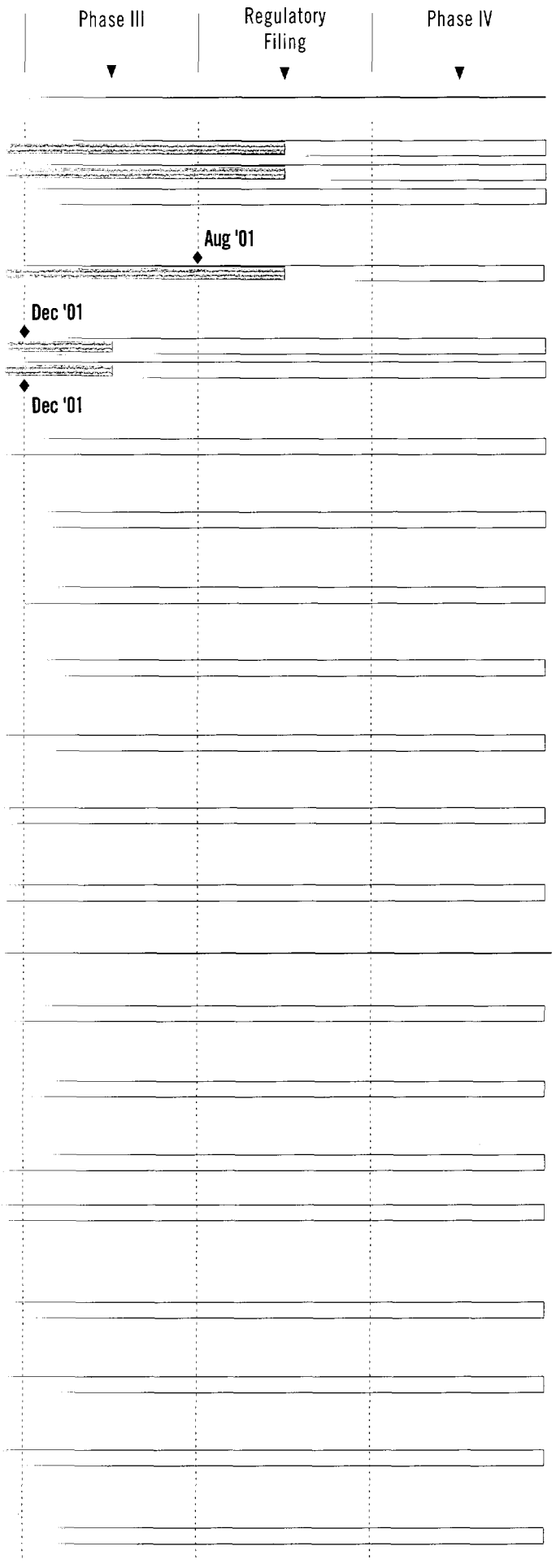
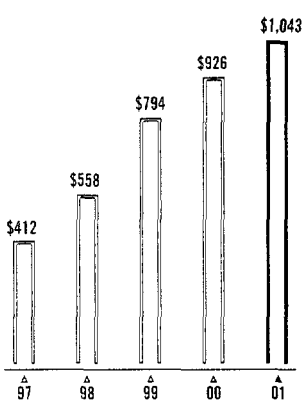
ANNUAL REPORT 2001

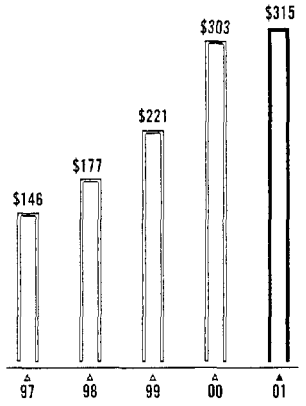
BIOGEN INC



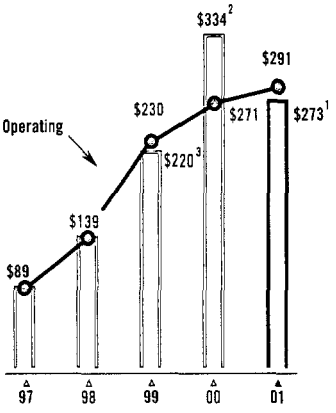
BIOGEN FINANCIAL HIGHLIGHTS



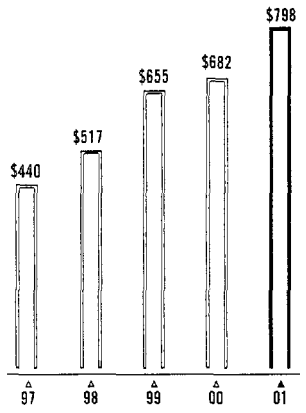
Total Revenues



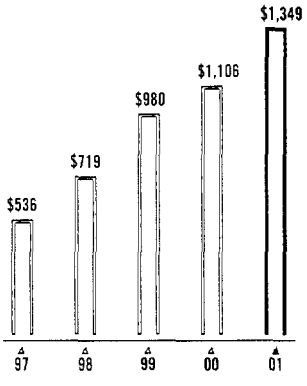
Research and Development



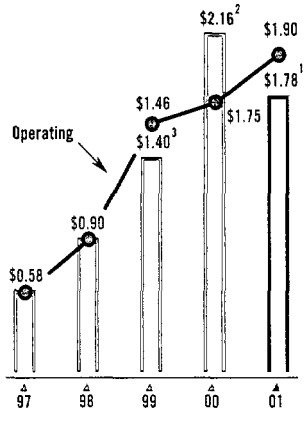
Net Income – as reported



Cash and Investments



Shareholders' Equity



Diluted Earnings per Share – as reported

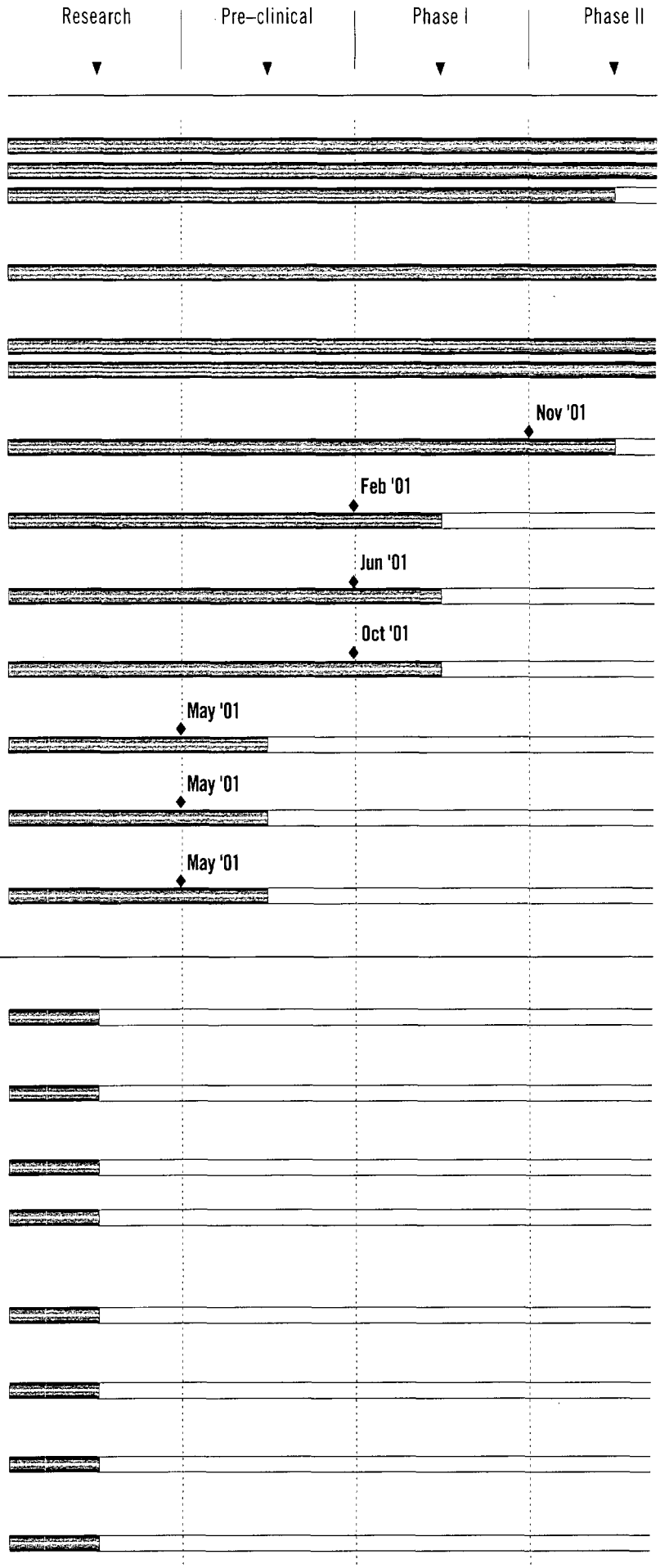
Dollars in millions, except for Diluted Earnings per Share

1 Includes the effect of non-operational net pre-tax gains on marketable securities of $2 million, a $20 million settlement on a patent infringement suit and $8 million in an upfront fee for an aggregate of $26 million or $0.12 in non-operational expense.

2 Includes the effect of non-operational net pre-tax gains of $101 million or $0.41 per share.

3 Includes the effect of a charge for the write-down of non-current marketable securities of $15 million, or $0.06 per share.

BIOGEN PRODUCT PIPELINE

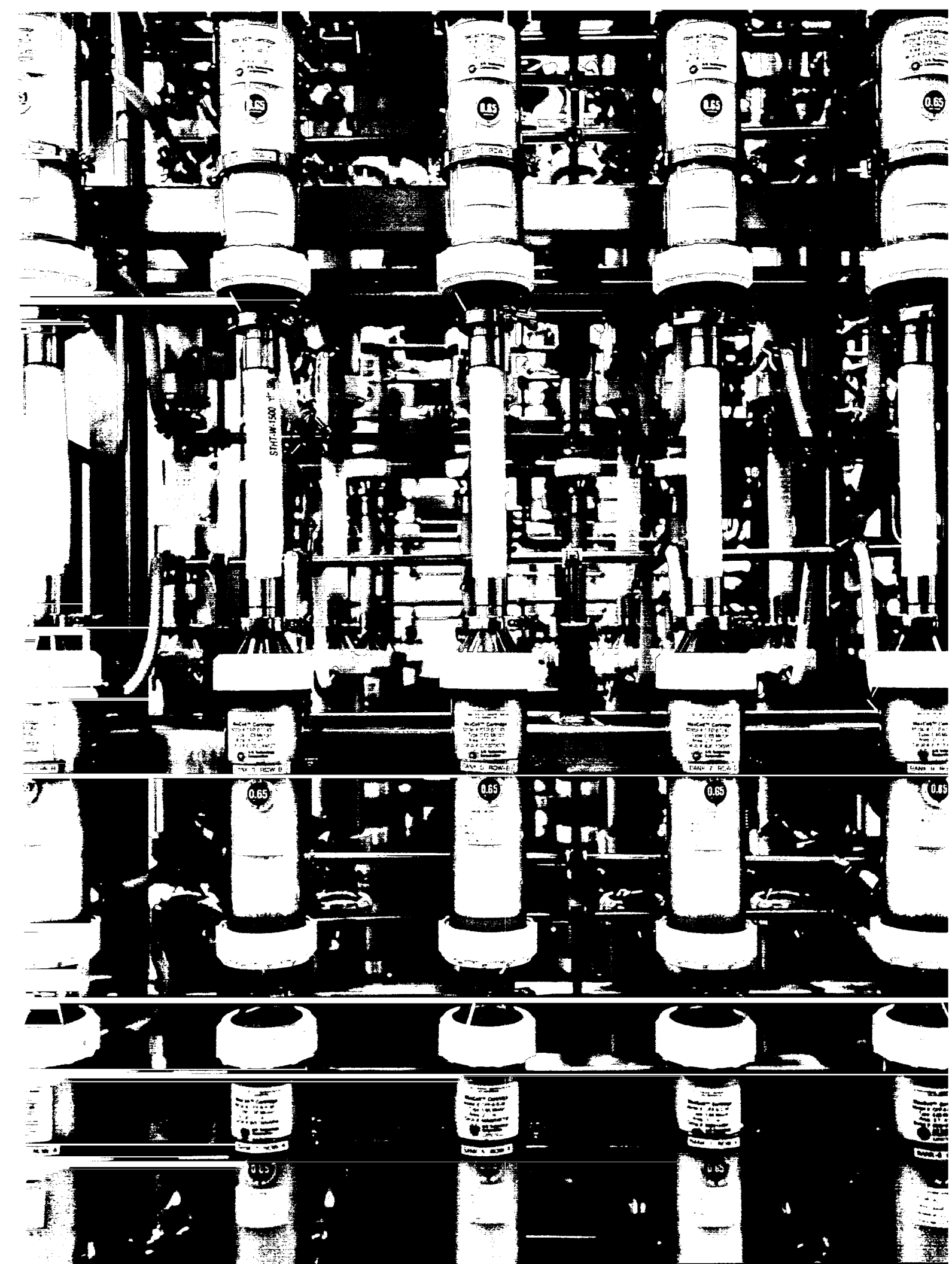


THE DRIVE TO DISCOVER...

AT BIOGEN, WE ARE IN THE BUSINESS OF RESULTS. AS AN INDUSTRY-LEADING BIOTECHNOLOGY COMPANY, WE WORK TO BRING INNOVATIVE MEDICAL TREATMENTS TO MARKET WITH PRECISION, CONSISTENCY AND EFFICIENCY. WE REALIZE THAT THERE IS NO ONE RIGHT WAY TO ACHIEVE THESE RESULTS, SO WE ADAPT TO THE CHANGING WORLD AROUND US. WE CHALLENGE OUR PEOPLE — THROUGHOUT THE WORLD — TO DISCOVER AND DEVELOP NEW WAYS TO DELIVER VALUE ... FOR PATIENTS, STOCKHOLDERS AND THE MEDICAL COMMUNITY.

THE DISCIPLINE TO DELIVER™

IMPORTANT NOTE TO SHAREHOLDERS In addition to historical information, this Annual Report contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Reference is made in particular to statements regarding expectations as to the future performance of our stock price, our success at bringing products to market, future financial results, including the potential growth of the market for AVONEX and the potential market for AMEVIVE, the development and commercialization of new formulations and new uses of AVONEX, the potential product launch and commercial success of AMEVIVE, the potential efficacy and uses of products in development, the anticipated results of ongoing clinical trials, the timing of anticipated and ongoing clinical trials, the description of the Company's plans, goals and objectives for future operations and future product development, assumptions underlying such plans, goals and objectives and other forward-looking statements included in the CEO's Letter, the Chairman's Letter, "Management's Discussion and Analysis of Financial Condition and Results of Operations" ("MD&A") and other sections of this Annual Report. Such statements are based on management's current expectations and are subject to a number of factors and uncertainties which could cause actual results to differ materially from those described in the forward-looking statements. In particular, careful consideration should be given to cautionary statements made in MD&A, including under the heading "Outlook" and in the business section of the Company's Form 10-K under the heading "Risks Associated with Drug Development and Commercialization."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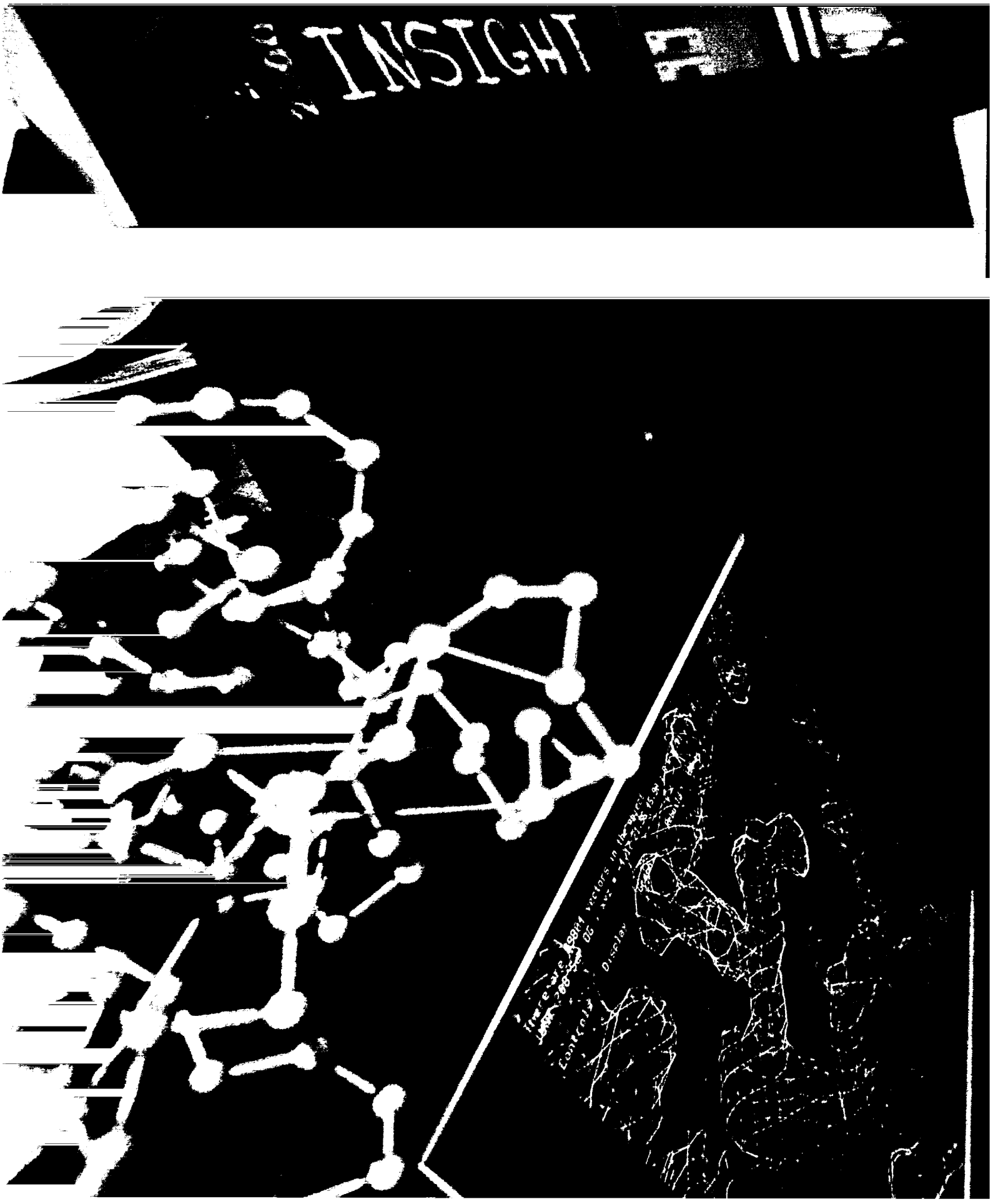
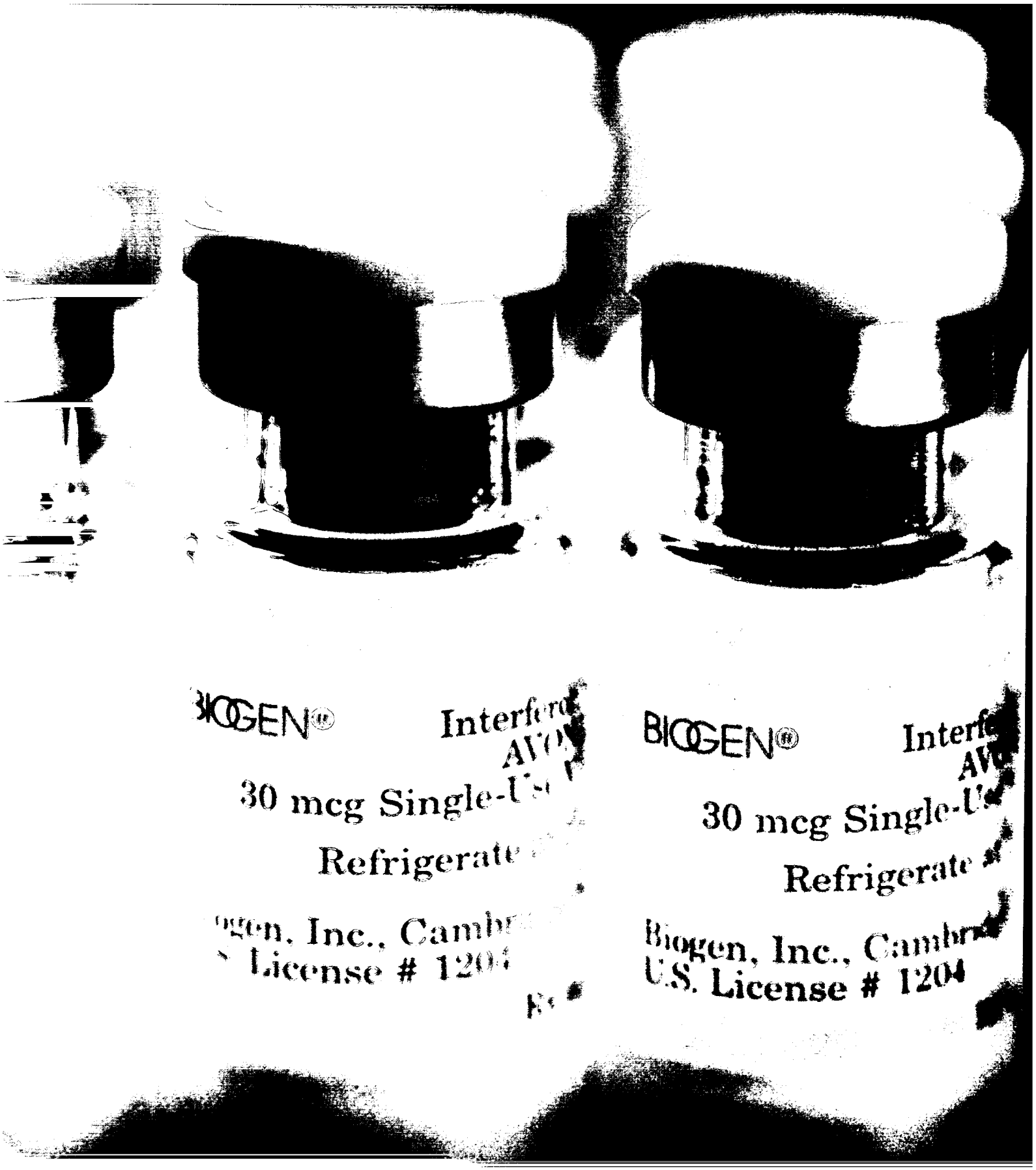
STRATEGIC R&D FOCUS



