risk.* As a reversible thrombin inhibitor, Angiomax has consistently shown clinically meaningful reductions in bleeding compared to heparin in percutaneous coronary intervention trials.
- *Predictability.* As a synthetic peptide, a specified dose of Angiomax results in a predictable level of anticoagulation.

- *Effective in high-risk patients.* Angiomax has been shown to be effective in patients having suffered prior heart attacks and patients with acute coronary syndromes.
- *Reduced incidence of thrombocytopenia.* Angiomax has been shown to result in a significant reduction in thrombocytopenia, or lower platelet counts, an immunogenic disorder associated with heparin.

Clinical data in coronary angioplasty. We have invested significantly in the development of clinical data on the mode of action and clinical effects of Angiomax in procedures including coronary angioplasty and stenting. In almost all of our investigations to date, we have compared Angiomax to heparin, which until relatively recently was the only injectable anticoagulant for use in coronary angioplasty, or combinations of drugs including heparin. Angiomax has been tested against heparin or combinations of drugs including heparin in eight comparative trials and found to reduce the risk of arterial thrombosis and of bleeding.

We conducted the REPLACE-2 clinical trial in 2001 and 2002 to evaluate Angiomax as the foundation anticoagulant for angioplasty within the context of modern therapeutic products and technologies, including coronary stents. The trial, which involved 6,002 patients in 233 clinical sites, was designed to evaluate whether the use of Angiomax with provisional use of GP IIb/IIIa inhibitors provides clinical outcomes relating to rates of ischemic and bleeding events that are superior to heparin alone and the same as, or non-inferior to, the current standard of low-dose weight-adjusted heparin plus GP IIb/IIIa inhibitors. These outcomes were designed to be assessed using formal statistical tests for superiority and non-inferiority.

REPLACE-2 employed two randomized arms:

- Heparin with a GP IIb/IIIa inhibitor, which was either Integrilin or ReoPro; and
- Angiomax with the provisional use of a GP IIb/IIIa inhibitor, which was either Integrilin or ReoPro, if deemed necessary by the physician during the procedure.

The trial also evaluated the Angiomax regimen against heparin alone using an historical control arm. The heparin historical control arm of the study was calculated using an average of the event rates from the EPISTENT and ESPRIT trials, which were previous angioplasty trials of other companies in which heparin alone was compared to heparin plus a GP IIb/IIIa inhibitor.

The primary objective of REPLACE-2 was to demonstrate superiority versus heparin and non-inferiority to heparin plus a GP IIb/IIIa inhibitor for the quadruple composite endpoint of death, MI, urgent revascularization and major bleeding. The secondary objectives of REPLACE-2 included superiority versus heparin and non-inferiority to heparin plus a GP IIb/IIIa inhibitor for a triple composite endpoint of death, MI and urgent revascularization.

Based on 30-day, six-month and 12-month patient follow-up results, Angiomax met all primary and secondary objectives for the study.

The pre-specified 30-day analyses were based on all components of the quadruple endpoint. At 30 days, the Angiomax arm demonstrated superiority versus heparin alone and non-inferiority to heparin plus a GP IIb/IIIa inhibitor for both the quadruple and triple composite endpoints. Additionally, patients in the Angiomax arm experienced bleeding rates that were superior to heparin plus a GP IIb/IIIa inhibitor. Additionally, a protocol-defined health economic analysis of the 30-day follow-up data demonstrated that the costs associated with treating patients in the Angiomax arm were statistically significantly lower than the costs associated with treating patients in the heparin plus GP IIb/IIIa arm. The 30-day findings were published in the *Journal of the American Medical Association*, or *JAMA*, in February 2003. The health economic analysis was published in the *Journal of the American College of Cardiology* in November 2004.

The pre-specified six-month analyses were based on the components of the triple endpoints to measure if non-inferiority was maintained. The Angiomax arm again demonstrated non-inferiority to heparin plus a GP IIb/IIIa inhibitor.

The pre-specified 12-month analyses were based on the death endpoint to measure if non-inferiority was maintained. These analyses showed that non-inferiority was maintained. They also showed a numeric mortality advantage in the Angiomax arm, which widened from the six-month to 12-month long-term findings. Although this numeric advantage in the overall population was not defined by statistics as superior or statistically significant, the numeric advantage among patients with highest risk of death was wider than among lower risk patients. In *JAMA*, REPLACE-2 investigators reported that among patients at high risk, death occurred significantly less frequently in the Angiomax arm compared to heparin plus a GP IIb/IIIa inhibitor. The long term 6-month and 12-month findings were published in *JAMA* in August 2004.

In July 2003, we submitted a supplemental new drug application to the FDA requesting an amended package insert for Angiomax in order to include in the package insert data from the REPLACE-1 and REPLACE-2 trials in coronary angioplasty as well as from our AT-BAT trial in patients with heparin-induced thrombocytopenia undergoing coronary angioplasty. In May 2004, we received a review letter from the FDA stating that our application was not approvable. The FDA stated that, because in its view there were deficiencies with the study methods used and in the analysis of the clinical data we submitted, it could not approve the proposed package insert changes without data from additional studies. We have responded to the FDA letter and we are in discussions with the FDA about the issues it has raised. In international markets, including Europe, Canada and Australia, REPLACE-2 results served as the pivotal clinical trial in our regulatory submissions. REPLACE-2 was the basis for the approval granted by the European Commission in September 2004 for Angiox for use as an anticoagulant in patients undergoing percutaneous coronary interventions. REPLACE-2 data findings were incorporated into the Canadian product label as a regulatory update approved in January of 2005. REPLACE-2 was also the basis for approval in Australia.

Angiomax use in the emergency department

Ischemic heart disease patients are subject to chest pain that results from a range of conditions, from unstable angina to acute myocardial infarction, or AMI. The severe onset of these cardiac conditions is collectively referred to as acute coronary syndromes, or ACS. Some ACS patients enter the hospital by way of the emergency department and are triaged to be medically managed with pharmacotherapy and observation, scheduled for an angioplasty procedure, and/or scheduled for CABG surgery. Based on hospital reimbursement data, in the United States in 2003 there were approximately 1.8 million patients hospitalized for ACS.

Unstable angina is a condition in which patients experience the new onset of severe chest pain, increasingly frequent chest pain or chest pain that occurs while they are resting. Unstable angina is caused most often by a rupture of plaque on an arterial wall that results in clot formation and ultimately decreases coronary blood flow but does not cause complete blockage of the artery. Unstable angina is often medically managed in the emergency department with anticoagulation therapy that may include aspirin, indirect thrombin inhibitors such as heparin or a low molecular weight heparin such as enoxaparin and GP IIb/IIIa inhibitors. Many unstable angina patients also undergo coronary angioplasty or CABG surgery depending on the severity of the disease.

AMI is a leading cause of death in ischemic heart disease patients. AMI occurs when coronary arteries, which supply blood to the heart, become completely blocked by a clot. AMI patients are routinely treated with heparin, with and without fibrinolytics, in combination with GP IIb/IIIa inhibitors. AMI patients are increasingly undergoing angioplasty as a primary treatment to unblock clogged arteries.

Angiomax has been the subject of five Phase II trials in patients with unstable angina or who had experienced a less serious form of MI known as non Q-wave MI. These trials enrolled a total of 630 patients, of whom 553 received various doses of Angiomax. These studies have demonstrated that Angiomax is an anticoagulant that can be administered safely in patients with unstable angina.

We are currently conducting a Phase III trial, ACUITY, to study Angiomax in the ACS population. We plan to enroll a total of 13,800 patients worldwide in three main treatment regimens:

- Angiomax monotherapy starting in the emergency department and continued through the cardiac catheterization laboratory, permitting use of GP IIb/IIIa inhibitors for treatment of breakthrough ischemic events prior to percutaneous coronary intervention, or PCI, or for bail-out during PCI;
- Angiomax with GP IIb/IIIa inhibitors started either in the emergency department and then continued through the cardiac catheterization laboratory, or Angiomax monotherapy started in the emergency department and combined with GP IIb/IIIa inhibitors started in the cardiac catheterization laboratory only; or
- Heparin or enoxaparin, a low molecular weight heparin, with GP IIb/IIIa inhibitors started either in the emergency department and then continued through the cardiac catheterization laboratory or enoxaparin monotherapy started in the emergency department and GP IIb/IIIa inhibitors started in the cardiac catheterization laboratory only.

We believe that the Angiomax plus a GP IIb/IIIa inhibitor combination may demonstrate outcomes at least equivalent to heparin or enoxaparin plus a GP IIb/IIIa inhibitor. We also believe that the Angiomax alone arm may demonstrate that it is as effective as enoxaparin with a GP IIb/IIIa inhibitor, while at the same time being less likely to cause bleeding. We began enrolling patients in the ACUITY trial in August 2003 and had enrolled approximately 6,000 patients through the end of 2004. We expect to complete enrollment in the ACUITY trial during 2005.

If the results of the ACUITY study confirm our expectations, we intend to submit an application for approval to market Angiomax in patients with ACS who are starting treatment in the emergency department.

Angiomax product development in other interventional and emergency medical procedures

HIT/HITTS. Approximately one to three percent of patients who receive heparin develop a clinical condition known as heparin-induced thrombocytopenia and thrombosis syndrome, or HIT/HITTS. The underlying mechanism for the condition appears to be an immunological response to a complex formed by heparin and another factor, resulting in thrombocytopenia, and in some cases in arterial or venous clotting, which may result in death or the need for limb amputation. In order to treat a HIT/HITTS patient, an alternative anticoagulant is necessary because further administration of heparin is not possible.

Prior to 1997, Angiomax was administered to a total of 39 HIT/HITTS patients treated for a variety of indications, including patients requiring anticoagulation for angioplasty, invasive coronary procedures or treatment of thrombosis. For those patients undergoing angioplasty and other procedures, Angiomax provided adequate anticoagulation, was well-tolerated and rarely resulted in bleeding complications. In the December 2000 approval letter for Angiomax, the FDA required us to complete our trial designed to evaluate the use of Angiomax for treatment of HIT/HITTS patients undergoing angioplasty. That trial, called AT-BAT, was completed in 2003 and the results of the AT-BAT trial were part of the supplemental new drug application package submitted to FDA with the REPLACE-1 and REPLACE-2 data in July 2003. .

Angiomax Phase IV trials. In addition to the clinical trials conducted to pursue additional uses of Angiomax, we conduct Phase IV post-marketing clinical trials. Phase IV trials are intended to provide

information about the use of Angiomax in procedures performed in the cardiac catheterization laboratory in specific patient populations or procedures performed in the cardiac catheterization laboratory or other hospital departments that employ new technologies.

We believe that these Phase IV, post-market studies provide an important service to our customers by helping us to provide contemporary clinical data about the use of Angiomax and to answer specific questions about the use of Angiomax posed by the marketplace. For example, we sponsored a study of Angiomax use in percutaneous peripheral intervention, which is similar to coronary angioplasty but is conducted in arteries outside of the heart, such as in the carotid artery in the neck. These Phase IV trials also provide us with data about potential new uses for Angiomax, where we might conduct trials to seek an FDA-approved indication for those new uses.

Cangrelor product development

Overview. Cangrelor is short-acting injectable antiplatelet agent we are developing that prevents platelet aggregation in the clotting process. We believe that cangrelor may fit into our hospital acute care product portfolio because of its potential advantages in the treatment of vascular disease.

Cangrelor binds directly to the P2Y12 receptor, a clinically validated target to treat or prevent arterial thrombosis. There is currently no short-acting, intravenous, P2Y12 antagonist approved for acute patient care.

In the cardiac catheterization laboratory, the use of antiplatelet agents that block aggregation is considered important therapy because several studies of oral platelet inhibitors have demonstrated better patient outcomes when these agents are administered before coronary angioplasty.

One of the leading oral platelet inhibitors is clopidogrel. Clopidogrel is commonly administered at a high dose by giving patients four to eight oral tablets before the angioplasty procedure. This practice is known as pre-loading. Although clopidogrel pre-loading has been shown to improve ischemic outcomes in coronary angioplasty, there are several safety and convenience issues with the use of this agent in acute care practice:

- As a pro-drug, clopidogrel requires liver metabolism to form the active agent; therefore, the pre-loading dose may require up to six hours to achieve its full effect.
- There does not appear to be a clear relationship between increased dosage and intended effect that is consistent across different patient groups.
- The inhibition of platelet function is irreversible, meaning the agent remains bound to receptors for the life of the platelet, which is typically ten days. This may impede patient management and treatment flexibility, especially if a patient needs cardiac surgery, which is usually delayed for days awaiting the generation and release of new platelets from the bone marrow.
- Oral agents are difficult to administer in the acute care setting because they need to be swallowed by patients that may have received light anesthesia; this is especially true when there is a need to swallow multiple tablets in a restricted period of time.

Based on input from our hospital customers in the cardiac catheterization laboratory, we believe that the combination of the ischemic outcomes benefits of platelet inhibition and the acute care limitations of current oral therapy has created a need for an injectable platelet inhibitor that acts quickly and is cleared from the bloodstream rapidly. We believe that cangrelor has demonstrated these attributes in pre-clinical studies and clinical studies conducted in approximately 500 patients to date. Cangrelor has demonstrated the following characteristics in these studies:

- An immediate inhibitory effect on platelets;

- Inhibition of platelet aggregation that is proportional to the dose administered;
- Inhibitory effects that are sustainable through a period of infusion;
- Rapid clearance—half life of less than five minutes; and
- Platelet function recovery in less than an hour.

With these attributes, we believe that cangrelor could also have utility when administered to surgery patients. Surgeons have never had an approved agent at their disposal to control thrombosis during surgery by inhibiting platelets. The antiplatelet agents currently approved for use in coronary angioplasty, GP IIb/IIIa inhibitors, oral thienopyridines and aspirin, have not demonstrated feasibility in surgery due to bleeding concerns or the necessity of long infusions. We believe that cangrelor has potential for use in surgery due to its rapid effect in inhibiting platelets and the rapid recovery of platelet function following cessation of administration.

Clinical trials. We are developing cangrelor for potential use as an antiplatelet agent in the acute care settings of the cardiac catheterization laboratory, the operating room, and/or the emergency department. Several features of the development program may be similar to those followed for Angiomax.

We are currently conducting a 40-patient clinical trial in healthy volunteers to identify a dosing strategy for use of cangrelor, and we intend to commence Phase III clinical testing of cangrelor in 2005. In the future, we may also study the combination of Angiomax and cangrelor, which we believe are compatible agents, the combination of which may yield synergistic effects.

Surgery Unit

The surgery unit develops and plans to market products to address potential surgical and intensive care customers. The business unit is primarily responsible for the following:

- developing Angiomax for uses in open vascular surgery, including cardiac surgeries such as CABG surgery, as well as valve replacement surgery; and
- developing Clevelox initially for use in cardiac surgery and potentially for use in other surgeries.

Angiomax development for cardiac surgery

Background. Cardiac surgery, commonly referred to as "open heart surgery," is performed to treat ischemic heart disease or to repair parts of the heart, either on-pump or off-pump. On-pump cardiac surgery is conducted with the use of a cardiac pulmonary bypass machine, a device that pumps the patient's blood while the heart is stopped and the surgery is performed. For off-pump cardiac surgery, physicians slow but do not stop the heartbeat, stabilize the heart by keeping certain areas immobile with various devices, and perform the surgery without the use of a bypass machine. According to hospital reimbursement data, there were over 400,000 cardiac surgery procedures performed in the United States in 2003.

The two most common cardiac surgeries are CABG surgery and valve replacement or repair surgery. CABG surgery is conducted to treat ischemic heart disease. Surgeons bypass a blockage in the patient's artery by grafting a vein to the artery on both sides of the blockage to restore blood flow around the obstruction. Valve replacement or repair is conducted on one or more of the four valves in the heart. The heart has two valves that regulate blood flow between the heart's four chambers, one valve that regulates blood flow into the aorta, the body's largest artery and one valve that regulates blood flow into the lungs. In some cases, surgeons conduct CABG surgery and valve replacement/repair in the same surgery.

A high level of anticoagulation is necessary in on-pump cardiac surgery during the period of cardiopulmonary bypass in order to prevent clots from forming in the machine or in the patient's

cardiovascular system. Anticoagulation is also necessary in off-pump cardiac surgery to prevent clots from forming in the patient's cardiovascular system as a result of the manipulation of coronary arteries and the heart. Heparin with protamine reversal has been the standard anticoagulant for cardiac surgery since the 1950's.

Surgery patients exposed to heparin are at risk of immune reactions that result from developing antibodies to heparin. Clinical publications have cited several different rates of CABG surgery patients who are heparin antibody positive, ranging from 12% to 50%. Heparin antibody positivity is the major marker for the development of HIT/HITTS. Even absent the clinical condition of HIT/HITTS, the presence of heparin antibodies alone has been associated with an increased risk of death or major complications and in length of stay in hospital after cardiac surgery. In addition, because heparin's duration of effect is variable and sometimes prolonged, surgeons usually give protamine to reverse heparin at the end of surgery. The use of protamine has been associated with an immune reaction and a subsequent increase in the risk of death or major complications.

Clinical Trials. We have conducted two studies and are conducting two additional studies as part of our Phase III clinical development program in CABG surgery:

- EVOLUTION included on-pump and off-pump studies to evaluate if Angiomax alone could be safely used in the general cardiac surgery patient population by demonstrating similar results to a regimen of heparin plus protamine. The EVOLUTION on-pump study consisted of 150 patients, and the EVOLUTION off-pump study consisted of 157 patients; and
- CHOOSE includes on-pump and off-pump studies to evaluate the whether Angiomax can be effectively used in patients identified as having or to be at risk for HIT/HITTS, having tested positive for the heparin antibody or having a history of HIT/HITTS. We are seeking to enroll 50 patients in each of the CHOOSE on-pump and off-pump studies.

We have completed both EVOLUTION trials and both trials met their primary objectives. Patients treated with Angiomax, compared to patients treated with heparin and protamine reversal, demonstrated a comparable rate of procedural success, defined at seven days post-surgery as absence of death, Q-wave MI, or heart attack, repeat operation or catheterization for coronary revascularization, or stroke.

We are enrolling patients in both CHOOSE studies, on- and off-pump, and expect to complete enrollment of the two studies in the third quarter of 2005.

Assuming positive results in the Phase III CHOOSE studies, we intend to submit an application for approval to market Angiomax in patients at risk for HIT/HITTS, including patients who are heparin antibody positive, undergoing CABG surgery.

We previously completed a randomized, blinded 100-patient Phase II/III trial of Angiomax comparing Angiomax to heparin in patients undergoing off-pump CABG surgery. The results showed that anticoagulation for off-pump CABG surgery with Angiomax had similar bleeding rates, but better graft flow 90 days after surgery, compared to the regimen of heparin and protamine. In addition, patients in the trial who received Angiomax experienced more rapid and consistent anticoagulation compared to the regimen of heparin and protamine. We believe that this was the first ever randomized comparison of a new anticoagulant with heparin and protamine reversal for anticoagulation during cardiac surgery. Results of this trial were published in *Annals of Thoracic Surgery* in March 2004.

We also previously completed Phase II/III dose-finding studies of Angiomax in on-pump CABG surgery. Based on these results, we identified the dosing regimen for Angiomax in the CHOOSE on-pump and EVOLUTION on-pump trials.

Clevelox development

Background. Blood pressure control is important in patients undergoing surgery or other interventional procedures in a hospital. These patients are treated by a team of physicians and nurses, which include the surgeon and anesthesiologist. Usually, the anesthesiologist is responsible for controlling blood pressure and, in doing so, these physicians often employ multiple medications, which may increase the duration of the patient's stay in the intensive care unit. These medications include sodium nitroprusside, nicardipine and nitroglycerine. Each of these agents has been shown to increase a cardiac side effect known as reflex tachycardia, which is characterized by a quickening of the patient's heart rate that may cause severe adverse surgical outcomes.

Clevelox belongs to a well-known class of drugs called calcium channel blockers, which are used to control high blood pressure. Clevelox acts by selectively relaxing the smooth muscle cells that line small arteries, resulting in widening of the artery opening and reducing blood pressure within the artery. Unlike some other blood pressure reducing agents, including some other calcium channel blockers, animal studies have indicated that Clevelox does not appear to have effects on the coronary arteries or the veins, and has not been associated with reflex tachycardia in anesthetized patients. Moreover, Clevelox has been shown in clinical trials to improve the pumping performance of the heart.

Prior to licensing Clevelox to us, AstraZeneca conducted Phase II clinical trials of Clevelox. In these clinical trials Clevelox acted to reduce blood pressure rapidly after intravenous infusion. Clevelox is metabolized rapidly by enzymes in the blood, which results in the drug being cleared from the blood stream in a short period of time. Therefore, the effects of Clevelox are short-lived, and clinical trials have demonstrated reductions in blood pressure that are dose-dependent and that cease rapidly after stopping Clevelox infusions.

We believe that attributes of Clevelox demonstrated in clinical trials to date, namely rapid, titratable onset of effect on blood pressure, simple preparation and administration, arterial selectivity and rapid metabolism and elimination, could potentially benefit patients with high blood pressure undergoing surgical procedures and patients with severely elevated blood pressure that requires rapid reduction.

We are initially focusing our development efforts on the potential use of Clevelox in surgery, particularly cardiac surgery.

Clinical trials. After meeting with the FDA in 2003, we defined five Phase III trials in two programs to investigate the potential of Clevelox to control blood pressure in patients undergoing surgery.

- The ESCAPE program consisted of two clinical trials to evaluate the efficacy of Clevelox in controlling blood pressure before and after cardiac surgery compared to a placebo control. The protocols provided for approximately 200 patients to be enrolled in these trials, 100 patients for ESCAPE-1, conducted in patients before surgery, and 100 patients for ESCAPE-2, conducted in patients after surgery.
- The ECLIPSE program consists of three clinical trials to evaluate the safety of Clevelox in comparison to sodium nitroprusside, nicardipine, and nitroglycerine during and following cardiac surgery. The protocols provide for a total of approximately 1,500 patients in these trials.

In 2004, we completed both ESCAPE trials. Results in both trials met the protocol-defined objective, as measured by rates of treatment success, which was defined as at least a 15% reduction in blood pressure.

- In ESCAPE-1 cardiac surgery patients with high blood pressure treated with Clevelox achieved treatment success 92.5% of the time versus 17.3% in placebo. This result was highly statistically significant.

- In ESCAPE-2 cardiac surgery patients with high blood pressure treated with Clevelox achieved treatment success 91.8% of the time versus 20.4% in placebo. This result was also highly statistically significant.

We are currently enrolling patients in all three ECLIPSE trials. If the ECLIPSE trials meet their objectives, we intend to submit a new drug application for clearance to market Clevelox. We believe that Clevelox can be efficiently sold by our U.S. sales force to hospital customers, including Angiomax customers, when and if Clevelox is approved for sale by the FDA.

Manufacturing

Our product manufacturing business unit is comprised of professionals with expertise in biochemistry and pharmaceutical manufacturing development, as well as logistics and supply chain management, who oversee the manufacturing and distribution of our products by third party companies. We do not have a manufacturing infrastructure and do not intend to develop one. We are party to agreements with contract manufacturers to supply bulk drug substance for our products and with other third parties to formulate, package and distribute our products.

Angiomax

In December 1999, we entered into a commercial development and supply agreement with UCB Bioproducts S.A. for the development and supply of Angiomax bulk drug substance. Together with UCB Bioproducts, we developed a second generation chemical synthesis process to improve the economics of manufacturing Angiomax bulk drug substance. This process, which was approved by the FDA in May 2003, is known as the Chemilog process.

We have agreed that we will purchase a substantial portion of our Angiomax bulk drug substance manufactured using the Chemilog process from UCB Bioproducts at agreed upon prices for a period ending in September 2010. Following the expiration of the agreement, which automatically renews for consecutive three year periods unless either party provides notice of non-renewal within one year prior to the expiration of the initial term or any renewal term, or if we terminate the agreement prior to its expiration, UCB Bioproducts has agreed to transfer the development technology to us. We may only terminate the agreement prior to its expiration in the event of a material breach by UCB Bioproducts. If we engage a third party to manufacture Angiomax for us using this technology prior to bivalirudin becoming a generic drug in the United States, we will be obligated to pay UCB Bioproducts a royalty based on the amount paid by us to the third-party manufacturer.

In July 2004, we entered into a development and supply agreement with Lonza Ltd. for the development of an alternative method of manufacture and commercial supply of bivalirudin. If development of this alternative method of manufacture is successful, our agreement will obligate us to purchase a minimum quantity of bulk drug substance from Lonza on an annual basis during the term of the agreement, although a second source of supply would reduce our supply chain related risk.

We have developed reproducible analytical methods and processes for the fill-finish of Angiomax drug product by Ben Venue Laboratories, Inc. Ben Venue Laboratories has carried out all of our Angiomax fill-finish activities.

Clevelox

Prior to our acquisition of Clevelox, Astra Production Chemicals manufactured all clevidipine bulk drug. We have transferred the manufacturing process for bulk drug to Johnson Matthey Pharma Services, for scale up and manufacture for Phase III clinical trials and commercial supplies.

We are also a party to an agreement with Hospira, Inc., pursuant to which Hospira has agreed to use its formulation technology to manufacture all finished drug product for all Phase III clinical trials of Clevelox and, if and when Clevelox is approved by the FDA, commercial supplies, and to carry out release testing and clinical packaging.

Cangrelor

Prior to our acquisition of cangrelor, AstraZeneca manufactured all cangrelor bulk drug which, after testing and release, has been used in clinical trials. Following our acquisition of cangrelor, we transferred the manufacturing process for bulk drug to Johnson Matthey Pharma Services for scale-up and manufacture for Phase III clinical trials and commercial supplies.

We have also entered into an agreement with Baxter Pharmaceutical Solutions LLC, a division of Baxter Healthcare Corporation, pursuant to which, Baxter has agreed to manufacture all finished drug product for all Phase III clinical trials and to carry out release testing.

Business Development

Overview

We intend to continue building our acute care franchise of hospital products by selectively acquiring and developing late-stage product candidates or products approved for marketing. We believe that products may be acquired from larger pharmaceutical companies in the process of refining their own product portfolios and from smaller companies seeking specialist development or commercial collaborations.

In evaluating product acquisition candidates, we will continue to seek products that have the potential to alleviate the growing pressures on U.S. hospitals to treat patients more efficiently. We look for an anticipated time from acquisition to commercialization of four years or less and existing clinical data which provides reasonable evidence of safety and efficacy, together with the potential to reduce a patient's hospital stay. In addition, we may acquire approved products that can be marketed in hospitals by our commercial organization. In making our acquisition decisions, our approach is to:

- understand the market opportunity and potential cost savings for initially-targeted uses of the drug based on our knowledge of the acute care hospital markets and input from healthcare practitioners;
- assess the investment and development programs that will be necessary to achieve a marketable product profile in these initial uses;
- attempt to structure the design of our development programs to obtain critical information relating to the clinical and economic performance of the product early in the development process, so that we can make or adjust key development decisions; and
- assess the fit with our acute care franchise to enable commercial overlap and minimize the need for expansion of our commercial organization.

We believe that Angiomax, Clevelox and cangrelor each fit the profile set forth above. For each of these products, we structured the license agreements to include an upfront payment, milestone payments upon marketing and regulatory achievements and royalties on eventual product sales.

License Agreements

Biogen Idec. In March 1997, we entered into an agreement with Biogen, Inc., a predecessor of Biogen Idec, Inc., for the license of the anticoagulant pharmaceutical bivalirudin, which we have developed as Angiomax. Under the terms of the agreement, we acquired exclusive worldwide rights to the technology,

patents, trademarks, inventories and know-how related to Angiomax. In exchange for the license, we paid $2.0 million on the closing date and are obligated to pay up to an additional $8.0 million upon the first commercial sales of Angiomax for the treatment of AMI in the United States and Europe. In addition, we are obligated to pay royalties on sales of Angiomax and on any sublicense royalties on a country-by-country basis earned until the later of (1) 12 years after the date of the first commercial sales of the product in a country or (2) the date on which the product or its manufacture, use or sale is no longer covered by a valid claim of the licensed patent rights in such country. Under the terms of the agreement, the royalty rate due to Biogen on sales increases with growth in annual sales of Angiomax. The agreement also stipulates that we use commercially reasonable efforts to meet certain milestones related to the development and commercialization of Angiomax, including expending at least $20 million for certain developmental and commercialization activities, which we met in 1998. The license and rights under the agreement remain in force until our obligation to pay royalties ceases. Either party may terminate the agreement for material breach by the other party, if the material breach is not cured within 90 days after written notice. In addition, we may terminate the agreement for any reason upon 90 days prior written notice. Through February, 2005, we have paid a total of approximately $18.6 million in royalties relating to Angiomax under our agreement with Biogen.