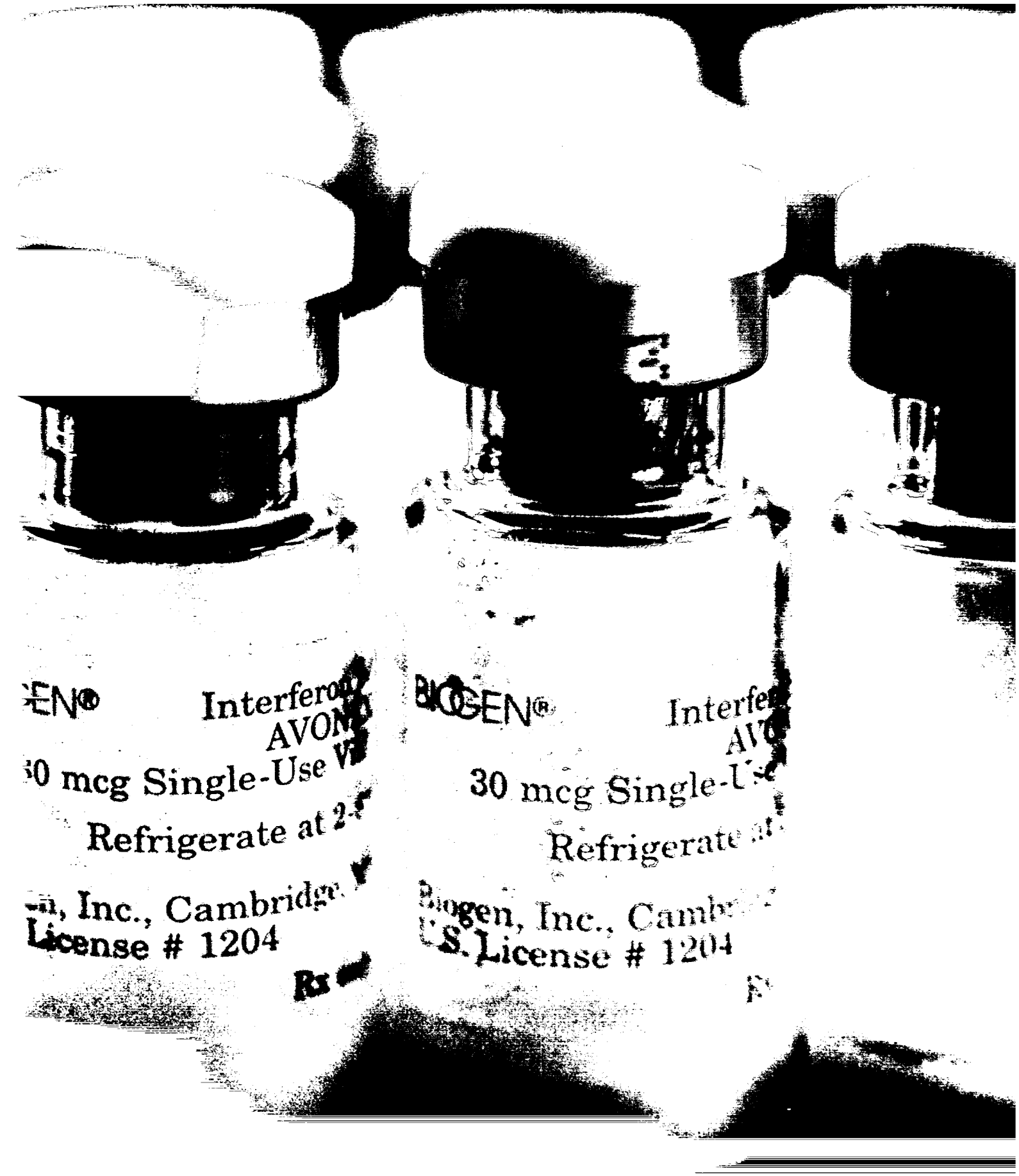
GROWING PIPELINE OF DRUG CANDIDATES

BIOTECH MANUFACTURING LEADERSHIP

PROCESS WASTE



GLOBAL SALES EXCEEDING $1 BILLION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CEO'S LETTER

On behalf of Biogen's more than 2,000 employees around the world, it is my privilege to report a performance that I believe ranks 2001 as one of the most memorable and impressive years in this company's history.

Solid business fundamentals are a Biogen hallmark, and in 2001 we continued this tradition: a strong cash position, minimal debt and a straightforward business model. Standard measures of financial performance continued to show the growth and improvement that people have come to associate with a top-tier biotechnology company.

Revenues grew to the $1 billion mark – driven by continued strong performance of our flagship product, the multiple sclerosis drug AVONEX® (Interferon beta-1a). Reaching this level of sales is more than a symbolic achievement. It's a validation of the basic business strategy that distinguishes Biogen from competitors throughout the biotech world.

Income before income taxes for 2001 reached $390 million, reflecting a compound annual growth rate of 57 percent since 1996. Operating earnings per share rose to $1.90.

Biogen also continued to build it's world-class engine for drug discovery. We invested more than $314 million in research and development, or 30 percent of revenues. That is a higher percentage of R&D investment than for virtually all other leading names in biotechnology. This cornerstone of our strategy is creating value – steadily producing a pipeline of innovative and much-needed medical treatments.

In 2001, Biogen completed the required regulatory filings (both in the U.S. and in Europe) for our new psoriasis drug, AMEVIVE® (alefacept), in an accelerated timeframe that set a new industry standard. Once again, we demonstrated the extraordinary capacity of Biogen's people to redefine the rules of the game in product development and commercialization.

Equally significant, we recorded numerous major accomplishments that go well beyond short-term, dollars-and-cents measures. We planted and nurtured the strategic seeds of growth – seeds that will bear fruit as exciting new products. In addition to the above-mentioned progress for AVONEX and AMEVIVE, we also started six other promising clinical trials – including three in Phase III, one in Phase II and three in Phase I. What's more, we developed nine additional major research candidates and moved three into the pre-clinical stages.

As these new products are launched and the pipeline grows, our lackluster performance in the stock market will improve. The market will recognize that Biogen has successfully evolved into a company with the skills, resources and commitment to deliver a sustainable pipeline of innovative medical therapies. With each passing day, Biogen is creating value – and this value will be reflected in our share price.

During 2001, we also made several important advances in transforming the promise of biotechnology into reality for customers around the world.

JAMES C. MULLEN
PRESIDENT & CEO

First, we reaffirmed Biogen's position as an industry leader in manufacturing bioengineered therapies. In North Carolina's Research Triangle Park, we completed construction and commissioning of our large-scale manufacturing complex – one of the largest cell culture manufacturing facilities in the world. Preliminary work also began at our planned manufacturing facility in Denmark. Our "in-house" ability to manufacture complex biologic products to exacting quality standards on a consistent and cost-efficient basis remains one of Biogen's most important competitive strengths.

Biogen also marked notable progress in the development of our commercial capacities during the year. As we extend our direct sales capabilities in the global arena, we now have significantly expanded our marketing staff and expertise. Direct selling is an important capability and distinction because it creates twice the profit and value as selling through partners. Biogen is one of only a few biotech companies to have maintained worldwide rights to all our products. Two of our products are 50 percent partnered collaborations, and are not joint ventures. The rest of our pipeline is 100 percent owned by Biogen and offers maximum value for our shareholders – by selling directly in the most important markets in the world.

Our progress in 2001 reflects our conviction that success in biotechnology demands discipline. The discipline to focus energy, time and resources toward attainable goals and objectives. The discipline to remember that ideals and intentions alone can only go so far. They must be married to a sustainable, replicable commercial process – bringing products to market and improvements to patients' lives. That simple reality lies at the heart of our performance in 2001, our long-term track record of exceptional performance over time and our expectations for still greater success in the years ahead.

2001 marked my first full year as Biogen's CEO. Although I have been part of this organization for more than a dozen years, it's the past 12 months that have brought the greatest sense of reward. Biogen today is an energized team that is redefining industry norms – day after day after day. Together we have made remarkable progress, and there's a palpable confidence here of great things yet to come.

So this year's report will provide information that goes behind "the numbers" – by also introducing a few of Biogen's people. Their own descriptions of our culture and accomplishments convey a different kind of information, complementing the tables and graphs of financial data. I am extremely proud of the Biogen team and am grateful for the individual and collective dedication they display every day. I thank them, along with our investors and our customers, for sharing our vision in the early days and for their continued support as we set our sights on the next exciting milestones.

James C. Mullen
President & CEO

FROM THE CHAIRMAN

Biogen will celebrate its 25th anniversary year throughout 2002–2003. We enter this period as a mature and confident leader of the biotechnology industry.

Long-term members of the Biogen family will remember that this strength was not always the case. When I joined the company in 1986, Biogen was navigating some stormy seas. At times, it appeared that the blaze of invention and creativity on which we were founded might be extinguished. During the years that followed, we repositioned the company and established the financial strength and discipline that are still unparalleled in our industry. We brought AVONEX through worldwide registration to its current position of global market leadership. We leveraged our revenue stream from outlicensing important Biogen discoveries, such as Intron®A alpha interferon, and the hepatitis B vaccine and diagnostic. We developed world-class biologics manufacturing and were among the few biotechnology companies to establish a global commercial infrastructure.

Most important, we recruited – and retained – a cohort of men and women characterized by outstanding intellectual capacity, solid value systems, energy, drive and talent. They are united in our mission of building a world-class biotechnology company and providing significant returns to the people who believe in us – our employees, our investors and the physicians and patients we serve.

The 25th anniversary is an event to celebrate, not a time to rest on our laurels. Our job of building Biogen into the world's pre-eminent biotechnology company is an ongoing challenge. The advances of the genetic engineering revolution of the 1980s were matched or exceeded by those of the 1990s – including genomics, proteomics and nanotechnology. We have to become a more flexible and responsive organization, maintaining our ability to respond quickly to new scientific platforms and a changing commercial environment, even as we rapidly grow our workforce and the complexity of our business.

James L. Vincent
Chairman of the Board

BIOGEN OPERATIONAL REVIEW

The Biogen pipeline of innovative medical therapies is the result of a disciplined approach to focusing the company's thinking and resources around four key therapeutic areas:

- AUTOIMMUNE DISEASES
- NEURODEGENERATION
- ONCOLOGY
- FIBROSIS

These four areas of research represent a convergence of specific Biogen capabilities and market opportunity. They are fields in which we are uniquely able to leverage our expertise and experience in biological science to discover and develop products with high commercial potential. By seeking out these synergies, we ensure that our drive to find promising medical therapies becomes a commercially sound, sustainable process.

THE AUTOIMMUNE PORTFOLIO: BUILDING ON THE SUCCESS OF AVONEX

Since its introduction more than five years ago, AVONEX has quickly become the market-leading treatment among patients and doctors. The Biogen product offers numerous advantages, including once-a-week intramuscular injection (IM) administration. Because AVONEX is delivered by injection directly into the muscle, it is released slowly into the bloodstream. IM injection allows effective amounts of the drug to stay in the body longer, eliminating the need to inject as frequently. Competitive drugs are injected subcutaneously (SC) and tend to remain in the body for a shorter period. As a result, those drugs require more frequent injections – daily or every other day. IM injections can reduce the chance of having painful and unsightly injection-site reactions – such as redness, swelling and tissue death (necrosis) – that can appear at SC injection sites. AVONEX also offers a solid safety profile and proven efficacy in relapsing forms of MS. And long-term trials have shown AVONEX to maintain its therapeutic benefits over time – a critical factor in managing this chronic, life-long disease. No other treatment offers this wide range of benefits.

The AVONEX advantage is more than just an effective product. It extends to a customer service of unmatched quality. Biogen representatives work tirelessly with doctors and patients to improve a patient's experience with the drug. Our sales calls to doctors' offices increased by 16 percent in 2001 alone. More than 20,000 people attended Biogen's MS patient programs, and registration in the company's AVONEX and MS-related websites reached 22,000.

The combination of proven product and superior service has fueled a leading global market share for AVONEX, and has enabled the addition of more patients over the year than any other MS therapy. AVONEX is the clear market leader in the United States, but it also remains the preferred treatment in seven of the top ten European markets. Sales of AVONEX continued to grow at double-digit rates in 2001. As the industry leader in the MS field, Biogen's strategy for AVONEX and our entire autoimmune portfolio demands a continued focus and an innovative approach to the marketplace.

AVONEX continues to expand, and business expansion outside the United States will help accelerate Biogen's push to capture an even larger global market share. Within five years, the global market for MS treatments is expected to grow from roughly $2 billion in 2001 to an estimated $4 billion. No other company is better positioned to capture the opportunities inherent in this dramatic expansion of market potential.

We also have significant commercial opportunities based upon promising new formulations of AVONEX. We are looking to extend its use to other treatment indications for early and late stages of MS. We're confident that AVONEX has a bright future with these new possibilities for its expanded use.

We're equally excited about the prospects for ANTEGREN® (natalizumab), the first of a revolutionary new class of compounds known as selective adhesion molecule (SAM) inhibitors, now in the final stages of clinical testing with our partner, Elan Corporation, plc. ANTEGREN was discovered in Elan's research facilities in South San Francisco, and both Biogen and Elan have pioneered research into this unique pathway. ANTEGREN binds to the cell surface receptors known as alpha-4-beta-1 (VLA-4) and alpha-4-beta-7 integrins, which are believed to play an important role in the trafficking of mononuclear cells, such as lymphocytes, into sites of inflammation. Based upon a new mode of biological action, ANTEGREN potentially offers a number of benefits for MS patients – including the possibility of better tolerance and the convenience of once-per-month dosing.

Biogen Idec is currently conducting two Phase III trials of AMEVIVE in multiple sclerosis as well as two Phase III trials in Crohn's disease — and we are excited about the potential our therapy offers to patients with these difficult diseases. We also continue to explore indications for AMEVIVE in other autoimmune conditions, in addition to MS and Crohn's disease.

Until the world's market-leading MS therapy today was a possible next-generation drug already well into development, it may seem that Biogen is synonymous with treatments for multiple sclerosis. Our interest in the immune system, however, covers a broad range of diseases — and the dedication of Biogen scientists has led to groundbreaking work on treatments for other conditions.

AMEVIVE: LEADING A LIFE NOT DEFINED BY PSORIASIS OR ITS TREATMENT

For many of the nearly 1.5 million patients worldwide suffering from moderate to severe psoriasis, the difficulty of living with the scales and the whispered comments often are not the physical discomfort associated with psoriasis. They're people often hide their skin condition under long sleeves and pants no matter what the weather. Some of them simply don't go out at all.

For current treatment options often aren't effective enough for many people with moderate to severe psoriasis. In fact, for these patients, say they are dissatisfied with current treatments. An estimated 35 to 45 percent of treated patients have dropped out of the inconvenient and often painful treatment regimens of drugs and/or ultraviolet light.

2001 marked a potential milestone in the world of psoriasis for both patients and Biogen. Biogen's innovative AMEVIVE therapy offers hope to establish a new therapy paradigm in which the cycle of treatment and recurrence may be broken. AMEVIVE presents a different therapeutic profile.

AMEVIVE also represents Biogen's emergence as a leader in immunology — a commercially strong, competitive and sustainable business with a prospective market of nearly 1.5 million patients worldwide. AMEVIVE has the potential to become a significant commercial success in the Biogen pipeline. For psoriasis patients, this could mean the opportunity to lead a normal life.

AMEVIVE is designed to give psoriasis patients the opportunity to break the cycle of rotating therapies, a practice that helps to manage side effects with current therapies. Moderate to severe psoriasis patients have a chance for long-term efficacy with fewer relapses. With AMEVIVE, our goal is to positively impact the quality of people's lives and to provide patients with new options not currently available to them. People with psoriasis may be able to leave the house, even visit the beach — anytime of year — without covering their psoriasis.

On August 6, 2001, Biogen simultaneously filed AMEVIVE marketing applications with regulatory bodies in both the U.S. and Europe. This filing caught the attention of industry-watchers who noted that Biogen was an early adopter of the new technologies for electronic submission. (Documents that ordinarily would fill a semi-trailer truck were submitted on a handful of compact discs.) The big story, however, was not the documents themselves — but the speed and efficiency with which they were completed. In an industry where companies typically require six months or more to complete a drug filing, Biogen finished in a mere 38 days after the last patient was dosed — an industry record.

Biogen shortened the time frame by applying the same discipline to the huge administrative task of filing as it does to the research and product development process. The feat was significant to both outside audiences and employees since shortening time to market can have a dramatic impact on a company's future profitability. To the people at Biogen and to their colleagues in the competitive world of pharmaceuticals, it made a dramatic statement about what a motivated team by a dedicated group can accomplish.

That "whatever it takes" attitude is at work across the company — helping find ways to reduce the enormous costs and time to market associated with development of new therapies. This ability to redefine industry standards is a core competency here. It's how Biogen delivers on the promising discoveries that occur — everyday — in our labs.

Yet another promising autoimmune candidate is Biogen's Lymphotoxin-Beta Receptor Inhibitor (LTBR). This biologic therapeutic disrupts critical positioning of immune cells in lymphoid tissue — thereby reducing immune activation. In animal models, LTBR has demonstrated an ability to ameliorate autoimmune disease in several of these models and Biogen is pursuing its potential application in rheumatoid arthritis and Crohn's disease.

[redacted] Biogen's proven strengths in the research, development and manufacturing of these products. Our [redacted] pharmaceutical products remains the company's [redacted] performance source, but it is certainly not the only [redacted] with exciting new market potential.

NEURODEGENERATION

[redacted] the dawn of medicine, this word carries with it a [redacted] that aura of despair.

[redacted] language of suffering and, too often, lost hope. [redacted] disease, Parkinson's disease, there are seem- [redacted] other diseases and disorders associated with [redacted] nervous system.

[redacted] Biogen scientists describe neurodegeneration with a [redacted] analogy, think of the telephone system – a network of [redacted] that are connected by wires and other transmission [redacted] systems. When the means of connecting begin to fail, the [redacted] cannot operate. When the brain can no longer [redacted] properly with the rest of the body, the results can [redacted] tragic.

[redacted] for some of the millions of people who suffer from [redacted] degenerative diseases, research underway at Biogen [redacted] hope for the future.

[redacted] example, one program Biogen scientists are looking [redacted] is focused on a biological agents that may allow [redacted] cells in the central nervous system to regenerate. [redacted] animal research and development unfolds, Biogen [redacted] will be exploring how this new treatment approach [redacted] [redacted] and then serious conditions as spinal [redacted] injury, stroke and multiple sclerosis.

[redacted] program applies similar knowledge and experience [redacted] [redacted] in a treatments for neuropathic pain [redacted] those suffering from the aftermath of painful shingles. [redacted] example often find the simple touch of clothing or a [redacted] change in temperature to be excruciatingly painful. [redacted] clinical work on a biologically derived therapy now [redacted] underway with this research prospects for a [redacted] treatment are closer than ever before.

ONCOLOGY

[redacted] list of urgent, unmet needs in oncology is all too familiar. Patients worldwide continue to seek new and better treatments for lung cancer, breast cancer, prostate cancer, [redacted] colorectal cancer and many other varieties of [redacted] cancer.

[redacted] the past decade, Biogen scientists have explored gene therapy to create biological treatment regimens that attack tumor cells. Today, that body of research is showing [redacted] across a broad spectrum of cancers.

As an example, interferon beta gene therapy offers hope for destroying a variety of cancer cells. Extensive pre-clinical research and preliminary clinical trials show it's [redacted] potential for effective treatment of a variety of cancers – both by inhibiting tumor cell growth and through outright destruction of tumor cells. At the close of 2001, clinical trials were underway with interferon beta gene therapy for malignant glioma, a form of brain cancer.

Biogen scientists also are exploring the use of biologically based treatments that, when used with chemotherapy [redacted] may significantly reduce tumor growth.

Collaboration with Eos Biotechnology has produced additional research based on monoclonal antibodies and [redacted] offer new treatment therapies for breast cancer and other solid tumors. The value of this collaboration is significant for Biogen and oncologists offering the potential for identifying promising treatments.

FIBROSIS

[redacted] with all four of Biogen's areas of research focus, fibrotic diseases represent an area of profound need and significant opportunity. Fibrosis, pathological scarring, is due to an aberration in the normal wound healing process. Fibrotic diseases include some of the most serious – and increasingly widespread – conditions that affect people around the world.

...sis, kidney disease, Congestive heart disease, Rheumatoid arthritis, Lupus, Scleroderma. These conditions, chronic and often fatal, have so far eluded every attempt to cure them – but the advent of biologically based techniques has brought renewed optimism for their treatment.

...pathogenic pathways specific to fibrosis, including ...and VLA-1 for treatment. Biogen has been exploring a ...ility of new treatment options that could be deployed in ...ts against a number of these illnesses.

...example, interference with the VLA-1 integrin pathways ...ults in blocking the action of two pathogenic cell types ...ved in chronic inflammation and fibrosis – macrophage ...and fibroblast. It may help reduce the painful tissue ...mation associated with fibrosis, and break the cycle ...flammation that can lead to chronic fibrotic disease.

...Biogen researchers point to the fibrosis work as another ...mple of how the company leverages its findings across ...ne of its research focus areas. In this way, Biogen ...imizes the impact of its discoveries and works to speed ...delivery of future therapies to hopeful patients.

LEVERAGING OUR THERAPEUTIC EXPERTISE

...no longer enough to describe Biogen as simply a ...technology based research and development company. ...have demonstrated that we are much more than that. ...are a company capable of producing a steady and ...growing roster of medical therapies – both biologic-based ...and small molecules.

...a license from GV Therapeutics, Inc., Biogen is ...ently on ADENTRI™ (adenonsine A1 antagonist), our small ...molecule adenosine A1 receptor antagonist. ADENTRI is ...currently in Phase II trials – scheduled for completion in the ...second half of 2002. This highly selective therapy targets ...receptors in the kidney that are clinically relevant for the ...treatment of acute and chronic congestive heart failure.

In 2001, Biogen began collaborating with ICOS Corporation for the development of orally active, small molecule LFA-1 antagonists. LFA-1 (Leukocyte Function-associated Antigen-1) is a cell adhesion molecule that promotes T-cell migration and activation that can lead to inflammatory diseases – including psoriasis, multiple sclerosis, rheumatoid arthritis and organ transplant rejection. ICOS has developed orally active small molecules that block LFA-1 and work to inhibit T-cell migration and activation.

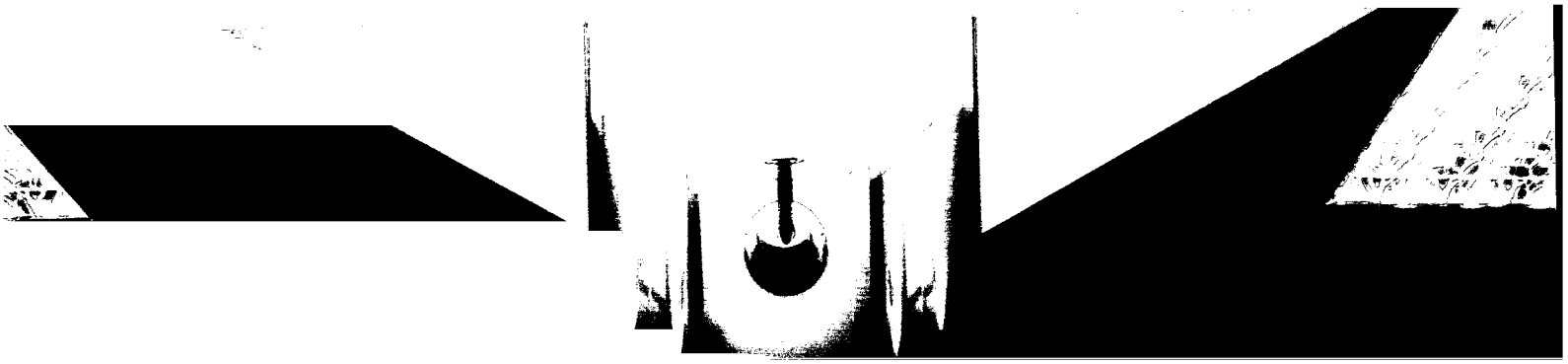
This collaboration is part of Biogen's ongoing effort to partner in "leading" molecules that have promising medical and commercial potential. Our goal with ICOS is to commercialize an oral therapeutic that would significantly enhance treatment options for a wide range of autoimmune and inflammatory diseases. The project is scheduled to begin Phase II trials during the second half of 2002.

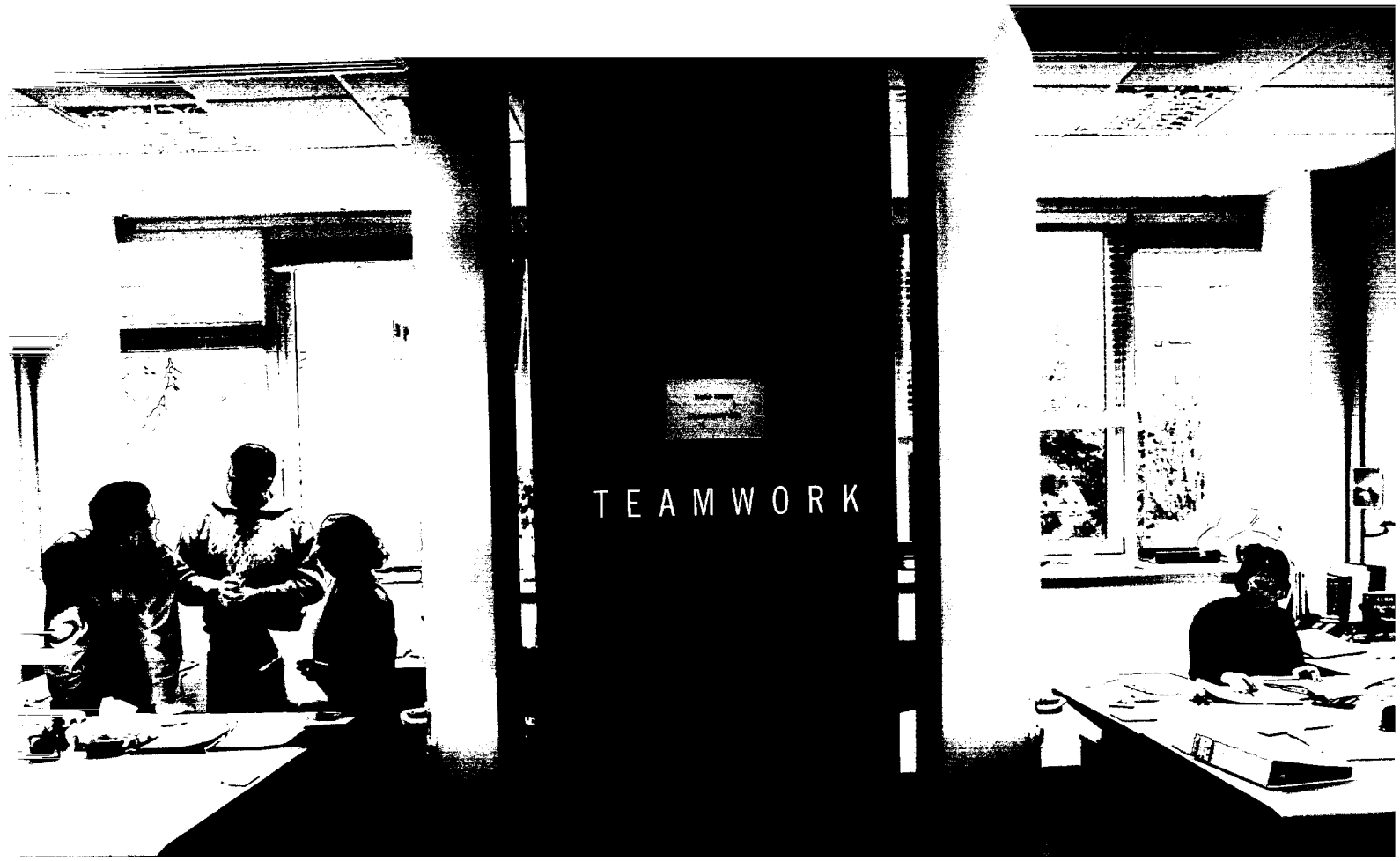
THE BIOGEN CULTURE

Biogen's groundbreaking work combating major diseases has earned the company a reputation for research excellence. The company has also become renowned for its state-of-the-art manufacturing capability and its tireless dedication to customer service.

The past few years at Biogen have been characterized by rapid expansion, extensive recruiting and a series of marketplace successes – all of which have solidified our company and our culture. We're excited about what Biogen has become and what lies ahead for our team.

Our brand identity has evolved out of this unique culture. This phrase "The Drive to Discover . . . the Discipline to Deliver" embodies the spirit and passion that's evident in Biogen and our people. These words reflect our business objectives and guide our communications with each other and with our external constituents. They express our values and our focus to transform research into therapies that significantly improve the quality of patients' lives.




TEAMWORK

DEDICATION. INVOLVEMENT. PRIDE.

I CAME TO BIOGEN IN 1995 WHEN I WAS LOOKING TO COMPLETELY CHANGE THE DIRECTION OF MY CAREER. I SPOKE WITH AT LEAST 20 FIRMS, BUT I WAS IMMEDIATELY ATTRACTED TO BIOGEN BECAUSE OF ITS WORK STYLE.

I REMEMBER LOOKING AROUND AT WHAT WAS THEN A 900-SQUARE-METER OFFICE WITH ONLY 10 OR 11 EMPLOYEES AND HAVING DOUBTS ABOUT WHAT THEY WOULD DO WITH ALL THAT EMPTY SPACE. BUT WHEN I BEGAN SPEAKING WITH THE MANAGERS THERE, THEY WERE SO CONFIDENT. THEY EXPLAINED THEIR VISION FOR THE FUTURE OF BIOGEN AND BY THE TIME THEY WERE THROUGH, I WANTED TO BE PART OF IT.

AS PART OF A START-UP TEAM, I DID MANY JOBS AND GAINED A LOT OF EXPERIENCE VERY QUICKLY. HERE IN FRANCE, NOT EVERYONE RECOGNIZES THE NAME BIOGEN. BUT AS SOON AS PEOPLE HEAR ME TALK ABOUT THE KINDS OF RESPONSIBILITIES I'VE HAD AND UNDERSTAND THAT OUR PRODUCT IS FIGHTING MS, THEY ARE VERY IMPRESSED AND CURIOUS AND WISH THEY COULD BE PART OF A COMPANY LIKE THIS ONE.

FOR ME, ONE OF THE MOST EXCITING MOMENTS HERE WAS THE APPROVAL OF AVONEX IN EUROPE. I CLEARLY REMEMBER THE EMOTION IN THE PARIS OFFICE AT THE TIME -- WE WERE OVERJOYED. THERE WAS GREAT, GREAT TEAM SPIRIT.

AFTER MANAGING OFFICE EXPANSIONS AND FACILITY START-UPS IN SEVERAL COUNTRIES, I HAVE NOW BECOME A LIAISON BETWEEN THE BIOGEN CORPORATE OFFICE IN CAMBRIDGE, MASS., AND THE GROWING NUMBER OF LOCATIONS AROUND THE GLOBE, ENSURING THAT THE BIOGEN CULTURE AND ENVIRONMENTS ARE AS CONSISTENT AS POSSIBLE. WHEN WE WERE A SMALL COMPANY, EACH OFFICE WAS DIFFERENT. NOW THOUGH, WE ARE TRULY BECOMING GLOBAL AND WE NEED TO MANAGE THAT PROCESS.

RETAINING A TANGIBLE CORPORATE CULTURE IS CHALLENGING, PARTICULARLY BECAUSE OUR GROWTH IS SO RAPID RIGHT NOW. HOWEVER, HAVING WORKED WITH STAFF ALL OVER THE WORLD, I HAVE IDENTIFIED A COMMON CHARACTERISTIC OF BIOGEN PEOPLE. THEY ARE DEDICATED, INVOLVED AND VERY PROUD OF BIOGEN.

I KNOW THAT OUR CULTURE WILL BE AN IMPORTANT ELEMENT OF OUR FUTURE SUCCESS. WE HAVE VERY GOOD PRODUCTS - IN THE MARKET AND IN THE PIPELINE - BUT BIOGEN CAN ALSO COUNT ON THE TRUST AND ENTHUSIASM OF ITS EMPLOYEES.

BERNADETTE FORNASARI
OFFICE MANAGER, INTERNATIONAL


2000
INSIGHT
• MODELLER •
DURACELL
SUSTAINABILITY
sgi
sgi


BIOGEN
BIOGEN

REPLICATING SUCCESS.

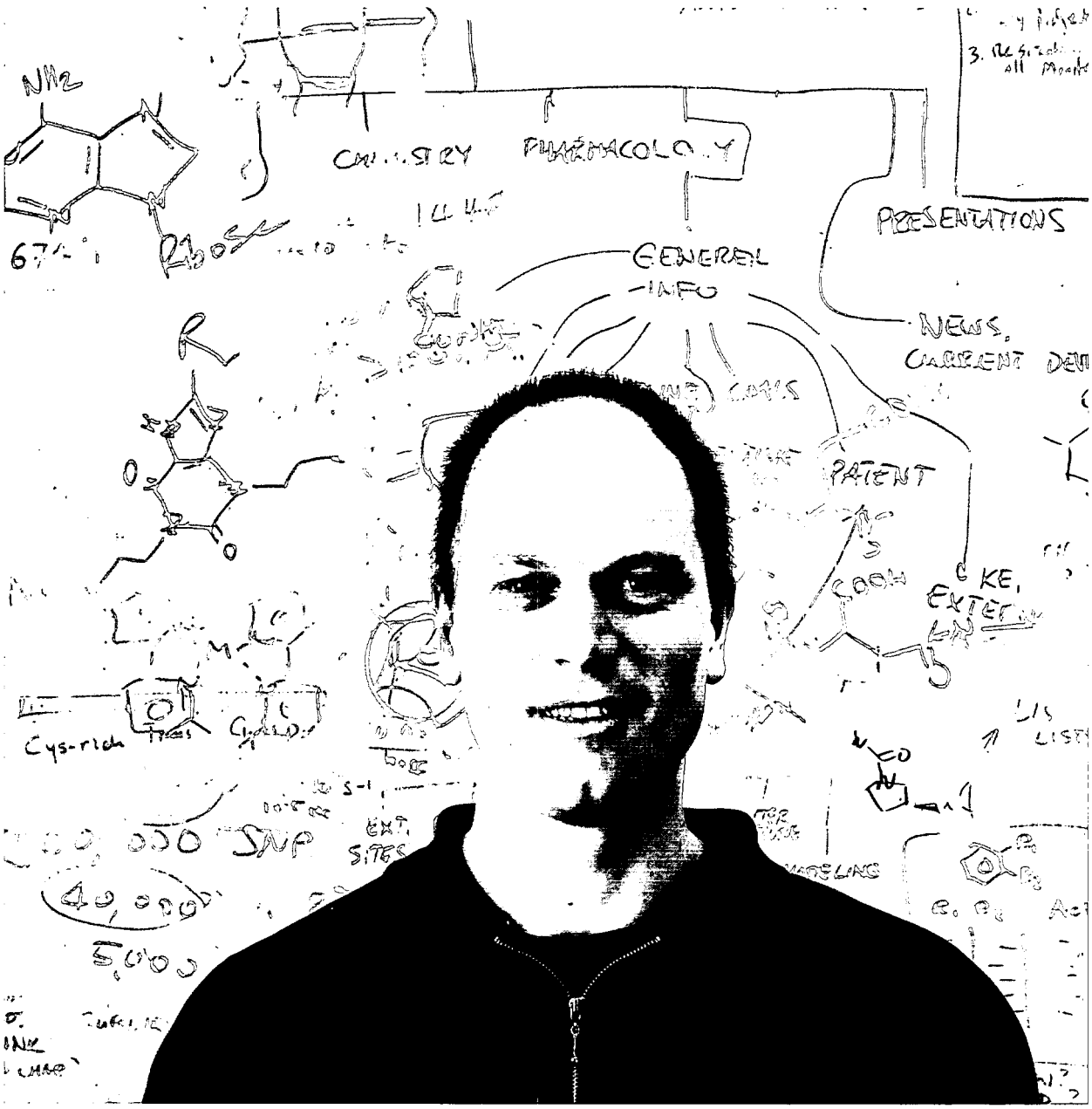
I JOINED BIOGEN IN 1996 AFTER GRADUATE SCHOOL. I INTERVIEWED AT SEVERAL PLACES BUT I HAD THE BEST FEELING BY FAR AFTER VISITING BIOGEN. AND MY INSTINCTS WERE CORRECT. THE PEOPLE HERE ARE GREAT. EVERYONE'S VERY EXCITED ABOUT RESEARCH AND SEEING THE RESULTS OF THEIR HARD WORK. I STARTED A FEW MONTHS AFTER AVONEX WAS APPROVED, AND FROM THE BEGINNING THERE WAS A LOT OF ENERGY HERE.

AT THE TIME I JOINED THE COMPANY, THE FOCUS WAS SOLELY ON AVONEX. ONCE AVONEX WAS LAUNCHED, WE STARTED TO ASK "WHAT'S NEXT?" IT'S BEEN EXCITING TO WATCH THIS CHANGE HAPPEN. BIOGEN'S VERY FOCUSED ON STAYING ON THE CUTTING EDGE OF RESEARCH. TODAY, I'D SAY WE'RE AHEAD OF THE CURVE. WE'VE REALLY DEVELOPED INTO A MATURE RESEARCH ORGANIZATION. WE'VE ADVANCED OUR TECHNOLOGICAL CAPABILITY, AND WE'RE COMMITTED TO DISCOVERY AND FINDING NEW DRUGS.

EACH DAY I DEVELOP MODELS AND IDEAS IN THE AREAS OF SMALL MOLECULES, ANTIBODIES AND PROTEIN ENGINEERING PROJECTS. IN STRUCTURAL INFORMATICS, WE USE COMPUTATIONAL TECHNOLOGY TO DEVELOP RESEARCH IDEAS AND THEN WORK WITH THE OTHER GROUPS IN RESEARCH TO DELIVER RESULTS. I REALLY LIKE THIS STRUCTURE BECAUSE WE GET TO KNOW A LOT OF THE PEOPLE IN RESEARCH AND THE SCOPE OF WORK IN THE ENTIRE DEPARTMENT. I'VE WORKED ON ADENTRI FROM THE BEGINNING AND ALSO ON VLA-4, SO IT'S GRATIFYING TO SEE THEM MOVE FROM DEVELOPMENT TO THE CLINICAL STAGE.

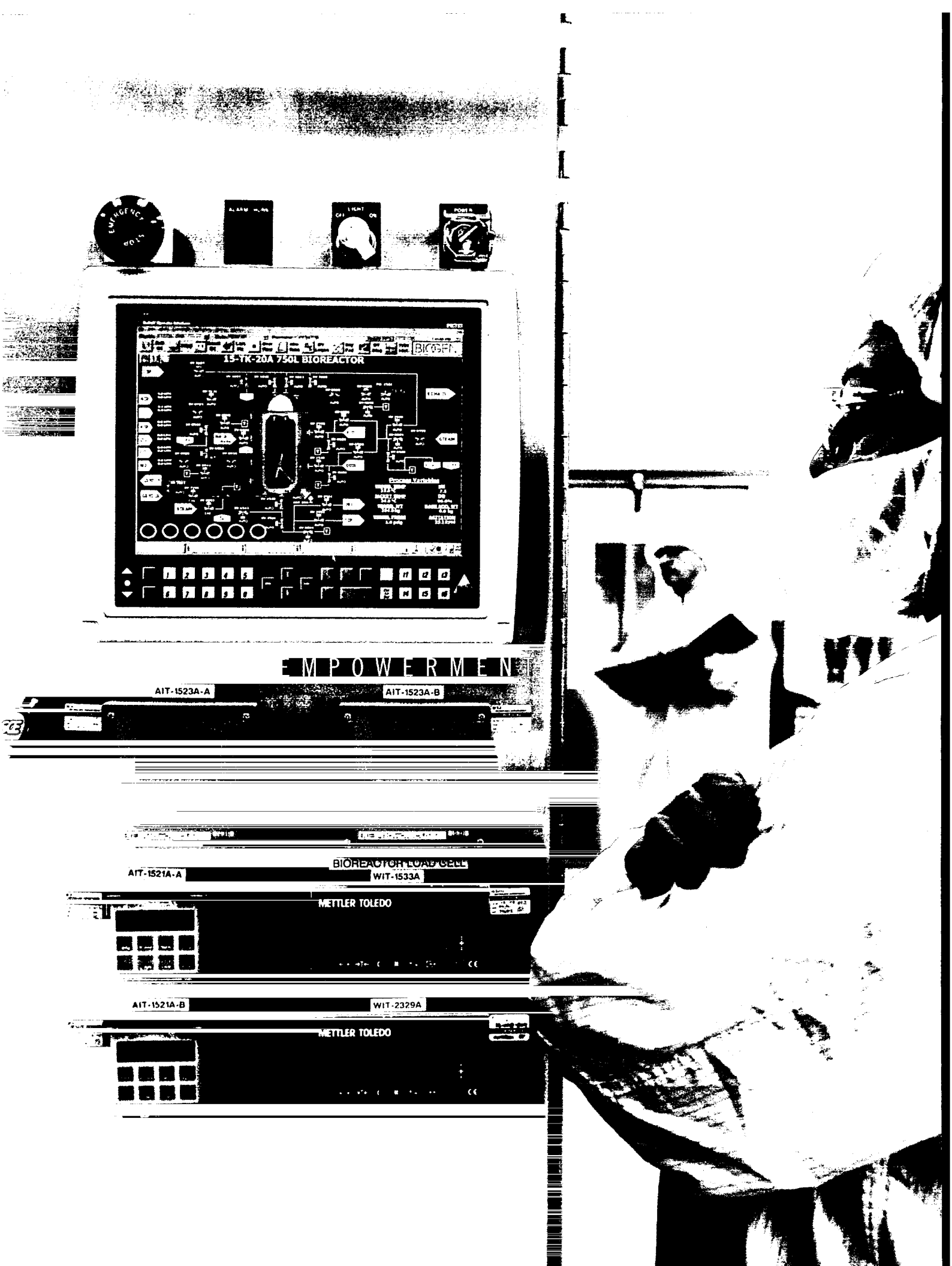
AT BIOGEN, OUR MANAGEMENT IS VERY INVOLVED IN THE DIRECTION FOR RESEARCH, WHICH I FIND VERY REASSURING. IT'S ALSO BEEN TERRIFIC TO SEE THE INCREASED FINANCIAL SUPPORT FOR RESEARCH AND DEVELOPMENT.