AstraZeneca. In March 2003, we acquired from AstraZeneca exclusive worldwide license rights to Clevelox for all countries other than Japan. We acquired this license after having studied Clevelox under the study and exclusive option agreement with AstraZeneca that we entered into in March 2002. In exchange for the license, we paid $1.0 million in 2003 upon entering into the license and may have to pay up to an additional $5.0 million upon reaching certain regulatory milestones. In addition, we will be obligated to pay royalties on a country-by-country basis on future annual sales of Clevelox, and on any sublicense royalties earned, until the later of (1) the duration of the licensed patent rights which are necessary to manufacture, use or sell Clevelox in a country or (2) ten years from our first commercial sale of Clevelox in such country. The licenses and rights under the agreement remain in force until we cease selling Clevelox in any country or the agreement is otherwise terminated. We may terminate the agreement upon 30 days written notice, unless AstraZeneca, within 20 days of having received our notice, requests that we enter into good faith discussions to redress our concerns. If we cannot reach a mutually agreeable solution with AstraZeneca within three months of the commencement of such discussions, we may then terminate the agreement upon 90 days written notice. Either party may terminate the agreement for material breach upon 60 days prior written notice, if the breach is not cured within such 60 days.

In December 2003, we acquired from AstraZeneca exclusive license rights to cangrelor for all countries other than Japan, China, Korea, Taiwan and Thailand. In exchange for the license, we paid in January 2004 an upfront payment upon entering into the license and may have to make additional payments upon reaching certain regulatory milestones. In addition, we will be obligated to pay royalties on a country-by-country basis on future annual sales of cangrelor, and on any sublicense royalties earned, until the later of (1) the duration of the licensed patent rights which are necessary to manufacture, use or sell cangrelor in a country or (2) ten years from our first commercial sale of cangrelor in such country. The licenses and rights under the agreement remain in force until we cease selling cangrelor in any country or the agreement is otherwise terminated. We may terminate the agreement upon 30 days written notice, unless AstraZeneca, within 20 days of having received our notice, requests that we enter into good faith discussions to redress our concerns. If we cannot reach a mutually agreeable solution with AstraZeneca within three months of the commencement of such discussions, we may then terminate the agreement upon 90 days written notice. Either party may terminate the agreement for material breach upon 60 days prior written notice, if the breach is not cured within such 60 days.

Product Infrastructure

Our product infrastructure business unit supports the commercial business units by providing expertise in clinical data management and analysis, pre-clinical and scientific affairs resources, medical information and medical writing capabilities and product safety surveillance.

Corporate Infrastructure

Our corporate infrastructure business unit supports the commercial business units and has overall responsibility of certain company operations, including human resources, information technology, corporate finance, legal and external communications functions.

Research and Development

Our research and development expenses totaled $49.3 million in 2004, $35.9 million in 2003 and $38.0 million in 2002. The funding for Angiomax development has represented a significant portion of our research and development spending.

Employees

We believe that our success will depend greatly on our ability to identify, attract and retain capable employees. We have assembled a management team with significant experience in drug development and commercialization.

As of February 28, 2005, we employed 220 persons. Our employees are not represented by any collective bargaining unit, and we believe our relations with our employees are good.

Patents, Proprietary Rights and Licenses

Our success will depend in part on our ability to protect the products we acquire or license by obtaining and maintaining patent protection both in the United States and in other countries. We rely upon trade secrets, know-how, continuing technological innovations, contractual restrictions and licensing opportunities to develop and maintain our competitive position. We plan to prosecute and defend any patents or patent applications we acquire or license, as well as any proprietary technology.

In all, as of February 28, 2005, we exclusively licensed 13 issued United States patents and a broadly filed portfolio of corresponding foreign patents and patent applications. We have not yet filed any independent patent applications. The U.S. patents licensed by us are currently set to expire at various dates ranging from March 2010, in the case of the principal patent relating to Angiomax, to November 2019.

We have exclusively licensed from Biogen patents and applications for patents covering Angiomax and Angiomax analogs and other novel anticoagulants as compositions of matter, and processes for using Angiomax and Angiomax analogs and other novel anticoagulants. We are responsible for prosecuting and maintaining patents and patent applications relating to Angiomax. We have exclusively licensed from AstraZeneca, patents and patent applications covering Clevelox as a composition of matter and covering formulations and uses of Clevelox, and patents and patent applications covering cangrelor as a composition of matter, and covering formulations and uses of cangrelor. Under both licenses, AstraZeneca is responsible for prosecuting and maintaining these patents and patent applications relating to Clevelox and cangrelor, and we are required to reimburse AstraZeneca for expenses it incurs in connection with the prosecution and maintenance of the patents or patent applications.

The patent positions of pharmaceutical and biotechnology firms like us can be uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued. Consequently, we do not know whether any of the

applications we acquire or license will result in the issuance of patents or, if any patents are issued, whether they will provide significant proprietary protection or will be challenged, circumvented or invalidated. Because unissued U.S. patent applications filed prior to November 29, 2000 and patent applications filed within the last 18 months are maintained in secrecy until patents issue, and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain of the priority of inventions covered by pending patent applications. Moreover, we may have to participate in interference proceedings declared by the United States Patent and Trademark Office to determine priority of invention, or in opposition proceedings in a foreign patent office, either of which could result in substantial cost to us, even if the eventual outcome is favorable to us. There can be no assurance that the patents, if issued, would be held valid by a court of competent jurisdiction. An adverse outcome could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties or require us to cease using such technology.

The development of anticoagulants is intensely competitive. A number of pharmaceutical companies, biotechnology companies, universities and research institutions have filed patent applications or received patents in this field. Some of these applications could be competitive with applications we have acquired or licensed, or could conflict in certain respects with claims made under such applications. Such conflict could result in a significant reduction of the coverage of the patents we have acquired or licensed, if issued, which would have a material adverse effect on our business, financial condition and results of operations. In addition, if patents are issued to other companies that contain competitive or conflicting claims and such claims are ultimately determined to be valid, no assurance can be given that we would be able to obtain licenses to these patents at a reasonable cost, or develop or obtain alternative technology.

We also rely on trade secret protection for our confidential and proprietary information. No assurance can be given that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose such technology, or that we can meaningfully protect our trade secrets. We have a number of trademarks that we consider important to our business. The Medicines Company name and logo, Angiomax®, Angiox™ and Clevelox™ are either our registered trademarks or our trademarks in the United States and/or other countries.

It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees and consultants, the agreements provide that all inventions conceived by the individual shall be our exclusive property. There can be no assurance, however, that these agreements will provide meaningful protection or adequate remedies for our trade secrets in the event of unauthorized use or disclosure of such information.

Government Regulation

Government authorities in the United States and other countries extensively regulate the testing, manufacturing, labeling, advertising, promotion, export and marketing, among other things, of our products. In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act and implementing regulations. We cannot market a drug until we have submitted an application for marketing authorization to the FDA, and the FDA has approved it. Both before and after approval is obtained, violations of regulatory requirements may result in various adverse consequences, including the FDA's delay in approving or refusal to approve a product, suspension or withdrawal of an approved

product from the market, operating restrictions, and the imposition of civil or criminal penalties. The steps required before a drug may be marketed in the United States include:

- pre-clinical laboratory tests, animal studies and formulation studies;
- submission to the FDA of an investigational new drug exemption, or IND, for human clinical testing, which must become effective before human clinical trials may begin;
- adequate and well-controlled clinical trials to establish the safety and efficacy of the drug for each indication;
- submission to the FDA of a new drug application, or an NDA;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current good manufacturing practices, or cGMP; and
- FDA review and approval of the NDA.

Pre-clinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. The results of the pre-clinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND, which must become effective before human clinical trials may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions about issues such as the conduct of the trials as outlined in the IND. In such a case, the IND sponsor and the FDA must resolve any outstanding FDA concerns or questions before clinical trials can proceed. Submission of an IND does not necessarily result in the FDA allowing clinical trials to commence.

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

Clinical trials typically are conducted in three sequential phases, but the phases may overlap or be combined. Each trial must be reviewed and approved by an independent Institutional Review Board before it can begin. Phase I usually involves the initial introduction of the investigational drug into people to evaluate its safety, dosage tolerance, pharmacodynamics, and, if possible, to gain an early indication of its effectiveness. Phase II usually involves trials in a limited patient population to:

- evaluate dosage tolerance and appropriate dosage;
- identify possible adverse effects and safety risks; and
- evaluate preliminarily the efficacy of the drug for specific indications.

Phase III trials usually further evaluate clinical efficacy and test further for safety by using the drug in its final form in an expanded patient population. We cannot guarantee that Phase I, Phase II or Phase III testing will be completed successfully within any specified period of time, if at all. Furthermore, we or the FDA may suspend clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk.

Assuming successful completion of the required clinical testing, the results of the pre-clinical studies and of the clinical studies, together with other detailed information, including information on the manufacture and composition of the drug, are submitted to the FDA in the form of an NDA requesting approval to market the product for one or more indications. Before approving an application, the FDA usually will inspect the facility or the facilities at which the drug is manufactured, and will not approve the product unless cGMP compliance is satisfactory. If the FDA determines the application and the

manufacturing facilities are acceptable, the FDA will issue an approval letter. If the FDA determines the application or manufacturing facilities are not acceptable, the FDA will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. After approval, certain changes to the approved product, such as adding new indications, manufacturing changes, or additional labeling claims are subject to further FDA review and approval before the changes can be implemented. The testing and approval process requires substantial time, effort and financial resources, and we cannot be sure that any approval will be granted on a timely basis, if at all. As a condition of approval of an application, the FDA may require postmarket testing and surveillance to monitor the drug's safety or efficacy.

Once the FDA approves a product, we and our contract manufacturers must comply with a number of post-approval requirements. For example, holders of an approved NDA are required to report certain adverse reactions and production problems, if any, to the FDA, and to comply with certain requirements concerning advertising and promotional labeling for their products. Also, quality control and manufacturing procedures must continue to conform to cGMP after approval, and the FDA periodically inspects manufacturing facilities to assess compliance with cGMP. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

We use and will continue to use third-party manufacturers to produce our products in clinical and commercial quantities, and we cannot be sure that future FDA inspections will not identify compliance issues at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct. In addition, discovery of problems with a product may result in restrictions on a product, manufacturer, or holder of an approved NDA, including withdrawal of the product from the market. Also, new government requirements may be established that could delay or prevent regulatory approval of our products under development.

We are also subject to foreign regulatory requirements governing human clinical trials and marketing approval for pharmaceutical products which we sell outside the United States. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country. Whether or not we obtain FDA approval, we must obtain approval of a product by the comparable regulatory authorities of foreign countries before manufacturing or marketing the product in those countries. The approval process varies from country to country and the time required for these approvals may differ substantially from that required for FDA approval. Clinical trials in one country may not be accepted by other countries, and approval in one country may not result in approval in any other country. For clinical trials conducted outside the United States, the clinical stages generally are comparable to the phases of clinical development established by the FDA.

Competition

The development and commercialization of new drugs is competitive, and we face competition from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. Our competitors may develop or license products or other novel technologies that are more effective, safer or less costly than any that have been or are being developed by us, or may obtain FDA approval for their products more rapidly than we may obtain approval for ours.

The acquisition or licensing of pharmaceutical products is a competitive area, and a number of more established companies, which have acknowledged strategies to license or acquire products, may have competitive advantages, as may emerging companies taking similar or different approaches to product acquisition. These established companies may have a competitive advantage over us due to their size, cash flows and institutional experience.

Many of our competitors have substantially greater financial, technical and human resources than we have. Additional mergers and acquisitions in the pharmaceutical industry may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances made in the commercial applicability of technologies and greater availability of capital for investment in these fields. Our success will be based in part on our ability to build and actively manage a portfolio of drugs that addresses unmet medical needs and creates value in patient therapy.

We compete, in the case of Angiomax, and expect to compete, in the cases of Clevelox and cangrelor, on the basis of efficacy, safety, ease of administration and economic value compared to drugs used in current practice, or currently being developed.

Angiomax

Due to the incidence and severity of cardiovascular diseases, the market for anticoagulant therapies is large and competition is intense. We are evaluating Angiomax for additional uses in open vascular surgery such as CABG surgery, in medical conditions that require urgent treatment such as ACS, in patients with heparin allergy and in peripheral angioplasty. There are a number of anticoagulant therapies currently on the market, awaiting regulatory approval or in development for these uses.

Direct thrombin inhibitors. Direct thrombin inhibitors act directly on thrombin, inhibiting the action of thrombin in the clotting process. Because thrombin activates platelets, direct thrombin inhibitors also prevent platelet aggregation. Direct thrombin inhibitors include Angiomax, Refludan from Berlex Laboratories and Argatroban from GlaxoSmithKline, Encysive Pharmaceuticals Inc, and Mitsubishi Chemical Corp. Both Refludan and Argatroban are approved for use in the treatment of patients with HIT/HITTS. Argatroban is also approved for use in patients with HIT/HITTS undergoing angioplasty.

Indirect thrombin inhibitors. Heparin is manufactured and distributed by a number of companies as a generic product. Low molecular weight heparin products include Lovenox from Sanofi-Aventis and Fragmin from Pfizer Inc. Very short molecules of heparin, called pentasaccharide sequences, include Arixtra from Sanofi-Aventis. Heparin is widely used in patients with ischemic heart disease. Low molecular weight heparins have been approved for use in the treatment of patients with unstable angina and are being developed for use in angioplasty and vascular surgery. Arixtra has been approved for use in the treatment and prevention of deep vein thrombosis and is being developed for arterial thrombosis.

Platelet inhibitors. Platelet inhibitors, such as GP IIb/IIIa inhibitors, block the aggregation of platelets. GP IIb/IIIa inhibitors include ReoPro from Eli Lilly and Company and Johnson & Johnson/Centocor, Inc., Integrilin from Millennium Pharmaceuticals, Inc. and Schering-Plough Corporation, and Aggrastat from Merck & Co., Inc. and Guilford Pharmaceuticals Inc. ReoPro is approved and marketed for angioplasty in a broad range of patients. Integrilin is approved and marketed for angioplasty and for the management of acute coronary syndromes. Aggrastat is approved for the management of ACS.

Although platelet inhibitors drugs may be complementary to Angiomax, Angiomax may compete with platelet inhibitors for the use of hospital financial resources. For example, many U.S. hospitals receive a fixed reimbursement amount per procedure for the angioplasties and other treatment therapies they perform. Because this amount is not based on the actual expenses the hospital incurs, hospitals may choose to use either Angiomax or a platelet inhibitor but not necessarily several of the drugs together.

Clevelox

We expect that Clevelox will compete with a variety of parenteral antihypertensive agents before, during and after surgery including nitroglycerine, a generic product, Nipride from Hoffmann-La Roche Inc., Cardene IV from ESP Pharma, Inc., Brevibloc from Baxter Healthcare Corporation, and Corlopam from Hospira.

Cangrelor

We expect that cangrelor will compete with oral platelet inhibitors that are used in acute care settings such as clopidogrel from Bristol Meyers Squibb/Sanofi Pharmaceuticals Partnership.

Available Information

Our Internet address is http://*www.themedicinescompany.com*. The contents of our website are not part of this Annual Report on Form 10-K, and our Internet address is included in this document as an inactive textual reference only. We make our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports available free of charge on our website as soon as reasonably practicable after we file such reports with, or furnish such reports to, the Securities and Exchange Commission, or SEC.

Item 2. Properties

We currently occupy approximately 32,666 square feet of office space in Parsippany, New Jersey under a lease expiring in January 2013. We have entered into a lease for approximately 19,462 square feet of additional office space in the same building in Parsippany, New Jersey that we plan to occupy in the second quarter of 2005. The term of this lease also expires in January 2013. In addition, we lease approximately 5,700 square feet of office space in Waltham, Massachusetts under a lease expiring in December 2008. We believe our current arrangements will be sufficient to meet our needs for the foreseeable future and that any required additional space will be available on commercially reasonable terms to meet space requirements if they arise. We also have offices in Milton Park, Abingdon, United Kingdom.

Executive Officers of the Registrant

Information regarding our executive officers, including their names, ages and offices with us, is included in Part III of this annual report on Form 10-K, under "Item 10. Directors and Executive Officers of the Registrant."

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information and Holders

Our common stock trades on the Nasdaq National Market under the symbol "MDCO". The following table reflects the range of the high and low bid information per share of our common stock, as reported on the Nasdaq National Market for the periods indicated. These prices reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

	High	Low
Year Ended December 31, 2003		
First Quarter	$20.00	$15.20
Second Quarter	$25.91	$16.83
Third Quarter	$31.41	$19.25
Fourth Quarter	$29.98	$22.80
Year Ended December 31, 2004		
First Quarter	$33.15	$25.76
Second Quarter	$36.11	$26.93
Third Quarter	$32.40	$19.93
Fourth Quarter	$29.76	$22.27

Mellon Investor Services, LLC is the transfer agent and registrar for our common stock. As of the close of business on March 4, 2005, we had 208 holders of record of our common stock.

Dividends

We have never declared or paid cash dividends on our common stock. We anticipate that we will retain all of our future earnings, if any, for use in the expansion and operation of our business and do not anticipate paying cash dividends in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our board of directors.

Item 6. Selected Financial Data

In the table below, we provide you with our selected consolidated financial data. We have prepared this information using our audited consolidated financial statements for the years ended December 31, 2004, 2003, 2002, 2001 and 2000. In 2004, diluted shares include the effects of options and warrants outstanding. There are no diluted calculations for any prior periods as the impact would have been anti-dilutive. Diluted earnings/(loss) per common share data in 2000 reflect the conversion of our convertible notes, and accrued interest, and the conversion of our outstanding redeemable convertible preferred stock, and accrued dividends, into common stock upon the closing of our initial public offering in August 2000. For further discussion of the computation of basic and diluted earnings/(loss) per share, please see note 9 to our consolidated financial statements.

	Year Ended December 31,				
	2004	2003	2002	2001	2000
	(in thousands, except share and per share data)				
Statements of Operations Data					
Net revenue	$ 144,251	$ 85,591	$ 38,301	$ 14,248	$ —
Operating expenses					
Cost of revenue	29,123	22,749	10,284	2,110	—
Research and development	49,290	35,905	37,951	32,768	39,572
Selling, general and administrative	50,275	45,082	36,808	36,567	15,034
Total operating expenses	128,688	103,736	85,043	71,445	54,606
Income/(loss) from operations	15,563	(18,145)	(46,742)	(57,197)	(54,606)
Other income/(expense), net	2,126	1,403	911	2,313	(16,686)
Provision for income taxes	(690)	(128)	—	—	—
Net income/(loss)	16,999	(16,870)	(45,831)	(54,884)	(71,292)
Dividends and accretion to redemption value of redeemable convertible preferred stock	—	—	—	—	(30,343)
Net earnings/(loss) attributable to common stockholders	$ 16,999	$ (16,870)	$ (45,831)	$ (54,884)	$ (101,635)
Basic earnings/(loss) per common share	$ 0.36	$ (0.37)	$ (1.23)	$ (1.67)	$ (8.43)
Shares used in computing basic earnings/(loss) attributable to common stockholders per common share, basic and diluted	47,855,484	45,624,289	37,209,931	32,925,968	12,059,275
Diluted earnings/(loss) per common share	$ 0.34	$ (0.37)	$ (1.23)	$ (1.67)	$ (2.10)
Shares used in computing diluted earnings/(loss) per common share	49,772,314	45,624,289	37,209,931	32,925,968	24,719,075

	As of December 31,				
	2004	2003	2002	2001	2000
			(in thousands)		
Balance Sheet Data					
Cash and cash equivalents, available for sale securities and accrued interest receivable	$ 161,224	$ 136,855	$ 43,638	$ 54,016	$ 80,718
Working capital	173,349	139,725	54,172	59,744	68,023
Total assets	210,044	166,662	74,714	78,674	84,363
Accumulated deficit	(297,145)	(314,145)	(297,275)	(251,444)	(196,560)
Total stockholders' equity	171,671	140,165	53,934	61,121	69,239

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

You should read the following discussion and analysis of our financial condition and results of operations together with "Selected Consolidated Financial Data" and our financial statements and accompanying notes included elsewhere in this annual report. In addition to the historical information, the discussion in this annual report contains certain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated by the forward-looking statements due to our critical accounting policies and factors set forth under "Factors That May Affect Future Results" below and elsewhere in this annual report.

Overview

We are a pharmaceutical company that specializes in acute hospital care products, with growing revenue from sales of our first product, Angiomax® (bivalirudin). Angiomax is a direct thrombin inhibitor that was approved by the FDA in December 2000 for use as an anticoagulant in combination with aspirin in patients with unstable angina undergoing coronary angioplasty. We are also currently developing Angiomax for other indications. We have concentrated our commercial sales and marketing resources on the U.S. hospital market. Since we began selling Angiomax in 2001, revenues to date have been generated principally from sales of Angiomax in the United States. In September 2004, we received authorization from the European Commission to market Angiomax® (bivalirudin) as Angiox™ (bivalirudin) in the member states of the European Union for use as an anticoagulant in patients undergoing percutaneous coronary interventions. We began selling Angiox to Nycomed Danmark A/S, one of our European distribution partners, in August 2004 in anticipation of this approval. Our total net revenue was $144.3 million in 2004, $85.6 million in 2003 and $38.3 million in 2002, and we achieved profitability on an annual basis for the first time in 2004, with net income of $17.0 million.

We focus on increased use of Angiomax by existing hospital customers, as well as penetration to new hospitals, to evaluate our operating performance. Since the announcement of the results of our REPLACE-2 clinical trial in November 2002, additional hospitals have granted Angiomax formulary approval and hospital demand for the product has increased, which are critical elements of our ability to increase revenues. Specifically, in 2004, based on data from a third-party industry source, the number of hospitals purchasing Angiomax increased by approximately 21% as compared to 2003 and the number of hospitals purchasing four or more boxes of Angiomax increased by approximately 33% as compared to 2003.

From our inception through the third quarter of 2003, we generated losses on a quarterly basis as we incurred significant research and development expenses and general and administrative expenses relating to our development activities. In the last five consecutive quarters, as we have generated increased sales of Angiomax, we have been profitable.

Research and development expenses represent costs incurred for product acquisition, clinical trials, and activities relating to regulatory filings and manufacturing development efforts. We outsource much of our clinical trials and all of our manufacturing development activities to independent organizations to maximize efficiency and minimize our internal overhead. We expense our research and development costs as they are incurred. Selling, general and administrative expenses consist primarily of salaries and related expenses, general corporate activities and costs associated with promotion and marketing activities.

We expect to continue to spend significant amounts on the development of our products in the future. In 2005, we plan to continue to invest in clinical studies to expand the approved indications for Angiomax and to develop Clevelox and cangrelor. We also plan to continue our sales and marketing programs to promote Angiomax and educate and inform physicians, nurses, pharmacists and other medical decision-makers about the benefits of Angiomax. In light of these activities, as well as our plan to continue to evaluate possible acquisitions of late development-stage or approved products that fit within our growth strategy, we will likely need to generate greater revenues to maintain profitability.

In 2004, we had our first year of U.S. taxable income. We have accrued for U.S. and state alternative minimum taxes, state taxes based on net worth and some income taxes in international jurisdictions in our financial statements. At December 31, 2004, net operating losses available to offset future taxable income for federal income tax purposes were approximately $233.1 million. If not utilized, federal net operating loss carryforwards will expire at various dates beginning in 2012 and ending in 2023. We have provided a full valuation allowance against the potential tax benefit of our net operating losses since the realization of these benefits is not considered more likely than not. The future utilization of our net operating loss carryforwards may be limited based upon changes in ownership pursuant to regulations promulgated under the Internal Revenue Code of 1986, as amended.

Application of Critical Accounting Estimates

The discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and judgments that affect our reported assets and liabilities, revenues and expenses, and other financial information. Actual results may differ significantly from these estimates under different assumptions and conditions. In addition, our reported financial condition and results of operations could vary due to a change in the application of a particular accounting standard.

We regard an accounting estimate or assumption underlying our financial statements as a "critical accounting estimate" where:

- the nature of the estimate or assumption is material due to the level of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change; and
- the impact of the estimates and assumptions on financial condition or operating performance is material.

Our significant accounting policies are more fully described in Note 2 to our consolidated financial statements included in this annual report on Form 10-K. Not all of these significant accounting policies, however, fit the definition of "critical accounting estimates" included in this annual report on Form 10-K. We have discussed our accounting policies with the audit committee of our board of directors, and we believe that our estimates relating to revenue recognition and inventory described below fit the definition of "critical accounting estimates."

Revenue Recognition

Product Sales. We sell our products primarily to wholesalers and distributors, who, in turn, sell to hospitals. We do not recognize revenue from product sales until there is persuasive evidence of an arrangement, delivery has occurred, the price is fixed and determinable, the buyer is obligated to pay us, the obligation to pay is not contingent on resale of the product, the buyer has economic substance apart from us, we have no obligation to bring about the sale of the product, the amount of returns can be reasonably estimated and collectibility is reasonably assured.

We record allowances for product returns, chargebacks, rebates and other discounts at the time of sale, and report revenue net of such amounts. In determining allowances for product returns, chargebacks and rebates, we must make significant judgments and estimates. For example, in determining these amounts, we estimate hospital demand, buying patterns by hospitals and group purchasing organizations from wholesalers and the levels of inventory held by wholesalers. Making these determinations involves estimating whether trends in past buying patterns will predict future product sales.

The nature of our allowances requiring critical accounting estimates, and the specific considerations we use in estimating their amounts, are as follows:

- *Product returns.* Our customers have the right to return any unopened product during the 18-month period beginning six months prior to the labeled expiration date and ending 12 months after the labeled expiration date. As a result, in calculating the allowance for product returns, we must estimate the likelihood that product sold to wholesalers might remain in their inventory to within six months of expiration and analyze the likelihood that such product will be returned within 12 months after expiration.

  In estimating the likelihood of product remaining in our wholesalers' inventory, we rely on information from our wholesalers regarding their inventory levels, measured hospital demand as reported by third party sources and on internal sales data. We believe the information from our wholesalers and third party sources is directionally reliable, but we are unable to verify the accuracy of such data independently. We also consider our wholesalers' past buying patterns, estimated remaining shelf life of product previously shipped and the expiration dates of product currently being shipped.

  In estimating the likelihood of product return, we rely primarily on historic patterns of returns and estimated remaining shelf life of product previously shipped. During 2004, $0.6 million of Angiomax was returned to us, representing approximately 0.4% of the total revenue from Angiomax sales. At December 31, 2004 and 2003, our allowance for returns was $0.6 million and $1.1 million, respectively. A 10% change in our allowance for product returns in 2004 would have an approximate $0.1 million effect on our reported revenue in 2004.

- *Chargebacks and rebates.* Although we sell Angiomax primarily to wholesalers and distributors, we typically enter into agreements with hospitals, either directly or through group purchasing organizations acting on behalf of their hospital members, in connection with the hospitals' purchases of Angiomax from our wholesalers. Based on the terms of these agreements, most of our hospital customers have the right to receive a discounted price and volume-based rebate on product purchases. We provide a credit to the wholesaler, or a chargeback, representing the difference between the wholesaler's acquisition list price and the discounted price.

  As a result of these contracts, at the time of product shipment, we must estimate the likelihood that Angiomax sold to wholesalers might be ultimately sold to a contracting hospital or group purchasing organization. We must also estimate the contracting hospital's or group purchasing organization's volume of purchases.

  We base our estimates on the historic chargeback data we receive from wholesalers, which detail historic buying patterns and sales mix for particular hospitals and group purchasing organizations, and the applicable customer chargeback rates and rebate thresholds.

  At December 31, 2004 and 2003, our allowance for chargebacks was $3.1 million and $1.8 million, respectively, and our allowance for rebates was $1.6 million and $1.8 million, respectively. A 10% change in our allowance for chargebacks would have had an approximate $0.3 million effect on our reported revenue in 2004, and a 10% change in our allowance for rebates would have had an approximate $0.2 million effect on our reported revenue in 2004.

We have adjusted our allowances for product returns, chargebacks and rebates in the past based on our actual sales experience, and we will likely be required to make adjustments to these allowances in the future. We continually monitor our allowances and make adjustments when we believe actual experience may differ from our estimates.

The following table provides a summary of activity with respect to our allowances over the course of 2004 (amounts in thousands):

	Returns	Chargebacks	Rebates
Balance at December 31, 2003	$1,102	$1,772	$1,828
Allowances for sales during 2004	121	5,978	2,663
Actual credits issued for prior years sales	617	1,852	1,913
Actual credits issued for sales during 2004	3	2,795	954
Balance at December 31, 2004	$ 603	$3,103	$1,624

We have offered, and occasionally will offer in the future, incentives to wholesalers to ensure that they have what we believe are appropriate stocks of product to meet expected increased demand as a result of events such as clinical trials, regulatory approvals and competitive developments, or to ensure that they are stocking within a normal range of inventory for a product like Angiomax. Because our three largest U.S. wholesalers accounted for nearly 77% of our net revenue in 2004, it is critical that these wholesalers have adequate inventory to meet product demand. We only began selling Angiomax in the United States in 2001, and wholesaler buying patterns have sometimes been unpredictable. In addition, product demand has generally not grown at a uniform rate. For example, we experienced an accelerated rate of demand for Angiomax following commercial launch and following the announcement of REPLACE-2 trial results in November 2002. We believe that wholesaler inventories as of December 31, 2004 were within a normal range for a product like Angiomax, and we believe that sales recorded for the year ended December 31, 2004 were generally representative of underlying demand for Angiomax. We have no agreements, understandings or business practices under which we extend incentives based on levels of inventory held by wholesalers in excess of ordinary course of business inventory levels, and any incentives we may offer are not intended to have any relation to the wholesalers' cost of carrying inventory.

International Distribution Partners. Under our agreements with international distribution partners, we sell our product to these distribution partners at a percentage of the distribution partner's established net price. The established net price is typically determined in the quarter in which we sell our products to these distribution partners based on the distribution partner's net selling price. In those situations, usually prior to product launch, where product is sold prior to the establishment of the distribution partner's selling price, we initially record revenue at minimum prices outlined in these agreements and later adjust our selling price to the distribution partner once the partner's net selling price is determined. In accordance with the terms of these agreements, under no circumstances would the subsequent adjustment result in the net selling price being lower than the minimum price.

Revenue from the sale of distribution rights includes milestone payments. We record these payments as deferred revenue until contractual performance obligations have been satisfied, and we then recognize these payments ratably over the term of these agreements. When the period of deferral cannot be specifically identified from the contract, we must estimate the period based upon other critical factors contained within the contract. We review these estimates at least annually, which could result in a change in the deferral period.

Inventory

We record inventory upon the transfer of title from our vendors. Inventory is stated at the lower of cost or market value. Angiomax bulk product is classified as raw materials, and its costs are determined using acquisition costs. Work-in-progress costs of filling, finishing and packaging are recorded against specific product batches. Prior to FDA approval of Angiomax and its original manufacturing process in December 2000, we expensed all of these costs as research and development. We recorded as inventory

any Angiomax bulk drug product manufactured using the original manufacturing process to which we took title after FDA approval.

Together with our contract manufacturer, UCB Bioproducts, we have developed a second-generation chemical synthesis process, the Chemilog process, for the manufacture of Angiomax bulk drug substance. In May 2003, we received FDA approval for this process. All Angiomax bulk drug product manufactured using the Chemilog process to which title had transferred to us prior to FDA approval was expensed as research and development at the time of transfer of title, and all bulk drug product manufactured after FDA approval of the Chemilog process has been and will continue to be recorded as inventory upon transfer of title from our vendor.

We review our inventory for slow moving or obsolete amounts based on expected revenues. If actual revenues are less than expected, we may be required to make allowances for excess amounts of inventory in the future.

Results of Operations

Years Ended December 31, 2004 and 2003

Net Revenue. Net revenue increased 69% to $144.3 million for 2004 as compared to $85.6 million for 2003. As shown in the table below, for 2004, approximately $135.7 of net revenue was derived from U.S. sales of Angiomax and approximately $8.6 million of net revenue was derived from international sales, mostly related to stocking of Angiox by one of our European distributors. Virtually all of our revenue in 2003 was derived from U.S. sales of Angiomax. We believe that in addition to the international sales, growth in 2004 was due primarily to increased use of Angiomax in the United States by existing hospital customers, adoption of Angiomax by new hospital customers and higher prices as a result of a 3% price increase to our wholesalers in June 2004.

Net Revenue

	Year Ended December 31,			
Net Revenue	2004 (in thousands)	% of Total Revenue	2003 (in thousands)	% of Total Revenue
Angiomax				
United States Sales	$135,666	94%	$85,019	99%
International Sales	8,585	6%	572	1%
Total Net Revenue	$144,251	100%	$85,591	100%

In the third quarter of 2004, we shipped to Nycomed Danmark A/S, one of our European distribution partners, vials of Angiox to be sold in Europe after European regulatory approval. Pursuant to our distribution agreement, Nycomed paid a minimum transfer price per vial for these pre-approval vials, which we recognized as revenue in the third quarter of 2004 and agreed that once the price of the product to end-users was established, the effective transfer price payable to us for the pre-approval vials would be recalculated based on the end-user price. The effective transfer price could not be less than the minimum transfer price. Following determination of the effective transfer price on a country-by-country basis in the fourth quarter of 2004, Nycomed paid to us on a per vial basis the difference between the effective transfer price and the minimum transfer price. As a result, we recognized an additional $3.3 million in revenue in the fourth quarter of 2004 relating to the third quarter product shipments. In addition, we recognized $0.4 million in revenue in the fourth quarter of 2004 relating to post-approval product shipments to Nycomed. We expect to ship additional product to Nycomed in the first quarter of 2005.

In 2004 and 2003, we recognized $0.3 million and $0.1 million, respectively, of revenue from milestone payments related to the $2.5 million and a $1.5 million non-refundable fees received from Nycomed. These payments were recorded as deferred revenue in 2004 and 2002, respectively, and are being recognized ratably over the estimated term of our agreement with Nycomed.

Cost of Revenue. Cost of revenue in 2004 was $29.1 million, or 20% of net revenue, compared to $22.7 million, or 27% of net revenue in 2003. Cost of revenue in 2004 consisted of expenses in connection with the manufacture of the Angiomax sold, which represented 49% of the 2004 cost of revenue, royalty expenses under our agreement with Biogen Idec, Inc., which represented 37% of the 2004 cost of revenue, and the logistics costs of selling Angiomax, such as distribution, storage, and handling, which represented 14% of the 2004 cost of revenue. Cost of revenue in 2003 consisted of expenses in connection with the manufacture of the Angiomax sold, which represented 62% of the 2003 cost of revenue, royalty expenses under our agreement with Biogen Idec, which represented 25% of the 2003 cost of revenue, and the logistics costs of selling Angiomax, which represented 13% of the 2003 cost of revenue.

Our expenditures in connection with the manufacture of Angiomax sold in 2003 and 2004, and the decrease in our costs of manufacturing as a percentage of revenue from 2003 to 2004, reflected our transition from selling Angiomax manufactured using the original manufacturing process to selling Angiomax manufactured using the Chemilog process. The cost of manufacturing using the Chemilog process is lower than the cost of manufacturing using the original manufacturing process.

In 2003, we sold Angiomax that had been manufactured using the original manufacturing process until the third quarter. Late in the third quarter of 2003, we began selling Angiomax that was manufactured using the Chemilog process prior to FDA approval of that process in May 2003. All costs of manufacturing this Angiomax had been expensed as research and development costs and therefore were not reflected in cost of revenue. As a result, our cost of manufacturing as a percentage of revenue decreased substantially in the fourth quarter of 2003 compared to the first three quarters of 2003.

In the first quarter of 2004, we continued to sell Angiomax produced using the Chemilog process whose cost of manufacturing was previously expensed. As a result, our cost of manufacturing as a percentage of net revenue continued to benefit. Late in the first quarter of 2004, however, we began selling Angiomax produced using the Chemilog process to which we took title after FDA approval of the process. All costs of manufacturing this Angiomax had been recorded as inventory, which is reflected in cost of revenue when sold, rather than as research and development expense.

Since the second quarter of 2004, and for the foreseeable future, we expect to sell Angiomax produced using the Chemilog process that has not been previously expensed. We would expect, however, that our cost of manufacturing using the Chemilog process will remain lower as a percentage of revenue than our cost of manufacturing using the original manufacturing process had been.

Research and Development Expenses. Research and development expenses increased 37% to $49.3 million for 2004, from $35.9 million for 2003. The increase in research and development expenses was primarily due to a net $7.1 million increase of Angiomax clinical trial costs in 2004, including an $11.0 million increase in costs for ACUITY, our study of Angiomax in patients presenting in the emergency department with ACS, offset in part by a $3.5 million decrease in the expenses related to the REPLACE-2 trial. Angiomax manufacturing and development costs decreased by $1.1 million in 2004 as Chemilog inventory was expensed prior to FDA approval of the Chemilog process in May 2003. The overall increase in research and development expenses for 2004 was also due to an increase of $3.0 million in costs related to trials studying Clevelox and an increase of $3.5 million in infrastructure, cangrelor and other. This increase was primarily due to $1.7 million of cangrelor development costs and $1.8 million of increased infrastructure costs for data management, statistical analysis and product safety related costs.

The following table identifies for each of our major research and development projects, our spending for 2004 and 2003. Spending for past periods is not necessarily indicative of spending in future periods.

Major Research and Development Projects

Research and Development	Year Ended December 31, 2004 (in thousands)	% of Total R&D	2003 (in thousands)	% of Total R&D
Angiomax				
Clinical trials	$25,069	51%	$17,970	50%
Manufacturing development	2,088	4%	3,232	9%
Administrative and headcount costs	6,950	14%	6,105	17%
Total Angiomax	$34,107	69%	$27,307	76%
Clevelox	9,101	18%	6,052	17%
Infrastructure, cangrelor and other	6,082	13%	2,546	7%
	$49,290	100%	$35,905	100%

We currently plan to spend approximately $64 million to $68 million on research and development in 2005, of which approximately 67% is planned for Angiomax. This anticipated increase in research and development spending in 2005 primarily reflects the expected completion of patient enrollment and associated expenditures relating to the ACUITY trial and Clevelox and cangrelor Phase III trials.

Angiomax. We have a number of clinical trial programs currently underway for expanding the applications of Angiomax for use as an intravenous anticoagulant in the treatment of arterial thrombosis, a condition involving the formation of blood clots in the arteries. As of the date of this annual report, we are conducting:

- a Phase III trial program studying the use of Angiomax as an anticoagulant in patients undergoing coronary artery bypass graft surgery, or CABG, with and without the use of a bypass pump, and in treatment of patients with a clinical condition known as heparin-induced thrombocytopenia and thrombosis syndrome, or HIT/HITTS, who are undergoing CABG, with and without the use of a bypass pump; and
- a randomized Phase III trial called ACUITY to study the use of Angiomax in patients presenting to the emergency department with coronary syndromes who may be medically managed or ultimately treated in the catheterization laboratory or operating room.

We also completed three Phase IV programs during 2004, two of which investigated the use of Angiomax with drug-eluting stents and one that investigated Angiomax in patients undergoing percutaneous peripheral angioplasties.

Clevelox. We have commenced five Phase III clinical trials in two programs in cardiac surgery. Two of these trials are 100-patient efficacy studies with results expected later this year. The three other trials are 500-patient safety studies with results expected in mid-to-late 2005.

Cangrelor. As of the date of this annual report, we are conducting a 40-patient clinical trial in healthy volunteers to identify a dosing strategy for use of cangrelor in the cardiac catheterization laboratory. We intend to commence Phase III clinical testing of cangrelor in 2005.

Our success in expanding the approved indications for Angiomax, or developing our product candidates, is highly uncertain. We cannot reasonably estimate or know the nature, timing and estimated costs of the efforts necessary to complete the development of, or the period in which material net cash

inflows are expected to commence from, any of our product candidates due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- the scope, rate of progress and cost of our clinical trials and other research and development activities;
- future clinical trial results;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the cost and timing of regulatory approvals;
- the cost and timing of establishing sales, marketing and distribution capabilities;
- the cost of establishing clinical and commercial supplies of our product candidates;
- the effect of competing technological and market developments; and
- the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased 12% to $50.3 million for 2004, from $45.1 million for 2003. The increase in selling, general and administrative expenses of $5.2 million was primarily due to increased promotion expenditures, headcount additions and legal costs, including costs of settlement relating to an Equal Employment Opportunity Commission complaint.

Non-cash Stock Compensation. We amortize the deferred stock compensation that was recorded in 2000 over the respective vesting periods of the individual stock options. We recorded amortization expense for such deferred compensation of approximately $0.7 million and $2.2 million for the years ended December 31, 2004 and 2003, respectively. The amortization expense is included in our operating expenses in the consolidated statements of operations. As of December 31, 2004 there is no additional deferred stock compensation expense to be amortized.

In September 2003, we amended the terms of fully-vested options to purchase 10,000 shares of common stock that were granted to a non-employee consultant in May 2001. In addition, in May 2003 we granted options to a non-employee consultant to purchase 50,000 shares at an exercise price based on the fair market value of our common stock on the date of the consulting agreement in April 2003. In each case, these options were valued utilizing the Black-Scholes option-pricing model. We recorded the $0.1 million and $1.2 million in non-cash stock compensation expense associated with these options during 2004 and 2003, respectively. All of these options have now fully vested and we will not be required to record any additional associated non-cash stock compensation expense.

Other Income. Other income, which is comprised of interest income, increased over 51% to $2.1 million for 2004, from $1.4 million for 2003. The increase in interest income of $0.7 million was primarily due to higher rates of return on our available for sale securities in 2004.

Provision for Income Tax. Tax expense for 2004 was $0.7 million, mostly reflecting U.S. alternative minimum taxes based on our first full year of profitability and state taxes based on net worth.

Years Ended December 31, 2003 and 2002

Net Revenue. Net revenue increased 123% to $85.6 million for the year ended December 31, 2003 as compared to $38.3 million for the year ended December 31, 2002. As shown in the table below, virtually all the revenue in both periods was from U.S. sales of Angiomax. We believe that growth in 2003 was due primarily to increased use of Angiomax by existing hospital customers and adoption of Angiomax by new hospital customers as well as higher prices as a result of a 9% price increase to our wholesalers in June 2003.

Net Revenue

Net Revenue	Year Ended December 31, 2003 (in thousands)	% of Total Revenue	2002 (in thousands)	% of Total Revenue
Angiomax				
United States Sales	$85,019	99%	$38,152	100%
International Sales	572	1%	149	—%
Total Net Revenue	$85,591	100%	$38,301	100%

In each of 2003 and 2002, we recognized $0.1 million of the $1.5 million in deferred revenue we recorded in 2002 relating to the distributor fee received from Nycomed.

Cost of Revenue. Cost of revenue in 2003 was $22.7 million, or 27% of net revenue, compared to $10.3 million, or 27% of net revenue in 2002. Cost of revenue in 2003 consisted of expenses in connection with the manufacture of the Angiomax sold, which represented 62% of the 2003 cost of revenue, royalty expenses under our agreement with Biogen Idec, which represented 25% of the 2003 cost of revenue, and the logistics costs of selling Angiomax, which represented 13% of the 2003 cost of revenue. Cost of revenue in 2002 consisted of expenses in connection with the manufacture of the Angiomax sold, which represented 58% of the 2002 cost of revenue, royalty expenses under our agreement with Biogen Idec, which represented 28% of the 2002 cost of revenue and the logistics costs of selling Angiomax, which represented 14% of the 2002 cost of revenue.

Prior to obtaining FDA approval for Angiomax and its original manufacturing process, all costs of manufacturing Angiomax were expensed as research and development costs and therefore not reflected in cost of revenue. In late 2000, after obtaining FDA approval for Angiomax and its original manufacturing process, we began recording the costs of manufacturing Angiomax as inventory, which is reflected in cost of revenue when sold, rather than as research and development expense.

During 2002 and in early 2003, we took delivery of drug material manufactured using the Chemilog process. Because this material was manufactured prior to FDA approval of the Chemilog process, all costs of manufacturing were previously expensed as research and development. This process was approved by the FDA on May 23, 2003, and we have recorded all costs of manufacturing Angiomax incurred after May 23, 2003 as inventory.

Although we sold some Angiomax in 2003 that had been manufactured using the Chemilog process and whose cost of manufacturing was previously expensed, all of the Angiomax that we sold in 2002 and most of the Angiomax that we sold in 2003 was manufactured using the original manufacturing process following the date of FDA approval of Angiomax. We recorded the cost of manufacturing such material as cost of revenue during 2003. In 2002, we sold a greater proportion of Angiomax whose costs had been previously expensed than Angiomax for which the cost of manufacturing needed to be recorded in 2002. As a result, our cost of manufacturing as a percentage of cost of revenue was higher in 2003 compared to 2002.

Research and Development Expenses.

Research and development expenses decreased 5% to $35.9 million for 2003, from $38.0 million for 2002. The decrease in research and development expenses was primarily due to $17.3 million less of clinical trial costs in 2003 relating to REPLACE-2, which completed enrollment in 2002, and $4.0 million in lower manufacturing development costs incurred in connection with our receipt of Angiomax manufactured using the Chemilog process. These lower costs were partly offset by the addition of clinical development costs of $4.8 million for ACUITY, $4.0 million in additional costs for clinical trial programs

studying Angiomax use in cardiac surgery and $5.8 million in additional costs relating to Clevelox development consisting of a $1.0 million license fee to AstraZeneca and manufacturing development and other start-up costs relating to the two Phase III clinical trials we commenced in the fourth quarter of 2003 in patients undergoing cardiac surgery. The lower overall research and development costs in 2003 were also partially offset by development expenses relating to cangrelor, which consisted of an initial payment to AstraZeneca in connection with our license.

The following table identifies for each of our major research and development projects, our spending for 2003 and 2002. Spending for past periods is not necessarily indicative of spending in future periods.

Major Research and Development Projects

	Year Ended December 31,			
Research and Development	2003 (in thousands)	% of Total R&D	2002 (in thousands)	% of Total R&D
Angiomax				
Clinical trials	$17,970	50%	$23,493	62%
Manufacturing development	3,232	9%	7,184	19%
Administrative and headcount costs	6,105	17%	4,468	12%
Total Angiomax	$27,307	76%	$35,145	93%
Clevelox	6,052	17%	258	—%
Infrastructure, cangrelor and other	2,546	7%	2,548	7%
	$35,905	100%	$37,951	100%

We partially funded development activities relating to the Chemilog process, including validation and process batch costs of approximately $1.2 million and $6.7 million incurred in 2003 and 2002, respectively. We expensed all of these development costs as research and development in the period incurred.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased 22% to $45.1 million for 2003, from $36.8 million for 2002. The increase in selling, general and administrative expenses of $8.3 million was primarily due to an increase in salary and recruiting expenses relating to our sales force, which grew in early 2003 from 86 to 97 persons, and additional marketing and medical education expenses relating to the promotion of Angiomax, and certain non-cash stock compensation recorded in connection with options granted to non-employees.

Non-cash Stock Compensation. We amortize the deferred stock compensation that was recorded in 2000 over the respective vesting periods of the individual stock options. We recorded amortization expense for the deferred compensation of approximately $2.2 million and $3.3 million for the years ended December 31, 2003 and 2002, respectively. The amortization expense is included in our operating expenses in the consolidated statements of operations.

In May 2003 we granted options to a non-employee consultant to purchase 50,000 shares of common stock. In September 2003, we amended the terms of fully vested options to purchase 10,000 shares of common stock that were granted to a non-employee consultant in May 2001. In connection with these actions, we recorded $1.2 million in related non-cash stock compensation expense during 2003. The unvested options granted in May 2003 will be revalued, utilizing the Black-Scholes option pricing model, and expensed over the remaining five months of the one-year vesting term. In 2002, we accelerated the vesting of stock options held by terminated employees in connection with their termination agreements, which resulted in $0.5 million in non-cash compensation expense. Non-cash compensation expense is included in our operating expenses in the consolidated statements of operations.

Other Income and Expense. Interest income increased over 49% to $1.4 million for 2003, from $0.9 million for 2002. The increase in interest income of $0.5 million was primarily due to higher cash and available for sale securities balances attributable to our public offerings in 2002 and 2003, offset in part by lower available interest rates on securities. For 2002, interest income was attributable to the investment of the remaining proceeds of our sales of shares of common stock in a private placement in May 2001 and in a public offering in 2002.

We had no interest expense in 2003 as there were no borrowings during this period. We had interest expense of $33,000 during 2002 associated with the draw down of our revolving line of credit at the end of March 2002. We terminated the revolving line of credit in August 2002.

Liquidity and Capital Resources

Sources of Liquidity. Since our inception, we have financed our operations principally through the sale of common and preferred stock, sales of convertible promissory notes and warrants, interest income and revenues from sales of Angiomax. In the last five consecutive quarters, as we have generated increasing sales of Angiomax, we have been profitable. In 2004, we achieved profitability on an annual basis for the first time. We had $160.3 million in cash, cash equivalents and available for sale securities as of December 31, 2004.

In August and September 2000, we received $101.4 million in net proceeds from the sale of common stock in our initial public offering. Since our initial public offering, we have received an additional $41.8 million in net proceeds in May 2001 from the sale of 4.0 million shares of our common stock in a private placement, $30.9 million in net proceeds in June 2002 from the sale of 4.0 million shares of our common stock in a public offering and $91.5 million in net proceeds in March 2003 from the sale of 5.6 million shares of our common stock in a public offering. Prior to our initial public offering, we had received net proceeds of $79.4 million from the private placement of equity securities, primarily redeemable convertible preferred stock, and $19.4 million from the issuance of convertible notes and warrants. In 2004, employees and a consultant purchased stock pursuant to option exercises and our employee stock purchase plan for aggregate net proceeds to us of approximately $13.7 million.

In March 2002, we entered into a collaboration agreement with Nycomed, under which Nycomed serves as the exclusive distributor of Angiox in countries in the European Union other than Greece, Portugal and Spain. Under the agreement Nycomed paid us an initial non-refundable fee of $1.5 million and milestone payments of $2.5 million based on regulatory approvals in Europe. In addition, Nycomed purchased 79,428 shares of our common stock for a total purchase price of approximately $1.0 million.

Cash Flows. As of December 31, 2004, we had $36.5 million in cash and cash equivalents, as compared to $43.4 million as of December 31, 2003. Our major uses of cash during 2004 include net cash used in investing activities of $34.0 million, which was partially offset by $13.7 million in net cash provided by financing activities and $13.3 million in net cash provided by operations.

We had $13.3 million in net cash provided by operating activities during 2004. This consisted primarily of net income of $17.0 million, an increase of $5.2 million in accounts payable, an increase of $4.4 million in accrued expenses, mainly attributable to higher clinical trial and royalty costs, an increase of approximately $3.2 million in non-cash items, including amortization of premium and discounts on available for sale securities, non-cash stock compensation expense and depreciation, and an increase of $2.2 million in deferred revenue from the Nycomed milestone payment based upon regulatory approval in Europe. Cash was used in operations to fund an increase in inventory of $15.9 million, an increase in accounts receivable of $2.7 million and an increase in prepaid expenses of $0.3 million, mainly attributable to prepayment of insurance premiums.

During 2004, we used $34.0 million in net cash in investing activities, which consisted principally of the purchase of $112.8 million of available for sale securities and purchases of $0.8 million of fixed assets, mostly related to our leasehold improvements, offset by $79.7 million in proceeds from the maturation and sale of available for sale securities.

Cash provided by financing activities in 2004 reflected $13.7 million consisted of net proceeds to us related to purchases of stock by our employees and a consultant pursuant to option exercises and our employee stock purchase plan.

Funding Requirements. We expect to devote substantial resources to our research and development efforts and to our sales, marketing and manufacturing programs associated with the commercialization of our products. Our funding requirements will depend on numerous factors including:

- the extent to which Angiomax is commercially successful;
- the extent to which our international partners, including Nycomed, are commercially successful;
- the progress, level and timing of our research and development activities related to our clinical trials with respect to Angiomax, Clevelox and cangrelor;
- the cost and outcomes of regulatory reviews;
- the continuation or termination of third party manufacturing or sales and marketing arrangements;
- the cost and effectiveness of our sales and marketing programs;
- the status of competitive products;
- our ability to defend and enforce our intellectual property rights; and
- the establishment of additional strategic or licensing arrangements with other companies or acquisitions.

We believe, based on our operating plan as of the date of this annual report, which includes anticipated revenues from Angiomax and Angiox and interest income, that our current cash, cash equivalents and available for sale securities are sufficient to fund our operations into 2006 and beyond, without requiring us to obtain external financing. We expect, however, to periodically assess our financing alternatives and access the capital markets opportunistically. If our existing resources are insufficient to satisfy our liquidity requirements due to slower than anticipated revenues from Angiomax or otherwise, or if we acquire additional product candidates, or if we otherwise believe that raising additional capital would be in our interests and the interests of our stockholders, we may sell equity or debt securities or seek financing through other arrangements. Any sale of equity or debt securities may result in dilution to our stockholders, and debt financing may involve covenants limiting or restricting our ability to take specific actions, such as incurring additional debt or making capital expenditures. We cannot be certain that public or private financing will be available in amounts or on terms acceptable to us, if at all. If we seek to raise funds through collaboration or licensing arrangements with third parties, we may be required to relinquish rights to products, product candidates or technologies that we would not otherwise relinquish or grant licenses on terms that may not be favorable to us. If we are unable to obtain additional financing, we may be required to delay, reduce the scope of, or eliminate one or more of our planned research, development and commercialization activities, which could harm our financial condition and operating results.

Contractual Obligations

Our long-term contractual obligations include commitments and estimated purchase obligations entered into in the normal course of business. These include commitments related to purchases of

inventory of our products, research and development service agreements, operating leases and selling, general and administrative obligations.

Future estimated contractual obligations as of December 31, 2004 are:

Contractual Obligations	2005	2006	2007	2008	2009	Later Years	Total
Inventory related commitments	$49,231,000	$ —	$ —	$ —	$ —	$ —	$ 49,231,000
Research and development	20,469,000	24,853,000	3,400,000	—	—	—	48,722,000
Operating leases	1,460,000	1,733,000	1,759,000	1,763,000	1,589,000	4,976,000	13,280,000
Selling, general and administrative	3,814,000	132,000	—	—	—	—	3,946,000
Total contractual obligations	$74,974,000	$26,718,000	$5,159,000	$1,763,000	$1,589,000	$4,976,000	$115,179,000

Included above in inventory-related commitments are non-cancellable commitments to make payments to UCB Bioproducts of a total of $42.3 million during 2005 for Angiomax bulk drug substance to be produced using the Chemilog process and $6.9 million in related filling, finishing and packaging commitments through 2005. We also have $48.7 million of estimated contractual obligations for research and development activities, of which $4.5 million is non-cancellable. The amounts included in selling, general and administrative obligations are primarily related to non-cancelable consulting arrangements, of which $1.1 million is non-cancelable.

In addition to the contractual obligations above, we have agreed to make payments upon the achievement of sales and regulatory milestones, and agreed to pay royalties, to Biogen Idec, Inc. and to AstraZeneca AB under our product license agreements for Angiomax, Clevelox and cangrelor. Under the Angiomax license, we have agreed to pay up to an additional $8.0 million upon the first commercial sales of Angiomax for the treatment of acute myocardial infarction in the United States and Europe. Under the Clevelox license, we have agreed to pay up to an additional $5.0 million upon reaching certain regulatory milestones. Under the cangrelor license, we have made an upfront payment and will provide milestone payments upon regulatory approval in major markets. The foregoing amounts do not include royalties that we may also have to pay.

Forward-Looking Statements

This Annual Report on Form 10-K includes forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended. For this purpose, any statements contained herein regarding our strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives of management, other than statements of historical facts, are forward-looking statements. The words "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We cannot guarantee that we actually will achieve the plans, intentions or expectations expressed or implied in our forward-looking statements. There are a number of important factors that could cause actual results, levels of activity, performance or events to differ materially from those expressed or implied in the forward-looking statements we make. These important factors include our "critical accounting estimates" and the risk factors set forth below. Although we may elect to update forward-looking statements in the future, we specifically disclaim any obligation to do so, even if our estimates change, and readers should not rely on those forward-looking statements as representing our views as of any date subsequent to the date of this annual report.

Factors that May Affect Future Results

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below in addition to the other information included or incorporated by reference in this annual report. If any of the following risks actually occur, our business, financial condition or results of operations would likely suffer. In that case, the trading price of our common stock could fall.

Risks Related to Our Financial Results

We have a history of net losses and may not maintain profitability on an annual basis

Except for our most recently completed year, we have incurred net losses on an annual basis since our inception. As of December 31, 2004, we had an accumulated deficit of approximately $297.1 million. We expect to make substantial expenditures to further develop and commercialize our products, including costs and expenses associated with clinical trials, regulatory approvals and commercialization. Although we have achieved profitability in five consecutive quarters, we will likely need to generate significantly greater revenues to maintain profitability in light of our planned expenditures. We remain unsure as to whether we will remain profitable for any substantial period of time. If we fail to maintain profitability on a quarterly or annual basis, the market price of our common stock may decline.