I REALLY SEE A TREMENDOUS FUTURE FOR BIOGEN. IT'S AN OPPORTUNITY TO FULLY EXPECT THAT RESEARCH WILL PRODUCE SO MANY PROMISING DRUG CANDIDATES THAT IT WILL BE HARD TO CHOOSE WHICH ONES TO PURSUE. NOT EVERY DRUG MAKES IT, SO IT IS CRITICAL TO PICK THE BEST ONES. BUT WE'RE GETTING TO A POINT WHERE WE HAVE THE LUXURY OF BEING HIGHLY SELECTIVE.



HERMAN VAN VLIJMEN

SENIOR SCIENTIST, RESEARCH AND DEVELOPMENT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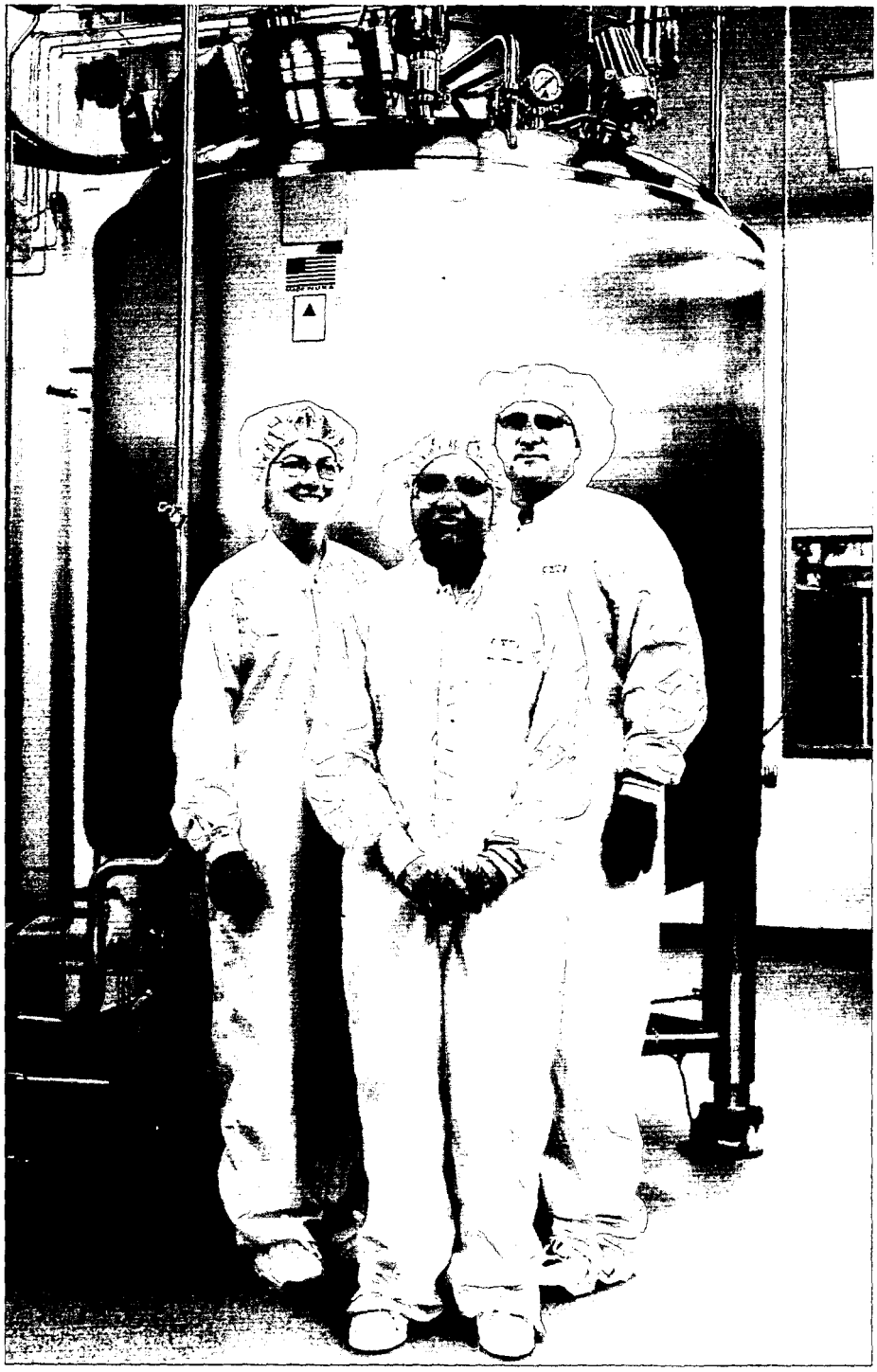
AIT-1523A-B
BIOREACTOR LOAD CELL
AIT-1521A-A
WIT-1533A
METTLER TOLEDO
AIT-1521A-B
WIT-2329A
METTLER TOLEDO



UNLOCKING INDIVIDUAL ACHIEVEMENT.

WHEN I SIGNED ON AS A SUPERVISOR IN 1996, I WAS NOT COMPLETELY SURE WHAT TO EXPECT FROM BIOGEN. AT THAT POINT WE WERE A GROUP OF 11 PEOPLE WORKING OUT OF A TRAILER. I COULDN'T HAVE IMAGINED THE WAY THINGS WOULD EVOLVE BUT IT HAS BEEN AN INCREDIBLY REWARDING EXPERIENCE TO PARTICIPATE IN THE SERIES OF SUCCESSFUL OPERATIONS WE'VE STARTED HERE AT RTP IN NORTH CAROLINA.

SEEING THE 2,000-LITER FACILITY GO UP AND KNOWING THAT WE BUILT THAT BUILDING WAS A GREAT FEELING. THEN WE LAUNCHED THE AVONEX CAMPAIGN, AND THE TEAM PERFORMED ONE OF THE QUICKEST START-UPS OF A CELL CULTURE OPERATION EVER. WITH THAT, WE REALLY BUILT A NAME FOR OURSELVES IN RTP AS A COMPANY AND AS A GROUP OF PEOPLE THAT COULD REALLY GET THINGS DONE. THE MANUFACTURING LAUNCH OF AMEVIVE, WHICH WAS MY FIRST ASSIGNMENT AFTER BEING PROMOTED TO MANAGER, WAS A REAL CHALLENGE, SO IT WAS A GREAT FEELING WHEN THE FIRST FIVE PROCESS VALIDATION RUNS WERE A COMPLETE SUCCESS.

NOW WE'VE OPENED A NEW 15,000-LITER FACILITY, AND IT IS HARD TO BELIEVE THAT NONE OF THIS EXISTED WHEN I STARTED HERE. JIM VINCENT AND JIM MULLEN WERE LOOKING AT BARE LANDSCAPE AND TALKING ABOUT THE OPERATION THEY ENVISIONED, AND I COULD BARELY IMAGINE IT. NOW I'M WALKING AROUND IN THE OFFICES THEY WERE TALKING ABOUT. WE HAVE TREMENDOUS, EXTREMELY VISIONARY LEADERSHIP.

YOU CAN PICK UP ON THAT VISION EVERYWHERE BECAUSE BIOGEN HAS MANAGED TO RETAIN A PERSONAL FEEL. THE RTP TEAM HAS GROWN FROM 11 TO CLOSE TO 270 PEOPLE, HOWEVER, EVEN AS LARGE AS WE ARE, IT STILL FEELS LIKE A SMALL COMPANY. [illegible]

NOW AS A MANAGER, I'M FORTUNATE TO HAVE HIRED AND RETAINED MANY TALENTED PEOPLE, AND I'VE HELPED DEVELOP TWO OF MY FORMER OPERATORS INTO SUPERVISORS. THERE REALLY IS A TRADITION HERE OF RECOGNIZING AND EMPOWERING HIGH-POTENTIAL PEOPLE, OF CONTINUING THE MOMENTUM. THAT IS JUST ONE OF THE MANY ELEMENTS THAT MAKE THIS AN OUTSTANDING OPERATION WITH OUTSTANDING LEADERSHIP AND MANAGEMENT.

JAMES PHILLIPS
CELL CULTURE PRODUCTION MANAGER


COMPASSION

CARING ENOUGH TO LISTEN.

I RECENTLY CELEBRATED MY FIRST ANNIVERSARY AS A REIMBURSEMENT SPECIALIST IN THE CUSTOMER SERVICE DEPARTMENT AT BIOGEN. WHEN I CAME HERE, I HOPED THAT I WOULD WORK WITH PEOPLE WHO TOOK PRIDE IN THEIR WORK AND REALLY WANTED TO MAKE A DIFFERENCE IN PEOPLE'S LIVES. I FOUND ALL OF THIS AND MORE HERE AT BIOGEN. I FEEL CONNECTED WITH THE PEOPLE HERE. THERE'S A GREAT SENSE OF SPIRIT AND DEDICATION AT BIOGEN – A LOT OF ENERGY.

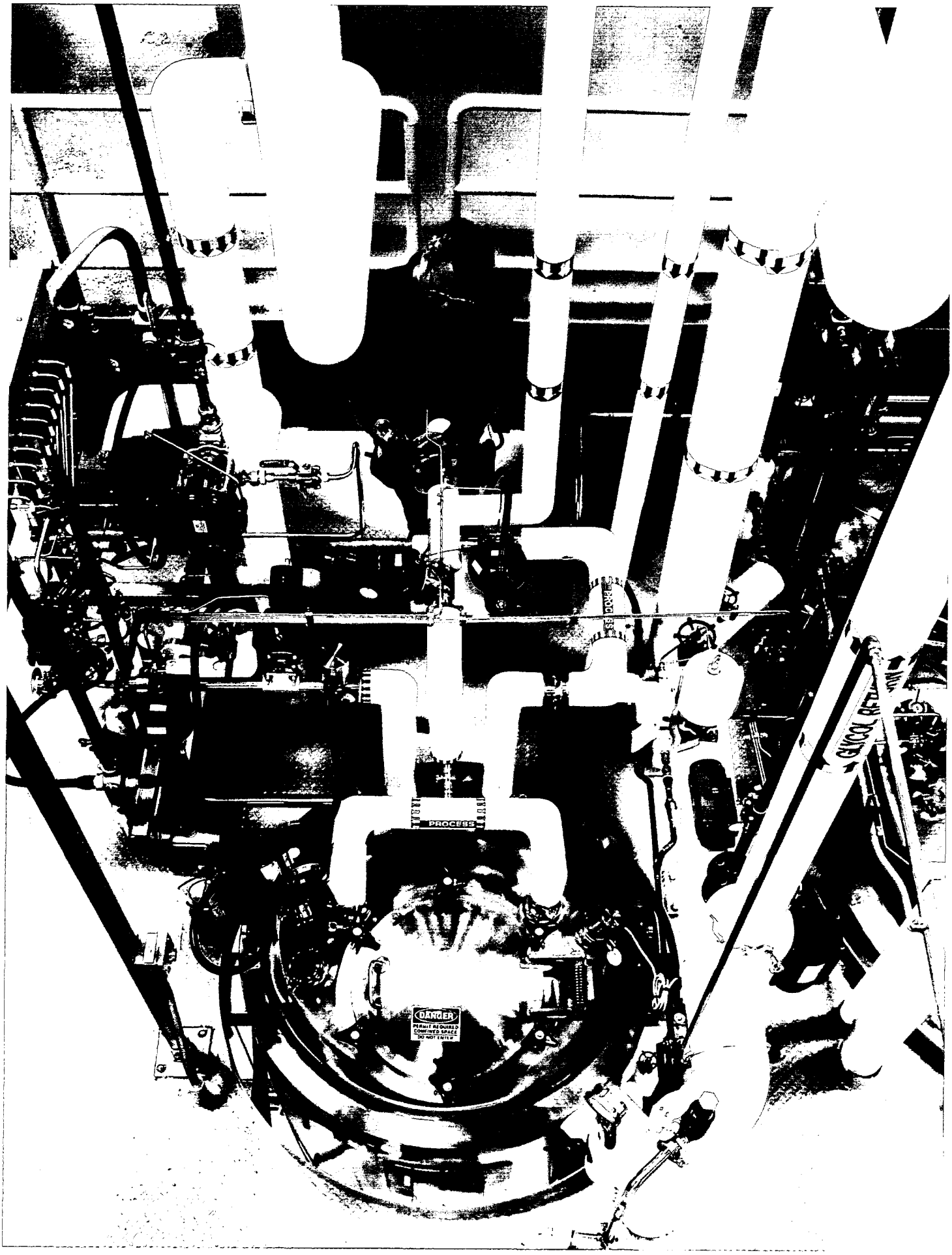
MY COLLEAGUES HERE IN CUSTOMER SERVICE GO ABOVE AND BEYOND THE CALL OF DUTY. WE HANDLE HUNDREDS OF CALLS EACH DAY AND EACH CUSTOMER HAS A UNIQUE SITUATION. RECENTLY, THE ENTIRE DEPARTMENT PRICKED THEMSELVES WITH NEEDLES SO THEY COULD RELATE TO PATIENTS' NEEDLE PHOBIA. THEY FELT IT WOULD MAKE A DIFFERENCE IN THE LEVEL OF SERVICE THEY OFFER. IT'S STORIES LIKE THIS THAT SHOW THE HEART OF OUR DEPARTMENT. AT BIOGEN, IT FEELS NATURAL TO DO THE EXTRA FOR PATIENTS. WE FEEL GOOD ABOUT HELPING PEOPLE, AND I THINK IT REALLY SHOWS.

I'VE LEARNED SO MUCH IN THIS YEAR, ESPECIALLY FROM MY PEERS. WE GET TOGETHER AND TALK ABOUT PATIENTS. WE ALSO CONTINUALLY EDUCATE OURSELVES ABOUT AVONEX SO WE'RE KNOWLEDGEABLE ABOUT THE DRUG. I THINK PATIENTS APPRECIATE THIS "SOMETHING EXTRA" WE OFFER THEM. WE'RE MORE THAN JUST A VOICE ON THE PHONE.

EACH DAY, I SPEAK TO PEOPLE WHO DEAL WITH THE CHALLENGES OF MULTIPLE SCLEROSIS. SOME OF THESE PEOPLE FACE THE ADDITIONAL BURDEN OF HAVING LIMITED FINANCIAL MEANS AND NO HEALTHCARE TO COVER THE COST OF THEIR TREATMENTS. I LISTEN TO THEIR STORIES, REASSURE THEM AND HELP FIND A SOLUTION. OFTEN I SHIP THEM ADDITIONAL MEDICATION FOR THE MONTH OR WORK WITH THEIR DOCTOR TO HELP COVER THE COSTS OF TREATMENT THROUGH BIOGEN'S AVONEX ACCESS® PROGRAM. LAST YEAR, OUR PROGRAM PROVIDED MILLIONS OF DOLLARS OF ASSISTANCE TO AVONEX PATIENTS. AND EACH MONTH THE REIMBURSEMENT GROUP TALKS TO ABOUT 1,000 PEOPLE ABOUT ASSISTANCE WITH THEIR AVONEX TREATMENTS. IT'S TREMENDOUSLY REWARDING, ESPECIALLY WHEN THEY TELL ME HOW GRATEFUL THEY ARE TO HAVE THIS ASSISTANCE – TO HAVE SOMEONE TO TALK TO WHO CARES. TALKING WITH THESE PEOPLE, I'M CONTINUALLY REMINDED OF THE DIFFERENCE WE CAN MAKE IN THEIR LIVES.

LEGER WALCOTT

REIMBURSEMENT SPECIALIST, CUSTOMER SERVICE


PROCESS
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PERMIT REQUIRED
CONFINED SPACE
DO NOT ENTER

FINANCIALS

2001

Biogen, Inc. and Subsidiaries

SELECTED FINANCIAL DATA

Biogen, Inc. and Subsidiaries

(in thousands, except per share amounts)

Years Ended December 31,	**2001**	2000	1999	1998	1997
Product revenue	**$ 971,594**	$ 761,079	$ 620,636	$ 394,863	$ 239,988
Royalty revenue	**71,766**	165,373	173,799	162,724	171,921
Total revenues	**1,043,360**	926,452	794,435	557,587	411,909
Total costs and expenses	**683,162**	598,096	478,184	366,948	285,787
Income before income taxes	**389,497**	487,105	329,016	210,193	148,968
Net income	**272,683**	333,577	220,450	138,697	89,167
Diluted earnings per share	**1.78**	2.16	1.40	0.90	0.58
Cash, cash equivalents and short-term marketable securities	**798,107**	682,412	654,539	516,914	440,088
Total assets	**1,721,046**	1,431,856	1,277,973	924,715	813,825
Long-term debt, less current portion	**42,297**	47,185	52,073	56,960	61,846
Shareholders' equity	**1,348,832**	1,106,402	979,530	718,613	536,293
Shares used in calculating diluted earnings per share	**152,916**	154,602	157,788	154,270	152,999

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

Biogen, Inc. and Subsidiaries

Overview

Biogen, Inc. (the "Company" or "Biogen") is a biopharmaceutical company principally engaged in the business of developing, manufacturing and marketing drugs for human health care. The Company currently derives revenues from sales of its AVONEX® (interferon beta-1a) product for the treatment of relapsing forms of multiple sclerosis ("MS"). The Company also derives revenue from royalties on sales by the Company's licensees of a number of products covered under patents controlled by the Company.

RESULTS OF OPERATIONS 2001 AS COMPARED TO 2000

Revenues

Total revenues in 2001 were $1,043.4 million, as compared to $926.5 million in 2000, an increase of $116.9 million or approximately 13%.

Product sales in 2001 were $971.6 million as compared to $761.1 million in 2000, an increase of $210.5 million or approximately 28%. Product sales from AVONEX represented approximately 93% of the Company's total revenues in 2001 as compared to 82% in 2000. The growth in 2001 was primarily attributable to an increase in the sales volume of AVONEX in the United States and in the fifteen member countries of the European Union ("EU"). AVONEX sales outside of the United States were approximately $260.5 million in 2001 as compared to $208.5 million in 2000. The Company expects sales from AVONEX outside the United States to continue to increase as a percentage of total product sales. The Company, however, expects to face increasing competition in the MS marketplace in and outside the United States from existing and new MS treatments that may impact sales of AVONEX. In the United States, Biogen expects future growth in AVONEX revenues to be dependent to a large extent on the Company's ability to compete successfully with Serono, Inc. ("Serono") and its REBIF® interferon beta 1a product which was launched in the United States in March 2002 as a treatment for relapsing/remitting MS. The FDA approved REBIF for sale in the United States over a year before the expiration of AVONEX's orphan drug marketing exclusivity. Biogen expects Serono to compete aggressively in the United States market. REBIF is already on the market in the EU. See "Outlook – Competition".

Revenues from royalties in 2001 were $71.8 million, a decrease of $93.6 million or approximately 57% as compared to $165.4 million of royalty revenue in 2000. Revenues from royalties represented approximately 7% of total revenues in 2001 as compared to 18% in 2000. The decrease in royalty revenues in 2001 over the comparable period in 2000 is primarily attributable to expiration of Biogen's alpha interferon patents in most of Europe and in Japan, and a dispute, currently in arbitration, with Schering-Plough Corporation ("Schering-Plough") over royalties payable by Schering-Plough on U.S. sales of its alpha interferon products, and, to a lesser extent, attributable to lower licensee sales. See "Outlook – Royalty Revenue" and "Outlook – Patents and Other Proprietary Rights".

Biogen expects the low end of the range of potential royalty revenues in 2002 to be consistent with 2001. The low end of the range excludes amounts that are subject to the dispute with Schering-Plough. As noted above, Biogen is currently in arbitration with Schering-Plough on the issue of whether and to what extent Schering-Plough has an obligation to pay royalties in the United States on sales of its alpha interferon product. See "Outlook – Royalty Revenue." If Biogen were to prevail in this arbitration in 2002, Biogen expects that royalty revenues from Schering- Plough in 2002 would be higher than in 2001. Royalty revenues would also be higher in 2002 than in 2001 if Schering-Plough commences payments of royalties on sales of alpha interferon products in the United States based on issuance of a Roche/Genentech patent. See "Outlook-Royalty Revenues". In addition, royalty revenues may fluctuate as a result of fluctuations in sales levels of products sold by the Company's licensees from quarter to quarter due to the timing and extent of major events such as new indication approvals or government sponsored programs. For a discussion of some of the other factors that may affect royalty revenues in the future, see "Outlook – Royalty Revenue" and "Outlook – Patents and Other Proprietary Rights". The Company expects product sales as a percentage of total revenues to continue to increase in the near and long term as the Company continues to market AVONEX worldwide.

Costs and Expenses

Total costs and expenses in 2001 were $683.2 million as compared to $598.1 million in 2000, an increase of approximately 14%.