Our business is very dependent on the commercial success of Angiomax

Angiomax is our only commercial product and, we expect, will account for almost all of our revenues for the foreseeable future. The commercial success of Angiomax will depend upon:

- its continued acceptance by regulators, physicians, patients and other key decision-makers as a safe, therapeutic and cost-effective alternative to heparin and other products used in current practice or currently being developed;
- our ability to expand the indications for which we can market Angiomax; and
- our ability to market Angiomax in countries outside of the United States, or to the extent to which our international distribution partners are successful in marketing Angiox.

If Angiomax is not commercially successful, we will have to find additional sources of funding or curtail or cease operations.

Our revenues are substantially dependent on a limited number of wholesalers and international distribution partners to which we sell Angiomax, and such revenues may fluctuate from quarter to quarter based on the buying patterns of these wholesalers and distribution partners

We sell Angiomax primarily to a limited number of national medical and pharmaceutical distributors and wholesalers with distribution centers located throughout the United States and several international distribution partners. During 2004, revenues from the sale of Angiomax to our three largest U.S. wholesalers totaled nearly 77% of our net revenues and sales to one of our international partners totaled nearly 5% of our net revenue. Our reliance on a small number of wholesalers and distribution partners could cause our revenues to fluctuate from quarter to quarter based on the buying patterns of these wholesalers and distribution partners. In addition, if any of these wholesalers or international partners fails to pay us on a timely basis or at all, our financial position and results of operations could be materially adversely affected.

Failure to achieve our revenue targets or raise additional funds in the future may require us to delay, reduce the scope of, or eliminate one or more of our planned activities

We will need to generate significantly greater revenues to maintain profitability on an annual basis. The product development, including clinical trials, manufacturing development and regulatory approvals,

of Angiomax for additional indications, Clevelox and cangrelor, and the acquisition and development of additional product candidates by us will require a commitment of substantial funds. Our future funding requirements, which may be significantly greater than we expect, depend upon many factors, including:

- the extent to which Angiomax is commercially successful;
- the extent to which our international distribution partners, including Nycomed, are commercially successful;
- the progress, level and timing of our research and development activities related to our clinical trials with respect to Angiomax, Clevelox and cangrelor;
- the cost and outcomes of regulatory submissions and reviews;
- packaging approval for Angiox from the European authorities, and pricing reimbursement approvals in individual European countries, on a timely basis;
- the continuation or termination of third party manufacturing or sales and marketing arrangements;
- the cost and effectiveness of our sales and marketing programs;
- the status of competitive products;
- our ability to defend and enforce our intellectual property rights; and
- the establishment of additional strategic or licensing arrangements with other companies, or acquisitions.

As of the date of this annual report, we believe, based on our current operating plan, which includes anticipated revenues from Angiomax and interest income, that our current cash, cash equivalents and available for sale securities are sufficient to fund our operations into 2006 and beyond without requiring us to obtain external financing. However, if our existing resources are insufficient to satisfy our liquidity requirements due to slower than anticipated sales of Angiomax or otherwise, or if we acquire additional product candidates, or if we otherwise believe that raising additional capital would be in our interests and the interests of our stockholders, we may sell equity or debt securities or seek financing through other arrangements. Any sale of additional equity or debt securities may result in dilution to our stockholders, and debt financing may involve covenants limiting or restricting our ability to take specific actions, such as incurring additional debt or making capital expenditures. We cannot be certain that public or private financing will be available in amounts or on terms acceptable to us, if at all. If we seek to raise funds through collaboration or licensing arrangements with third parties, we may be required to relinquish rights to products, product candidates or technologies that we would not otherwise relinquish or grant licenses on terms that may not be favorable to us. If we are unable to obtain additional financing, we may be required to delay, reduce the scope of, or eliminate one or more of our planned research, development and commercialization activities, which could harm our financial condition and operating results.

Fluctuations in our operating results could affect the price of our common stock

Our operating results may vary from period to period based on factors including the amount and timing of sales of Angiomax, the availability and timely delivery of a sufficient supply of Angiomax, the timing and expenses of clinical trials, announcements regarding clinical trial results and product introductions by us or our competitors, the availability and timing of third-party reimbursement, including in Europe, and the timing of regulatory approvals. If our operating results do not meet the expectations of securities analysts and investors as a result of these or other factors, the trading price of our common stock will likely decrease.

Our stock price has been and may in the future be volatile. This volatility may make it difficult for you to sell common stock when you want or at attractive prices

Our common stock has been and in the future may be subject to substantial price volatility. From January 1, 2003 to December 31, 2004, the closing price of our common stock ranged from a high of $35.11 per share to a low of $15.37 per share. The value of your investment could decline due to the effect of any of the following factors upon the market price of our common stock:

- changes in securities analysts' estimates of our financial performance;
- changes in valuations of similar companies;
- variations in our quarterly operating results;
- acquisitions and strategic partnerships;
- announcements of technological innovations or new commercial products by us or our competitors;
- disclosure of results of clinical testing or regulatory proceedings by us or our competitors;
- the timing, amount and receipt of revenue from sales of our products and margins on sales of our products;
- governmental regulation and approvals;
- developments in patent rights or other proprietary rights;
- changes in our management; and
- general market conditions.

In addition, the stock market has experienced significant price and volume fluctuations, and the market prices of biotechnology companies have been highly volatile. Moreover, broad market and industry fluctuations that are not within our control may adversely affect the trading price of our common stock. You must be willing to bear the risk of fluctuations in the price of our common stock and the risk that the value of your investment in our securities could decline.

Risks Related to Commercialization

Angiomax may compete with all categories of anticoagulant drugs, which may limit the use of Angiomax

Because each category of anticoagulant drug acts on different components of the clotting process, we believe that there will be continued clinical work to determine the best combination of drugs for clinical use. We recognize that Angiomax may compete with other anticoagulant drugs to the extent Angiomax and any of these anticoagulant drugs are approved for the same indication.

In addition, other anticoagulant drugs may compete with Angiomax for the use of hospital financial resources. For example, many U.S. hospitals receive a fixed reimbursement amount per procedure for the angioplasties and other treatment therapies they perform. Because this amount is not based on the actual expenses the hospital incurs, hospitals may choose to use either Angiomax or other anticoagulant drugs, but not necessarily several of the drugs together.

Because the market for thrombin inhibitors is competitive, our product may not obtain widespread use

We have positioned Angiomax as a replacement for heparin, which is a widely used, inexpensive, generic drug used in patients with arterial thrombosis. Because heparin is inexpensive and has been widely used for many years, physicians and medical decision-makers may be hesitant to adopt Angiomax. In addition, due to the high incidence and severity of cardiovascular diseases, competition in the market for thrombin inhibitors is intense and growing. There are a number of direct and indirect thrombin inhibitors

currently on the market, awaiting regulatory approval and in development, including orally administered agents. The thrombin inhibitors on the market include products for use in the treatment of patients with a clinical condition known as HIT/HITTS, patients with unstable angina and patients with deep vein thrombosis.

We face substantial competition, which may result in others discovering, developing or commercializing competing products before or more successfully than we do

Our industry is highly competitive. Our success will depend on our ability to acquire and develop products and apply technology, and our ability to establish and maintain markets for our products. Potential competitors in the United States and other countries include major pharmaceutical and chemical companies, specialized pharmaceutical companies and biotechnology firms, universities and other research institutions. Many of our competitors have substantially greater research and development capabilities and experience, and greater manufacturing, marketing and financial resources, than we do. Accordingly, our competitors may develop or license products or other novel technologies that are more effective, safer, more convenient or less costly than existing products or technologies or products or technologies that are being developed by us or may obtain regulatory approvals for products more rapidly than we are able. Technological development by others may render our products or product candidates noncompetitive. We may not be successful in establishing or maintaining technological competitiveness.

Near-term growth in our sales of Angiomax is dependent on continued physician acceptance of Angiomax clinical data

In the fall of 2002, we completed a 6,002 patient post-marketing Phase 3b/4 clinical trial of Angiomax in coronary angioplasty called REPLACE-2. In November 2002, the principal investigators of the clinical trial announced that, based on 30-day patient follow-up results, Angiomax met all of the primary and secondary objectives of the trial. In March 2003, we released the results of the detailed cost analysis study to examine per-patient total hospital resource consumption at U.S. clinical trial sites. In September 2003, the principal investigators of the clinical trial announced that, based on six-month patient follow-up results, Angiomax again met all of the primary and secondary objectives of the trial. In November 2003, the principal investigators presented one-year follow-up mortality data from the trial, which confirmed the 30-day and six-month mortality results.

We believe that the near-term commercial success of Angiomax will depend upon the extent to which physicians, patients and other key decision-makers accept the results of the REPLACE-2 trial. Since the original results were announced, additional hospitals have granted Angiomax formulary approval and hospital demand for the product has increased. We cannot be certain, however, that these trends will continue. Some commentators have challenged various aspects of the trial design of REPLACE-2, the conduct of the study and the analysis and interpretation of the results from the study, including how we define bleeding and the clinical relevance of types of ischemic events. In addition, in May 2004, we received a non-approvable letter from the FDA relating to a supplemental new drug application, which had sought an amended label for Angiomax in order to include, among other trial results, the REPLACE-2 data. The FDA stated that, because in its view there were deficiencies in the study methods used and in the analysis of the clinical data we submitted, it could not approve the proposed label changes without data from additional studies. If physicians, patients and other key decision-makers do not accept the trial results, as a result of these commentators, the FDA or otherwise, adoption of Angiomax may suffer, and our business will be materially adversely affected.

Our ability to generate future revenue from products will be affected by reimbursement and drug pricing

Acceptable levels of reimbursement of drug treatments by government authorities, private health insurers and other organizations will have an effect on our ability to successfully commercialize, and attract collaborative partners to invest in the development of, product candidates. We cannot be sure that

reimbursement in the United States or elsewhere will be available for any products we may develop or, if already available, will not be decreased in the future. If reimbursement is not available or is available only to limited levels, we may not be able to commercialize our products, and may not be able to obtain a satisfactory financial return on our products.

In certain countries, particularly the countries of the European Union, the pricing of prescription pharmaceuticals and the level of reimbursement are subject to governmental control. In some countries, it can take an extended period of time to establish and obtain reimbursement, and reimbursement approval may be required at the individual patient level, which can lead to further delays. In addition, in some countries, it can take an extended period of time to collect payment even after reimbursement has been established.

Third-party payers increasingly are challenging prices charged for medical products and services. Also, the trend toward managed health care in the United States and the changes in health insurance programs, as well as legislative proposals, may result in lower prices for pharmaceutical products, including any products that may be offered by us. Cost-cutting measures that health care providers are instituting, and the effect of any health care reform, could materially adversely affect our ability to sell any products that are successfully developed by us and approved by regulators. Moreover, we are unable to predict what additional legislation or regulation, if any, relating to the health care industry or third-party coverage and reimbursement may be enacted in the future or what effect such legislation or regulation would have on our business.

We could be exposed to significant liability claims if we are unable to obtain insurance at acceptable costs and adequate levels or otherwise protect ourselves against potential product liability claims

Our business exposes us to potential product liability risks, which are inherent in the testing, manufacturing, marketing and sale of human healthcare products. Product liability claims might be made by patients in clinical trials, consumers, health care providers or pharmaceutical companies or others that sell our products. These claims may be made even with respect to those products that are manufactured in licensed and regulated facilities or otherwise possess regulatory approval for commercial sale.

These claims could expose us to significant liabilities that could prevent or interfere with the development or commercialization of our products. Product liability claims could require us to spend significant time and money in litigation or pay significant damages. As of the date of this annual report, we are covered, with respect to our commercial sales and our clinical trials, by products liability insurance in the amount of $20.0 million per occurrence and $20.0 million annually in the aggregate on a claims-made basis. This coverage may not be adequate to cover any product liability claims.

As we commercialize our products, we may wish to increase our product liability insurance. Product liability coverage is expensive. In the future, we may not be able to maintain or obtain such product liability insurance on reasonable terms, at a reasonable cost or in sufficient amounts to protect us against losses due to product liability claims.

Risks Related to Regulatory Approval of Our Product Candidates

If we do not obtain regulatory approvals for our product candidates we will not be able to market our product candidates and our ability to generate additional revenues could be materially impaired

Except for Angiomax, which has been approved for sale in the United States for use as an anticoagulant in combination with aspirin in patients with unstable angina undergoing coronary angioplasty, and which has been approved for sale in the European Union and in other countries for indications similar to that approved by the FDA, we do not have a product approved for sale in the United States or any foreign market. We must obtain approval from the FDA in order to sell our product candidates in the United States and from foreign regulatory authorities in order to sell our product

candidates in other countries. Securing regulatory approval requires the submission of extensive pre-clinical and clinical data, information about product manufacturing processes and inspection of facilities and supporting information to the regulatory authorities for each therapeutic indication to establish the product's safety and efficacy. We must successfully complete our clinical trials and demonstrate manufacturing capability before we can file for approval to sell our products. Delays in obtaining or failure to obtain regulatory approvals may:

- delay or prevent the successful commercialization of any of our product candidates;
- diminish our competitive advantage; and
- defer or decrease our receipt of revenues.

The regulatory review and approval process to obtain marketing approval for a new drug takes many years and requires the expenditure of substantial resources. This process can vary substantially based on the type, complexity, novelty and indication of the product candidate involved. Changes in the regulatory approval policy during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application may cause delays in the approval or rejection of an application. The regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that data is insufficient for approval and require additional pre-clinical, clinical or other studies. In addition, varying interpretations of the data obtained from pre-clinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate.

We cannot expand the indications for which we are marketing Angiomax unless we receive FDA approval for each additional indication. Failure to expand these indications will limit the size of the commercial market for Angiomax

In December 2000, we received approval from the FDA for the use of Angiomax as an anticoagulant in combination with aspirin in patients with unstable angina undergoing coronary angioplasty. One of our key objectives is to expand the indications for which Angiomax is approved for marketing by the FDA. In order to market Angiomax for these expanded indications, we will need to conduct appropriate clinical trials, obtain positive results from those trials and obtain FDA approval for such proposed indications. If we are unsuccessful in expanding the approved indications for the use of Angiomax, the size of the commercial market for Angiomax will be limited.

In July 2003, we submitted a supplemental new drug application to the FDA requesting an amended package insert for Angiomax in order to expand the approved use of Angiomax. In May 2004 we received a non-approvable letter from the FDA relating to that supplemental new drug application. We filed a response to the FDA and are in discussions with the FDA about the issues it has raised.

Clinical trials of product candidates are expensive and time-consuming, and the results of these trials are uncertain

Before we can obtain regulatory approvals to market any product for a particular indication, we will be required to complete pre-clinical studies and extensive clinical trials in humans to demonstrate the safety and efficacy of such product for such indication. As of the date of this annual report, we are evaluating Angiomax in the operating room for use in open vascular surgery such as CABG surgery and in the emergency department in medical conditions that require urgent treatment such as ACS. We are also studying Angiomax in patients with heparin allergy and in peripheral angioplasty. As of the date of this annual report, we are conducting a Phase III trial program in patients undergoing cardiac surgery to investigate the potential of Clevelox to simplify and improve the treatment of these patients.

Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more of our clinical trials can occur at any stage of testing.

Success in pre-clinical testing or early clinical trials does not ensure that later clinical trials will be successful, and interim results of a clinical trial do not necessarily predict final results. We may experience numerous unforeseen events during, or as a result of, the clinical trial process that could delay or prevent us from receiving regulatory approval or commercializing our products, including:

- our clinical trials may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials;
- data obtained from pre-clinical testing and clinical trials may be subject to varying interpretations, which could result in the FDA or other regulatory authorities deciding not to approve a product in a timely fashion, or at all;
- the cost of clinical trials may be greater than we currently anticipate;
- any regulatory approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the product commercially non-viable;
- regulators or institutional review boards may not authorize us to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we, or the FDA, might suspend or terminate a clinical trial at any time on various grounds, including a finding that participating patients are being exposed to unacceptable health risks; and
- the effects of our product candidates may not be the desired effects or may include undesirable side effects or the product candidates may have other unexpected characteristics.

The rate of completion of clinical trials depends in part upon the rate of enrollment of patients. Patient enrollment is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the existence of competing clinical trials and the availability of alternative or new treatments. In particular, the patient population targeted by some of our clinical trials may be small. Delays in patient enrollment in any of our current or future clinical trials may result in increased costs and program delays.

If we fail to comply with the extensive regulatory requirements to which we and our products are subject, our products could be subject to restrictions or withdrawal from the market and we could be subject to penalties

The testing, manufacturing, labeling, advertising, promotion, export, and marketing, among other things, of our products, both before and after approval, are subject to extensive regulation by governmental authorities in the United States, Europe and elsewhere throughout the world. Failure to comply with the laws administered by the FDA, the European Medicines Agency, or other governmental authorities could result in any of the following:

- delay in approving or refusal to approve a product;
- product recall or seizure;
- interruption of production;
- operating restrictions;
- warning letters;
- injunctions;
- criminal prosecutions; and
- unanticipated expenditures.

Both before and after approval of a product, quality control and manufacturing procedures must conform to current good manufacturing practice regulations, or GMP. Regulatory authorities, including the FDA, periodically inspect manufacturing facilities to assess compliance with GMP. Accordingly, we and our contract manufacturers will need to continue to expend time, monies, and effort in the area of production and quality control to maintain GMP compliance.

Risks Related to our Dependence on Third Parties for Manufacturing, Research and Development and Distribution Activities

We depend on single suppliers for the production of Angiomax, Clevelox and cangrelor bulk drug substance and different single suppliers to carry out all fill-finish activities

We do not manufacture any of our products and do not plan to develop any capacity to manufacture them. As of the date of this annual report, we obtain all of our Angiomax bulk drug substance from one manufacturer, UCB Bioproducts, and rely on another manufacturer, Ben Venue Laboratories, to carry out all fill-finish activities for Angiomax, which includes final formulation and transfer of the drug into vials where it is then freeze-dried and sealed. The terms of our agreement with UCB Bioproducts require us to purchase from UCB Bioproducts a substantial portion of our Angiomax bulk drug product manufactured using Chemilog process.

As of the date of this annual report on Form 10-K, we obtain all of our Clevelox bulk drug substance for use in clinical trials from one manufacturer, Johnson Matthey Pharma Services. We will rely on a different single supplier, Hospira, Inc., and its proprietary formulation technology, for the manufacture of all finished Clevelox product, as well as for release testing and clinical packaging.

As of the date of this annual report, we have transferred the manufacturing process for all of our cangrelor bulk drug substance to Johnson Matthey Pharma Services for scale up and manufacture for Phase III clinical trials and commercial supplies. We will also rely on a different single supplier, Baxter Pharmaceutical Solutions LLC, for the manufacture of all finished cangrelor drug product for all Phase III clinical trials and to carry out release testing.

There are a limited number of manufacturers capable of manufacturing Angiomax and Clevelox. As of the date of this annual report, we do not have alternative sources for production of bulk drug substance or to carry out fill-finish activities. In the event that UCB Bioproducts, Johnson Matthey, Hospira or Ben Venue is unable to carry out their respective manufacturing obligations, we may be unable to obtain alternative manufacturing, or obtain such manufacturing on commercially reasonable terms or on a timely basis. If we were required to transfer manufacturing processes to other third party manufacturers, we would be required to satisfy various regulatory requirements, which could cause us to experience significant delays in receiving an adequate supply of Angiomax or Clevelox. Any delays in the manufacturing process may adversely impact our ability to meet commercial demands for Angiomax on a timely basis and supply product for clinical trials of Angiomax or Clevelox.

The development and commercialization of our products may be terminated or delayed, and the costs of development and commercialization may increase, if third parties on which we rely to manufacture and support the development and commercialization of our products do not fulfill their obligations

Our development and commercialization strategy entails entering into arrangements with corporate and academic collaborators, contract research organizations, distributors, third-party manufacturers, licensors, licensees and others to conduct development work, manage or conduct our clinical trials, manufacture our products and market and sell our products outside of the United States. We do not have the expertise or the resources to conduct such activities on our own and, as a result, are particularly dependent on third parties in most areas.

We may not be able to maintain our existing arrangements with respect to the commercialization of Angiomax or establish and maintain arrangements to develop and commercialize Clevelox, cangrelor or any additional product candidates or products we may acquire on terms that are acceptable to us. Any current or future arrangements for development and commercialization may not be successful. If we are not able to establish or maintain agreements relating to Angiomax, Clevelox, cangrelor or any additional products we may acquire on terms that we deem favorable, our results of operations would be materially adversely affected.

Third parties may not perform their obligations as expected. The amount and timing of resources that third parties devote to developing, manufacturing and commercializing our products are not within our control. Our collaborators may develop and commercialize, either alone or with others, products and services that are similar to or competitive with the products that are the subject of the collaboration with us. Furthermore, our interests may differ from those of third parties that manufacture or commercialize our products. Our collaborators may re-evaluate their priorities from time to time, including following mergers and consolidations, and change the focus of their development and commercialization efforts. Disagreements that may arise with these third parties could delay or lead to the termination of the development or commercialization of our product candidates, or result in litigation or arbitration, which would be time consuming and expensive.

If any third party that manufactures or supports the development or commercialization of our products breaches or terminates its agreement with us, or fails to commit sufficient resources to our collaboration or conduct its activities in a timely manner, or fails to comply with regulatory requirements, such breach, termination or failure could:

- delay or otherwise adversely impact the development or commercialization of Angiomax, Clevelox, cangrelor or any additional products that we may acquire or develop;
- require us to seek a new collaborator or undertake unforeseen additional responsibilities or devote unforeseen additional resources to the development or commercialization of our products; or
- result in the termination of the development or commercialization of our products.

Use of third party manufacturers may increase the risk that we will not have appropriate supplies of our product candidates.

Reliance on third party manufacturers entails risks to which we would not be subject if we manufactured product candidates or products ourselves, including:

- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party; and
- the possible termination or nonrenewal of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for us.

If we are not able to obtain adequate supplies of Angiomax, Clevelox and cangrelor, it will be more difficult for us to compete effectively and develop our product candidates. Angiomax and our product candidates may compete with product candidates and products of third parties for access to manufacturing facilities.

We have inventory commitments to UCB Bioproducts through the end of 2005 which are intended to mitigate the risk of inadequate supply. If sales of Angiomax were to decline, we could be required to make an allowance for excess or obsolete inventory.

Our contract manufacturers are subject to ongoing, periodic, unannounced inspection by the FDA and corresponding state and foreign agencies or their designees to ensure strict compliance with the FDA's Good Manufacturing Practice, regulations and other governmental regulations and corresponding foreign standards. We cannot be certain that our present or future manufacturers will be able to comply with cGMP regulations and other FDA regulatory requirements or similar regulatory requirements outside the United States. We do not control compliance by our contract manufacturers with these regulations and standards. Failure of our third party manufacturers or us to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approval of our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of Angiomax and our product candidates.

Risks Related to our Intellectual Property

A breach of any of the agreements under which we license commercialization rights to products or technology from others could cause us to lose license rights that are important to our business or subject us to claims by our licensors

We license rights to products and technology that are important to our business, and we expect to enter into additional licenses in the future. For instance, we have exclusively licensed patents and patent applications relating to Angiomax from Biogen Idec and Health Research Inc. and relating to Clevelox and cangrelor from AstraZeneca. Under these agreements, we are subject to commercialization and development, sublicensing, royalty, patent prosecution and maintenance, insurance and other obligations. Any failure by us to comply with any of these obligations or any other breach by us of these license agreements could give the licensor the right to terminate the license in whole, terminate the exclusive nature of the license or bring a claim against us for damages. Any such termination or claim, particularly relating to our agreements with Biogen Idec and Health Research Inc., could have a material adverse effect on our business. Even if we contest any such termination or claim and are ultimately successful, our stock price could suffer. In addition, upon any termination of a license agreement, we may be required to license to the licensor any related intellectual property that we developed.

If we are unable to obtain or maintain patent protection for the intellectual property relating to our products, the value of our products will be adversely affected

The patent positions of pharmaceutical companies like us are generally uncertain and involve complex legal, scientific and factual issues. Our success depends significantly on our ability to:

- obtain and maintain U.S. and foreign patents, including defending those patents against adverse claims;
- protect trade secrets;
- operate without infringing the proprietary rights of others; and
- prevent others from infringing our proprietary rights.

We may not have any additional patents issued from any patent applications that we own or license. If additional patents are granted, the claims allowed may not be sufficiently broad to protect our technology. In addition, issued patents that we own or license may be challenged, narrowed, invalidated or circumvented, which could limit our ability to stop competitors from marketing similar products or limit the length of term of patent protection we may have for our products. Changes in patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection.

Our patents also may not afford us protection against competitors with similar technology. Because patent applications in the United States and many foreign jurisdictions are typically not published until eighteen months after filing, or in some cases not at all, and because publications of discoveries in the scientific literature often lag behind actual discoveries, neither we nor our licensors can be certain that others have not filed or maintained patent applications for technology used by us or covered by our pending patent applications without our being aware of these applications.

We exclusively license U.S. patents and patent applications and corresponding foreign patents and patent applications relating to Angiomax, Clevelox and cangrelor. As of the date of this annual report on Form 10-K, we exclusively license six issued U.S. patents relating to Angiomax, three issued U.S. patents relating to Clevelox and four issued U.S. patents relating to cangrelor. We have not yet filed any independent patent applications. The principal U.S. patent that covers Angiomax expires in 2010. The U.S. Patent and Trademark Office has rejected our application for an extension of the term of the patent beyond 2010 because the application was not filed on time by our counsel. We are exploring alternatives to extend the term of the patent, but we can provide no assurance that we will be successful. We have entered into agreements with the counsel involved in the filing that suspend the statute of limitations on our claims against them for failing to make a timely filing. We have entered into a similar agreement with Biogen Idec relating to any claims for damages and/or license termination they may bring in the event that a dispute arises between us and Biogen Idec relating to the late filing.

We may be unable to utilize the Chemilog process if UCB Bioproducts breaches our agreement

Our agreement with UCB Bioproducts for the supply of Angiomax bulk drug substance requires that UCB Bioproducts transfer the technology that was used to develop the Chemilog process to a secondary supplier of Angiomax bulk drug substance or to us or an alternate supplier at the expiration of the agreement. If UCB Bioproducts fails or is unable to transfer successfully this technology, we would be unable to employ the Chemilog process to manufacture our Angiomax bulk drug substance, which could cause us to experience delays in the manufacturing process and increase our manufacturing costs in the future.

If we are not able to keep our trade secrets confidential, our technology and information may be used by others to compete against us

We rely significantly upon unpatented proprietary technology, information, processes and know-how. We seek to protect this information by confidentiality agreements with our employees, consultants and other third-party contractors, as well as through other security measures. We may not have adequate remedies for any breach by a party to these confidentiality agreements. In addition, our competitors may learn or independently develop our trade secrets. If our confidential information or trade secrets become publicly known, they may lose their value to us.

If we infringe or are alleged to infringe intellectual property rights of third parties, it will adversely affect our business

Our research, development and commercialization activities, as well as any product candidates or products resulting from these activities, may infringe or be claimed to infringe patents or patent applications under which we do not hold licenses or other rights. Third parties may own or control these patents and patent applications in the United States and abroad. These third parties could bring claims against us or our collaborators that would cause us to incur substantial expenses and, if successful against us, could cause us to pay substantial damages. Further, if a patent infringement suit were brought against us or our collaborators, we or they could be forced to stop or delay research, development, manufacturing or sales of the product or product candidate that is the subject of the suit.

As a result of patent infringement claims, or in order to avoid potential claims, we or our collaborators may choose or be required to seek a license from the third party and be required to pay license fees or

royalties or both. These licenses may not be available on acceptable terms, or at all. Even if we or our collaborators were able to obtain a license, the rights may be nonexclusive, which could result in our competitors gaining access to the same intellectual property. Ultimately, we could be prevented from commercializing a product, or be forced to cease some aspect of our business operations, if, as a result of actual or threatened patent infringement claims, we or our collaborators are unable to enter into licenses on acceptable terms. This could harm our business significantly.

There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the pharmaceutical and biotechnology industries. In addition to infringement claims against us, we may become a party to other patent litigation and other proceedings, including interference proceedings declared by the United States Patent and Trademark Office and opposition proceedings in the European Patent Office, regarding intellectual property rights with respect to our products and technology. The cost to us of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Patent litigation and other proceedings may also absorb significant management time.

Risks Related to Growth and Employees

If we fail to acquire and develop additional product candidates or approved products it will impair our ability to grow

We have a single product approved for marketing. In order to generate additional revenues, we intend to acquire and develop additional product candidates or approved products. The success of this growth strategy depends upon our ability to identify, select and acquire pharmaceutical products that meet the criteria we have established. Because we neither have, nor intend to establish, internal scientific research capabilities, we are dependent upon pharmaceutical and biotechnology companies and other researchers to sell or license product candidates to us. We will be required to integrate any acquired products into our existing operations. Managing the development of a new product entails numerous financial and operational risks, including difficulties in attracting qualified employees to develop the product.

Any product candidate we acquire will require additional research and development efforts prior to commercial sale, including extensive pre-clinical and/or clinical testing and approval by the FDA and corresponding foreign regulatory authorities. All product candidates are prone to the risks of failure inherent in pharmaceutical product development, including the possibility that the product candidate will not be safe and effective or approved by regulatory authorities.

In addition, we cannot assure you that any approved products that we develop or acquire will be:

- manufactured or produced economically;
- successfully commercialized; or
- widely accepted in the marketplace.

We have previously acquired rights to products and, after having conducted development activities, determined not to devote further resources to those products. We cannot assure you that any additional products that we acquire will be successfully developed.

In addition, proposing, negotiating and implementing an economically viable acquisition is a lengthy and complex process. Other companies, including those with substantially greater financial, marketing and sales resources, may compete with us for the acquisition of product candidates and approved products. We

may not be able to acquire the rights to additional product candidates and approved products on terms that we find acceptable, or at all.

We may undertake strategic acquisitions in the future and any difficulties from integrating such acquisitions could damage our ability to attain or maintain profitability

We may acquire additional businesses and products that complement or augment our existing business. Integrating any newly acquired business or product could be expensive and time-consuming. We may not be able to integrate any acquired business or product successfully or operate any acquired business profitably. Moreover, we may need to raise additional funds through public or private debt or equity financing to acquire any businesses or products, which may result in dilution for stockholders or the incurrence of indebtedness.

We may not be able to manage our business effectively if we are unable to attract and retain key personnel and consultants

Our industry has experienced a high rate of turnover of management personnel in recent years. We are highly dependent on our ability to attract and retain qualified personnel for the acquisition, development and commercialization activities we conduct or sponsor. If we lose one or more of the members of our senior management, including our Chairman and Chief Executive Officer, Dr. Clive A. Meanwell, or other key employees or consultants, our ability to implement successfully our business strategy could be seriously harmed. Our ability to replace these key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to acquire, develop and commercialize products successfully. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate such additional personnel.

Our corporate governance structure, including provisions in our certificate of incorporation and by-laws and Delaware law, may prevent a change in control or management that securityholders may consider desirable

Section 203 of the General Corporation Law of the State of Delaware and our certificate of incorporation and by-laws contain provisions that might enable our management to resist a takeover of our company or discourage a third party from attempting to take over our company. These provisions include the inability of stockholders to act by written consent or to call special meetings, a classified board of directors and the ability of our board of directors to designate the terms of and issue new series of preferred stock without stockholder approval.

These provisions could have the effect of delaying, deferring, or preventing a change in control of us or a change in our management that stockholders may consider favorable or beneficial. These provisions could also discourage proxy contests and make it more difficult for stockholders to elect directors and take other corporate actions. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock or our other securities.

Item 7A. Quantitative and Qualitative Disclosure About Market Risk

Market risk is the risk of change in fair value of a financial instrument due to changes in interest rates, equity prices, creditworthiness, financing, exchange rates or other factors. Our primary market risk exposure relates to changes in interest rates in our cash, cash equivalents and available for sale securities. We place our investments in high-quality financial instruments, primarily money market funds, corporate debt and U.S. government agency securities with maturities of less than two years, which we believe are subject to limited interest rate and credit risk. We currently do not hedge interest rate exposure. At December 31, 2004, we held $160.3 million in cash, cash equivalents and available for sale securities which had an average interest rate of approximately 2.1%. Of this amount, approximately 53% of the cash, cash equivalents and available for sale securities were due on demand or within one year and had an average

interest rate of approximately of 2.0%. The remaining 47% were due within two years and had an average interest rate of approximately 2.1%.

Most of our transactions are conducted in U.S. dollars. We do have certain agreements with parties located outside the United States. Transactions under certain of these agreements are conducted in U.S. dollars, subject to adjustment based on significant fluctuations in currency exchange rates. Transactions under certain other of these agreements are conducted in the local foreign currency. If the applicable exchange rate undergoes a change of 10.0%, we do not believe that it would have a material impact on our results of operations or cash flows.

Item 8. Financial Statements and Supplementary Data

All financial statements and schedules required to be filed hereunder are filed as Appendix A to this annual report on Form 10-K and incorporated herein by this reference.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of the Company's disclosure controls and procedures as of December 31, 2004. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of December 31, 2004, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's report on our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) and the independent registered public accounting firm's related audit report are included as Appendix A to this Form 10-K and are incorporated herein by reference.

Management's Annual Report on Internal Control Over Financial Reporting

The report required to be filed hereunder is included in Appendix A to this annual report on Form 10-K and incorporated herein by this reference.

Attestation Report of Our Registered Public Accounting Firm

The report required to be filed hereunder is included in Appendix A to this annual report on Form 10-K and incorporated herein by this reference.

Changes in Internal Control Over Financial Reporting

No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the fourth quarter or fiscal year ended December 31, 2004 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

On December 14, 2004, the compensation committee of our board of directors determined the amounts of cash bonuses to be paid to our executive officers. We paid these bonuses in January 2005. The amount of the bonuses paid to our named executive officers is reflected in the summary included in Part III of the annual report on Form 10-K, under "Item 11. Executive Compensation."

PART III

Item 10. Directors and Executive Officers of the Registrant

Below is information about our executive officers, key employees and directors, including their ages as of February 28, 2005, their positions with us, the length of time they have held their positions, and their business experience for at least the past five years. There are no family relationships among any of our executive officers, key employees or directors.

Name	Age	Position
Clive A. Meanwell, M.D., Ph.D.*	46	Chief Executive Officer and Chairman of the Board of Directors
John Kelley*	51	President, Chief Operating Officer and Director
Steven H. Koehler*	54	Senior Vice President and Chief Financial Officer
John D. Richards, D.Phil.*	48	Vice President
Paul M. Antinori, J.D*	51	Vice President, General Counsel and Secretary
Gary Dickinson	53	Vice President
Fred M. Ryan	53	Vice President
Leonard Bell, M.D.	46	Director
William W. Crouse(3)	62	Director
Robert J. Hugin(1)	50	Director
T. Scott Johnson, M.D.(1)	57	Director
Armin M. Kessler(1)(2)(3)	66	Director
Robert G. Savage(2)(3)	51	Director

* Executive Officer

(1) Member of the Audit Committee

(2) Member of the Compensation Committee

(3) Member of the Nominating and Corporate Governance Committee

Clive A. Meanwell, M.D., Ph.D. Dr. Meanwell has served as our principal executive officer, or as one of our principal executive officers, continuously since 1996: he has served as our Chief Executive Officer since August 2004, and he served as our President from August 2004 to December 2004, as our Executive Chairman from September 2001 to August 2004 and as our Chief Executive Officer and President from 1996 to September 2001. From 1995 to 1996, Dr. Meanwell was a Partner and Managing Director at MPM Capital L.P., a venture capital firm. From 1986 to 1995, Dr. Meanwell held various positions at Hoffmann-La Roche, Inc., a pharmaceutical company, including Senior Vice President from 1992 to 1995, Vice President from 1991 to 1992 and Director of Product Development from 1986 to 1991. Dr. Meanwell currently serves as a director of Endo Pharmaceuticals Inc. Dr. Meanwell received an M.D. and a Ph.D. from the University of Birmingham, United Kingdom.

John Kelley has been our President and Chief Operating Officer since December 2004 and a director since February 2005. Prior to joining us, Mr. Kelley held a series of positions at Aventis, an international pharmaceutical company. From September 2003 until September 2004, Mr. Kelley served as Senior Vice President, Global Marketing and Medical at Aventis, where he was accountable for worldwide brand management of Aventis' core strategic brands and managed strategic alliances with partner companies. From September 2002 to September 2003, he served as Senior Vice President, Strategic Risk Officer for Aventis, advising the Management Board and Chief Executive Officer. From January 2000 to September 2002, Mr. Kelley served as Vice President, Head of Strategic Development of Aventis where he was responsible for leading the strategic planning process of the pharmaceutical division of Aventis as well

as merger and acquisition activity. Prior to the formation of Aventis, he served as a Vice President, Commercial Director, U.S. at Hoechst Marion Roussel, Inc., a life sciences firm focused on pharmaceuticals and agriculture, from March 1998 through December 1999. Prior to that, Mr. Kelley served as Vice President of Marketing of Hoechst Marion Roussel from 1995 to 1998. Mr. Kelley received a B.A. degree from Wilkes University and an M.B.A. degree from Rockhurst University.

Steven H. Koehler has been our Vice President and Chief Financial Officer since April 2002 and our Senior Vice President and Chief Financial Officer since August 2004. From March 2002 to April 2002, Mr. Koehler served as our Vice President, Finance and Business Administration. From July 2001 to March 2002, Mr. Koehler was Vice President, Finance and Chief Financial Officer of Vion Pharmaceuticals, Inc., a biotechnology company which develops cancer treatments. From April 1999 to July 2001, Mr. Koehler served as Vice President, Finance and Administration and as a member of the executive board of Knoll Pharmaceuticals, Inc., a wholly owned subsidiary of BASF Corporation, the U.S. subsidiary of a transnational chemical and life sciences company. From June 1997 to April 1999, Mr. Koehler was Vice President, Finance and Controlling for Knoll AG in Ludwigshafen, Germany, the former global pharmaceutical subsidiary of BASF AG. From November 1995 to June 1997, he served as Vice President, Value Based Management for Knoll AG. Mr. Koehler was Vice President, Finance and Treasurer for Boots Pharmaceuticals, Inc. from 1993 until its acquisition by Knoll in 1995. Mr. Koehler is a Certified Public Accountant. Mr. Koehler received a B.A. degree from Duke University and an M.B.A. degree from the Kellogg Graduate School of Management, Northwestern University.

John D. Richards, D.Phil. joined us in October 1997 and has been a Vice President since 1999, with a focus on product manufacturing and quality. From 1993 until he joined us in October 1997, Dr. Richards was Director of Process Development and Manufacturing at Immulogic Pharmaceutical Corporation, a pharmaceutical company. From 1989 to 1993, Dr. Richards was a Technical Manager at Zeneca PLC, a pharmaceutical company, where he developed and implemented processes for the manufacture of peptides as pharmaceutical active intermediates. In 1986, Dr. Richards helped establish Cambridge Research Biochemicals, a manufacturer of peptide-based products for pharmaceutical and academic customers. Dr. Richards received an M.A. and a D.Phil. in organic chemistry from the University of Oxford, United Kingdom, and has carried out post-doctoral research work at the Medical Research Councils Laboratory of Molecular Biology in Cambridge, United Kingdom.

Paul M. Antinori, J.D. has been our General Counsel since May 2002 and has been a Vice President since August 2004. From March 1998 to April 2002, Mr. Antinori was General Counsel and a consultant to Physician Computer Network, Inc., a healthcare information technology company. Prior to March 1998, Mr. Antinori was a partner at Gibbons, Del Deo, Dolan, Griffinger & Vecchione in Newark, New Jersey. Mr. Antinori received his J.D. from the University of Virginia School of Law and his B.A. from Boston College.

Gary Dickinson has been a Vice President since April 2001 with a focus on human resources activities. From March 2000 to April 2001, Mr. Dickinson was the Vice President of Human Resources of Elementis Specialties, Inc., a specialty chemicals manufacturing firm. From January 1997 to April 2001, Mr. Dickinson was the Senior Director of Human Resources of Bristol-Myers Squibb Company, a pharmaceuticals firm. Mr. Dickinson holds a B.A. from the University of Sheffield, United Kingdom.

Fred M. Ryan has been a Vice President since April 2000, with a focus on corporate strategic development, new product acquisitions and Angiomax commercial development. From April 2000 to September 2001, Mr. Ryan also served as a Partner and the Vice President of Business Development of Stack Pharmaceuticals, Inc. From July 1991 to April 2000, he held senior management positions with Novartis Pharmaceuticals Corporation, a pharmaceutical company, in the United States in the areas of Finance, Strategic Planning, Business Development and Marketing, serving from 1998 to April 2000 as Executive Director Mature Products responsible for managing sales and marketing activities for a portfolio

of products having annual sales in excess of $500 million. He received a B.S. and a B.A. degrees from Bryant College and his M.B.A. from Fairleigh Dickinson University.

Leonard Bell, M.D. has been a director since May 2000. From January 1992 to March 2002, Dr. Bell served as the President and Chief Executive Officer, Secretary and Treasurer of Alexion Pharmaceuticals, Inc., a pharmaceutical company. Since March 2002, Dr. Bell has served as the Chief Executive Officer, Secretary and Treasurer of Alexion Pharmaceuticals, Inc. Since 1993, Dr. Bell has served as an Adjunct Assistant Professor of Medicine and Pathology at the Yale University School of Medicine. Dr. Bell is the recipient of various honors and awards from academic and professional organizations and his work has resulted in more than 45 scientific publications, invited presentations and patent applications. Dr. Bell currently also serves as a director of Alexion Pharmaceuticals, Inc. Dr. Bell received an A.B. from Brown University and an M.D. from the Yale University School of Medicine.

William W. Crouse has been a director since April 2003. Since January 1994, Mr. Crouse has been a Managing Director of HealthCare Ventures, a venture capital firm with a focus on biotechnology firms. From 1987 to 1993, Mr. Crouse served as Worldwide President of Ortho Diagnostic Systems, a subsidiary of Johnson & Johnson that manufactures diagnostic tests for hospitals, and a Vice President of Johnson & Johnson International. Before joining Johnson & Johnson, Mr. Crouse was a Division Director of DuPont Pharmaceuticals Company, a pharmaceutical firm, where he was responsible for international operations and worldwide commercial development activities. Before joining Dupont, he served as President of Revlon Health Care Group's companies in Latin America, Canada, and Asia/Pacific. Mr. Crouse currently also serves as a director of ImClone Systems, Inc. Mr. Crouse received a B.S. in finance and economics from Lehigh University and an M.B.A. from Pace University.

Robert J. Hugin has been a director since April 2003. Since June 1999, Mr. Hugin has been the Senior Vice President and Chief Financial Officer of Celgene Corporation, a biopharmaceutical company focused on cancer and immunological diseases. From 1985 to 1999, Mr. Hugin held positions with J.P. Morgan & Co. Inc., an investment banking firm, serving most recently as a Managing Director. Mr. Hugin also currently serves as a director of Celgene Corporation. Mr. Hugin received an A.B. from Princeton University and an M.B.A. from the University of Virginia.

T. Scott Johnson, M.D. has been a director since September 1996. In July 1999, Dr. Johnson founded JSB Partners, L.P., an investment bank focusing on mergers and acquisitions, private financings and corporate alliances within the health care sector. From September 1991 to July 1999, Dr. Johnson served as a founder and managing director of MPM Capital, L.P., a venture capital firm. Dr. Johnson received both a B.S. and an M.D. from the University of Alabama.

Armin M. Kessler has been a director since October 1998. Mr. Kessler joined us after a 35-year career in the pharmaceutical industry, which included senior management positions at Sandoz Pharma Ltd., Basel, Switzerland, United States and Japan (now Novartis Pharma AG) and, most recently, at Hoffmann-La Roche, Basel where he was Chief Operating Officer and Head of the Pharmaceutical Division until 1995. Mr. Kessler currently also serves as a director of Spectrum Pharmaceuticals, Inc., Gen-Probe Incorporated and PRA International, Inc. Mr. Kessler received degrees in physics and chemistry from the University of Pretoria, a degree in chemical engineering from the University of Cape Town, a law degree from Seton Hall and an honorary doctorate in business administration from the University of Pretoria.

Robert G. Savage has been a director since April 2003. From March 2002 to April 2003, Mr. Savage was Group Vice President and President for the General Therapeutics and Inflammation Business, of Pharmacia Corporation, a research-based pharmaceutical firm acquired by Pfizer Inc. in April 2003. From September 1996 to January 2002, Mr. Savage held several senior positions with Johnson & Johnson, including Worldwide Chairman for the Pharmaceuticals Group during 2001, Company Group Chairman responsible for the North America pharmaceuticals business from 2000 to 2001, President, Ortho-McNeil Pharmaceuticals from 1998 to 2000 and Vice President Sales & Marketing from 1996 to 1998. Mr. Savage

also serves as a director for Noven Pharmaceuticals, a leader in the development of advanced drug delivery technologies, NovaDel Pharma Inc., a specialty pharmaceutical company developing drug delivery systems and chairman of the board of directors for EpiCept Corporation, a specialty pharmaceutical company focused on the development and commercialization of topically-delivered prescription pain management therapeutics. Mr. Savage received a B.S. in biology from Upsala College and an M.B.A. from Rutgers University.

Terms of Office.

Our board of directors is divided into three classes, and the terms of the three classes are staggered so that only one class is elected each year. At each annual meeting of stockholders, directors are elected to serve for a three-year term to succeed directors of the same class whose terms are then expiring. The terms of our:

- class 1 directors, William W. Crouse, T. Scott Johnson and John Kelley, will expire upon our 2007 annual meeting;
- class 2 directors, Robert J. Hugin and Clive A. Meanwell will expire upon our 2005 annual meeting; and
- class 3 directors, Leonard Bell, Armin M. Kessler and Robert G. Savage, will expire upon our 2006 annual meeting.

Our board of directors elects our officers annually, and officers serve until their successors are elected, or their earlier resignation or removal.

Audit Committee.

Members of the Audit Committee. Our board of directors has a separately-designated standing audit committee established by our full board for the purposes of overseeing our accounting and financial reporting processes and audits of our financial statements. The members of the audit committee are Robert Hugin, who serves as Chairman, Armin M. Kessler and T. Scott Johnson.

Financial Expert on Audit Committee. Our board of directors has determined that we currently have two audit committee financial experts, Robert J. Hugin and Armin M. Kessler. In deciding whether members of our audit committee qualify as financial experts within the meaning of the SEC regulations and the NASDAQ listing standards, our board considered the nature and scope of experiences and responsibilities members of our audit committee have previously had with reporting companies. Messrs. Hugin and Kessler, like all of the other members of our audit committee, are independent directors.

Section 16(a) Beneficial Ownership Reporting Compliance.

Section 16(a) of the Securities Exchange Act of 1934 requires our directors, executive officers and holders of more than ten percent of our common stock to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities. Based solely on our review of copies of reports filed by the reporting persons furnished to us, or written representations from reporting persons, we believe that during 2004, the reporting persons complied with all Section 16(a) filing requirements, other than one late filing by Clive Meanwell, one late filing by John Richards and two late filings by Steven Koehler. Each of these late filings reported one transaction.

Code of Ethics.

We have adopted a code of business conduct and ethics applicable to all of our employees, including our principal executive officer, our principal financial officer and our controller. The code of business conduct and ethics is available on our website, *www.themedicinescompany.com.*

1. From our main web page, first click on "The Medicines Investment."
2. Next, click on "Corporate Governance."
3. Finally, click on "Code of Business Conduct and Ethics"

Any waiver of the code of business conduct and ethics for executive officers or directors, or any amendment to the code that applies to executive officers or directors, may only be made by the board of directors. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of this code of ethics by posting such information on our website, at the address and location specified above. To date, no such waivers have been requested or granted.

Item 11. Executive Compensation

The following table presents summary information for the years ended December 31, 2004, 2003 and 2002, for:

- our chief executive officer;
- our former chief executive officer; and
- our three other executive officers who were serving at the end of the fiscal year.

These five individuals are referred to collectively as our named executive officers.

Summary Compensation Table

		Annual Compensation(1)		Long-Term Compensation Awards	
Name And Position	Year	Salary	Bonus	Securities Underlying Options (#)	All Other Compensation ($)(2)
Clive A. Meanwell(3).....	2004	$400,000	$180,000	100,000	$1,170
Chief Executive Officer	2003	$325,000	$250,000	125,000	$1,065
	2002	$300,000	$180,000	123,000	$ 990
David M. Stack(4)	2004	$315,000	$157,500	—	$1,601
Former President and Chief Executive	2003	$300,000	$150,000	65,000	$1,486
Officer	2002	$265,000	$115,000	204,000	$1,325
John Kelley(5).....	2004	$ 26,250	$ 20,000	225,000	$ 133
President and Chief Operating Officer					
Steven H. Koehler(6).....	2004	$260,417	$103,400	77,000	$1,288
Senior Vice President and Chief	2003	$222,500	$100,000	50,000	$1,083
Financial Officer	2002	$172,689	$ 65,000	250,000	$ 874
John D. Richards	2004	$176,800	$ 64,076	18,500	$ 547
Vice President	2003	$170,000	$105,000	50,000	$ 532
	2002	$150,000	$ 48,000	25,000	$ 450

(1) The aggregate amount of perquisites for each named executive officer did not exceed the lesser of $50,000 or 10% of the executive's total salary and bonus for the respective fiscal years and have been omitted in accordance with SEC rules.

(2) The dollar amount in the "All Other Compensation" column represents life insurance premium payments made by us on behalf of the named executive officer for his benefit.

(3) Dr. Meanwell served as our Executive Chairman from September 2001 to August 2004. In August 2004, he became our Chief Executive Officer.

(4) Mr. Stack resigned as Chief Executive Officer and President in August 2004.

(5) Mr. Kelley became our President and Chief Operating Officer in December 2004, at which time he received a one-time "sign-on" bonus.

(6) Mr. Koehler became our Vice President in March 2002 and our Chief Financial Officer in April 2002.

Option Grants in 2004

The following table summarizes information regarding options granted to each of the named executive officers during the year ended December 31, 2004. With the exception of the options granted to Mr. Kelley, options granted in 2004 to the named executive officers become exercisable in 48 equal monthly installments, commencing one month after the vesting commencement date, which is typically the grant date. The options granted to Mr. Kelley become exercisable over 48 months, with 25% of the shares covered by the option vesting 12 months after the vesting commencement date and the remainder of the shares covered by the option vesting in 36 equal monthly installments commencing one month after the first anniversary of the vesting commencement date. All options have an exercise price equal to the closing price per share of our common stock on the Nasdaq National Market on the date of grant.

Amounts in the following table represent hypothetical gains that could be achieved for the respective options if exercised at the end of the option term. The 5% and 10% assumed annual rates of compounded stock price appreciation are mandated by the rules of the SEC and do not represent an estimate or projection of our future common stock prices. These amounts represent assumed rates of appreciation in the value of our common stock from the fair market value on the date of grant. Actual gains, if any, on stock option exercises are dependent on the future performance of our common stock and overall stock market conditions. The amounts reflected in the following table may not be achieved.

Option Grants in Last Fiscal Year

	Individual Grants(1)				Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term	
Name	Number Of Securities Underlying Options Granted	Percent of Options Granted to Employees in 2004	Exercise Price Per Share	Expiration Date	5%	10%
Clive A. Meanwell.....	100,000	4.4%	$28.02	12/14/14	$1,762,163	$4,465,666
David M. Stack	—	—	—	—	—	—
John Kelley.....	225,000	10%	$25.25	12/1/14	$3,572,908	$9,054,449
Steven H. Koehler.....	30,000	1.3%	$23.77	8/3/14	$ 448,465	$1,136,498
	47,000	2.1%	$28.02	12/14/14	$ 828,216	$2,098,863
John D. Richards.....	18,500	0.8%	$28.02	12/14/14	$ 326,000	$ 826,148

(1) The percentage of total options granted to employees in 2004 is calculated based on options granted to employees under our 1998 stock incentive plan, 2001 non-officer, non-director employee stock incentive plan and 2004 stock incentive plan, or 2004 plan.

Option Exercises in 2004 and Option Values at December 31, 2004

The following table sets forth information regarding any options exercised by the named executive officers during the fiscal year ended December 31, 2004 and exercisable and unexercisable stock options held as of December 31, 2004 by each of the named executive officers.

Amounts shown under the column "Value Realized" represent the difference between the option exercise price and the closing sale price of our common stock on the date of exercise. Amounts shown under the column "Value of Unexercised In-the-Money Options at December 31, 2004" have been calculated based on the closing sale price of our common stock on the Nasdaq National Market on December 31, 2004 of $28.80 per share, without taking into account any taxes that may be payable in connection with the transaction, multiplied by the number of shares underlying the option, less the exercise price payable for these shares.

Aggregated Option Exercises in Last Fiscal Year and Fiscal Year-End Option Values

Name	Shares Acquired On Exercise	Value Realized	Number of Securities Underlying Unexercised Options at December 31, 2004		Value of Unexercised In-the-Money Options at December 31, 2004	
			Exercisable	Unexercisable	Exercisable	Unexercisable
Clive A. Meanwell.	145,661	$3,717,710	424,000	259,000	$7,516,000	$1,040,100
David M. Stack ...	401,501	$5,026,433	40,833	95,107	$ 113,394	$1,406,968
John Kelley.....	—	—	—	225,000	—	$ 798,750
Steven H. Koehler.	10,000	$ 151,800	167,500	199,500	$2,392,400	$1,535,860
John D. Richards..	20,024	$ 453,615	42,792	72,250	$ 282,929	$ 287,893

Director Compensation

2004 Compensation

In the year ended December 31, 2004, each of our non-employee directors who attended, either in person or by phone, at least 75% of the meetings of the board of directors held during the year received annual compensation of $12,500. In addition, each member of our audit, compensation or nominations committee who attended, either in person or by phone, at least 75% of the meetings of the committee on which he served held during the year received an additional $12,500. Directors were reimbursed for expenses in connection with their attendance at board meetings.

In addition, non-employee directors were eligible to receive stock options and other equity awards under our 2004 plan. In May 2004, we granted each of Drs. Bell and Johnson, and Messrs. Crouse, Hugin, Kessler and Savage, as well as James Thomas, a former director, an option under our 2004 plan to purchase 12,500 shares of common stock at an exercise price of $32.30 per share. All of the options vest in 36 equal monthly installments commencing one month after the date of grant.

2005 Compensation

On December 14, 2004, our board of directors adopted new terms of compensation for our non-employee directors as described below. The new compensation arrangements became effective on January 1, 2005.

Annual Retainer, Meeting Fees and Expenses

Each of our non-employee directors will receive an annual retainer of $25,000, payable on a quarterly basis. In addition, each non-employee director will receive meeting fees of $3,000 for each meeting of the

board attended in person and $500 for each meeting of the board attended by telephone. Directors will also be reimbursed for expenses in connection with their attendance at meetings of the board.

Option Grants

Each non-employee director will be granted non-statutory stock options under our 2004 plan to purchase:

- 20,000 shares of our common stock on the date of his or her initial election to the Board; and
- 15,000 shares of the our common stock on the date of each annual meeting of our stockholders, except if such non-employee director was initially elected to the board at such annual meeting.

These options will have an exercise price equal to the closing price of our common stock on the Nasdaq National Market on the date of grant and will have a ten year term. The initial options, to purchase 20,000 shares, will vest in 36 equal monthly installments beginning on the date one month after the grant date. The annual options will vest in 12 equal monthly installments beginning on the date one month after the date of grant. All vested options will be exercisable at any time prior to the first anniversary of the date the director ceases to be a director.

Committee Service

Each member of a committee of the board will also receive meeting fees of $1,500 for each committee meeting attended in person and $500 for each committee meeting attended by telephone. The chairman of the audit committee will receive $8,000 annually, and the chairman of each of the other standing committees of the board (currently, the compensation committee and the nominating and corporate governance committee) will receive $4,000 annually, to be paid on a quarterly basis.

Employment Agreements

Dr. Meanwell serves as our Chief Executive Officer pursuant to the terms of an employment agreement dated September 5, 1996. This agreement renews automatically on a yearly basis unless either party provides written notice of non-renewal at least 90 days prior to the expiration of the then-current term. Pursuant to the terms of the agreement, Dr. Meanwell's annual compensation is determined by our board of directors. If Dr. Meanwell terminates his employment for good reason, as defined in the agreement, or if we terminate his employment other than for cause, Dr. Meanwell will be entitled to three months salary and the same health, disability and other benefits as were provided during his employment for a period ending upon the earlier of (1) three months after the date of his termination, or (2) the date upon which Dr. Meanwell commences full-time employment with a new employer. Dr. Meanwell has agreed not to compete with us during the term of his employment and for a period of one year after his termination, unless such termination is at our election or at the election of Dr. Meanwell for good reason.