Cost of revenues in 2001 totaled $136.5 million, an increase of $11.3 million or 9% as compared to 2000. The increase in cost of revenues was attributable to the higher sales volume of AVONEX. Included in cost of revenues in 2001 and 2000 is $131.9 million and $112.9 million, respectively, from product sales and $4.6 million and $12.3 million, respectively, relating to royalty revenue. Gross margins on product sales increased to approximately 86% for the period ended December 31, 2001 compared to 85% for the same period in 2000 due to efficiencies of production reducing cost of goods sold in 2001. Gross margins on royalty revenue increased to approximately 94% for the period ended December 31, 2001 compared to 93% for the same period in 2000. The Company expects that gross margins on royalty revenue will fluctuate in the future based on changes in sales volumes for specific products.

Research and development expenses in 2001 were $314.6 million, an increase of $11.8 million or 4% as compared to $302.8 million in 2000. The increase was primarily due to an increase in clinical production and other costs associated with the Company's development efforts related to its ongoing research and development programs of $19.9 million and an increase in the funding of collaboration agreements of $7.2 million, offset by a reduction in the Company's clinical trial costs of $15.3 million in 2001. Costs for upfront fees and milestone payments may cause variability in future research and development expense. See "Critical Accounting Policies."

Selling, general and administrative expenses in 2001 were $232.1 million, an increase of $62 million or 36% as compared to 2000. This increase was primarily due to an increase in selling and marketing expenses related to the sale of AVONEX. The Company expects that selling, general and administrative expenses will continue to increase in the near term as the Company continues to expand its sales and marketing organizations and efforts necessary to sell AVONEX worldwide in response to increased competition, and as the Company expands in anticipation of the possible approval of additional products, including AMEVIVE® (alefacept).

Other Income, Net

Other income, net consists of the following (in thousands):

December 31,	**2001**	2000
Interest income	**$ 44,128**	$ 42,965
Interest expense	**(3,954)**	(4,310)
Other income (expense)	**(10,875)**	120,094
Total other income, net	**$ 29,299**	$ 158,749

Other income, net consists primarily of interest income, partially offset by interest expenses and other non-operating income and expenses. Other income, net in 2001 was $29.3 million as compared to $158.7 million in 2000, a decrease of $129.4 million. Interest income in 2001 was $44.1 million compared to $43 million in 2000, an increase of $1.1 million or 3% due to an increase in funds invested. The Company expects interest income to vary based on changes in the amount of funds invested and fluctuations in interest rates. Interest expense decreased $0.4 million or 9% in 2001 from 2000 due to lower outstanding borrowing under building loan agreements. Other income (expense) decreased by $109.2 million in 2001 from 2000. Other income (expense) for the period ended December 31, 2001 included realized gains on the sale of certain non-current marketable securities totaling $32.1 million, offset by a $28 million write-down for unrealized losses on certain non-current marketable securities that were determined to be other than temporary. Additionally, the Company reported a charge of $20 million as part of the settlement of an ongoing patent infringement dispute with Berlex. See "Legal Matters". Other income (expense) for the period ended December 31, 2000 included realized gains on the sale of certain non-current marketable securities totaling approximately $101.1 million. Additionally, the Company realized gains of approximately $24.1 million in 2000 upon the acquisition by third parties of two companies in which the Company had invested.

As part of its strategic product development efforts, the Company invests in equity securities of certain biotechnology companies with which it has collaborative agreements. As a matter of policy, Biogen determines on a quarterly basis whether any decline in the fair value of a marketable security is temporary or other than temporary. Unrealized gains and losses on marketable securities are included in other comprehensive income in shareholders' equity, net of related tax effects. If a decline in the fair value of a marketable security below the Company's cost basis is determined to be other than temporary, such marketable security is written down to its estimated fair value with a charge to current earnings. The factors that the Company considers in its assessments include prospects for favorable clinical trial results, new product initiatives and new collaborative agreements.

As part of its assessments at December 31, 2001, the Company assessed the unrealized losses on its investments in Curis Inc. and Targeted Genetics Corporation (see "Financial Condition"), and determined that the positive evidence suggesting that the investments described above would recover to at least the Company's purchase price was not sufficient to overcome the presumption that the current market price of the investments was the best indicator of value at December 31, 2001. Accordingly, the related unrealized losses of approximately $28 million were reclassified from other comprehensive income to current expense in the fourth quarter of 2001.

The Company had no unrealized losses at December 31, 2001 that were determined to be temporary.

Income Taxes

The Company's effective tax rate in 2001 was 30%. Income tax expense for 2001 varied from the amount computed at the U.S. federal statutory rates primarily due to higher sales in European jurisdictions with lower tax rates and to the utilization of research and development tax credits. The Company's effective tax rate outside the U.S. is lower than the U.S. tax rate, and the Company expects that the U.S. tax rate will continue to decline as a percentage of its total tax rate as international sales increase.

RESULTS OF OPERATIONS 2000 AS COMPARED TO 1999

Revenues

Total revenues in 2000 were $926.5 million, as compared to $794.4 million in 1999, an increase of $132.1 million or approximately 17%.

pg 4 Product sales in 2000 were $761.1 million as compared to $620.6 million in 1999, an increase of $140.5 million or approximately 23%. Product sales from AVONEX represent approximately 82% of the Company's total revenues in 2000 as compared to 78% in 1999. The growth in 2000 was primarily attributable to an increase in the sales volume of AVONEX in the United States and in the fifteen member countries of the EU. AVONEX sales outside of the United States were approximately $208.5 million in 2000 as compared to $178.4 million in 1999.

Revenues from royalties in 2000 were $165.4 million, a decrease of $8.4 million or approximately 5% as compared to $173.8 million of royalty revenue in 1999. Revenues from royalties represented approximately 18% of total revenues in 2000 as compared to 22% in 1999. The decrease in royalty revenues in 2000 over the comparable period in 1999 is primarily the result of reductions attributable to patent expirations and lower licensee sales.

Costs and Expenses

Total costs and expenses in 2000 were $598.1 million as compared to $478.2 million in 1999, an increase of approximately 25%.

Cost of revenues in 2000 totaled $125.2 million, an increase of $14.2 million or 13% as compared to 1999. The increase in cost of revenues was attributable to the higher sales volume of AVONEX. Included in cost of revenues in 2000 and 1999 is $112.9 million and $96.9 million, respectively, from product sales and $12.3 million and $14.1 million, respectively, relating to royalty revenue. Gross margins on product sales increased to approximately 85% for the period ended December 31, 2000 compared to 84% for the same period in 1999. Gross margins on royalty revenue increased to approximately 93% for the period ended December 31, 2000 compared to 92% for the same period in 1999.

Research and development expenses in 2000 were $302.8 million, an increase of $81.6 million or 37% as compared to $221.2 million in 1999. The increase was primarily due to an increase in clinical trial costs of $35.9 million, the costs associated with an increase in the Company's other development efforts related to its ongoing research and development programs of $14 million and the funding of collaboration agreements of $12.4 million.

Selling, general and administrative expenses in 2000 were $170.1 million, an increase of $24.1 million or 17% as compared to 1999. This increase was primarily due to an increase in selling and marketing expenses related to the sale of AVONEX.

Other Income, Net

Other income, net consists of the following (in thousands):

December 31,	2000	1999
Interest income	$ 42,965	$ 35,407
Interest expense	(4,310)	(4,639)
Other income (expense)	120,094	(18,003)
Total other income, net	$ 158,749	$ 12,765

Other income, net consists primarily of interest income, partially offset by interest expenses and other non-operating income and expenses. Other income, net in 2000 was $158.7 million as compared to $12.8 million in 1999, an increase of $145.9 million. Interest income in 2000 was $43 million compared $35.4 million in 1999, an increase of $7.6 million or 21% due to higher average yields and an increase in funds invested. Interest expense decreased $0.3 million or 7% in 2000 from 1999. Other income (expense) increased by $138.1 million in 2000 from 1999. Other income (expense) for the period ended December 31, 2000 included gains on the sale of certain non-current marketable securities totaling approximately $101.1 million. Additionally, the Company realized gains of approximately $24.1 million upon the acquisition of two of its investees by third parties. Other income (expense) for the period ended December 31, 1999 included a $15 million write-down of certain non-current marketable securities.

Income Taxes

The Company's effective tax rate in 2000 was 31.5%. Income tax expense for 2000 varied from the amount computed at the U.S. federal statutory rates primarily due to higher sales in European jurisdictions with lower tax rates and to the utilization of research and development tax credits.

Financial Condition

At December 31, 2001, cash, cash equivalents and short-term marketable securities were $798.1 million compared with $682.4 million at December 31, 2000, an increase of $115.7 million. Working capital increased $95.5 million to $802.8 million. Net cash from operating activities which included net income, for the year ended December 31, 2001 was $316.4 million compared with $365.9 million in 2000, and also included $32.1 million of realized gains on the sale of non-current marketable securities, tax benefits related to stock options of $35.1 million, and a non-cash adjustment of $27.9 million related to the write-down of non-current marketable securities. Cash outflows from investing activities during 2001 included investments in property and equipment and patents of $195.5 million and net purchases of marketable securities totaling $57.4 million. Significant cash outflows from financing activities included $88.3 million for purchases of the Company's common stock under its stock repurchase program and $4.9 million for repayments on loan agreements with banks. Cash inflows from financing activities included $35 million from common stock option exercises and employee stock purchase plan activity.

In August 1995, the Company entered into a loan agreement with a bank for financing the construction of its biological manufacturing facility in North Carolina (the "Construction Loan"). During 1997, the Company completed construction of the facility and the funds advanced under the Construction Loan were converted to a floating rate ten-year term loan with principal and interest payable quarterly. As of December 31, 2001, the Company had $33 million outstanding under the Construction Loan. The Construction Loan is collateralized by the underlying building. The Company also entered into an interest rate swap agreement with the same bank, fixing its interest rate on the Construction Loan at 7.75% during the remaining term of the loan with interest payable quarterly. In addition, as of December 31, 2001, the Company had $14.2 million outstanding under a floating rate loan with a bank (the "Term Loan"). The Term Loan is collateralized by the Company's laboratory and office building in Cambridge, Massachusetts. The Company has fixed its interest rate on the Term Loan at 7.5% under the terms of an interest rate swap agreement. Terms of the Company's loan agreements include various covenants, including financial covenants which require the Company to maintain minimum net worth, cash flow and various financial ratios. The Company is in compliance with all covenants or requirements set forth in its credit agreements.

On December 18, 2000, the Company announced that its Board of Directors had authorized the repurchase of up to 4 million shares of the Company's common stock. The repurchased stock provides the Company with treasury shares for general corporate purposes, such as stock to be issued under employee stock option and stock purchase plans. During 2001, the Company repurchased approximately 1.5 million shares of its common stock at a cost of $88.3 million. Approximately 2.5 million shares remain authorized for repurchase under this program at December 31, 2001. In November of 2000, the Company completed a previous stock repurchase program. During 2000, the Company repurchased approximately 4.6 million shares of its common stock under this program at a cost of $300.2 million.

The Company is building a large scale manufacturing plant in Research Triangle Park, North Carolina. The Company expects that construction will be completed early in 2002. The project is expected to cost $175 million, of which $172.5 million had been committed for construction costs at December 31, 2001. Additionally, the Company began expansion of its Research Triangle Park, North Carolina complex by constructing a laboratory office building and adding manufacturing capacity. The projects are expected to be completed by the summer of 2003 at a total cost of approximately $138 million. As of December 31, 2001, the Company had committed $87 million for construction costs. The Company is also completing plans to build a fill finish plant in Denmark. The Company expects that construction will commence in 2002 and be completed early in 2005, at an estimated cost of $130 million. At December 31, 2001, $17 million had been committed for construction costs related to the fill finish plant in Denmark.

In July 2001, the Company signed a development and marketing collaboration agreement (the "ICOS Agreement") with ICOS Corporation ("ICOS"), under which the Company and ICOS will collaborate worldwide on the development and commercialization of orally active, small molecule LFA-1 antagonists as oral therapeutics for the treatment of inflammatory conditions. Under the terms of the ICOS agreement, the Company paid ICOS a one-time, non-refundable license fee of $8 million, which was charged to research and development expense. Additionally, as part of the agreement, Biogen made available to ICOS a line of credit in the amount of $20 million, of which $17.7 million was available at December 31, 2001. During 2001, the Company provided $2.3 million from the line of credit to ICOS that was charged to research and development expense in 2001 upon the achievement of certain clinical milestones by ICOS. As of December 31, 2001, there were no borrowings outstanding under the credit facility. The Company has committed to providing milestone payments to ICOS upon the achievement of certain future events. If all the milestones were achieved and commercialization were to be successful in excess of specified levels of sales, the Company would be required to pay up to an additional $83.5 million over the life of the agreement.

In September 2000, the Company signed a research and development agreement (the "Eos Agreement") with Eos Biotechnology, Inc. ("Eos"), under which the Company and Eos will collaborate in the research and development of novel targets for antibody and protein therapeutics in the area of breast cancer. Under the Eos Agreement, the Company purchased 1.9 million shares of preferred stock of Eos for $5 million at fair market value. In addition, the Company paid a one-time non-refundable license fee of $6 million, which was charged to research and development expense and acquired certain exclusive, worldwide rights related to breast cancer-specific molecules for the use in the development of new antibody and secreted protein therapeutics. The Company accounts for its investment in Eos, which is included in other assets, using the cost method of accounting subject to periodic review of impairment. The Company provided Eos with research and development funding of $1.5 million in 2001 and $250,000 in 2000. The Company expects to fund research activities of Eos related to the collaboration of up to $1.5 million, $1.75 million and $1 million in 2002, 2003, and 2004, respectively.

In August 2000, the Company signed a development and marketing collaboration agreement (the "Antegren Agreement") with Elan Pharma International, Ltd, an affiliate of Elan Corporation, plc ("Elan") under which the Company and Elan collaborate in the development, manufacture and commercialization of Antegren® (natalizumab), a humanized monoclonal antibody and alpha 4 integrin inhibitor. Under the terms of the Antegren Agreement, Biogen and Elan will share costs for on-going development activities. The Company paid a one-time non-refundable license fee of $15 million in 2000, which was charged to research and development expense. During 2001, the Company provided $16 million to Elan for certain milestones achieved during the year, which were charged to research and development expense. The Company has committed to paying Elan additional amounts upon the completion of certain future milestones. If all the milestones are achieved, the Company would be required to pay up to an additional $21 million over the life of the agreement.

In October 1997, the Company signed a research and option agreement (the "CuraGen Agreement") with CuraGen Corporation ("CuraGen") under which the Company and CuraGen collaborate in the discovery of novel genes using CuraGen's functional genomics technologies. The Company provided CuraGen with research and development funding of $1.5 million and $1.1 million in 2000 and 1999, respectively. The CuraGen Agreement was terminated in September 2000 and all investments in CuraGen common stock were sold during the year 2000.

In July 1996, the Company signed a collaborative research and commercialization agreement (the "Ontogeny Agreement") with Ontogeny, Inc. ("Ontogeny"), a private biotechnology company, for the development and commercialization of three specific hedgehog cell proteins, a class of novel human proteins, that are responsible for reducing the formation or regeneration of tissue. In August 2000, Ontogeny merged with two other biotechnology companies to form Curis Inc. ("Curis"). As a shareholder in Ontogeny, Biogen received Curis common stock in exchange for the Company's shares in Ontogeny. The Company provided $1 million and $2.8 million of research funding to Ontogeny in 2000 and 1999, respectively. Additionally, the Company provided $1.5 million upon conclusion of the Ontogeny Agreement, which was charged to research and development expense in 2000. At December 31, 2001 the Company retained approximately 308,000 shares of Curis common stock, and included the investment in long-term marketable securities available-for-sale.

In August 1995, the Company signed a collaborative research agreement (the "Genovo Agreement") for the development of human gene therapy treatments with Genovo, Inc. ("Genovo"), a gene therapy research company. Under the Genovo Agreement, the Company acquired 380,000 shares of Genovo Series A Preferred stock for $4.5 million and acquired certain licensing rights. The Company accounted for this investment, which was included in other assets, using the equity method of accounting. The Company recorded its proportion of Genovo's net losses as research and development expense in the amounts of $3.9 million and $7.6 million in 2000 and 1999, respectively. In August 2000, Genovo entered into a merger agreement ("Targeted Merger Agreement") with Targeted Genetics Corporation ("Targeted"). As a shareholder in Genovo, Biogen received Targeted common stock in exchange for the Company's shares in Genovo. Additionally, concurrently with the Targeted Merger Agreement, the Company entered into a development and marketing agreement and a funding agreement (the "Targeted Agreements") for gene therapy research and development in oncology. The Targeted Agreements provide for a $10 million credit facility. Targeted also has an option to sell to the Company an additional $10 million of Targeted common stock at fair value. As of December 31, 2001, there were $10 million of borrowings outstanding under the credit facility and no additional common stock had been purchased by the Company. The Company provided $1 million and $250,000 in research funding to Targeted in 2001 and 2000, respectively. The Company expects to fund research activities of Targeted related to the collaboration of up to $1 million and $750,000 in 2002 and 2003, respectively.

The following summarizes the Company's contractual obligations (excluding contingent milestone payments) at December 31, 2001, and the effects such obligations are expected to have on its liquidity and cash flows in future periods.

	Payments due by period				
(in thousands)	Total Years	Less than 1 Year	1-3 Years	4-5 Years	After 5 Years
Long-term debt	$ 47,185	$ 4,888	$ 9,776	$ 15,609	$ 16,912
Non-cancelable operating leases	145,577	20,493	37,333	30,172	57,579
Other long-term obligations	6,000	2,500	3,500	–	–
Total contractual cash obligations	$ 198,762	$ 27,881	$ 50,609	$ 45,781	$ 74,491

The Company is in compliance with all covenants or other requirements set forth in its credit agreements.

The Company does not have any other relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As such, the Company is not exposed to any financing, liquidity, market or credit risk that could arise if the Company had engaged in such relationships.

The Company believes that existing funds and cash generated from operations are adequate to satisfy its working capital and capital expenditure requirements in the foreseeable future. However, the Company may raise additional capital to take advantage of favorable conditions in the market or in connection with the Company's development activities.

Legal Matters

On July 3, 1996, Berlex Laboratories, Inc. ("Berlex") filed suit against Biogen in the United States District Court for the District of New Jersey alleging infringement by Biogen of Berlex's "McCormick" patent (U.S. Patent No. 5,376,567) in the United States in the production of Biogen's AVONEX product. In November 1996, Berlex's New Jersey action was transferred to the United States District Court in Massachusetts and consolidated for pre-trial purposes with a related declaratory judgment action previously filed by Biogen. On August 18, 1998, Berlex filed a second suit against Biogen alleging infringement by Biogen of a patent which was issued to Berlex in August 1998 and which is related to the McCormick patent (U.S. Patent No. 5,795,779). On September 23, 1998, the cases were consolidated for pre-trial and trial purposes. Berlex sought a judgment granting it damages, a trebling of any damages awarded and a permanent injunction restraining Biogen from the alleged infringement. A hearing on the parties' summary judgment motions in the case was completed in March 2000. In September 2000, the District Court rendered final judgment in favor of Biogen and against Berlex determining that Biogen's production of AVONEX did not infringe any of the claims of the Berlex patents. Berlex has appealed this decision with the Court of Appeals for the Federal Circuit. Oral arguments were presented by the parties to the Court of Appeals on November 7, 2001 and a decision is expected in the first half of 2002. In January 2002, Biogen and Berlex reached a settlement of the litigation pursuant to which the parties agreed to end the dispute in return for a payment of $20 million from Biogen to Berlex, and the possibility of a second and final payment from Biogen to Berlex if the Court of Appeals were to reverse the District Court's previous ruling granting summary judgment in favor of Biogen. If the Court of Appeals were to rule against Biogen and return the case to the District Court, Biogen believes that the most likely decision would require it to make a second and final payment of $55 million to Berlex. In the event the ruling is significantly adverse to Biogen, the second and final payment to Berlex would be $230 million. As part of the settlement, Biogen and Berlex agreed not to pursue further litigation about these patents. Biogen has recorded a $20 million charge in "Other Income, net" in the fourth quarter of 2001 to account for the first payment to Berlex. The Company has determined that, based on information currently available, the most probable outcome is that no additional payments will be required.

In 1995, the Company filed an opposition with the Opposition Division of the European Patent Office to oppose a European patent (the "Rentschler I Patent") issued to Dr. Rentschler Biotechnologie GmbH ("Rentschler") relating to compositions of matter of beta interferon. In 1997, the European Patent Office issued a decision to revoke the Rentschler I Patent. Rentschler appealed that decision and an oral hearing on the appeal took place in December 2000. At the oral hearing in order to gain reinstatement of the patent, Rentschler narrowed the patent claims so as to claim only a specific cell line. Biogen does not use the specific cell line now claimed. On October 13, 1998, the Company filed another opposition with the Opposition Division of the European Patent Office to oppose a second European patent issued to Rentschler (the "Rentschler II Patent") with certain claims regarding compositions of matter of beta interferon with specific regard to the structure of the glycosylated molecule. A hearing on the Company's opposition previously scheduled for October 2000 has been postponed, and will likely be held in 2002. While Biogen believes that the Rentschler II Patent will be revoked, if the Rentschler II Patent were to be upheld and if Rentschler were to obtain, through legal proceedings, a determination that the Company's sale of AVONEX in Europe infringes a valid Rentschler II Patent, such result could have a material adverse effect on the Company's results of operation and financial position.