Mr. Kelley serves as our Chief Operating Officer and President pursuant to the terms of a letter agreement dated December 1, 2004. Although Mr. Kelley's employment is "at will," the letter agreement provides that he will receive an annual base salary of $315,000 and a one-time "sign-on" payment of $20,000. Mr. Kelley is eligible to receive, at the discretion of our board of directors, an annual bonus targeted to be 50 percent of his annual base salary, subject to meeting company and personal performance goals. We granted Mr. Kelley an option to purchase 225,000 shares of our common stock at an exercise price of $25.25 per share, the closing price of the our common stock on December 1, 2004. The stock option vests with respect to twenty-five percent of the shares covered thereby on December 1, 2005 and with respect to the remainder of the shares in thirty-six equal monthly installments beginning January 1, 2006. If Mr. Kelley's employment is terminated without cause or for good reason or if he is terminated under certain circumstances in connection with a change of control, the stock option will continue to vest

for twelve months beyond the date of termination, and Mr. Kelley will receive twelve months' base salary plus a bonus equal to the average of the preceding three years' bonuses.

Dr. Richards serves as one of our Vice Presidents pursuant to the terms of an employment agreement dated October 16, 1997. This agreement renews automatically on a yearly basis unless either party provides written notice of non-renewal. Pursuant to the terms of the agreement, Dr. Richards' annual compensation is determined by our board of directors. If Dr. Richards terminates his employment for good reason, as defined in the agreement, or if we terminate his employment other than for cause, Dr. Richards will be entitled to three months salary and the same health, disability and other benefits as were provided during his employment for a period of three months after the date of his termination. Dr. Richards has agreed not to compete with us during the term of his employment and for a period of one year after his termination.

Compensation Committee Interlocks and Insider Participation

Messrs. Kessler, Savage and Thomas, none of whom ever has been an officer or employee of our company served on the compensation committee throughout 2004. In December 2004, we entered into a consulting agreement with Strategic Imagery LLC, a consulting company owned by Mr. Savage. Under the terms of the consulting agreement, Mr. Savage will provide consulting services to us from time to time on organizational development and senior management coaching at an hourly rate of $625 per hour. The initial term of the consulting agreement is one year and is subject to renewal for successive periods upon further agreement of the parties. Either party may terminate the consulting agreement at any time upon 30 days written notice. During 2004, we paid Strategic Imagery LLC an aggregate of $2,500 pursuant to the consulting agreement. We do not expect payments pursuant to the consulting agreement to exceed $60,000 in 2005.

None of our executive officers has served as a director or member of the compensation committee, or other committee serving an equivalent function, of any other entity, one of whose executive officers served as one of our directors or as a member of our compensation committee.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The following table presents information we know regarding the beneficial ownership of our common stock as of January 31, 2005 for each person, entity or group of affiliated persons whom we know to beneficially own more than 5% of our common stock. The table also sets forth such information for our directors and named executive officers, individually, and our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. Except as indicated by footnote, to our knowledge, the persons named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. Common stock purchase warrants and options to purchase shares of common stock that are exercisable within 60 days of January 31, 2005 are deemed to be beneficially owned by the person holding such options or warrants for the purpose of computing ownership of such person, but are not treated as outstanding for the purpose of computing the ownership of any other person. Applicable percentage of beneficial ownership is based on 48,750,034 shares of common stock outstanding as of January 31, 2005.

Beneficial Owner:	Number of Shares Beneficially Owned	Percentage of Outstanding Common Stock
Wellington Management Company, LLP(1)	6,687,270	13.7%
BB Biotech AG(2)	4,727,854	9.6%
T. Rowe Price Associates, Inc.(3)	3,739,210	7.7%
Sectoral Asset Management, Inc.(4)	3,489,860	7.2%
Franklin Resources, Inc.(5)	2,974,800	6.1%
Barclays Global Investors, N.A.(6)	2,427,557	5.0%
Clive A. Meanwell(7)	487,446	1.0%
David M. Stack(8)	54,750	*
John Kelley(9)	—	*
Steven H. Koehler(10)	188,063	*
John D. Richards(11)	56,674	*
Leonard Bell(12)	36,302	*
William W. Crouse(13)	18,784	*
Robert J. Hugin(14)	18,784	*
T. Scott Johnson(15)	70,985	*
Armin M. Kessler(16)	108,012	*
Robert G. Savage(17)	18,784	*
James E. Thomas(18)	108,502	*
All directors and executive officers as a group (11 persons)(19)	1,112,336	2.3%

* Represents beneficial ownership of less than 1%.

(1) Includes shares owned by various investors for which Wellington Management Company, LLP serves as investment advisor with shared power to direct investments and/or to vote the shares. The shares were acquired by Wellington Trust Company, NA, a wholly owned subsidiary of Wellington Management Company, LLP. The address of Wellington Trust Company, NA and Wellington Management Company, LLP is 75 State Street, Boston, Massachusetts 02109. This information is based on a Schedule 13G/A filed by Wellington Management Company, LLP with the SEC on February 14, 2005.

(2) Consists of warrants to purchase 591,435 shares and 4,136,419 shares owned directly by BB Biotech AG with respect to which BB Biotech AG, Biotech Growth N.V. and Biotech Target N.V. share voting and dispositive power. Biotech Growth N.V. and Biotech Target N.V. are wholly owned

subsidiaries of BB Biotech AG. The address of Biotech Growth N.V. and Biotech Target N.V. is De Ruyterkade 62, Willemstad, Curacao, Netherlands Antilles. This information is based on a Schedule 13G/A filed by BB Biotech AG on behalf of Biotech Growth N.V. and Biotech Target N.V. with the SEC on November 12, 2004.

(3) Includes shares owned by various individual and institutional investors for which T. Rowe Price Associates, Inc. serves as investment advisor with power to direct investments and/or sole power to vote the shares. For purposes of the reporting requirements of the Securities Exchange Act of 1934, T. Rowe Price Associates, Inc. is deemed to be a beneficial owner of such shares; however, T. Rowe Price Associates, Inc. expressly disclaims that it is, in fact, the beneficial owner of such shares. The address of T. Rowe Price Associates, Inc. is 100 E. Pratt Street, Baltimore, Maryland 21202. This information is based on a Schedule 13G/A filed by T. Rowe Price Associates, Inc. with the SEC on February 11, 2005.

(4) Consists of shares for which Sectoral Asset Management, Inc. has or shares dispositive power and/or voting power in its capacity as an investment adviser. Jérôme G. Pfund and Michael L. Sjöström are the sole shareholders of Sectoral Asset Management, Inc. Jérôme G. Pfund, Michael L. Sjöström and Sectoral Asset Management, Inc. disclaim beneficial ownership of shares owned by Sectoral Asset Management, Inc. The address of Sectoral Asset Management is 2120-1000 Sherbrooke St., West Montreal PQ H3A 3G4 Canada. This information is based on a Schedule 13G/A filed with the SEC on February 14, 2005.

(5) Includes shares owned by various open or closed-end investment companies or other managed accounts for which direct and indirect subsidiaries of Franklin Resources, Inc., including Franklin Advisers, Inc. and Franklin Templeton Portfolio Advisors, Inc., serve as investment advisors with sole power to direct the investments and/or vote the shares. Charles B. Johnson and Rupert H. Johnson each own in excess of 10% of the outstanding common stock of Franklin Resources, Inc. For purposes of the reporting requirements of the Securities Exchange Act of 1934, Franklin Resources, Inc., Franklin Advisers, Inc., Franklin Templeton Portfolio Advisors, Inc., Charles B. Johnson and Rupert H. Johnson may be deemed to be the beneficial owner of such shares; however, Franklin Resources, Inc., Franklin Advisers, Inc., Franklin Templeton Portfolio Advisors, Inc., Charles B. Johnson and Rupert H. Johnson expressly disclaim beneficial ownership of shares owned by affiliates of Franklin Resources, Inc. The address of Franklin Resources, Inc. is One Franklin Parkway, San Mateo, CA 94403. This information is based on a Schedule 13G filed with the SEC on February 14, 2005.

(6) Includes shares held by Barclays Global Investors, N.A. in trust accounts for the economic benefit of the beneficiaries of those accounts and for which Barclays Global Investors, N.A. has sole dispositive and voting power. The address of Barclays Global Investors, N.A. is 45 Freemont Street, San Francisco, CA 94105. This information is based on a Schedule 13G filed with the SEC on February 14, 2005.

(7) Includes warrants to purchase 33,796 shares and options to purchase 433,689 shares. Excludes 550,923 shares subject to pre-paid variable forward sales contracts, pursuant to which Dr. Meanwell pledged a total of 550,923 shares to secure future obligation to deliver a maximum of 350,000 shares in February 2006, 100,000 shares in August 2006 and 100,923 shares in February 2007.

(8) Consists of options to purchase 54,750 shares. Mr. Stack resigned as our Chief Executive Officer and President in August 2004.

(9) Mr. Kelley became our President and Chief Operating Officer in December 2004 and a member of our board of directors in February 2005.

(10) Includes options to purchase 186,063 shares.

(11) Includes options to purchase 49,574 shares.

(12) Consists of options to purchase 36,302 shares.

(13) Consists of options to purchase 18,784 shares.

(14) Consists of options to purchase 18,784 shares.

(15) Includes 5,000 shares held by Dr. Johnson as trustee and options to purchase 21,702 shares held by Dr. Johnson.

(16) Includes 3,000 shares held by Mr. Kessler's wife, warrants to purchase 33,796 shares held by Mr. Kessler and options to purchase 36,302 shares held by Mr. Kessler.

(17) Consists of options to purchase 18,784 shares.

(18) Includes options to purchase 36,302 shares. Mr. Thomas resigned as a director on February 22, 2005.

(19) Excludes shares beneficially owned by Mr. Stack and 550,923 shares subject to Dr. Meanwell's variable forward sales contracts described above.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information as of December 31, 2004 about the securities authorized for issuance under our equity compensation plans, including our 2000 employee stock purchase plan.

We currently issue stock options to our employees under three separate equity incentive plans: our 2004 plan, our 1998 stock incentive plan, or 1998 plan, and our 2001 non-officer, non-director employee stock incentive plan, or 2001 plan. Prior to the adoption of our 2004 plan in April 2004, we issued stock options to our directors under a fourth equity incentive plan, our 2000 outside director stock option plan, or 2000 director plan. Although 27,920 shares remain available for issuance under the 2000 director plan, these shares are not reflected in the table below as we will not issue those shares. Instead, any option grants to non-employee directors will be made under the 2004 plan.

Equity Compensation Plan Information

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options (a)	Weighted-average Exercise Price of Outstanding Options (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders...	5,379,649(1)(2)	$21.18(2)	2,934,288(3)
Equity compensation plans not approved by security holders...	727,885(4)	$16.33	9,962
Total	6,107,534	$20.60(1)(2)(4)	2,944,250(3)

(1) Includes shares of common stock issuable under our 1998 plan, 2000 outside director plan and our 2004 plan.

(2) Excludes shares issuable at the end of the then-current offering period under our 2000 employee stock purchase plan.

(3) Includes shares available for issuance as of December 31, 2004 under our 1998 plan, 2000 director plan and 2000 employee stock purchase plan (which includes 27,380 shares which were subsequently issued on February 28, 2005 at the close of the then-current offering period). In addition to being

available for future issuance upon exercise of options that may be granted after December 31, 2004, all of the shares available under the 1998 plan and 2004 plan may be issued in the form of restricted stock or other equity-based awards.

(4) Consists of shares of common stock issuable under our 2001 plan.

2001 Non-Officer, Non-Director Employee Stock Incentive Plan

In May 2001, our board of directors approved the 2001 plan pursuant to which non-statutory stock options for up to 1,250,000 shares of common stock were authorized to be issued to our employees, consultants and advisors and those of our subsidiaries. The 2001 plan has not been approved by our stockholders.

Our board is authorized to administer the 2001 plan, to adopt, amend and repeal the administrative rules, guidelines and practices relating to the 2001 plan and to interpret the provisions of the 2001 plan. Our board may amend, suspend or terminate the 2001 plan at any time. In accordance with the provisions of the 2001 plan, our board of directors may delegate any or all of its powers under the 2001 plan to one or more committees or subcommittees of the board.

Our board selects the recipients of awards under the 2001 plan and determines:

- the number of shares of common stock covered by such awards;
- the dates upon which such awards become exercisable;
- the exercise price of options; and
- the duration of the options.

If any award granted under the 2001 plan expires or is terminated, surrendered, canceled or forfeited, the unused shares of common stock covered by such option or other award will again be available for grant under the 2001 plan.

Our board is required to make appropriate adjustments in connection with the 2001 plan to reflect any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar event to the extent that the board determines, in good faith, that such as adjustment is necessary and appropriate. Upon the occurrence of an acquisition event, as defined in the 2001 plan, the 2001 plan requires our board to take one or more of the following actions with respect to any then outstanding options and other awards:

- provide that each outstanding option or award will be assumed, or an equivalent option or award will be substituted by, the successor entity or an affiliate of the successor entity;
- provide that all outstanding options become exercisable in full for a specified period of time before such acquisition event takes place, even if such options would not have been exercisable otherwise; and
- if the acquisition event involves a cash payment to holders of common stock in exchange for their shares of common stock, provide for the termination of all outstanding options and provide for a cash payment to each option holder equal to the amount by which (1) the cash payment per share of common stock paid the holders of common stock multiplied by the number of shares of common stock subject to such outstanding option (whether or not exercisable), exceeds (2) the total exercise price of such options.

Upon the occurrence of a change in control, as defined in the 2001 plan, that is not an acquisition event, each option shall become immediately exercisable in full if, on or prior to the first anniversary of the

date of the change in control event, a termination event, as defined in the 2001 plan, occurs, provided that the parties involved in the change of control have not explicitly agreed to the contrary.

Item 13. Certain Relationships and Related Transactions

In December 2004, we entered into a consulting agreement with Strategic Imagery LLC, a consulting company owned by Mr. Savage, one of our directors. Under the terms of the consulting agreement, Mr. Savage will provide consulting services to us from time to time on organizational development and senior management coaching. The initial term of the consulting agreement is one year and is subject to renewal for successive periods upon further agreement of the parties. Either party may terminate the consulting agreement at any time upon thirty days written notice. During 2004, we paid Strategic Imagery LLC an aggregate of $2,500 pursuant to the consulting agreement. We do not expect payments pursuant to the consulting agreement to exceed $60,000 in 2005.

Item 14. Principal Accountant Fees and Services

Independent Auditor's Fees

The following table summarizes the fees of Ernst & Young LLP, our independent registered public accounting firm, billed to us for each of the last two fiscal years for audit services and billed to us in each of the last two fiscal years for other services:

Fee Category	2004	2003
Audit Fees(1)	$612,158	$359,876
Audit-Related Fees(2)	115,500	18,000
Tax Fees(3)	101,711	60,457
All Other Fees	—	—
Total Fees	$829,369	$438,333

(1) Audit fees consist of fees for the audit of our financial statements, the review of the interim financial statements included in our quarterly reports on Form 10-Q, and other professional services provided in connection with statutory and regulatory filings or engagements.

(2) Audit-related fees consist of fees for assurance and related services that are reasonably related to the performance of the audit or the review of our financial statements and which are not reported under "Audit Fees." These services relate to Sarbanes-Oxley consulting.

(3) Tax fees consist of fees for tax compliance, tax advice and tax planning services. Tax compliance services, which relate to preparation of original and amended tax returns, accounted for all of the total tax fees paid for 2004 and 2003.

Pre-Approval Policy and Procedures

The audit committee has adopted policies and procedures relating to the approval of all audit and non-audit services that are to be performed by our independent auditor. This policy generally provides that we will not engage our independent auditor to render audit or non-audit services unless the service is specifically approved in advance by the audit committee or the engagement is entered into pursuant to one of the pre-approval procedures described below.

From time to time, the audit committee may delegate pre-approval authority to a committee member for specified types of services. Any such pre-approval must be reported to the committee at its next scheduled meeting. We did not approve any services provided to us by Ernst & Young LLP in 2004 or 2003 pursuant to paragraph (c)(7)(i)(c) of Rule 2-01 of Regulation S-X.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) Documents filed as part of this annual report:

(1) Financial Statements. The Consolidated Financial Statements are included as Appendix A hereto and are filed as part of this annual report. The Consolidated Financial Statements include:

(2) Financial Statement Schedule. The financial statement schedule following the Notes to Consolidated Financial Statements is filed as part of this annual report. All other schedules are omitted because they are not applicable or are not required, or because the required information is included in the consolidated financial statements or notes filed as part of this annual report

(3) Exhibits. The exhibits set forth on the Exhibit Index following the signature page to this annual report are filed as part of this annual report. This list of exhibits identifies each management contract or compensatory plan or arrangement required to be filed as an exhibit to this annual report.

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, on March 14, 2005.

THE MEDICINES COMPANY

By: /s/ CLIVE A. MEANWELL
Clive A. Meanwell
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 indicated on March 14, 2005:

Signature	Title(s)
/s/ CLIVE A. MEANWELL Clive A. Meanwell	Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)
/s/ STEVEN H. KOEHLER Steven H. Koehler	Senior Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)
/s/ JOHN P. KELLEY John P. Kelley	President, Chief Operating Officer and Director
/s/ LEONARD BELL Leonard Bell	Director
/s/ WILLIAM W. CROUSE William W. Crouse	Director
/s/ ROBERT J. HUGIN Robert J. Hugin	Director
/s/ T. SCOTT JOHNSON T. Scott Johnson	Director
/s/ ARMIN M. KESSLER Armin M. Kessler	Director
/s/ ROBERT G. SAVAGE Robert G. Savage	Director

(This page has been left blank intentionally.)

APPENDIX A

INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS OF THE MEDICINES COMPANY

Management's Report on Consolidated Financial Statements and Internal Control over Financial Reporting

The management of The Medicines Company has prepared, and is responsible for, The Medicines Company's consolidated financial statements and related footnotes. These consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles.

The Medicines Company's management is responsible for establishing and maintaining adequate internal control over financial reporting and for assessing the effectiveness of internal control over financial reporting. Internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, 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. Our internal control over financial reporting 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 the assets of The Medicines Company;
- 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 Medicines Company are being made only in accordance with authorizations of management and directors of The Medicines Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of The Medicines 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.

The Medicines Company's management assessed the Company's internal control over financial reporting as of December 31, 2004. Management's assessment was based upon the criteria established in "Internal Control—Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its assessment, management concluded that, as of December 31, 2004, The Medicines Company's internal control over financial reporting is effective based on those criteria. The Company's assessment of the effectiveness over its financial reporting, as of December 31, 2004, has been audited by Ernst & Young LLP, an independent registered public accounting firm, that has audited the financial statements, and their attestation report is included herein.

Dated March 11, 2005

Clive A. Meanwell
Chairman and
Chief Executive Officer

Steven H. Koehler
Senior Vice President—
Chief Financial Officer

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of The Medicines Company

We have audited the accompanying consolidated balance sheets of The Medicines Company as of December 31, 2004 and 2003, and the related consolidated statements of operations, consolidated statements of stockholders' equity and cash flows for each of the three years in the period ended December 31, 2004. Our audits also included the financial statement schedule listed in item 15 (a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule 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 consolidated financial position of The Medicines Company at December 31, 2004 and 2003, and the consolidated results of its operations and its consolidated cash flows for each of the three years in the period ended December 31, 2004 in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related financial statement schedule when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of The Medicines 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 March 11, 2005 expressed an unqualified opinion thereon.

/s/ Ernst and Young, LLP

Metro Park, NJ
March 11, 2005

Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting

The Board of Directors and Stockholders of The Medicines Company

We have audited management's assessment, included in the accompanying Management's Report on Consolidated Financial Statements and Internal Control over Financial Reporting, that The Medicines 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 Organizations of the Treadway Commission (the COSO criteria). The Medicines 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 The Medicines 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, The Medicines 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 2004 consolidated financial statements of The Medicines Company and our report dated March 11, 2005 expressed an unqualified opinion thereon.

/s/ Ernst and Young, LLP

Metro Park, NJ
March 11, 2005

THE MEDICINES COMPANY
CONSOLIDATED BALANCE SHEETS

	December 31, 2004	December 31, 2003
ASSETS		
Current assets:		
Cash and cash equivalents	$ 36,504,962	$ 43,401,610
Available for sale securities	123,807,353	92,462,883
Accrued interest receivable	911,807	990,824
Accounts receivable, net of allowance of approximately $3.57 million and $2.23 million at December 31, 2004 and 2003	18,387,596	15,660,148
Inventory	27,341,855	11,459,771
Prepaid expenses and other current assets	1,252,211	976,258
Total current assets	208,205,784	164,951,494
Fixed assets, net	1,677,464	1,510,706
Other assets	160,614	200,265
Total assets	$ 210,043,862	$ 166,662,465
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 11,517,326	$ 6,349,548
Accrued expenses	23,339,111	18,877,240
Total current liabilities	34,856,437	25,226,788
Commitments and contingencies	—	—
Deferred revenue	3,516,523	1,270,833
Stockholders' equity:		
Preferred stock, $1.00 par value per share, 5,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, $.001 par value per share, 75,000,000 shares authorized 48,644,814 and 47,443,902 issued and outstanding at December 31, 2004 and 2003, respectively	48,645	47,444
Additional paid-in capital	469,100,751	454,804,001
Deferred compensation	—	(744,107)
Accumulated deficit	(297,145,341)	(314,144,531)
Accumulated other comprehensive (loss)/income	(333,153)	202,037
Total stockholders' equity	171,670,902	140,164,844
Total liabilities and stockholders' equity	$ 210,043,862	$ 166,662,465

See accompanying notes.

THE MEDICINES COMPANY
CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2004	2003	2002
Net revenue	$144,251,287	$ 85,590,503	$ 38,301,286
Operating expenses:			
Cost of revenue	29,123,370	22,748,868	10,284,033
Research and development	49,289,701	35,904,844	37,951,458
Selling, general and administrative	50,275,044	45,082,170	36,807,679
Total operating expenses	128,688,115	103,735,882	85,043,170
Income/(loss) from operations	15,563,172	(18,145,379)	(46,741,884)
Other income/(expense):			
Interest income	2,126,112	1,403,849	943,583
Interest expense	—	—	(32,847)
Income/(loss) before income taxes	17,689,284	(16,741,530)	(45,831,148)
Provision for income taxes	(690,094)	(128,171)	—
Net income/(loss)	$ 16,999,190	$ (16,869,701)	$ (45,831,148)
Basic earnings/(loss) per common share	$ 0.36	$ (0.37)	$ (1.23)
Shares used in computing basic earnings/(loss) per common share:	47,855,484	45,624,289	37,209,931
Diluted earnings/(loss) per common share	$ 0.34	$ (0.37)	$ (1.23)
Shares used in computing diluted earnings/(loss) per common share:	49,772,314	45,624,289	37,209,931

See accompanying notes.

THE MEDICINES COMPANY

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

For The Years Ended December 31, 2002, 2003 and 2004

	Common Stock		Additional Paid-in	Deferred Stock		Accumulated Comprehensive Income	Total Stockholders'
	Shares	Amount	Capital	Compensation	Accumulated Deficit	(Loss)	Equity
Balance at December 31, 2001	34,606,582	$34,607	$321,041,704	$(8,593,773)	$(251,443,682)	$ 82,108	$ 61,120,964
Employee stock purchases	738,081	738	2,993,498				2,994,236
Issuance of common stock—Nycomed purchase	79,428	79	999,921				1,000,000
Issuance of common stock—through public sale	4,000,000	4,000	30,906,000				30,910,000
Issuance of common stock—Warrant purchases	470,194	470	(547)				(77)
Adjustments to deferred compensation for terminations			(2,191,644)	2,191,644			—
Non-cash stock compensation—terminations			490,261				490,261
Amortization of deferred stock compensation				3,276,635			3,276,635
Net loss					(45,831,148)		(45,831,148)
Currency translation adjustment						(42,240)	(42,240)
Unrealized gain on available for sale securities						15,775	15,775
Comprehensive loss							(45,857,613)
Balance at December 31, 2002	39,894,285	$39,894	$354,239,193	$(3,125,494)	$(297,274,830)	$ 55,643	$ 53,934,406
Employee stock purchases	897,783	898	8,021,854				8,022,752
Issuance of common stock—through public sale	5,597,280	5,597	91,506,354				91,511,951
Issuance of common stock—Warrant purchases	1,054,554	1,055	(1,163)				(108)
Adjustments to deferred compensation for terminations			(151,491)	151,491			—
Non-cash stock compensation—Consultants			1,189,254				1,189,254
Amortization of deferred stock compensation				2,229,896			2,229,896
Net loss					(16,869,701)		(16,869,701)
Currency translation adjustment						(18,614)	(18,614)
Unrealized gain on available for sale securities						165,008	165,008
Comprehensive loss							(16,723,307)
Balance at December 31, 2003	47,443,902	$47,444	$454,804,001	$ (744,107)	$(314,144,531)	$ 202,037	$140,164,844
Employee stock purchases	1,097,041	1,097	13,642,903				13,644,000
Issuance of common stock—Warrant purchases	103,871	104	81,162				81,266
Adjustments to deferred compensation for terminations			(18,923)	18,923			—
Amortization of deferred stock compensation				725,184			725,184
Non-cash stock compensation—Consultants			142,824				142,824
Tax benefit from option exercises			448,784				448,784
Net income					16,999,190		16,999,190
Currency translation adjustment						11,505	11,505
Unrealized loss on available for sale securities						(546,695)	(546,695)
Comprehensive income							16,464,000
Balance at December 31, 2004	48,644,814	$48,645	$469,100,751	$ —	$(297,145,341)	$(333,153)	$171,670,902

See accompanying notes.

THE MEDICINES COMPANY
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2004	2003	2002
Cash flows from operating activities:			
Net income/(loss)	$ 16,999,190	$ (16,869,701)	$(45,831,148)
Adjustments to reconcile net income/(loss) to net cash provided by/(used in) operating activities:			
Depreciation	591,117	572,103	555,026
Amortization of net premiums and discounts on available for sale securities	1,280,779	905,195	66,517
Non-cash stock compensation expense	868,008	3,419,150	3,766,895
Loss on disposal of fixed assets	49,192	56,474	1,079
Tax benefit from option exercises	448,784	—	—
Changes in operating assets and liabilities:			
Accrued interest receivable	79,017	(861,410)	(122,657)
Accounts receivable	(2,727,448)	(581,660)	(9,545,107)
Inventory	(15,882,084)	2,718,889	2,405,669
Prepaid expenses and other current assets	(275,087)	(314,877)	(108,340)
Other assets	39,651	33,589	(80,778)
Accounts payable	5,166,198	(1,946,071)	(516,068)
Accrued expenses	4,445,716	7,751,023	2,887,070
Deferred revenue	2,245,690	(125,000)	1,395,833
Net cash provided by/(used in) operating activities	13,328,723	(5,242,296)	(45,126,009)
Cash flows from investing activities:			
Purchases of available for sale securities	(112,837,944)	(142,847,331)	(6,782,470)
Maturities and sales of available for sale securities	79,666,000	56,375,989	125,000
Purchases of fixed assets	(803,810)	(1,204,828)	(247,218)
Net cash used in investing activities	(33,975,754)	(87,676,170)	(6,904,688)
Cash flows from financing activities:			
Proceeds from revolving line of credit borrowings	—	—	10,000,000
Repayments of revolving line of credit borrowings	—	—	(10,000,000)
Proceeds from issuances of common stock, net	13,725,266	99,534,595	34,904,155
Net cash provided by financing activities	13,725,266	99,534,595	34,904,155
Effect of exchange rate changes on cash	25,117	8,474	19,173
Increase/(decrease) in cash and cash equivalents	(6,896,648)	6,624,603	(17,107,369)
Cash and cash equivalents at beginning of period	43,401,610	36,777,007	53,884,376
Cash and cash equivalents at end of period	$ 36,504,962	$ 43,401,610	$ 36,777,007
Supplemental disclosure of cash flow information:			
Interest paid	$ —	$ —	$ 32,847
Taxes paid	$ 68,503	$ 49,021	$ 35,069

See accompanying notes.

1. Nature of Business

The Medicines Company (the "Company") was incorporated in Delaware on July 31, 1996. The Company is a pharmaceutical company that specializes in acute care hospital products and is engaged in the acquisition, development and commercialization of late-stage development drugs. In December 2000, the U.S. Food and Drug Administration approved Angiomax® (bivalirudin), a direct thrombin inhibitor, for use as an anticoagulant in combination with aspirin in patients with unstable angina undergoing coronary angioplasty. The Company is also currently developing Angiomax for other indications. The Company has concentrated its commercial sales and marketing resources on the United States hospital market, and revenues to date have been generated principally from sales of Angiomax in the United States. In September 2004, the Company received authorization from the European Commission to market Angiomax® (bivalirudin) as Angiox™ (bivalirudin) in the member states of the European Union for use as an anticoagulant in patients undergoing percutaneous coronary interventions. In addition to Angiomax, the Company is currently developing two other pharmaceutical products as potential acute care hospital products. The first of these, Clevelox™ (clevidipine), is an intravenous drug intended for short-term control of blood pressure in surgical patients, including patients undergoing cardiac surgery. The second potential product, cangrelor, is an anti platelet agent that prevents platelet aggregation, which the Company believes has potential advantages in the treatment of vascular disease.

The Company reported net revenue of $144.3 million in 2004, $85.6 million in 2003 and $38.3 million in 2002, generated principally from sales of Angiomax in the United States. International sales and distributor fees included in total net revenue were $8.6 million in 2004, $0.6 million in 2003 and $0.1 million in 2002. The Company has invested, and plans to continue investing, in Angiomax development programs to expand the indications for which Angiomax is approved. Additionally, the Company plans to continue investing in the development of Clevelox™ (clevidipine) and cangrelor.

2. Significant Accounting Policies

Basis of Presentation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation. The Company has no unconsolidated subsidiaries.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Reclassification

Certain reclassifications have been made to prior years' information to conform to the 2004 presentation.

Risks and Uncertainties

The Company is subject to risks common to companies in the pharmaceutical industry including, but not limited to, uncertainties related to regulatory approvals, dependence on key products, dependence on key customers and suppliers, and protection of proprietary rights.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentration of credit risk include cash, cash equivalents, available for sale securities and accounts receivable. The Company believes it minimizes its exposure to potential concentrations of credit risk by placing investments in high-quality financial instruments with high quality institutions. At December 31, 2004, approximately $9.3 million of the cash and cash equivalents balance was invested in a single fund, the Evergreen Institutional Money Market Fund, a no-load money market fund, with the Capital Advisors Group. At December 31, 2003, approximately $21.0 million of the cash and cash equivalents balance was invested in the Evergreen Institutional Money Market Fund.

The Company's products are sold primarily to a limited number of national medical and pharmaceutical distributors and wholesalers with distribution centers located throughout the United States and to several international distribution partners. In the United States, AmerisourceBergen Drug Corporation, McKesson Corporation and Cardinal Health, Inc., accounted for 20%, 27% and 30%, respectively, of the Company's net revenue for the year ended December 31, 2004. Revenue from each of these customers accounted for similar percentages of net revenue in 2003 and 2002. During 2004, 2003 and 2002, the Company's net revenues from these three customers totaled approximately 77%, 89% and 93%, respectively, of net revenues. At December 31, 2004 and 2003, amounts due from these three wholesaler customers represented approximately $17.6 million, or 80%, and $16.9 million, or 96%, respectively, of gross accounts receivable. The Company's trade accounts receivable are reported net of allowances for chargebacks, cash discounts and doubtful accounts. The Company performs ongoing credit evaluations of its customers and generally does not require collateral. The Company maintains reserves for potential credit losses and, during 2004, such losses were within the expectations of management.

Cash, Cash Equivalents and Available for Sale Securities

The Company considers all highly liquid investments purchased with an original maturity at date of purchase of three months or less to be cash equivalents. Cash equivalents at December 31, 2004 included investments of $9.3 million in money market funds and $2.0 million of corporate bonds with original maturities of less than three months. Cash equivalents at December 31, 2003 included investments of $21.0 million in money market funds and $12.8 million of corporate bonds with original maturities of less than three months. These investments are carried at cost, which approximates fair value. The Company measures all original maturities from the date the investment was originally purchased by the Company.

The Company considers securities with original maturities of greater than three months to be available for sale securities. Securities under this classification are recorded at fair market value and unrealized gains and losses are recorded as a separate component of stockholders' equity. The estimated fair value of the available for sale securities is determined based on quoted market prices or rates for similar instruments. In addition, the cost of debt securities in this category is adjusted for amortization of premium and accretion of discount to maturity.

At December 31, 2004, the Company held available for sale securities with fair value totaling $123.8 million. These available for sale securities included various corporate debt securities and United States government agency notes, $74.7 million of which had original maturities of more than one year and up to two years and $49.1 million of which had original maturities of more than three months and up to one year. At December 31, 2003, the Company held available for sale securities with fair value totaling

$92.5 million. These available for sale securities included various certificates of deposit, corporate debt securities and United States government agency notes, $55.5 million of which had original maturities of more than one year and up to two years and $37.0 million of which had original maturities of more than three months and up to one year. Available for sale securities, including estimated fair values, are summarized as follows:

2004	Cost	Unrealized Loss	Fair Value
Corporate debt securities	14,379,937	(74,439)	14,305,498
U.S. government agency notes	109,793,327	(291,473)	109,501,855
Total	$124,173,264	$(365,912)	$123,807,353

2003	Cost	Unrealized Gain	Fair Value
Certificates of deposit	$ 1,099,944	$ 56	$ 1,100,000
Corporate debt securities	10,937,557	8,589	10,946,146
U.S. government agency notes	80,244,599	172,138	80,416,737
Total	$ 92,282,100	$ 180,783	$ 92,462,883

Revenue Recognition

Product Sales. The Company sells its products primarily to wholesalers and distributors who, in turn sell to hospitals. The Company does not recognize revenue from product sales until there is persuasive evidence of an arrangement, delivery has occurred, the price is fixed and determinable, the buyer is obligated to pay the Company, the obligation to pay is not contingent on resale of the product, the buyer has economic substance apart from the Company, the Company has no obligation to bring about sale of the product, the amount of returns can be reasonably estimated and collectibility is reasonably assured.

Domestic Sales. The Company records allowances for product returns, chargebacks, rebates, and other discounts at the time of sale, and reports revenue net of such amounts. In determining allowances for product returns, chargebacks and rebates, the Company must make significant judgments and estimates. For example, in determining these amounts, the Company estimates hospital demand, buying patterns by hospitals and group purchasing organizations from wholesalers and the levels of inventory held by wholesalers. Making these determinations involves estimating whether trends in past buying patterns will predict future product sales.

The nature of the Company's allowances requiring critical estimates, and the specific considerations it uses in estimating their amounts, are as follows:

- *Product returns.* The Company's customers have the right to return any unopened product during the 18-month period beginning six months prior to the labeled expiration date and ending 12 months after the labeled expiration date. As a result, in calculating the allowance for product returns, the Company must estimate the likelihood that product sold to wholesalers might remain in their inventory to within six months of expiration and analyze the likelihood that such product will be returned within 12 months after expiration.

  In estimating the likelihood of product remaining in wholesalers' inventory, the Company relies on information from wholesalers regarding their inventory levels, measured hospital demand as reported by third party sources and on internal sales data. The Company believes the information from its wholesalers and third-party sources is directionally reliable, but the Company is unable to verify the accuracy of such data independently. The Company also considers its wholesalers' past buying patterns, estimated remaining shelf life of product previously shipped and the expiration dates of product currently being shipped.

In estimating the likelihood of product return, the Company relies primarily on historic patterns of returns and estimated remaining shelf life of product previously shipped.

- *Chargebacks and rebates.* Although the Company sells Angiomax primarily to wholesalers and distributors, the Company typically enters into agreements with hospitals, either directly or through group purchasing organizations acting on behalf of their hospital members, in connection with the hospitals' purchases of Angiomax from the Company's wholesalers. Based on the terms of these agreements, most of the Company's hospital customers have the right to receive a discounted price and volume based rebate on product purchases. The Company provides a credit to the wholesaler, or a chargeback, representing the difference between the wholesaler's acquisition list price and the discounted price.

  As a result of these contracts, at the time of product shipment, the Company must estimate the likelihood that Angiomax sold to wholesalers might be ultimately sold to a contracting hospital or group purchasing organization. The Company must also estimate the contracting hospital's or group purchasing organization's volume of purchases.

  The Company bases its estimates on the historic chargeback data it receives from wholesalers, which detail historic buying patterns and sales mix for particular hospitals and group purchasing organizations, and the applicable customer chargeback rates and rebate thresholds.

  At December 31, 2004 and 2003, the Company's allowance for chargebacks was $3.1 million and $1.8 million, respectively, and its allowance for rebates was $1.6 million and $1.8 million, respectively.

The Company has adjusted its allowances for product returns, chargebacks and rebates in the past based on actual sales experience, and the Company will likely be required to make adjustments to these allowances in the future. The Company continually monitors its allowances and makes adjustments when the Company believes actual experience may differ from its estimates.

International Distribution Partners. Under the Company's agreements with international distribution partners, the Company sells its product to these distribution partners at a percentage of the distribution partner's established net selling price. The established net selling price is typically determined in the quarter in which the Company sells its products to these distribution partners based on the distribution partner's net selling price. In those situations, usually prior to product launch, where product is sold prior to the establishment of the distribution partner's selling price, the Company records revenue at minimum prices specified in these agreements and subsequently adjusts its selling price once the established net selling price is determined. In accordance with the terms of these agreements, under no circumstances would the subsequent adjustment result in the net selling price being less than the minimum price.

Revenue from the sale of distribution rights includes milestone payments. These payments are recorded as deferred revenue until contractual performance obligations have been satisfied, and they are typically recognized ratably over the term of these agreements. When the period of deferral cannot be specifically identified from the contract, the Company must estimate the period based upon other critical factors contained within the contract. The Company reviews these estimates at least annually, which could result in a change in the deferral period.

Cost of Revenue

Cost of revenue totaled $29.1 million in 2004, $22.7 million in 2003, and $10.3 million in 2002. Cost of revenue consisted of expenses in connection with the manufacture of the Angiomax sold, royalty expenses under the Company's agreement with Biogen Idec., Inc, and the logistics costs of selling Angiomax, such as distribution, storage, and handling.

Advertising Costs

The Company expenses advertising costs as incurred. Advertising costs were approximately $0.7 million, $1.4 million and $0.8 million, for the years ended December 31, 2004, 2003, and 2002, respectively.

Inventory

Inventory is recorded upon the transfer of title from the Company's vendors. Inventory is stated at the lower of cost or market value. Angiomax bulk drug product is classified as raw materials and its costs are determined using acquisition costs from contract manufacturers. Work-in-progress costs of filling, finishing and packaging are recorded against specific product batches. Prior to FDA approval of Angiomax and its original manufacturing process in December 2000, the Company expensed all of these costs as research and development. The Company recorded as inventory any Angiomax bulk drug product manufactured using the original manufacturing process to which the Company took title after FDA approval.

Together with its contract manufacturer, UCB Bioproducts, the Company has developed a second-generation chemical synthesis process, the Chemilog process, for the manufacture of Angiomax bulk drug substance. In May 2003, the Company received FDA approval of this process. All Angiomax bulk drug product that was manufactured using the Chemilog process to which title had transferred to the Company prior to FDA approval was expensed as research and development at the time of transfer of title, and all bulk drug product manufactured after FDA approval of the Chemilog process has been and will be recorded as inventory upon transfer of title from the Company's vendors.

The major classes of inventory were as follows:

Inventory	2004	2003
Raw materials	$ 7,071,522	$ 6,237,677
Work-in-progress	13,155,988	4,371,565
Finished goods	7,114,345	850,529
Total	$27,341,855	$11,459,771

The Company reviews inventory for slow moving or obsolete amounts based on expected revenues

Fixed Assets

Fixed assets are stated at cost. Depreciation is provided using the straight-line method based on estimated useful lives or, in the case of leasehold improvements, over the lesser of the useful lives or the lease terms.

Research and Development

Research and development costs are expensed as incurred.

Stock-Based Compensation

Statement of Financial Accounting Standards ("SFAS") No. 123, "Accounting for Stock-Based Compensation" encourages, but does not require, companies to record compensation cost for stock-based employee compensation plans at fair value. The Company has elected to account for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25").

The following table illustrates the effect on net income/(loss) and earnings/(loss) per share if the Company had applied the fair value recognition provisions of SFAS No. 123 to stock-based employee compensation:

	Years Ended December 31,		
	2004	2003	2002
Net income/(loss)—As reported	$ 16,999,190	$(16,869,701)	$(45,831,148)
Deduct: Total stock-based compensation expense determined under fair value based method for all stock option awards and discounts under the employee stock purchase Plan, net of tax	(15,002,247)	(10,408,223)	(5,753,913)
Add: Amortization of deferred stock compensation, net of tax	725,184	2,229,896	3,276,635
Net income/(loss)—Pro forma	$ 2,722,127	$(25,048,028)	$(48,308,426)
Net earnings/(loss) per common share, basic—As reported	$ 0.36	$ (0.37)	$ (1.23)
Net earnings/(loss) per common share, basic—Pro forma.	$ 0.06	$ (0.55)	$ (1.30)
Net earnings/(loss) per common share, diluted—As reported	$ 0.34	$ (0.37)	$ (1.23)
Net earnings/(loss) per common share, diluted—Pro forma	$ 0.05	$ (0.55)	$ (1.30)

For the purposes of the table above, the Company estimated the fair value of each option grant on the date of grant using the Black-Scholes option-pricing model with the following weighted average assumptions:

	Years Ended December 31,		
	2004	2003	2002
Expected dividend yield	0%	0%	0%
Expected stock price volatility	79%	86%	90%
Risk-free interest rate	2.84%	1.85%	3.0%
Expected option term (years)	2.84	2.84	2.79

Translation of Foreign Currencies

The functional currencies of the Company's foreign subsidiaries are the local currencies: British pound sterling, Swiss franc and New Zealand dollar. The Company translates its foreign operations using a current exchange rate. In accordance with SFAS No. 52 "Foreign Currency Translation," assets and liabilities are translated using the current exchange rate as of the balance sheet date. Stockholders' equity is translated using historical rates at the balance sheet date. Expenses and items of income are translated using a weighted average exchange rate over the period ended on the balance sheet date. Adjustments resulting from the translation of the financial statements of the Company's foreign subsidiaries into U.S. dollars are excluded from the determination of net earnings/(loss) and are accumulated in a separate component of stockholders' equity. Foreign exchange transaction gains and losses are included in the results of operations and are not material to the Company's consolidated financial statements.

Income Taxes

Deferred tax assets and liabilities are determined based on differences between financial reporting and income tax bases of assets and liabilities, as well as net operating loss carryforwards, and are measured

using the enacted tax rates and laws in effect when the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance to reflect the uncertainty associated with ultimate realization.

Comprehensive Income/(Loss)

The Company reports comprehensive income/(loss) and its components in accordance with the provisions of SFAS No. 130, "Reporting Comprehensive Income." Comprehensive income/(loss) includes net income/(loss), all changes in equity for cumulative translations adjustments resulting from the consolidation of foreign subsidiaries' financial statements and unrealized gain/(loss) on available for sale securities.

	Years Ended December 31,		
	2004	2003	2002
Comprehensive income/(loss)			
Net income/(loss)—As reported	$16,999,190	$(16,869,701)	$(45,831,148)
Unrealized (loss)/gain on available for sale securities	(546,695)	165,008	15,775
Foreign currency translation adjustment	11,505	(18,614)	(42,240)
Comprehensive income/(loss)	$16,464,000	$(16,723,307)	$(45,857,613)

Segments

The Company manages its business and operations as one segment and is focused on the acquisition, development and commercialization of late-stage development drugs and drugs approved for marketing. The Company has licensed rights to Angiomax®, Clevelox™ and cangrelor. Revenues reported to date are derived primarily from the sales of Angiomax in the United States.

3. Recent Accounting Pronouncement

On December 16, 2004, the Financial Accounting Standards Board (FASB) issued FASB Statement No. 123 (revised 2004), Share-Based Payment, which is a revision of FASB Statement No. 123, *Accounting for Stock-Based Compensation*. Statement 123(R) supersedes APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and amends FASB Statement No. 95, *Statement of Cash Flows*. Generally, the approach in Statement 123(R) is similar to the approach described in Statement 123. However, Statement 123(R) *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. Pro forma disclosure is no longer an alternative. Statement 123(R) must be adopted no later than July 1, 2005.

As permitted by Statement 123, the Company currently accounts for share-based payments to employees using Opinion 25's intrinsic value method and, as such, generally recognizes no compensation cost for employee stock options. Accordingly, the adoption of Statement 123(R)'s fair value method will have a significant impact on our result of operations, although it will have no impact on our overall financial position. The impact of adoption of Statement 123(R) cannot be predicted at this time because it will depend on levels of share-based payments granted in the future and the transition method the Company adopts. However, had we adopted Statement 123(R) in prior periods, the impact of that standard would have approximated the impact of Statement 123 as described in the disclosure of pro forma net income and earnings per share in Note 2 to our consolidated financial statements.
Statement 123(R) also requires the benefits of tax deductions in excess of recognized compensation cost to be reported as a financing cash flow, rather than as an operating cash flow as required under current literature.

4. The Company's Plans and Financing

Except for the year ended December 31, 2004, the Company has incurred net losses on an annual basis since inception. To date, the Company has primarily funded its operations through the issuance of debt and equity, and, in 2004, from cash flow from operations. The Company expects to continue to expend substantial amounts for continued product research, development and commercialization activities for the foreseeable future, and the Company plans to fund these expenditures from revenue or through debt or equity financing, if possible, and to secure collaborative partnering arrangements that will provide available cash funding for operations. Should revenue or additional debt or equity financing or collaborative partnering arrangements be unavailable to the Company, it will restrict certain of its planned activities and operations, as necessary, to sustain operations and conserve cash resources.

5. Fixed Assets

Fixed assets consist of the following:

	Estimated Life (Years)	December 31, 2004	December 31, 2003
Furniture, fixtures and equipment	3	$ 795,798	$ 384,977
Computer hardware and software	3	1,907,022	1,570,186
Leasehold improvements	5-10	623,340	850,178
		3,326,160	2,805,341
Less: Accumulated depreciation		(1,648,696)	(1,294,635)
		$ 1,677,464	$ 1,510,706

Depreciation expense was approximately $591,000, $572,000, and $555,000 for the years ended December 31, 2004, 2003 and 2002, respectively.

6. Accrued Expenses

Accrued expenses consisted of the following at December 31:

	2004	2003
Research and development services	$ 7,549,400	$ 7,009,185
Royalties and commissions	5,453,744	2,985,463
Compensation related	4,324,330	3,951,621
Product returns and rebates	2,226,490	2,929,892
Manufacturing and logistics related	1,686,396	278,522
Legal, accounting and other	1,292,023	651,408
Sales and marketing	806,728	1,071,149
	$23,339,111	$18,877,240

7. Common Stock Purchase Warrants

In October 1999, the Company issued $6,000,000 of 8% convertible notes (the "October Notes") and warrants (the "October Warrants") to purchase 1,013,877 shares of Common Stock of the Company (the "Common Stock") to then existing investors, raising proceeds of $6,000,000. The October Notes were ultimately converted into shares of Common Stock of the Company. Each October Warrant provided the holder with the right to purchase one share of Common Stock at a price of $5.92 per share at any time prior to October 19, 2004. At December 31, 2004, all of the October Warrants had been exercised.

In March 2000, the Company issued $13,348,779 of 8% convertible notes ("March Notes") and warrants (the "March Warrants") to purchase 2,255,687 shares of Common Stock to then existing investors, raising proceeds of $13,348,779. The March Notes were ultimately converted into shares of Common Stock of the Company. Each March Warrant provides the holder with the right to purchase one share of Common Stock at a price of $5.92 per share at any time prior to March 2, 2005. At December 31, 2004 there were 661,561 March Warrants outstanding. All of these warrants were exercised on or before March 2, 2005.

8. Stockholders Equity

Preferred Stock

The Company has 5,000,000 shares of preferred stock (the "Preferred Stock") authorized, none of which has been issued.

Common Stock

Common stockholders are entitled to one vote per share and dividends when declared by the Company's board of directors (the "Board of Directors"), subject to the preferential rights of any outstanding shares of Preferred Stock.

In March 2002, the Company received $1.0 million in proceeds from the sale of 79,428 shares of Common Stock to Nycomed at the market price of $12.59 per share at the time of purchase. In June 2002, the Company received $30.9 million in proceeds from the sale of 4.0 million shares of Common Stock in a public offering at a price of $8.20 per share.

In March 2003, the Company received $91.5 million in proceeds from the sale of 5.6 million shares of Common Stock in a public offering at the price of $17.50 per share.

Employees and consultants of the Company purchased 1,097,041, 897,783, and 738,081 shares of Common Stock during the years ended December 31, 2004, 2003 and 2002, respectively, pursuant to option exercises and the Company's employee stock purchase plan for aggregate net proceeds to the Company of approximately $13.6 million, $8.0 million and $3.0 million during the years ended December 31, 2004, 2003 and 2002, respectively.

Warrant holders purchased 103,871, 1,054,554, and 470,194 shares of Common Stock during the years ended December 31, 2004, 2003 and 2002, respectively. In 2004 the Company received net proceeds of $0.1 million related to the exercise of warrants. In the years ended 2003 and 2002, all warrants exercised were cashless, resulting in no proceeds to the Company.

Stock Plans

1998 Plan

In April 1998, the Company adopted the 1998 Stock Incentive Plan (the "1998 Plan"), which provides for the grant of stock options, restricted stock and other stock-based awards to employees, officers, directors, consultants, and advisors of the Company and its subsidiaries, including any individuals who have accepted an offer of employment. The Board of Directors has authority to determine the term of each option, the option price, the number of shares for which each option is granted and the rate at which each option becomes exercisable. During 1999, the Board of Directors amended all then-outstanding options to allow holders to exercise the options prior to vesting, provided that the shares of Common Stock issued upon exercise of the option would be subject to transfer restrictions and vesting provisions that allowed the Company to repurchase unvested shares at the exercise price. There were no outstanding unvested shares of Common Stock at December 31, 2004. Pursuant to the terms of the 1998 Plan, the Board of Directors

has delegated its authority under the 1998 Plan to its compensation committee (the "Compensation Committee"). Accordingly, the Compensation Committee, consisting of independent directors, administers the 1998 Plan, including granting options and other awards under the 1998 Plan. In addition, pursuant to the terms of the 1998 Plan, the Board of Directors has delegated to the Company's chief executive officer limited authority to grant stock options to employees without further action by the Board of Directors or the Compensation Committee. Options granted under the 1998 Plan generally vest in increments over four years and have a ten-year term. As a result of subsequent amendments, the 1998 Plan currently provides that 6,118, 259 shares of Common Stock may be issued pursuant to awards under the 1998 Plan.

2004 Plan

In April 2004, the Board of Directors adopted, subject to stockholder approval, the 2004 Stock Incentive Plan (the "2004 Plan"), which provides for the grant of stock options, restricted stock awards, stock appreciation rights and other stock-based awards to the Company's employees, officers, directors, consultants and advisors, including any individuals who have accepted an offer of employment. The Company's stockholders approved the 2004 Plan in May 2004.

Under the 2004 Plan, the Company may issue up to 4,400,000 shares of Common Stock, subject to adjustment in the event of stock splits and other similar events, pursuant to awards granted under the 2004 Plan. The Board of Directors has the authority to administer the 2004 Plan. Pursuant to the terms of the 2004 Plan, the Board of Directors has delegated its authority under the 2004 Plan to the Compensation Committee. Accordingly, the Compensation Committee, administers the 2004 Plan, including granting options and other awards under the 2004 Plan. In addition, pursuant to the terms of the 2004 Plan, the Board of Directors has delegated to the Company's chief executive officer limited authority to grant stock options to employees without further action by the Board of Directors or the Compensation Committee. Options granted under the 2004 Plan generally vest in increments over four years and have a ten-year term.

The Board of Directors has adopted a program under the 2004 Plan providing for automatic options grants to the Company's non-employee directors. Each non-employee director is granted non-statutory stock options under the 2004 Plan to purchase:

- 20,000 shares of Common Stock on the date of his or her initial election to the Board of Directors (the "Initial Options"); and
- 15,000 shares of the Common Stock on the date of each annual meeting of the Company's stockholders (the "Annual Options"), except if such non-employee director was initially elected to the Board of Directors at such annual meeting.

These options have an exercise price equal to the closing price of the Common Stock on the NASDAQ National Market on the date of grant and have a ten-year term. The Initial Options vest in 36 equal monthly installments beginning on the date one month after the grant date. The Annual Options vest in 12 equal monthly installments beginning on the date one month after the date of grant. All vested options will be exercisable at any time prior to the first anniversary of the date the director ceases to be a director.

2000 ESPP

In May 2000, the Board of Directors and the Company's stockholders approved the 2000 Employee Stock Purchase Plan (the "2000 ESPP"), which provides for the issuance of up to 255,500 shares of Common Stock. The 2000 ESPP permits eligible employees to purchase shares of Common Stock at the lower of 85% of the fair market value of the Common Stock at the beginning or at the end of each offering period. Employees who own 5% or more of the Common Stock are not eligible to participate in the 2000 ESPP. Participation is voluntary.

2000 Director Plan

Prior to the adoption of the 2004 Plan, the Company granted non-statutory stock options to the Company's non-employee directors pursuant to the 2000 Director Stock Option Plan (the "2000 Director Plan"). The Company ceased making grants under the 2000 Director Plan following adoption of the 2004 Plan.

2001 Plan

In May 2001, the Board of Directors approved the 2001 Non-Officer, Non-Director Employee Stock Incentive Plan (the "2001 Plan"), which provides for the grant of nonstatutory stock options to employees, consultants and advisors of the Company and its subsidiaries, including individuals who have accepted an offer of employment, other than those employees who are officers or directors of the Company. The 2001 Plan provides for the issuance of up to 1,250,000 shares of Common Stock. The Board of Directors has delegated its authority under the 2001 Plan to the Compensation Committee, which administers the 2001 Plan, including granting options under the 2001 Plan. In addition, pursuant to the terms of the 2001 Plan, the Board of Directors has delegated to the Company's chief executive officer limited authority to grant stock options to employees without further action by the Board of Directors or the Compensation Committee.

Prior to the Company's initial public offering, the Board of Directors determined the fair value of the Common Stock in its good faith judgment at each option grant date considering a number of factors, including the financial and operating performance of the company, recent transactions in the Common Stock and Preferred Stock, if any, the values of similarly situated companies and the lack of marketability of Common Stock. Following the Company's initial public offering, the fair value is determined based on the trading price of the Common Stock.

During the period January 1, 2000 to September 30, 2000, the Company granted options to purchase 2,273,624 shares of Common Stock at exercise prices below the estimated fair value of the Common Stock as of the date of grant of such options based on the price of the Common Stock in connection with the Company's initial public offering. The total deferred stock compensation associated with these options was approximately $17.3 million. The Company amortized this deferred stock compensation over the respective vesting periods of the individual stock options. Total deferred compensation was reduced when the associated options were cancelled prior to exercise. During 2004, 2003 and 2002, cancellation of options that had not been exercised resulted in a reduction in deferred compensation of approximately $19,000, $0.2 million and $2.2 million, respectively.

Included in the results of operations is stock compensation expense associated with the above-mentioned options of approximately $0.7 million, $2.2 million and $3.3 million for the years ended December 31, 2004, 2003 and 2002, respectively. As of December 31, 2004, all of these options were vested and the associated deferred stock compensation expense had been fully amortized.

In May 2003 the Company granted options to a non-employee consultant to purchase 50,000 shares of Common Stock. In September 2003, the Company amended the terms of fully vested options to purchase 10,000 shares of Common Stock that were granted to a non-employee consultant in May 2001. The options granted were revalued, utilizing the Black-Scholes option pricing model, and expensed over their vesting term. In connection with these actions, the Company recorded $0.1 million and $1.2 million in related non-cash stock compensation expense during 2004 and 2003, respectively. In 2002, the Company accelerated the vesting of stock options held by terminated employees in connection with their termination agreements, which resulted in $0.5 million in non-cash compensation expense. Non-cash compensation expense is included in operating expenses in the consolidated statements of operations.

Stock Option Activity

A summary of stock option activity under all of the Company's stock option plans are as follows:

	Number of Shares	Weighted Average Exercise Price Per Share
Outstanding, December 31, 2001	4,759,950	$10.16
Granted	1,945,700	12.71
Exercised	(708,723)	3.88
Canceled	(1,158,270)	12.39
Outstanding, December 31, 2002	4,838,657	$11.57
Granted	1,945,800	23.45
Exercised	(855,001)	8.84
Canceled	(613,463)	14.88
Outstanding, December 31, 2003	5,315,993	$15.98
Granted	2,261,000	27.64
Exercised	(1,060,174)	12.06
Canceled	(409,285)	21.61
Outstanding, December 31, 2004	6,107,534	$20.60
Available for future grant at December 31, 2004	2,814,034	

The weighted average per share fair market value of options granted during 2004, 2003 and 2002 was $13.79, $12.51 and $6.95, respectively. There were no options granted during 2004, 2003 or 2002 with an exercise price below the fair market value of the underlying shares on the date of grant. The weighted average per share exercise price of options granted during 2004, 2003 and 2002 was $27.64, $23.45 and $12.71, respectively.