Critical Accounting Policies

The preparation of consolidated financial statements requires the Company to make estimates and judgements that may affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, the Company evaluates its estimates, including those related to

revenue recognition, marketable securities, hedging programs, bad debts, inventories, patents, income taxes, pensions, contingencies and litigation. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

The Company believes the following critical accounting policies affect its more significant judgments and estimates used in the preparation of its consolidated financial statements.

Revenue Recognition and Accounts Receivable

SEC Staff Accounting Bulletin No. 101 ("SAB 101") was effective for the Company in fiscal 2000. SAB 101 provides guidance on the recognition, presentation, and disclosure of revenue in financial statements. SAB 101 establishes the SEC's view that it is not appropriate to recognize revenue until all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the seller's price to the buyer is fixed or determinable; and collectibility is reasonably assured. Further, SAB 101 requires that both title and the risks and rewards of ownership be transferred to the buyer before revenue can be recognized. The Company believes that its revenue recognition policies are in compliance with SAB 101.

Revenues from product sales are recognized when product is shipped and title and risk of loss has passed to the customer. Revenues are recorded net of applicable allowances for returns, rebates and other applicable discounts and allowances. The timing of distributor orders and shipments can cause variability in earnings. The Company prepares its estimates for sales returns and allowances, discounts and rebates quarterly based primarily on historical experience updated for changes in facts and circumstances, as appropriate. If actual future results vary, the Company may need to adjust its estimates, which could have an impact on earnings in the period of adjustment.

The Company receives royalty revenues under license agreements with a number of third parties that sell products based on technology developed by the Company or to which the Company has rights. The license agreements provide for the payment of royalties to the Company based on sales of the licensed product. The Company records these revenues based on estimates of the sales that occurred during the relevant period. The relevant period estimates of sales are based on interim data provided by licensees and analysis of historical royalties paid to the Company (adjusted for any changes in facts and circumstances, as appropriate). The Company maintains regular communication with its licensees in order to gauge the reasonableness of its estimates. Differences between actual royalty revenues and estimated royalty revenues are reconciled and adjusted for in the period in which they become known, typically the following quarter. Historically, adjustments have not been material based on actual amounts paid by licensees. There are no future performance obligations on the part of the Company under these license agreements. Under this policy, revenue can vary due to factors such as resolution of royalty disputes and arbitration.

Revenue is not recognized in any circumstances unless collectibility is reasonably assured.

Biogen maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. If the financial condition of Biogen's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required, which could affect future earnings.

Marketable Securities

As part of its strategic product development efforts, the Company invests in equity securities of certain biotechnology companies with which it has collaborative agreements. Statement of Financial Accounting Standards ("SFAS") No. 115 ("SFAS 115"), Accounting for Certain Investments in Debt and Equity Securities, addresses the accounting for investment in marketable equity securities. As a matter of policy, Biogen determines on a quarterly basis whether any decline in the fair value of a marketable security is temporary or other than temporary. Unrealized gains and losses on marketable securities are included in other comprehensive income in shareholders' equity, net of related tax effects. If a decline in the fair value of a marketable security below the Company's cost basis is determined to be other than temporary, such marketable security is written down to its estimated fair value with a charge to current earnings. The factors that the Company considers in its assessments include prospects for favorable clinical trial results, new product initiatives and new collaborative agreements. Any future determinations that unrealized losses are other than temporary could have an impact on earnings.

Inventory Capitalization

Inventories are stated at the lower of cost or market with cost determined under the first-in/first-out ("FIFO") method, and are included in other current assets. Included in inventory are raw materials used in the production of pre-clinical and clinical products, which are expensed as research and development costs when consumed.

Biogen writes down obsolete or otherwise unmarketable inventory to its estimated net realizable value. If the actual realizable value is less than that estimated by Biogen, additional inventory write-downs may be required.

Biogen capitalizes inventory costs associated with certain products prior to regulatory approval, based on management's judgment of probable future commercialization. Biogen would be required to expense previously capitalized costs related to pre-approval inventory upon a change in such judgment, due to, among other potential factors, a denial or delay of approval by necessary regulatory bodies. At December 31, 2001, capitalized inventory related to AMEVIVE, which has not yet received regulatory approval, was $8.4 million.

Research and Development Expenses

Research and development expenses are comprised of costs incurred in performing research and development activities including salaries and benefits, facilities costs, overhead costs, clinical trial and related clinical manufacturing costs, contract services and other outside costs. Research and development costs, including upfront fees and milestones paid to collaborative partners, are expensed as incurred. The timing of upfront fees and milestone payments in the future may cause variability in future research and development expense.

Accounting for Contingencies and Litigation

Because the substantive terms of the Berlex settlement arrangement were agreed to in the fourth quarter of 2001, the Company determined that the provisions of SFAS 5, "Accounting for Contingencies," required that the Company account for this settlement in its December 31, 2001 financial statements. The guidance in Financial Accounting Standards Board ("FASB"), Interpretation No. 14, Reasonable Estimation of the Amount of a Loss, an Interpretation of SFAS 5, requires that when an amount within the range of potential loss appears to be a better estimate that any other amount within the range, that amount should be accrued. It further requires that when no amount within the range is a better estimate than any other amount, the minimum amount in the range should be accrued. In the case of the Berlex settlement, Biogen determined that $20 million is both the best estimate of the Company's potential loss, and the minimum amount in the range of potential losses. As a result, the Company recorded a charge of $20 million related to this settlement in its December 31, 2001 financial statements.

New Accounting Pronouncements

In July 2001, the FASB issued SFAS 141, "Business Combinations" and SFAS 142, "Goodwill and Other Intangible Assets." SFAS 141 requires that all business combinations be accounted for under the purchase method only and that certain acquired intangible assets in a business combination be recognized as assets apart from goodwill. SFAS 142 requires that ratable amortization of goodwill be replaced with periodic tests of the goodwill's impairment and that intangible assets other than goodwill be amortized over their useful lives. SFAS 141 is effective for all business combinations initiated after June 30, 2001 and for all business combinations accounted for by the purchase method for which the date of acquisition is after June 30, 2001. The provisions of SFAS 142 will be effective for fiscal years beginning after December 15, 2001, and will thus be adopted by the Company, as required, in fiscal year 2002. The impact of SFAS 141 and SFAS 142 on the Company's financial statements is not expected to be material.

In August 2001, the FASB issued SFAS 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS 144 requires that those long-lived assets be measured at the lower of carrying amount or fair value less cost to sell, whether reported in continuing operations or in discontinued operations. SFAS 144 is effective for financial statements issued for fiscal years beginning after December 15, 2001, and will thus be adopted by the Company, as required, in fiscal year 2002. The adoption of SFAS 144 is not expected to have a material effect on the Company's financial statements.

In February 2002, the FASB Emerging Issues Task Force ("EITF") released EITF Issue No. 01-09 ("EITF 01-09"), "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)". EITF 01-09 states that cash consideration (including a sales incentive) given by a vendor to a customer is presumed to be a reduction of the selling prices of the vendor's products or services and, therefore, should be characterized as a reduction of revenue when recognized in the vendor's income statement. The provisions of EITF 01-09 will be effective for fiscal years beginning after December 15, 2001, and will thus be adopted by the Company, as required, in 2002. The Company is currently evaluating the effect on the Company's financial statements of adoption of EITF 01-09.

OUTLOOK

Safe Harbor Statement Under Private Securities Litigation Reform Act of 1996

In addition to historical information, this annual report contains forward-looking statements that involve risks and uncertainties that could cause actual results to differ materially from those reflected in such forward-looking statements. Reference is made in particular to forward-looking statements regarding the anticipated level of future product sales, royalty revenues, expenses and profits, statements regarding the timing of clinical trials, statements regarding the potential outcome of clinical programs, statements regarding expectations regarding regulatory approvals, the marketing of additional products and predictions as to the impact of competitive products, predictions regarding the anticipated outcome of pending or anticipated litigation, arbitration and patent-related proceedings, statements regarding the Company's expectations regarding facility expansion and Biogen's expectations as to the value of its investments in certain marketable securities. These and all other forward-looking statements are made based on Biogen's current belief as to the outcome and timing of such future events. Factors which could cause actual results to differ from Biogen's expectations and which could negatively impact Biogen's financial condition and results of operations are discussed below.

Dependence on AVONEX Sales

Biogen's ability to sustain increases in revenues and profitability until at least approval and launch of a second product will be primarily dependent on the level of revenues and profitability from AVONEX sales. The level of revenues from sales of AVONEX will depend on a number of factors, including: Biogen's ability to sustain market share of AVONEX in light of competitive products for the treatment of multiple sclerosis ("MS"), including the launch of REBIF in the United States; continued market acceptance of AVONEX worldwide; Biogen's ability to maintain a high level of patient satisfaction with AVONEX; the nature of regulatory and pricing decisions related to AVONEX worldwide; the extent to which AVONEX continues to receive and maintains reimbursement coverage; the success of ongoing development related to AVONEX in expanded MS indications; and the continued accessibility of third parties to vial, label, and distribute AVONEX on acceptable terms.

Competition

Biogen faces increasing competition from other products for the treatment of relapsing forms of MS. In 2001, AVONEX competed in the United States as a treatment for MS with three other products: an interferon beta-1b product sold under the brand name BETASERON® by Berlex Laboratories, a product known as COPAXONE® (glatiramer acetate) marketed by Teva Neuroscience, Inc. and Aventis Pharmaceuticals, Inc., and NOVANTRONE® (mitoxantrone for injection) marketed by Immunex Corporation for patients with clinically worsening forms of relapsing-remitting and secondary progressive MS. Biogen expects that competition in the United States will increase significantly with the March 2002 launch of REBIF, an interferon beta-1a product marketed by Serono, Inc ("Serono"). The FDA approved REBIF for sale in the United States over a year earlier than the expiration of AVONEX's orphan drug marketing exclusivity based on the 24-week results of a head-to-head study of AVONEX and REBIF conducted by Serono. Biogen expects Serono to compete aggressively in the United States market. In most countries outside of the United States, AVONEX competes with REBIF, BETASERON (sold in the EU by Schering A.G. under the name BETAFERON®), and COPAXONE.

A number of companies, including Biogen, are working to develop products to treat MS which may in the future compete with AVONEX, the worldwide market leader among MS therapies. AVONEX may also in the future face competition from off-label uses of drugs approved for other indications. Some of Biogen's current competitors are also working to develop alternative formulations for delivery of their products which may in the future compete with AVONEX. Biogen believes that competition among treatments for MS will be based on product performance, service and price.

If AMEVIVE is approved, Biogen will also face significant competition from other products for the treatment of moderate-to-severe plaque psoriasis. AMEVIVE would compete with existing therapies such as oral retinoids, steroids, methotrexate and cyclosporin, as well as new drugs currently in development and drugs approved for other indications. Genentech and Xoma Corporation are co-developing XANELIM® (efalizumab), an antibody designed to block certain immune cells as a potential treatment for moderate-to-severe psoriasis. The companies have completed Phase 3 trials for XANELIM and expect to complete a one-year Phase 3 extension trial in early 2002. Centocor, Inc. sells REMICADE® (Infliximab) worldwide as a treatment for other indications and has initiated a Phase 2 proof of concept study for REMICADE as a potential treatment for psoriasis. ENBREL® (etanercept), a drug co-developed by Immunex Corporation and Wyeth (formerly American Home Products Corporation), has been approved by the FDA as a treatment for psoriatic arthritis, a disease that has skin plaque systems associated with moderate-to-severe plaque psoriasis. In addition, a number of other companies are working to develop products to treat psoriasis which may ultimately compete with AMEVIVE.

Royalty Revenue

Biogen receives royalty revenues which, prior to 2001, contributed a significant amount to its overall profitability. Royalty revenues have decreased significantly in recent years primarily as the result of patent expirations, see "Outlook - Patents and Other Proprietary Rights," and a royalty dispute with Schering-Plough. As noted above, Biogen is currently in arbitration with Schering-Plough on the issue of whether and to what extent Schering-Plough has an obligation to pay royalties in the United States on sales of its alpha interferon products. Schering-Plough has taken the position that a Court of Appeal's decision affirming a District Court's ruling which narrowed the scope of the claims of Biogen's United States alpha interferon patent (the "901 Patent") allowed it to discontinue royalty payments to Biogen in the United States on sales of its alpha interferon products. The Court of Appeals decision came as part of a suit filed by Schering-Plough, as Biogen's exclusive licensee, against Amgen, Inc. ("Amgen") to enforce the 901 Patent which Schering-Plough claimed was infringed by Amgen's consensus interferon product. Biogen disagrees with Schering-Plough's position and has filed for arbitration to compel payment of unpaid past royalties and to ensure payment of royalties due in the future under the license agreement. Given Schering-Plough's history of

taking aggressive positions in contract interpretation, Biogen has included in the arbitration claims which would resolve issues related to future royalty payments to pre-empt any potential challenges by Schering-Plough. These claims include asking the arbitration panel to confirm Schering-Plough's obligation to commence royalty payments in July 2002 (the expiration date of the 901 Patent) based on a patent application owned by F. Hoffman-LaRoche ("Roche") and Genentech, Inc. ("Genentech"). The agreement between Biogen and Schering-Plough extending Schering-Plough's royalty obligation beyond the expiration date of the 901 Patent was part of the settlement of a lawsuit between Biogen and Roche/Genentech. In return for Schering-Plough's agreement to extend its royalty obligation, Biogen settled the lawsuit with Roche/Genentech and Roche granted Schering-Plough an exclusive license for Schering-Plough to sell its products under the Roche/Genentech patent rights that were the subject of the dispute. Biogen intends to vigorously pursue its claims against Schering-Plough, but there is no guarantee that Biogen will be successful in its efforts.

There are a number of other factors which could also cause the actual level of royalty revenue to differ from Biogen's expectations. For example, pricing reforms, health care reform initiatives, other legal and regulatory developments and the introduction of competitive products may have an impact on product sales by Biogen's licensees. In addition, sales levels of products sold by Biogen's licensees may fluctuate from quarter to quarter due to the timing and extent of major events such as new indication approvals or government sponsored programs. Since Biogen is not involved in the development or sale of products by its licensees, it cannot be certain of the timing or potential impact of factors which may affect sales by licensees. See "Outlook - Patents and Other Proprietary Rights."

Patents and Other Proprietary Rights

Biogen has numerous issued patents and patent applications pending on a number of its processes and products. Biogen has also obtained rights to certain patents under licenses with third parties which provide for the payment of royalties. There can be no assurances that Biogen's existing patents or others, if obtained, will substantially protect or commercially benefit Biogen. In addition, Biogen does not know to what extent its pending patent applications or patent applications licensed from third parties will be granted or whether any of Biogen's patents will prevail if they are challenged in litigation. Also, there is also no assurance that third parties have not or will not be granted patents claiming subject matter necessary to Biogen's business. Biogen is aware that others, including various universities and companies working in the biotechnology field, have also filed patent applications and have been granted patents in the United States and in other countries claiming subject matter potentially useful or necessary to Biogen's business. Some of those patents and patent applications claim only specific products or methods of making such products, while others claim more general processes or techniques useful or now used in the biotechnology industry. For example, Genentech has been granted patents and is prosecuting other patent applications in the United States and certain other countries which it may allege are currently used by Biogen and the rest of the biotechnology industry to produce recombinant proteins in host cells. Genentech has offered to Biogen and others in the industry non-exclusive licenses under some of those patents and patent applications for various proteins and in various fields of use, but not for others. Biogen is aware of certain patents held by Genentech relating to immunoadhesion technology that Genentech may take the position are valid and infringed by Biogen's future commercial activities with AMEVIVE. Biogen is evaluating these patents to determine if a license should be taken. The ultimate scope and validity of Genentech's patents, of other existing patents, or of patents which may be granted to third parties in the future, and the extent to which Biogen may wish or be required to acquire rights under such patents and the availability and cost of acquiring such rights, currently cannot be determined by Biogen.

Biogen has granted an exclusive worldwide license to Schering-Plough under Biogen's alpha interferon patents. Schering-Plough's royalty obligation to Biogen on sales of Schering-Plough's INTRON® A brand of alpha interferon in Japan and Europe terminated upon expiration of Biogen's alpha interferon patent in such territories in January 2001, except in France, Italy and Spain. Biogen has obtained supplementary protection certificates in France and Italy extending the coverage (in France until 2003 and in Italy until 2007). In Spain, Biogen's alpha interferon patents expire in 2003. In 2000, a Court of Appeals decision affirmed a District Court's decision narrowing the scope of Biogen's United States alpha interferon patents. For a discussion of the arbitration with Schering-Plough over the implications of the decision on the amount of royalties owed to Biogen on sales of alpha interferon products in the United States, see "Outlook - Royalty Revenue". In consideration of assignment to Schering-Plough by Biogen of a Biogen patent application claiming recombinant mature human alpha interferon, Schering-Plough has agreed to pay to Biogen certain sums on sales by Schering-Plough of alpha interferon products in the United States from the date when Biogen's existing United States alpha interferon patent expires (i.e. July 2002) until expiration of the Roche/Genentech patent. The Roche/Genentech patent right was the subject of a lawsuit brought by Biogen which was ultimately settled. Schering-Plough entered into an agreement with Roche as part of the settlement. In addition to deciding other aspects of the royalty dispute, Biogen has asked an arbitration panel to confirm Schering-Plough's obligation to pay royalties commencing in July 2002. See "Outlook – Royalty Revenues."

Biogen has licensed its recombinant hepatitis B antigen patent rights to GlaxoSmithKline plc and Merck and Co, Inc. to manufacture and market hepatitis B vaccines and to manufacturers of diagnostic test kits, and receives royalties on sales of the vaccines and test kits by its licensees. See "Principal Products Being Marketed or Developed by Biogen's Licensees - Hepatitis B Vaccines and Diagnostics." The obligation of Glaxo and Merck to pay royalties on sales of hepatitis B vaccines and the obligation of Biogen's other licensees under its hepatitis B patents to pay royalties on sales of diagnostic products will terminate upon expiration of Biogen's hepatitis B patents in each licensed country. Following the conclusion of a successful interference proceeding in the United States, Biogen was granted patents in the United States expiring in 2018 and which broadly cover hepatitis B virus polypeptides and vaccines and diagnostics containing such polypeptides. Biogen's European hepatitis B patents expired at the end of 1999, except in those countries in which Biogen has obtained supplementary protection certificates. Coverage under supplementary protection certificates still exists in Austria, France, Italy, Luxembourg and Sweden. The additional coverage afforded by the supplementary protection certificates ranges from one to five years. There can be no assurance as to the extent of coverage available under the supplementary protection certificates, or that protection will be available in additional countries.

There has been, and Biogen expects that there may continue to be significant litigation in the industry regarding patents and other intellectual property rights. Such litigation could create uncertainty and consume substantial resources. See also "Legal Matters".

Products

AVONEX is currently the only product sold by Biogen. Biogen's long-term viability and growth will depend on the successful development and commercialization of other products from its research and development activities and collaborations. Biogen expects that its next product on the market will be AMEVIVE. In the second quarter of 2001, the Company completed Phase 3 clinical studies of both the intramuscular and intravenous formulations of AMEVIVE in patients with moderate to severe psoriasis. In August of 2001, Biogen completed a simultaneous filing for regulatory approval of AMEVIVE in the United States and Europe, with submission of data from the clinical studies. The applications are currently under review by both the FDA and regulatory authorities in the EU. Biogen continues to expand its development efforts related to other potential products in its pipeline. The expansion of the pipeline may include increases in spending on internal projects, the acquisition of third-party technologies or products or other types of investments. Product development involves a high degree of risk. Only a small number of research and development programs result in the commercialization of a product. Success in preclinical and early clinical trials does not ensure that later stage or large-scale clinical trials will be successful. Many important factors affect Biogen's ability to successfully develop and commercialize AMEVIVE and its other potential products, including the ability to obtain and maintain necessary patents and licenses, to demonstrate safety and efficacy of drug candidates at each stage of the clinical trial process, to overcome technical hurdles that may arise, to meet applicable regulatory standards, to obtain reimbursement coverage for the products, to receive required regulatory approvals, to be capable of producing drug candidates in commercial quantities at reasonable costs, to compete successfully against other products and to market products successfully. Success in early stage clinical trials or preclinical work does not ensure that later stage or larger scale clinical trials will be successful. Even if later stage clinical trials are successful, the risk exists that unexpected concerns may arise from analysis of data or from additional data or that obstacles may arise or issues be identified in connection with review of clinical data with regulatory authorities or that regulatory authorities may disagree with the Company's view of the data or require additional data or information or additional studies. There can be no assurance that Biogen will be successful in its efforts to develop and commercialize new products.

Market Risk

Biogen has exposure to financial risk in several areas including changes in foreign exchange rates and interest rates. Biogen attempts to minimize its exposures by using certain financial instruments, for purposes other than trading, in accordance with the Biogen's overall risk management guidelines. Further information regarding Biogen's accounting policies for financial instruments and disclosures of financial instruments can be found in Notes 1, 2 and 3 to Biogen's Consolidated Financial Statements.

Foreign Exchange

Biogen has operations in several European countries, Japan, Australia and Canada in connection with the sale of AVONEX. Biogen also receives royalty revenues based on worldwide product sales by its licensees. As a result, Biogen's financial position, results of operations and cash flows can be affected by fluctuations in foreign currency exchange rates (primarily the Euro, British pound, Japanese yen and Canadian dollar).

Biogen uses foreign currency forward contracts to manage foreign currency risk and does not engage in currency speculation. Biogen uses these forward contracts to hedge certain forecasted transactions denominated in foreign currencies. A hypothetical adverse 10% movement in foreign exchange rates compared to the U.S. dollar across all maturities would result in a hypothetical loss in fair value of approximately $11 million. Biogen's use of this methodology to quantify the market risk of such instruments should not be construed as an endorsement of its accuracy or the accuracy of the related assumptions. The quantitative information about market risk is necessarily limited because it does not take into account operating transactions.