The following table summarizes information about stock options from all of the Company's stock option plans outstanding at December 31, 2004:

	Options Outstanding			Options Vested	
Range of Exercise Prices Per Share	Number Outstanding at 12/31/04	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price Per Share	Number Outstanding at 12/31/04	Weighted Average Exercise Price Per Share
$ 1.23- $ 8.51	712,927	5.95	$ 5.62	638,899	$ 5.34
$ 8.60- $12.82	761,171	7.09	11.06	484,582	11.14
$12.95- $15.50	681,332	7.70	15.17	330,179	15.04
$15.75- $23.75	789,745	8.38	19.84	245,916	19.84
$23.77- $25.25	698,535	9.22	24.70	113,248	24.19
$25.41- $27.81	979,533	8.80	26.98	257,855	26.74
$27.87- $28.02	912,458	9.66	28.02	79,969	28.00
$28.36- $33.77	553,833	9.32	31.62	49,175	31.24
$34.95- $34.95	18,000	9.30	34.95	—	—
	6,107,534	8.30	$20.60	2,199,823	$14.58

Common Stock Reserved for Future Issuance

At December 31, 2004, there were 9,740,635 shares of Common Stock reserved for future issuance under the 2000 ESPP, for exercise of the March Warrants and for grants made under the 1998 Plan, the 2001 Plan, and the 2004 Plan.

9. Net Earnings/(Loss) per Share

The following table sets forth the computation of basic and diluted net earnings/(loss) per share for the years ended December 31, 2004, 2003 and 2002.

	Years Ended December 31,		
	2004	2003	2002
Basic and diluted			
Net income/(loss)—As reported	$16,999,190	$(16,869,701)	$(45,831,148)
Weighted average common shares outstanding, basic	47,855,748	45,628,258	37,223,342
Less: unvested restricted common shares outstanding	(264)	(3,969)	(13,411)
Weighted average common shares outstanding, basic	47,855,484	45,624,289	37,209,931
Net effect of dilutive stock options and warrants	1,916,830	—	—
Weighted average common shares outstanding, diluted	49,772,314	45,624,289	37,209,931
Net earnings/(loss) per common share, basic	$ 0.36	$ (0.37)	$ (1.23)
Net earnings/(loss) per common share, diluted	$ 0.34	$ (0.37)	$ (1.23)

Basic net earnings/(loss) per share is computed using the weighted average number of shares of Common Stock outstanding during the period reduced, where applicable, for outstanding, yet unvested, shares. As of December 31, 2004, there were options to purchase 6,107,534 shares of Common Stock and warrants to purchase 661,561 shares of Common Stock outstanding. These options and warrants have been included in the computation of diluted net earnings per share for the year ended December 31, 2004. The number of dilutive common stock equivalents was calculated using the treasury stock method. The Company has not included options and warrants in the computation of diluted net loss per share for the years ended December 31, 2002 and 2003, as their effects would have been antidilutive.

10. Income Taxes

The provision for income taxes in 2004 and 2003 consist of current federal, state and foreign taxes paid based on net income as follows: There was no provision for income taxes for the year ended December 31, 2002.

	2004	2003
Federal	$411,000	$ —
State	240,000	122,000
Foreign	39,000	6,000
Total	$690,000	$128,000

The difference between tax expense and the amount computed by applying the statutory federal income tax rate (34%) to income before income taxes is as follows:

	Year Ended December 31, 2004	2003
Statutory rate applied to pre-tax (loss)	$ 6,007,000	$(5,692,000)
Add (deduct):		
State income taxes, net of federal benefit	321,000	(709,000)
Foreign	23,000	(40,000)
Compensation expense	—	648,000
Tax credits	(1,949,000)	(1,497,000)
Other	283,000	220,000
(Decrease)/increase to valuation allowance (net)	(3,995,000)	7,198,000
Income taxes	$ 690,000	$ 128,000

The significant components of the Company's deferred tax assets are as follows:

	December 31, 2004	2003
Deferred tax assets:		
Net operating loss carryforwards	$ 91,372,000	$ 92,357,000
Research and development credit	10,161,000	8,449,000
Intangible assets	726,000	807,000
Other	4,491,000	3,323,000
	106,750,000	104,936,000
Valuation allowance	(106,750,000)	(104,936,000)
Net deferred tax assets	$ —	$ —

The decrease in deferred tax assets related to net operating loss carryforwards is primarily related to the utilization of $8,226,000 of net operating losses to reduce current year taxes offset primarily by current year benefits for exercises of non-qualified stock options of $6,388,000. The Company increased its valuation allowance by $1,814,000 in 2004 to provide a full valuation allowance for deferred tax assets since the realization of these future benefits is not considered more likely than not. The amount of the deferred tax asset considered realizable is subject to change based on estimates of future taxable income during the carryforward period. If the Company continues to achieve profitability, these deferred tax assets would be available to offset future income taxes.

The future utilization of net operating losses and credits may be subject to limitation based upon changes in ownership under the rules of the Internal Revenue Code. The Company has not yet determined the effect of these rules on the utilization of its net operating loss and credit carryforwards. At December 31, 2004, the Company has federal net operating loss carryforwards available to reduce taxable income, and federal research and development tax credit carryforwards available to reduce future tax liabilities, which expire approximately as follows:

Year of Expiration	Federal Net Operating Loss Carryforwards	Federal Research and Development Tax Credit Carryforwards
2011	$ —	$ 22,000
2012	11,597,000	527,000
2018	27,876,000	425,000
2019	33,803,000	1,002,000
2020	45,270,000	1,176,000
2021	51,100,000	477,000
2022	41,403,000	1,876,000
2023	22,033,000	2,084,000
2024	—	1,949,000
	$233,082,000	$9,538,000

At December 31, 2004 a total of $9.2 million of the deferred tax asset valuation allowance related to net operating loss carryforwards is associated with the exercise of non-qualified stock options. Such benefits, when realized, will be credited to additional paid-in capital.

For state tax purposes, net operating loss carryforwards of approximately $202,073,000 expire in the years 2005 through 2011. State research and development tax credit carryforwards are approximately $623,000.

11. License Agreements

Angiomax® (bivalirudin)

In March 1997, the Company entered into an agreement with Biogen, Inc., a predecessor of Biogen Idec, Inc., for the license of the anticoagulant pharmaceutical bivalirudin, which the Company has developed as Angiomax. Under the terms of the agreement, the Company acquired exclusive worldwide rights to the technology, patents, trademarks, inventories and know-how related to Angiomax. In exchange for the license, the Company paid $2.0 million on the closing date and is obligated to pay up to an additional $8.0 million upon the first commercial sales of Angiomax for the treatment of acute myocardial infarction in the United States and Europe. In addition, the Company is obligated to pay royalties on sales of Angiomax and on any sublicense royalties on a country-by-country basis earned until the later of (1) 12 years after the date of the first commercial sales of the product in a country or (2) the date on which the product or its manufacture, use or sale is no longer covered by a valid claim of the licensed patent rights in such country. Under the terms of the agreement, the royalty rate due to Biogen on sales increases with growth in annual sales of Angiomax. The agreement also stipulates that the Company use commercially reasonable efforts to meet certain milestones related to the development and commercialization of Angiomax, including expending at least $20 million for certain development and commercialization activities, which the Company met in 1998. The license and rights under the agreement remain in force until the Company's obligation to pay royalties ceases. Either party may terminate the agreement for material breach by the other party, if the material breach is not cured within 90 days after written notice. In addition, the Company may terminate the agreement for any reason upon 90 days prior written notice. The

Company recognized royalty expense under the agreement of $10.8 million in 2004, $5.7 million in 2003 and $2.8 million in 2002 for Angiomax sales.

Clevelox™ (clevidipine)

In March 2003, the Company acquired from AstraZeneca AB exclusive license rights to Clevelox for all countries other than Japan. The Company acquired this license after having studied Clevelox under a study and exclusive option agreement with AstraZeneca that the Company entered into in March 2002. The Company plans to develop Clevelox as a short acting blood pressure control agent for use in hospital setting. In exchange for the license, the Company paid $1.0 million in 2003 upon entering into the license and may have to pay up to an additional $5.0 million upon reaching certain regulatory milestones. In addition, the Company will be obligated to pay royalties on a country-by-country basis on future annual sales of Clevelox, and on any sublicense royalties earned, until the later of (1) the duration of the licensed patent rights which are necessary to manufacture, use or sell Clevelox in a country or (2) ten years from the Company's first commercial sale of Clevelox in such country. The licenses and rights under the agreement remain in force until the Company ceases selling Clevelox in any country or the agreement is otherwise terminated. The Company may terminate the agreement upon 30 days written notice, unless AstraZeneca, within 20 days of having received the Company's notice, requests that the Company enter into good faith discussions to redress its concerns. If the Company cannot reach a mutually agreeable solution with AstraZeneca within three months of the commencement of such discussions, the Company may then terminate the agreement upon 90 days written notice. Either party may terminate the agreement for material breach upon 60 days prior written notice, if the breach is not cured within such 60 days.

Cangrelor

In December 2003, the Company acquired from AstraZeneca AB exclusive license rights to cangrelor for all countries other than Japan, China, Korea, Taiwan and Thailand. In exchange for the license, the Company paid in January 2004 an upfront payment upon entering into the license and may have to make additional payments upon reaching certain regulatory milestones. In addition, the Company will be obligated to pay royalties on a country-by-country basis on future annual sales of cangrelor, and on any sublicense royalties earned, until the later of (1) the duration of the licensed patent rights which are necessary to manufacture, use or sell cangrelor in a country or (2) ten years from the Company's first commercial sale of cangrelor in such country. The licenses and rights under the agreement remain in force until the Company ceases selling cangrelor in any country or the agreement is otherwise terminated. The Company may terminate the agreement upon 30 days written notice, unless AstraZeneca, within 20 days of having received the Company's notice, requests that the Company enter into good faith discussions to redress its concerns. If the Company cannot reach a mutually agreeable solution with AstraZeneca within three months of the commencement of such discussions, the Company may then terminate the agreement upon 90 days written notice. Either party may terminate the agreement for material breach upon 60 days prior written notice, if the breach is not cured within such 60 days.

12. Related Party Transactions and Strategic Alliances

Strategic Imagery, LLC

In December 2004, the Company entered into a consulting agreement with Strategic Imagery LLC, a consulting company owned by Mr. Robert Savage, a director of the Company. Under the terms of the consulting agreement, Mr. Savage has agreed to provide consulting services to the Company from time to time on organizational development and senior management coaching. The initial term of the consulting agreement is one year and is subject to renewal for successive periods upon further agreement of the parties. Either party may terminate the consulting agreement at any time upon thirty days written notice.

The Company incurred $2,500 of expenses in 2004 pursuant to the consulting agreement, which is included in accounts payable at December 31, 2004.

UCB Bioproducts

In December 1999, the Company entered into a commercial supply agreement with UCB Bioproducts S.A. ("UCB") for the development and supply of the Angiomax bulk drug substance. Under the terms of the commercial supply agreement, UCB completed development of a modified production process known as the Chemilog process and filed an amendment in 2001 to its drug master file for regulatory approval of the Chemilog process by the FDA. The Chemilog process was approved by the FDA in May 2003. The Company has agreed to purchase a substantial portion of its Angiomax bulk drug product manufactured using the Chemilog process from UCB at agreed upon prices for a period ending in September 2010. Following the expiration of the agreement, which automatically renews for consecutive three-year periods unless either party provides notice of non-renewal within one year prior to the expiration of the initial term or any renewal term, or if the Company terminates the agreement prior to its expiration, UCB has agreed to transfer the development technology to the Company. If the Company engages a third party to manufacture Angiomax using this technology prior to bivalirudin becoming a generic drug in the U.S., the Company will be obligated to pay UCB a royalty based on the amount paid by the Company to the third-party manufacturer. The Company may only terminate the agreement prior to its expiration in the event of a material breach by UCB.

During 2004, 2003 and 2002 the Company recorded $25.9 million, $11.1 million and $9.7 million, respectively, in costs related to UCB's production of Angiomax bulk drug substance and Angiomax related development activities, of which $1.1 million and $6.8 million were expensed as research and development in 2003 and 2002 respectively, as FDA approval of the Chemilog processes had not been received.

Nycomed

In March 2002, the Company entered into an agreement with Nycomed, a privately owned company, with its headquarters in Roskilde, Denmark to market and distribute Angiomax in Europe. Nycomed sources, manufactures and markets pharmaceuticals and consumer health products. In September 2004, the Company received authorization from the European Commission to market Angiomax® (bivalirudin) as Angiox™ (bivalirudin) in the member states of the European Union for use as an anticoagulant in patients undergoing percutaneous coronary interventions.

Nycomed is the Company's exclusive distributor of Angiox in all countries of the European Union excluding Greece, Portugal and Spain, with the Company and Nycomed sharing Angiox sales revenue. Nycomed paid an initial distributor fee to the Company of $1.5 million in 2002 and paid to the Company an additional $2.5 million in 2004 in additional milestones based on regulatory approval in Europe. These payments were recorded as deferred revenue when received and are being amortized over the expected life of this agreement. In addition, in 2002 Nycomed also made a $1 million equity investment in the Company.

13. Commitments and Contingencies

The Company's long-term contractual obligations include commitments and estimated purchase obligations entered into in the normal course of business. These include commitments related to purchases of inventory of the Company's products, research and development service agreements, operating leases and selling, general and administrative obligations.

Future estimated contractual obligations as of December 31, 2004 are:

Contractual Obligations	2005	2006	2007	2008	2009	Later Years	Total
Inventory related commitments	$49,231,000	$ —	$ —	$ —	$ —	$ —	$ 49,231,000
Research and development	20,469,000	24,853,000	3,400,000	—	—	—	48,722,000
Operating Leases	1,460,000	1,733,000	1,759,000	1,763,000	1,589,000	4,976,000	13,280,000
Selling, general and administrative	3,814,000	132,000	—	—	—	—	3,946,000
Total contractual obligations	$74,974,000	$26,718,000	$5,159,000	$1,763,000	$1,589,000	$4,976,000	$115,179,000

Included above in inventory-related commitments are non-cancelable commitments to make payments to UCB of a total of $42.3 million during 2005 for Angiomax bulk drug substance to be produced using the Chemilog process and $6.9 million in related filling, finishing and packaging commitments through 2005. The Company also has $48.7 million of estimated contractual obligations for research and development activities, of which $4.5 million is non-cancelable. The amounts included in selling, general and administrative obligations are primarily related to consulting arrangements, of which $1.1 million is non-cancelable .

In addition to the contractual obligations above, the Company has agreed to make certain milestone payments and royalty payments to Biogen Idec, Inc. and to AstraZeneca AB related to the Company's product licenses for Angiomax, Clevelox and cangrelor. Under the Angiomax license, the Company may have to pay up to an additional $8.0 million upon the first commercial sales of Angiomax for the treatment of acute myocardial infarction in the United States and Europe. Under the Clevelox license, the Company may have to pay up to an additional $5.0 million upon reaching certain regulatory milestones. Under the cangrelor license, the Company made an upfront payment and will provide milestone payments upon regulatory approval in major markets. The foregoing amounts do not include royalties that the Company may also have to pay as discussed in note 11.

The Company leases its facilities in Parsippany, New Jersey and Waltham, Massachusetts. The leases for Parsippany and Waltham expire in January 2013 and December 2008, respectively. Rent expense was approximately $1.1 million, $0.9 million and $0.7 million in 2004, 2003 and 2002, respectively.

Litigation

The Company is involved in ordinary and routine matters and litigation incidental to its business. In the opinion of management, there are no matters outstanding that would have a material adverse effect on the consolidated financial position or results of operations of the Company.

In November 2003, the Company received a notice from the Equal Employment Opportunity Commission, or EEOC, that a current employee of the Company had filed a Charge of Discrimination with the EEOC alleging that the Company had engaged in sexual discrimination and sexual harassment in violation of Title VII of the Civil Rights Act of 1964 and the New Jersey Law Against Discrimination. In March 2004, the Company reached a settlement with the employee, in which the Company agreed to a financial settlement without admitting any of the facts of the complaint. The associated legal costs and settlement expenses are included in selling, general and administrative expense in the Company's results of operations.

14. Employee Benefit Plan

The Company has an employee savings and retirement plan which is qualified under Section 401(k) of the Internal Revenue Code. The Company's employees may elect to reduce their current compensation up to the statutorily prescribed limit and have the amount of such reduction contributed to the 401(k) plan. The Company may make matching or additional contributions to the 401(k) plan in amounts to be determined annually by the Board of Directors. The Company has not made any matching or additional contributions to date.

15. Selected Quarterly Financial Data (Unaudited)

The following table presents selected quarterly financial data for the years ended December 31, 2004 and 2003.

	Three Months Ended							
	Mar. 31, 2004	June 30, 2004	Sept. 30, 2004	Dec. 31, 2004	Mar. 31, 2003	June 30, 2003	Sept. 30, 2003	Dec. 31, 2003
	(in thousands, except per share data)							
Net revenue	$31,284	$34,387	$37,715	$40,865	$16,705	$18,750	$21,248	$28,888
Cost of sales	4,007	7,174	9,148	8,795	6,263	6,970	6,603	2,914
Total operating expenses	27,404	31,874	32,833	36,578	23,292	25,749	27,820	26,874
Net income/(loss)	4,230	2,841	5,261	4,667	(6,416)	(6,587)	(6,162)	2,296
Basic net (loss) /income per common share	$ 0.09	$ 0.06	$ 0.11	$ 0.10	$ (0.16)	$ (0.14)	$ (0.13)	$ 0.05
Diluted net income per common share	$ 0.08	$ 0.06	$ 0.11	$ 0.09	—	—	—	$ 0.05
Market Price								
High	$ 33.15	$ 36.11	$ 32.40	$ 29.76	$ 20.00	$ 25.91	$ 31.41	$ 29.98
Low	$ 25.76	$ 26.93	$ 19.93	$ 22.27	$ 15.20	$ 16.83	$ 19.25	$ 22.80

Schedule II

Valuation and Qualifying Accounts

Year ended December 31, 2004, 2003 and 2002

	Balance at Beginning of Period	(Credit) Charged to Costs and Expenses(1)	Other Charges (Deductions)(2)	Balance at End of Period
2004				
Allowances for chargebacks, cash discounts and doubtful accounts....	$2,226,000	$9,076,000	$7,728,000	$3,574,000
2003				
Allowances for chargebacks, cash discounts and doubtful accounts....	$ 636,000	$5,746,000	$4,156,000	$2,226,000
2002				
Allowances for chargebacks, cash discounts and doubtful accounts....	$ 258,000	$1,428,000	$1,050,000	$ 636,000

(1) amounts presented herein were charged to and reduced revenues

(2) represents actual cash discounts, chargeback credits and other deductions

INDEX TO EXHIBITS

Number	Description
3.1(1)	Third Amended and Restated Certificate of Incorporation of the registrant
3.2(2)	Amended and Restated By-laws of the registrant, as amended
10.1(1)*	1998 Stock Incentive Plan, as amended
10.2(2)*	2000 Employee Stock Purchase Plan, as amended
10.3(3)*	2000 Outside Director Stock Option Plan, as amended
10.4(4)	2001 Non-Officer, Non-Director Employee Stock Incentive Plan
10.5(11)*	2004 Stock Incentive Plan
10.6(5)	Amended and Restated Registration Rights Agreement, dated as of August 12, 1998, as amended, by and among the registrant and the other parties thereto
10.7(1)†	Chemilog Development and Supply Agreement, dated as of December 20, 1999, by and between the registrant and UCB Bioproducts S.A.
10.8(1)†	License Agreement, dated as of June 6, 1990, by and between Biogen, Inc. and Health Research, Inc., as assigned to the registrant
10.9(1)†	License Agreement dated March 21, 1997, by and between the registrant and Biogen, Inc.
10.10(6)†	Sales, Marketing and Distribution Agreement dated March 25, 2002 by and between Nycomed Danmark A/S and the registrant
10.11(7)	Termination Agreement, dated November 1, 2001, by and between the registrant and Stack Pharmaceuticals, Inc. relating to the Services Agreement dated April 1, 2000, as amended
10.12(1)*	Employment agreement dated September 5, 1996 by and between the registrant and Clive Meanwell
10.13(8)*	Employment Agreement dated October 16, 1997 by and between the registrant and John D. Richards
10.14(7)*	Amended and Restated Employment Agreement, dated November 1, 2001, by and between the registrant and David M. Stack
10.15(12)*	First Amendment to Employment Agreement dated as of August 1, 2004, by and between the registrant and David M. Stack
10.16(7)*	Assignment and Assumption of Lease, dated October 18, 2001, by and between the Registrant and Stack Pharmaceuticals, Inc.
10.17(10)	Lease for 8 Campus Drive dated September 30, 2002 by and between Sylvan/Campus Realty L.L.C. and the registrant, as amended
10.18	Third Amendment to Lease for 8 Campus Drive dated December 30, 2004 by and between Sylvan/Campus Realty L.L.C. and the registrant
10.19(9)	Lease for 200 Fifth Avenue, Waltham, MA dated June 19, 2003 by and between Prospect Hill Acquisition Trust and the registrant
10.20(10)††	License Agreement effective as of March 28, 2003 by and between AstraZeneca AB and the registrant
10.21(10)††	License Agreement dated as of December 18, 2003 by and between AstraZeneca AB and the registrant
10.22*	Form of stock option agreement under 2004 Stock Incentive Plan
10.23(11)*	Form of stock option agreement under 1998 Stock Incentive Plan
10.24(12)††	Development and Supply Agreement, dated as of July 28, 2004 by and between Lonza, Ltd. and the registrant
10.25*	Letter Agreement dated December 1, 2004 by and between the registrant and John Kelley
10.26*	Consulting Agreement dated December 14, 2004 by and between the registrant and Strategic Imagery, LLC
10.27*	Summary of Board of Director Compensation
21(10)	Subsidiaries of the registrant
23	Consent of Ernst & Young LLP, Independent Auditors

Number	Description
31.1	Chief Executive Officer—Certification pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Chief Financial Officer—Certification pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Chief Executive Officer—Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Chief Financial Officer—Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* Management contract or compensatory plan or arrangement filed as an exhibit to this form pursuant to Items 15(a) and 15(c) of Form 10-K

† Confidential treatment was granted for certain portions of this Exhibit pursuant to Rule 406 promulgated under the Securities Act of 1933, as amended, or Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended

†† Confidential treatment has been requested for certain portions of this Exhibit pursuant to Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended

(1) Incorporated by reference to the exhibits to the registration statement on Form S-1 (registration no. 333-37404)

(2) Incorporated by reference to the exhibits to the registrant's annual report on Form 10-K for the year ended December 31, 2001

(3) Incorporated by reference to the exhibits to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2003

(4) Incorporated by reference to the exhibits to the registration statement on Form S-8 (registration no. 333-74612)

(5) Incorporated by reference to the exhibits to the registrant's quarterly report on Form 10-Q for the quarter ended June 30, 2002

(6) Incorporated by reference to the exhibits to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2002

(7) Incorporated by reference to the exhibits to the registrant's quarterly report on Form 10-Q for the quarter ended September 30, 2001

(8) Incorporated by reference to the exhibits to the registration statement on Form S-1 (registration no. 333-53280)

(9) Incorporated by reference to the exhibits to the registrant's quarterly report on Form 10-Q for the quarter ended June 30, 2003

(10) Incorporated by reference to the exhibits to the registrant's annual report on Form 10-K for the year ended December 31, 2003

(11) Incorporated by reference to the exhibits to the registrant's quarterly report on Form 10-Q for the quarter ended June 30, 2004

(12) Incorporated by reference to the exhibits to the registrant's quarterly report on Form 10-Q for the quarter ended September 30, 2004

THE MEDICINES COMPANY

CORPORATE INFORMATION

Executive Officers

Clive Meanwell
Chairman and
Chief Executive Officer

John Kelley
President and
Chief Operating Officer

Steve Koehler
Senior Vice President and
Chief Financial Officer

John Richards
Vice President

Paul Antinori
Vice President and General Counsel

Directors

William W. Crouse
Managing Director
HealthCare Ventures

Robert J. Hugin
Senior Vice President and
Chief Financial Officer
Celgene Corporation

T. Scott Johnson, M.D.
Partner and Co-Founder
JLS Partners, LP

Armin M. Kessler
Former Chief Operating Officer and
Head of Pharmaceutical Division
Hoffmann-La Roche, Inc.

Robert G. Savage
Former Group Vice President and
President for the General Therapeutics
and Inflammation Business
Pharmacia Corporation

Elizabeth H.S. Wyatt
Former Vice President,
Corporate Licensing
Merck & Co., Inc.

Employees
220 (end 2004)

Headquarters
8 Campus Drive
Parsippany, NJ 07054

Offices
Waltham, MA
Abingdon, UK

Founded
1996

IPO
2000

Stock Listing
Nasdaq: MDCO

Transfer Agent:
Mellon Investor Services

Independent Registered Public Accounting Firm
Ernst & Young LLP

Corporate Counsel
Wilmer Cutler, Pickering, Hale and Dorr LLP

Investor Relations Contact
Michael Mitchell
Executive Director, Corporate Affairs
973-656-1616
investor.relations@themedco.com

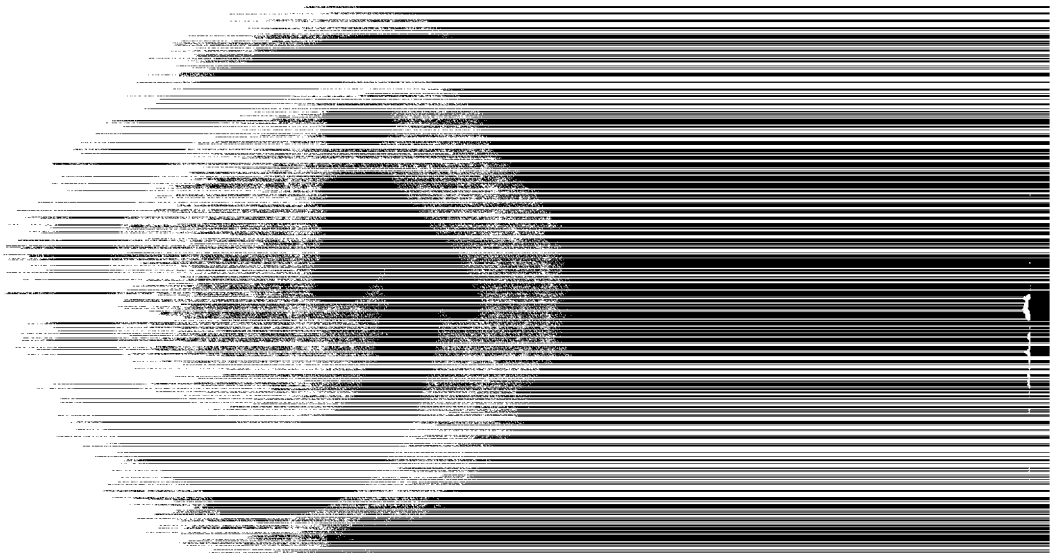
Stock Information

The following table reflects the range of the high and low bid information per share of our common stock, as reported on the Nasdaq National Market for the periods indicated. These prices reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

Year Ended December 31, 2003	HIGH	LOW
First Quarter	$20.00	$15.20
Second Quarter	$25.91	$16.83
Third Quarter	$31.41	$19.25
Fourth Quarter	$29.98	$22.80

Year Ended December 31, 2004	HIGH	LOW
First Quarter	$33.15	$25.76
Second Quarter	$36.11	$26.93
Third Quarter	$32.40	$19.93
Fourth Quarter	$29.76	$22.27

Statements contained in this document about our position and the success of our products in the marketplace, the development of our products and the acquisition of additional products and all other statements that are not purely historical, are forward-looking statements for purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. These forward-looking statements involve known and unknown risks and uncertainties that may cause the Company's actual results, levels of activity, performance or achievements to be materially different from those expressed or implied by these forward-looking statements. Some of the important factors that may cause or contribute to such differences include the commercial success of Angiomax® (bivalirudin), whether the Company's products will advance in the clinical trials process, whether the Company's products will receive approval from regulatory agencies, physician's acceptance of clinical trial results, and the Company's ability to identify, select and acquire additional product candidates, as well as the risk factors detailed from time to time in the Company's periodic reports filed with the Securities and Exchange Commission, including without limitation the Company's Annual Report on Form 10-K filed on March 14, 2005. We specifically disclaim any obligation to update these forward-looking statements.



THE MEDICINES COMPANY®

8 Campus Drive
Parsippany, New Jersey 07054
973.656.1616
www.themedicinescompany.com