Interest Rates

Biogen is exposed to risk of interest rate fluctuations in connection with its variable rate long-term debt. The Term Loan requires annual principal payments of $1.7 million through 2004, with the balance due in 2005. The Construction Loan requires annual principal payments of $3.2 million through 2006, with the balance due in 2007. At December 31, 2001, the carrying values of the Term Loan and the Construction Loan approximated fair value.

Biogen has fixed its interest rates on the Term Loan and Construction Loan by entering interest rate swap agreements under which Biogen exchanges the difference between 7.5% and 7.75%, respectively, and a floating rate. The notional principal balances on the interest rate swap agreements are exactly equal to the principal on the underlying debt agreements. All other relevant terms of the interest rate swap agreements (including the index rate, reset period, etc.) exactly match the underlying loan agreements. The fair value of the interest rate swap agreements at December 31, 2001, representing the cash requirements of Biogen to settle the agreements, was approximately $3.3 million. Terms of Biogen's loan agreements include various covenants, including financial covenants which require Biogen to maintain minimum net worth, cash flow and various financial ratios.

The fair value of Biogen's cash, cash equivalents, marketable securities, long-term debt and interest rate swap agreements are subject to change as a result of potential changes in market interest rates. The potential change in fair value for interest rate sensitive instruments has been assessed on a hypothetical 100 basis point adverse movement across all maturities. Biogen estimates that such hypothetical adverse 100 basis point movement would not have materially impacted net income or materially affected the fair value of interest rate sensitive instruments.

Stock Price

The stock prices of biotechnology companies are subject to significant fluctuations. The stock price may be affected by a number of factors including, but not limited to clinical trial results and other product development events, the outcome of litigation, the financial impact of changes in the value of investments, including investments in other biotechnology companies, the decisions relating to intellectual property rights and the entrance of competitive products into the market, changes in reimbursement policies or other practices related to the pharmaceutical industry or other industry and market changes or trends. In addition, if revenues or earnings in any quarter fail to meet the investment community's expectations, there could be an immediate adverse impact on Biogen's stock price.

CONSOLIDATED STATEMENTS OF INCOME

Biogen, Inc. and Subsidiaries

(in thousands, except per share amounts)

For the years ended December 31,	**2001**	2000	1999
Revenues:			
Product	**$ 971,594**	$ 761,079	$ 620,636
Royalties	**71,766**	165,373	173,799
Total revenues	**1,043,360**	926,452	794,435
Costs and expenses:			
Cost of revenues	**136,510**	125,198	111,005
Research and development	**314,556**	302,840	221,153
Selling, general & administrative	**232,096**	170,058	146,026
Total costs and expenses	**683,162**	598,096	478,184
Income from operations	**360,198**	328,356	316,251
Other income, net	**29,299**	158,749	12,765
Income before income taxes	**389,497**	487,105	329,016
Income taxes	**116,814**	153,528	108,566
Net Income	**$ 272,683**	$ 333,577	$ 220,450
Basic earnings per share	**$ 1.84**	$ 2.24	$ 1.47
Diluted earnings per share	**$ 1.78**	$ 2.16	$ 1.40
Shares used in calculating:			
Basic earnings per share	**148,355**	148,743	149,921
Diluted earnings per share	**152,916**	154,602	157,788

See accompanying notes to consolidated financial statements.

CONSOLIDATED BALANCE SHEETS

Biogen, Inc. and Subsidiaries

(in thousands, except share amounts)

As of December 31,	2001	2000
Assets		
Current assets		
Cash and cash equivalents	**$ 54,042**	$ 48,737
Marketable securities	**744,065**	633,675
Accounts receivable, less allowances for doubtful accounts of $2,082 and $2,436, respectively	**177,582**	143,178
Deferred tax assets	**44,108**	40,047
Other current assets	**77,930**	62,634
Total current assets	1,097,727	928,271
Property and equipment, net	**555,998**	400,429
Patents	**16,562**	13,510
Marketable securities	**12,183**	71,982
Other assets	**38,576**	17,664
	$ 1,721,046	$ 1,431,856
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable	**$ 50,944**	$ 37,869
Current portion of long-term debt	**4,888**	4,888
Accrued expenses and other	**239,110**	178,264
Total current liabilities	**294,942**	221,021
Long-term debt, less current portion	**42,297**	47,185
Other long-term liabilities	**34,975**	57,248
Commitments and contingencies	**--**	--
Shareholders' equity		
Common stock, par value $0.01 per share (375,000,000 shares authorized; 151,705,636 shares issued in 2001 and 2000)	**1,517**	1,517
Additional paid-in capital	**808,076**	772,172
Treasury stock, at cost, 3,233,351 and 3,882,979 shares in 2001 and 2000, respectively	**(176,123)**	(233,576)
Retained earnings	**705,893**	543,913
Accumulated other comprehensive income	**9,469**	22,376
Total shareholders' equity	**1,348,832**	1,106,402
	$ 1,721,046	$ 1,431,856

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

Biogen, Inc. and Subsidiaries

(in thousands)

For the years ended December 31,	**2001**	2000	1999
Cash Flows from Operating Activities			
Net Income	**$ 272,683**	$ 333,577	$ 220,450
Adjustments to reconcile net income to net cash provided from operating activities			
Depreciation and amortization	**36,913**	38,824	31,099
Other	**(267)**	(569)	5,162
Deferred income taxes	**(18,100)**	25,203	(23,981)
Realized gain on sale of non-current marketable securities	**(32,143)**	(101,129)	--
Tax benefit of stock options	**35,075**	81,023	91,295
Write-down of non-current marketable securities	**27,942**	--	15,287
Changes in:			
Accounts receivable	**(34,404)**	(5,815)	(36,082)
Other current and other assets	**(41,884)**	(35,329)	(41,372)
Accounts payable, accrued expenses and other current and long-term liabilities	**70,543**	30,154	101,725
Net cash flows from operating activities	**316,358**	365,939	363,583
Cash Flows from Investing Activities			
Purchases of current marketable securities	**(827,807)**	(627,168)	(1,120,218)
Proceeds from sales and maturities of current marketable securities	**734,599**	606,087	1,006,465
Proceeds from sales of non-current marketable securities	**35,827**	120,199	--
Investment in collaborative partners	**--**	(5,000)	(10,000)
Acquisitions of property and equipment	**(190,753)**	(194,402)	(82,528)
Additions to patents	**(4,781)**	(4,713)	(3,799)
Net cash flows from investing activities	**(252,915)**	(104,997)	(210,080)
Cash Flows from Financing Activities			
Repayments on long-term debt	**(4,888)**	(4,888)	(4,887)
Purchases of treasury stock	**(88,284)**	(300,192)	(197,717)
Proceeds from put warrants	**--**	--	22,086
Issuance of common stock and option exercises	**35,034**	35,955	58,490
Net cash flows from financing activities	**(58,138)**	(269,125)	(122,028)
Net increase (decrease) in cash and cash equivalents	**5,305**	(8,183)	31,475
Cash and cash equivalents, beginning of the year	**48,737**	56,920	25,445
Cash and cash equivalents, end of the year	**$ 54,042**	$ 48,737	$ 56,920
Supplemental Cash Flow Data			
Cash paid during the year for:			
Interest	**$ 3,954**	$ 4,314	$ 4,598
Income taxes	**$ 79,002**	$ 42,683	$ 4,787

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

Biogen, Inc. and Subsidiaries

(in thousands)	Common Stock	Additional Paid-in Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income	Total Shareholders' Equity
Balance, December 31, 1998	$ 1,483	$ 538,105	$ (21,317)	$ 213,507	$ (13,165)	$ 718,613
Net income				220,450		220,450
Unrealized gains/losses on marketable securities, net of tax of $25,013					48,555	48,555
Unrealized gains/losses on foreign currency forward contracts, net of tax of $2,490					6,654	6,654
Unrealized gains/losses on interest rate swaps, net of tax of $137					4,501	4,501
Translation adjustment					(927)	(927)
Total comprehensive income						279,233
Exercise of options and related tax benefits	24	108,952	122,750	(81,941)		149,785
Proceeds from sale of put warrants		22,086				22,086
Treasury stock purchased			(197,717)			(197,717)
Compensation expense related to stock options		7,530				7,530
Balance, December 31, 1999	$ 1,507	$ 676,673	$ (96,284)	$ 352,016	$ 45,618	$ 979,530
Net income				333,577		333,577
Unrealized gains/losses on marketable securities, net of tax of $6,791					(16,152)	(16,152)
Unrealized gains/losses on foreign currency forward contracts, net of tax of $1,686					(5,311)	(5,311)
Unrealized gains/losses on interest rate swaps, net of tax of $789					(1,458)	(1,458)
Translation adjustment					(321)	(321)
Total comprehensive income						310,335
Exercise of options and related tax benefits	10	95,748	162,900	(141,680)		116,978
Treasury stock purchased			(300,192)			(300,192)
Compensation expense related to stock options		(249)				(249)
Balance, December 31, 2000	$ 1,517	$ 772,172	$ (233,576)	$ 543,913	$ 22,376	$ 1,106,402
Net income				272,683		272,683
pg 14 Unrealized gains/losses on marketable securities, net of tax of $4,750					(11,352)	(11,352)
Unrealized gains/losses on foreign currency forward contracts, net of tax of $52					(87)	(87)
Unrealized gains/losses on interest rate swaps, net of tax of $587					(981)	(981)
Translation adjustment					(487)	(487)
Total comprehensive income						259,776
Exercise of options and related tax benefits		35,075	145,737	(110,703)		70,109
Treasury stock purchased			(88,284)			(88,284)
Compensation expense related to stock options		829				829
Balance, December 31, 2001	$ 1,517	$ 808,076	$ (176,123)	$ 705,893	$ 9,469	$ 1,348,832

See accompanying notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Biogen, Inc. and Subsidiaries

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Business

Biogen, Inc. ("Biogen" or the "Company") is a biopharmaceutical company principally engaged in the business of developing, manufacturing and marketing drugs for human health care. The Company currently derives revenues from sales of its AVONEX® (Interferon beta-1a) product for the treatment of relapsing forms of multiple sclerosis and from royalties on worldwide sales by the Company's licensees of a number of products covered under patents controlled by the Company, including alpha interferon and hepatitis B vaccines and diagnostic products.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All material intercompany balances and transactions have been eliminated. Certain items in prior years' financial statements have been reclassified to conform with the current year's presentation.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and use assumptions that affect certain reported amounts and disclosures; actual amounts may differ.

Translation of Foreign Currencies

The functional currency for most of the Company's foreign subsidiaries is the local currency. Assets and liabilities are translated at current rates of exchange. Income and expense items are translated at the average exchange rates for the year. Adjustments resulting from the translation of the financial statements of the Company's foreign operations into U.S. dollars are excluded from the determination of net income and are accumulated in a separate component of shareholders' equity. The U.S. dollar is the functional currency for certain foreign subsidiaries. The Company's subsidiaries which have the U.S. dollar as the functional currency are remeasured into U.S. dollars using current rates of exchange for monetary assets and liabilities and historical rates of exchange for nonmonetary assets. Foreign exchange transaction gains and losses are included in the results of operations in other income, net. Foreign exchange gains totaled $1.2 million, $2.8 million and $2.5 million in 2001, 2000, and 1999, respectively.

Cash and Cash Equivalents

The Company considers only those investments, which are highly liquid, readily convertible to cash and which mature within three months from date of purchase to be cash equivalents.

Fair Value of Financial Instruments

The carrying amounts reflected in the consolidated balance sheets for cash and cash equivalents, accounts receivable, other current assets, accounts payable, and accrued expenses and other, approximate fair value due to their short-term maturities. Marketable securities are carried at fair value based on quoted market prices, consistent with the requirements of Statement of Financial Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities". The fair values of trading securities, interest rate swaps, foreign currency forward contracts and options on non-marketable instruments are based on quoted market prices or pricing models using current market rates. The Company's long-term debt approximates fair value.

Inventories

Inventories are stated at the lower of cost or market with cost determined under the first-in/first-out ("FIFO") method and are included in other current assets. Included in inventory are raw materials used in the production of pre-clinical and clinical products which are expensed as research and development costs when consumed. The components of inventories for the periods ending December 31, are as follows:

(in thousands)	**2001**	2000
Raw materials	**$ 14,754**	$ 7,775
Work in process	**17,004**	17,582
Finished goods	**20,161**	14,172
	$ 51,919	$ 39,529

Biogen writes down obsolete or otherwise unmarketable inventory to its estimated net realizable value. If the actual realizable value is less than that estimated by Biogen, additional inventory write-downs may be required. The Company has not had any material write-downs of inventory for the years ended December 31, 2001, 2000, or 1999.

Biogen capitalizes inventory costs associated with certain products prior to regulatory approval, based on management's judgment of probable future commercialization. Biogen would be required to expense previously capitalized costs related to pre-approval inventory upon a change in such judgment, due to, among other potential factors, a denial or delay of approval by necessary regulatory bodies. At December 31, 2001, capitalized inventory related to AMEVIVE® (alefacept), which has not yet received regulatory approval, was $8.4 million.

Marketable Securities

The Company invests its excess cash balances in short-term marketable securities, principally corporate notes and government securities. At December 31, 2001, substantially all of the Company's securities were classified as "available-for-sale". All available-for-sale securities are recorded at fair market value and unrealized gains and losses are included in accumulated other comprehensive income in shareholders' equity, net of related tax effects. Realized gains and losses and declines in value, if any, judged to be other than temporary on available-for-sale securities are reported in other income or expense.

As part of its strategic product development efforts, the Company invests in equity securities of certain biotechnology companies with which it has collaborative agreements. As a matter of policy, Biogen determines on a quarterly basis whether any decline in the fair value of a marketable security is temporary or other than temporary. Unrealized gains and losses on marketable securities are included in other comprehensive income in shareholders' equity, net of related tax effects. If a decline in the fair value of a marketable security below the Company's cost basis is determined to be other than temporary, such marketable security is written down to its estimated fair value with a charge to current earnings. The factors that the Company considers in its assessments include prospects for favorable clinical trial results, new product initiatives and new collaborative agreements.

As part of its assessments at December 31, 2001, the Company assessed the unrealized losses on its investments in Curis Inc. and Targeted Genetics Corporation, and determined that the positive evidence suggesting that the investments described above would recover to at least the Company's purchase price was not sufficient to overcome the presumption that the current market price of the investments was the best indicator of value at December 31, 2001. Accordingly, the related unrealized losses of approximately $28 million were reclassified from other comprehensive income to current expense in the fourth quarter of 2001.

The Company had no unrealized losses at December 31, 2001 that were determined to be temporary.

Property and Equipment

Property and equipment is carried at cost, subject to review of impairment for significant assets whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. Depreciation is calculated on the straight-line basis over the estimated useful lives of the assets. Leasehold improvements are amortized over the lesser of the useful life or the term of the respective lease. Maintenance of computer systems is expensed as incurred. Buildings and equipment are depreciated over estimated useful lives ranging from 30 to 40 and 3 to 10 years, respectively. The Company capitalizes certain incremental costs associated with the validation effort required for licensing by the FDA of manufacturing equipment for the production of a commercially approved drug. These costs include primarily direct labor and material and are incurred in preparing the equipment for its intended use. Net capitalized validation costs were $5.4 million and $4.3 million at December 31, 2001 and 2000, respectively. The validation costs are amortized over the life of the related equipment.

Patents

The costs associated with successful patent defenses and patent applications are capitalized and amortized on a straight-line basis over estimated useful lives up to 15 years. Accumulated amortization of patent costs was $15.7 million and $25.2 million as of December 31, 2001 and 2000, respectively. The carrying value of patents is regularly reviewed by the Company and impairments are recognized when the expected future operating cash flows derived from the patent is less than their carrying value.

Derivatives and Hedging Activities

Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities", ("SFAS 133") requires that all derivatives be recognized on the balance sheet at their fair value. Changes in the fair value of derivatives are recorded each period in current earnings or other comprehensive income, depending on whether a derivative is designated as part of a hedge transaction and, if it is, the type of hedge transaction. The Company assesses, both at its inception and on an on-going basis, whether the derivatives that are used in hedging transactions are highly effective in offsetting the changes in cash flows of hedged items. The Company assesses hedge ineffectiveness on a quarterly basis and records the gain or loss related to the ineffective portion to current earnings to the extent significant. If the Company determines that a forecasted transaction is no longer probable of occurring, the Company discontinues hedge accounting for the affected portion of the hedge instrument, and any related unrealized gain or loss on the contract is recognized in current earnings.

Comprehensive Income

Statement of Financial Accounting Standards No. 130 ("SFAS 130"), "Reporting Comprehensive Income", requires the display of comprehensive income and its components as part of the Company's full set of financial statements. Comprehensive income is comprised of net income and other comprehensive income. Other comprehensive income includes certain changes in equity that are excluded from net income, such as translation adjustments and unrealized holding gains and losses on available-for-sale marketable securities and certain derivative instruments, net of tax. The Consolidated Statements of Shareholders' Equity reflect comprehensive income for years ended December 31, 2001, 2000 and 1999 of $259.8 million, $310.3 million and $279.2 million, respectively.

In accordance with SFAS 133, the Company records an adjustment to other comprehensive income to recognize at fair value all derivatives designated as cash flow hedging instruments, which comprised unrealized gains or losses related to the Company's interest rate swaps. During 1999, the Company recorded $4.5 million of unrealized gains to other comprehensive income reflecting the increase in the fair value of the interest rate swaps and at December 31, 1999 had a cumulative unrealized gain, net of tax, of $366,000. During 2000, the Company recorded $1.5 million of unrealized losses to other comprehensive income reflecting the decrease in the fair value of the interest rate swaps and at December 31, 2000 had a cumulative unrealized loss, net of tax, of $1.1 million. During 2001, the Company recorded $1 million of unrealized losses to other comprehensive income reflecting the decrease in the fair value of the interest rate swaps and at December 31, 2001 had a cumulative unrealized loss, net of tax, of $2.1 million.

The Company has foreign currency forward contracts to hedge specific transactions denominated in foreign currencies. During 1999, the fair value of the Company's foreign currency forward contracts increased by $6.7 million in unrealized gains. At December 31, 1999, the Company had cumulative unrealized gains, net of tax, of $6.7 million on its foreign currency forward contracts. During 2000, the fair value of the Company's foreign currency forward contracts decreased by $5.3 million. At December 31, 2000, the Company had cumulative unrealized gains, net of tax, of $1.4 million on its foreign currency forward contracts. During 2001, the fair value of the Company's foreign currency forward contracts decreased by approximately $0.1 million. At December 31, 2001, the Company had cumulative unrealized gains, net of tax, of $1.3 million on its foreign currency forward contracts.

Segment Information

Statement of Financial Accounting Standards No. 131, "Disclosures about Segments of an Enterprise and Related Information", ("SFAS 131") establishes standards for reporting information on operating segments in interim and annual financial statements. The Company's chief operating decision-makers review the profit and loss of the Company on an aggregate basis and manage the operations of the Company as a single operating segment. Accordingly, the Company operates in one segment, which is the business of developing, manufacturing and marketing drugs for human health care.

Revenue Recognition and Accounts Receivable

SEC Staff Accounting Bulletin No. 101 ("SAB 101") was effective for the Company in fiscal 2000. SAB 101 provides guidance on the recognition, presentation, and disclosure of revenue in financial statements. SAB 101 establishes the SEC's view that it is not appropriate to recognize revenue until all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the seller's price to the buyer is fixed or determinable; and collectibility is reasonably assured. Further, SAB 101 requires that both title and the risks and rewards of ownership be transferred to the buyer before revenue can be recognized. The Company believes that its revenue recognition policies are in compliance with SAB 101.

Revenues from product sales are recognized when product is shipped and title and risk of loss has passed to the customer. Revenues are recorded net of applicable allowances for returns, rebates and other applicable discounts and allowances. The Company prepares its estimates for sales returns and allowances, discounts and rebates quarterly based primarily on historical experience updated for changes in facts and circumstances, as appropriate.

The Company receives royalty revenues under license agreements with a number of third parties that sell products based on technology developed by the Company or to which the Company has rights. The license agreements provide for the payment of royalties to the Company based on sales of the licensed product. The Company records these revenues based on estimates of the sales that occurred during the relevant period. The relevant period estimates of sales are based on interim data provided by licensees and

analysis of historical royalties paid to the Company (adjusted for any changes in facts and circumstances, as appropriate). The Company maintains regular communication with its licensees in order to gauge the reasonableness of its estimates. Differences between actual royalty revenues and estimated royalty revenues are reconciled and adjusted for in the period which they become known, typically the following quarter. Historically, adjustments have not been material based on actual amounts paid by licensees. There are no future performance obligations on the part of the Company under these license agreements.

Revenue is not recognized in any circumstances unless collectibility is reasonably assured.

Research and Development Expenses

Research and development expenses are comprised of costs incurred in performing research and development activities including salaries and benefits, facilities costs, overhead costs, clinical trial and related clinical manufacturing costs, contract services and other outside costs. Research and development costs, including upfront fees and milestones paid to collaborative partners, are expensed as incurred.

Earnings per Share

The Company calculates earnings per share in accordance with Statement of Financial Accounting Standards No. 128, "Earnings per Share" ("SFAS 128"). SFAS 128 requires the presentation of "basic" earnings per share and "diluted" earnings per share. Basic earnings per share is computed by dividing the net income available to common shareholders by the weighted average number of shares of common stock outstanding. For purposes of calculating diluted earnings per share the denominator includes both the weighted average number of shares of common stock outstanding and the number of dilutive common stock equivalents such as stock options and warrants.

Dilutive securities include options outstanding under the Company's stock option plans. Options to purchase 3.8 million shares, 2.7 million shares and 276,000 shares were outstanding at December 31, 2001, 2000, and 1999, respectively, but not included in the computations of diluted earnings per share because the options' exercise prices were greater than the average market price during the periods. The put warrants sold in connection with the Company's stock repurchase program in 1999 did not have a significant additional dilutive effect. As of December 31, 2001, there were no outstanding put warrants.

Shares used in calculating basic and diluted earnings per share for the periods ending December 31, are as follows:

(in thousands)	**2001**	2000	1999
Weighted average number of shares of common stock outstanding	**148,355**	148,743	149,921
Dilutive stock options	**4,561**	5,859	7,867
Shares used in calculating diluted earnings per share	**152,916**	154,602	157,788

On June 11, 1999, the Board of Directors declared a two-for-one stock split to be effected in the form of a stock dividend of one share of common stock for each share outstanding. The stock dividend was payable on June 25, 1999 to shareholders of record at the close of business on June 11, 1999. All references to number of shares and per share amounts in the financial statements have been restated to give effect to the stock split for all periods presented.

2. FINANCIAL INSTRUMENTS

Financial instruments that potentially subject the Company to concentrations of credit risk are accounts receivable and marketable securities. Wholesale distributors and large pharmaceutical companies account for the majority of the accounts receivable and collateral is generally not required. To mitigate the risk, the Company monitors the financial performance and credit worthiness of its customers. The Company invests its excess cash balances in marketable debt securities, primarily U.S. government securities and corporate bonds and notes, with strong credit ratings. The Company limits the amount of investment exposure as to institution, maturity and investment type.

The average maturity of the Company's marketable securities as of December 31, 2001 and 2000 was 29 months and 30 months, respectively. Proceeds from maturities and other sales of marketable securities, which were primarily reinvested, for the years ended December 31, 2001, 2000 and 1999 were approximately $735 million, $606 million and $1,006 million, respectively. The cost of securities sold is determined based on the specific identification method. Realized gains and (losses) on these sales for the years ended December 31, 2001, 2000 and 1999 were $6.1 million, $(1.8) million and $(1.4) million, respectively.

The following is a summary of marketable securities:

(in thousands)	Fair Value	Net Unrealized Gains	Amortized Cost
December 31, 2001:			
U.S. Government securities	$ 252,838	$ 6,414	$ 246,424
Corporate debt securities	491,227	12,349	478,878
	$ 744,065	$ 18,763	$ 725,302
Marketable securities, noncurrent	$ 12,183	$ --	$ 12,183
December 31, 2000:			
U.S. Government securities	$ 288,214	$ 5,284	$ 282,930
Corporate debt securities	345,461	2,444	343,017
	$ 633,675	$ 7,728	$ 625,947
Marketable securities, noncurrent	$ 71,982	$ 28,174	$ 43,808

The Company uses interest rate swap agreements to mitigate the risk associated with its floating rate debt. The fair value of the interest rate swap agreements at December 31, 2001, representing the cash requirements of the Company to settle the agreements, approximated $3.3 million. The fair value of the interest rate swap agreements at December 31, 2000, representing the cash requirements of the Company to settle the agreements, was approximately $1.7 million. The Company has designated the interest rate swaps as cash flow hedges. There were no amounts of hedge ineffectiveness related to the Company's interest rate swaps during 2001 and 2000, and no gains or losses were excluded from the assessment of hedge effectiveness. The Company records the differential to be paid or received on the interest rate swaps as incremental interest expense. The Company expects approximately $2.5 million in losses related to its interest rate swaps to affect earnings in 2002.

The Company has foreign currency forward contracts to hedge specific transactions denominated in foreign currencies. All foreign currency forward contracts have durations of ninety days to 12 months. These contracts have been designated as cash flow hedges and accordingly, to the extent effective, any unrealized gains or losses on these foreign currency forward contracts are reported in other comprehensive income. Realized gains and losses for the effective portion are recognized with the underlying hedge transaction. The Company assesses hedge ineffectiveness on a quarterly basis and records the gain or loss related to the ineffective portion to current earnings to the extent significant. If the Company determines that a forecasted transaction is no longer probable of occurring, the Company discontinues hedge accounting for the affected portion of the hedge instrument and any related unrealized gain or loss on the contract is recognized in current earnings. The notional settlement amount of the foreign currency forward contracts outstanding at December 31, 2001 was approximately $113.4 million. These contracts had a fair value of $2.0 million, representing an unrealized gain, and were included in other current assets at December 31, 2001.

In 2001, there were no significant amounts recognized in earnings due to hedge ineffectiveness or as a result of the discontinuance of cash flow hedges upon determining that it was no longer probable that the original forecasted transaction would occur. The Company recognized $6.9 million of gains in product revenue and $2 million of gains in royalty revenue for the settlement of certain effective cash flow hedge instruments during the year ended December 31, 2001. These settlements were recorded in the same period as the related forecasted transactions affecting earnings. The Company expects approximately $2 million of unrealized gains at December 31, 2001 to affect earnings in 2002 related to its foreign currency forward contracts.

In 2000, there were no significant amounts recognized in earnings due to hedge ineffectiveness. During 2000, the Company recognized $977,000 in other income as a result of the discontinuance of cash flow hedges upon determining that it was no longer probable that the original forecasted transaction would occur. The Company recognized $12.7 million of gains in product revenue and $3.7 million of gains in royalty revenue for the settlement of certain effective cash flow hedge instruments during the year ended December 31, 2000. These settlements were recorded in the same period as the related forecasted transactions affecting earnings.

In 1999, there were no significant amounts recognized in earnings due to hedge ineffectiveness or as a result of the discontinuance of cash flow hedge accounting because it was probable that the original transaction would not occur. The Company recognized $7.4 million of gains in product revenue and $2.7 million of gains in royalty revenue for the settlement of certain effective cash flow hedge instruments during the year ended December 31, 1999. These settlements were recorded in the same period as the related forecasted transactions affecting earnings.

3. BORROWINGS

As of December 31, 2001, the Company had $14.2 million outstanding under a floating rate loan with a bank (the "Term Loan"). The Term Loan is collateralized by the Company's laboratory and office building in Cambridge, Massachusetts. The Term Loan provides for annual principal payments of $1.7 million in each of the years 1996 through 2004 with the balance due May 8, 2005. The Company also entered into an interest rate swap agreement, with the same bank, fixing its interest rate at 7.5% during the remaining term of the loan, payable semi-annually.

As of December 31, 2001, the Company had $33 million outstanding under a floating rate loan agreement with a bank for financing the construction of its biological manufacturing facility in North Carolina (the "Construction Loan"). The Construction Loan is collateralized by the facility. Payments of $805,000 are due quarterly through 2006 with the balance due in 2007. The Company also entered into an interest rate swap agreement, with the same bank, fixing its interest rate at 7.75% during the remaining term of the loan, payable quarterly.

The Term Loan and Construction Loan agreements include various covenants, including financial covenants, which require the Company to maintain minimum net worth, cash flow and various financial ratios. The Company's long-term debt obligations are carried at face value, which approximates fair market value.

Long-term debt at December 31, consists of the following:

(in thousands)	**2001**	2000
Term Loan due 2005	**$ 14,168**	$ 15,836
Construction Loan due 2007	**33,017**	36,237
	47,185	52,073
Current portion	**(4,888)**	(4,888)
	$ 42,297	$ 47,185

4. CONSOLIDATED BALANCE SHEETS DETAILS

Property and equipment:

	December 31,	
(in thousands)	**2001**	2000
Land	**$ 23,532**	$ 12,349
Buildings	**170,504**	84,119
Leasehold improvements	**65,381**	63,845
Equipment	**249,887**	185,404
Construction in Progress	**218,521**	191,355
Total cost	**727,825**	537,072
Less accumulated depreciation	**171,827**	136,643
	$ 555,998	$ 400,429

Depreciation expense was $36.9 million, $27.8 million and $25.9 million for 2001, 2000 and 1999, respectively.

Accrued expenses and other:

	December 31,	
(in thousands)	**2001**	2000
Royalties and licensing fees	**$ 34,361**	$ 32,188
Income taxes	**90,131**	69,494
Clinical trial costs	**13,099**	24,694
Legal settlement accrual	**20,000**	--
Other	**81,519**	51,888
	$ 239,110	$ 178,264

5. PENSIONS

The Company has a defined benefit pension plan which provides benefits to substantially all of its employees. The Company also has a supplemental retirement benefit plan which covers certain employees. The pension plans are noncontributory with benefit formulas based on employee earnings and credited years of service. The Company's funding policy for its pension plans is to contribute amounts deductible for federal income tax purposes. Funds contributed to the plans are invested in fixed income and equity securities.

The components of net periodic pension cost for each of the three years ended December 31 are summarized below:

(in thousands)	**2001**	2000	1999
Service cost	**$ 3,644**	$ 3,314	$ 2,923
Interest cost	**2,039**	1,799	1,307
Expected return on plan assets	**(1,655)**	(1,258)	(994)
Amortization of prior service cost	**43**	43	43
Amortization of net actuarial loss	**16**	86	22
Net pension cost	**$ 4,087**	$ 3,984	$ 3,301

Reconciliations of projected benefit obligations, fair value of plan assets and the funded status of the plans as of December 31, are presented below:

(in thousands)	**2001**	2000
Change in projected benefit obligation		
Net projected benefit obligation at the beginning of the year	**$ (24,434)**	$ (19,377)
Service cost	**(3,644)**	(3,314)
Interest cost	**(2,039)**	(1,799)
Actuarial loss	**(190)**	(935)
Gross benefits paid	**317**	991
Net projected benefit obligation at the end of the year	**(29,990)**	(24,434)
Change in plan assets		
Fair value of plan assets at the beginning of the year	**15,256**	15,061
Actual return on plan assets	**(1,090)**	(934)
Employer contributions	**5,000**	2,000
Gross benefits paid	**(182)**	(752)
Administrative expenses	**(256)**	(119)
Fair value of plan assets at the end of the year	**18,728**	15,256
Funded status at the end of the year		
Funded status at the end of the year	**(11,262)**	(9,178)
Unrecognized net actuarial loss	**4,295**	1,224
Unrecognized prior service cost	**229**	271
Net amount recognized at the end of the year	**$ (6,738)**	$ (7,683)
Weighted average assumptions at the end of the year		
Discount rate	**7.25%**	7.50%
Expected return on plan assets	**9.00%**	8.00%
Rates of compensation increase	**5.00%**	5.00%

The Company has an unfunded supplemental retirement plan. As of December 31, 2001 the projected benefit and the accumulated benefit obligations were $5.9 million and $4.6 million, respectively. As of December 31, 2000 the projected benefit and the accumulated benefit obligations were $5.7 million and $3.7 million, respectively.

6. OTHER INCOME, NET

Other income, net consists of the following:

		December 31,	
(in thousands)	**2001**	2000	1999
Interest income	**$ 44,128**	$ 42,965	$ 35,407
Interest expense	**(3,954)**	(4,310)	(4,639)
Other income (expense)	**(10,875)**	120,094	(18,003)
Total other income, net	**$ 29,299**	$ 158,749	$ 12,765

Other income (expense) for the period ended December 31, 2001 included realized gains on the sale of certain non-current marketable securities totaling $32.1 million and a $28 million write-down of unrealized losses in certain non-current marketable securities that were determined to be other than temporary. Additionally, the Company reported a charge of $20 million as part of the settlement of the ongoing patent infringement dispute with Berlex. (See Note 9 of the Notes to Consolidated Financial Statements).

Other income (expense) for the period ended December 31, 2000 included realized gains on the sale of certain non-current marketable securities totaling approximately $101.1 million. Additionally, the Company realized gains of approximately $24.1 million upon the acquisition of two of its investees by third parties. Other income (expense) for the period ended December 31, 1999 included a $15 million write-down of unrealized losses in certain non-current marketable securities that were determined to be other than temporary.

As part of its strategic product development efforts, the Company invests in equity securities of certain biotechnology companies with which it has collaborative agreements. As a matter of policy, Biogen determines on a quarterly basis whether any decline in the fair value of a marketable security is temporary or other than temporary. Unrealized

gains and losses on marketable securities are included in other comprehensive income in shareholders' equity, net of related tax effects. If a decline in the fair value of a marketable security below the Company's cost basis is determined to be other than temporary, such marketable security is written down to its estimated fair value with a charge to current earnings. The factors that the Company considers in its assessments include prospects for favorable clinical trial results, new product initiatives and new collaborative agreements.

As part of its assessments at December 31, 2001, the Company assessed the unrealized losses on its investments in Curis Inc. and Targeted Genetics Corporation, and determined that the positive evidence suggesting that these investments would recover to at least the Company's purchase price was not sufficient to overcome the presumption that the current market price of the investments was the best indicator of value at December 31, 2001. Accordingly, the related unrealized losses of approximately $28 million were recognized as other expense in the fourth quarter of 2001. As part of its assessments at June 30, 1999, the Company assessed the unrealized losses on its investments in Creative BioMolecules, Inc, CV Therapeutics, and CuraGen, and determined that the positive evidence suggesting that these investments would recover to at least the Company's purchase price was not sufficient to overcome the presumption that the current market price of the investments was the best indicator of value at June 30, 1999. Accordingly, the related unrealized losses of approximately $15 million were recognized as other expense in the second quarter of 1999.

The Company had no unrealized losses at December 31, 2001 that were determined to be temporary.

7. INCOME TAXES

The components of income before income taxes and of income tax expense (benefit) for each of the three years ended December 31, are as follows:

(in thousands)	**2001**	2000	1999
Income before income taxes:			
Domestic	**$ 298,669**	$ 379,489	$ 253,303
Foreign	**90,828**	107,616	75,713
	$ 389,497	$ 487,105	$ 329,016
Income tax expense:			
Current			
Federal	**$ 119,930**	$ 115,696	$ 112,499
State	**12,911**	11,969	15,587
Foreign	**1,917**	1,098	4,206
	$ 134,758	$ 128,763	$ 132,292
Deferred			
Federal	**$ (16,257)**	$ 25,344	$ (20,863)
State	**(1,687)**	(579)	(2,863)
	(17,944)	24,765	(23,726)
Total income tax expense	**$ 116,814**	$ 153,528	$ 108,566

Deferred tax assets (liabilities) are comprised of the following at December 31:

(in thousands)	**2001**	2000
Tax credits	**$ 25,440**	$ 28,135
Inventory and other reserves	**18,288**	11,532
Other	**380**	380
Deferred tax asset	**44,108**	40,047
Depreciation, amortization and other	**(10,365)**	(24,189)
Unrealized gain on investments	**(6,424)**	(12,956)
Deferred tax liabilities	**(16,789)**	(37,145)
	$ 27,318	$ 2,901

A reconciliation of the U.S. federal statutory tax rate to the effective tax rate for the periods ending December 31 is as follows:

	2001	2000	1999
Statutory rate	**35.0%**	35.0%	35.0%
State taxes	**2.5**	3.2	3.3
Foreign taxes	**(4.2)**	(2.6)	(2.6)
Credits and net operating loss utilization	**(3.4)**	(3.3)	(2.6)
Other	**0.1**	(0.8)	(0.1)
Effective tax rate	**30.0%**	31.5%	33.0%

At December 31, 2001, the Company had tax credits of $25.4 million, most of which expire at various dates through 2016.

As of December 31, 2001, undistributed foreign earnings of non-U.S. subsidiaries included in consolidated retained earnings aggregated $188.3 million, exclusive of earnings that would result in little or no tax under current U.S. tax law. The Company intends to reinvest these earnings indefinitely in operations outside the United States. It is not practicable to estimate the amount of additional tax that might be payable if such earnings were remitted to the United States.

8. RESEARCH COLLABORATIONS

In July 2001, the Company signed a development and marketing collaboration agreement (the "ICOS Agreement") with ICOS Corporation ("ICOS"), under which the Company and ICOS will collaborate worldwide on the development and commercialization of orally active, small molecule LFA-1 antagonists as oral therapeutics for the treatment of inflammatory conditions. Under the terms of the ICOS agreement, the Company paid ICOS a one-time, non-refundable license fee of $8 million, which was charged to research and development expense. Additionally, as part of the agreement, Biogen made available to ICOS a line of credit in the amount of $20 million, of which $17.7 million was available at December 31, 2001. During 2001, the Company provided $2.3 million from the line of credit to ICOS that was charged to research and development expense in

2001 upon the achievement of certain clinical milestones by ICOS. As of December 31, 2001, there were no borrowings outstanding under the credit facility. The Company has committed to providing milestone payments to ICOS upon the achievement of certain future events. If all the milestones were achieved and commercialization were to be successful in excess of specified levels of sales, the Company would be required to pay up to an additional $83.5 million over the life of the agreement.

In September 2000, the Company signed a research and development agreement (the "Eos Agreement") with Eos Biotechnology, Inc. ("Eos"), under which the Company and Eos will collaborate in the research and development of novel targets for antibody and protein therapeutics in the area of breast cancer. Under the Eos Agreement, the Company purchased 1.9 million shares of preferred stock of Eos for $5 million at fair market value. In addition, the Company paid a one-time non-refundable license fee of $6 million, which was charged to research and development expense and acquired certain exclusive, worldwide rights related to breast cancer-specific molecules for the use in the development of new antibody and secreted protein therapeutics. The Company accounts for its investment in Eos, which is included in other assets, using the cost method of accounting, subject to periodic review of impairment. The Company provided Eos with research and development funding of $1.5 million in 2001 and $250,000 in 2000. The Company expects to fund research activities of Eos related to the collaboration of up to $1.5 million, $1.75 million and $1 million in 2002, 2003, and 2004, respectively.

In August 2000, the Company signed a development and marketing collaboration agreement (the "Antegren Agreement") with Elan Pharma International, Ltd, an affiliate of Elan Corporation, plc ("Elan") under which the Company and Elan collaborate in the development, manufacture and commercialization of Antegren® (natalizumab), a humanized monoclonal antibody and alpha 4 integrin inhibitor. Under the terms of the Antegren Agreement, Biogen and Elan will share costs for on-going development activities. The Company paid a one-time non-refundable license fee of $15 million in 2000, which was charged to research and development expense. During 2001, the Company provided $16 million to Elan for certain milestones achieved during the year, which were charged to research and development expense. The Company has committed to paying Elan additional amounts upon the completion of certain future milestones. If all the milestones are achieved, the Company would be required to pay up to an additional $21 million over the life of the agreement.

In October 1997, the Company signed a research and option agreement (the "CuraGen Agreement") with CuraGen Corporation ("CuraGen") under which the Company and CuraGen collaborate in the discovery of novel genes using CuraGen's functional genomics technologies. The Company provided CuraGen with research and development funding of $1.5 million and $1.1 million in 2000 and 1999, respectively. The CuraGen Agreement was terminated in September 2000 and all investments in CuraGen common stock were sold during the year 2000.

In July 1996, the Company signed a collaborative research and commercialization agreement (the "Ontogeny Agreement") with Ontogeny, Inc. ("Ontogeny"), a private biotechnology company, for the development and commercialization of three specific hedgehog cell proteins, a class of novel human proteins, that are responsible for reducing the formation or regeneration of tissue. In August 2000, Ontogeny merged with two other biotechnology companies to form Curis Inc. ("Curis"). As a shareholder in Ontogeny, Biogen received Curis common stock in exchange for the Company's shares in Ontogeny. The Company provided $1 million and $2.8 million of research funding to Ontogeny in 2000 and 1999, respectively. Additionally, the Company provided $1.5 million upon conclusion of the Ontogeny Agreement, which was charged to research and development expense in 2000. At December 31, 2001 the Company retained approximately 308,000 shares of Curis common stock, and included the investment in long-term marketable securities available-for-sale.

In August 1995, the Company signed a collaborative research agreement (the "Genovo Agreement") for the development of human gene therapy treatments with Genovo, Inc. ("Genovo"), a gene therapy research company. Under the Genovo Agreement, the Company acquired 380,000 shares of Genovo Series A Preferred stock for $4.5 million and acquired certain licensing rights. The Company accounted for this investment, which was included in other assets, using the equity method of accounting. The Company recorded its proportion of Genovo's net losses as research and development expense in the amounts of $3.9 million and $7.6 million in 2000 and 1999, respectively. In August 2000, Genovo entered into a merger agreement ("Targeted Merger Agreement") with Targeted Genetics Corporation ("Targeted"). As a shareholder in Genovo, Biogen received Targeted common stock in exchange for the Company's shares in Genovo. Additionally, concurrently with the Targeted Merger Agreement, the Company entered into a development and marketing agreement and a funding agreement (the "Targeted Agreements") for gene therapy research and development in oncology. The Targeted Agreements provide for a $10 million credit facility. Targeted also has an option to sell to the Company an additional $10 million of Targeted common stock at fair value. As of December 31, 2001, there were $10 million of borrowings outstanding under the credit facility and no additional common stock had been purchased by the Company. The Company provided $1 million and $250,000 in research funding to Targeted in 2001 and 2000, respectively. The Company expects to fund research activities of Targeted related to the collaboration of up to $1 million and $750,000 in 2002 and 2003, respectively.

9. COMMITMENTS AND CONTINGENCIES

The Company rents laboratory and office space and certain equipment under noncancelable operating leases. The rental expense under these leases, which terminate at various dates through 2015, amounted to $17.2 million in 2001, $14.9 million in 2000 and $11.9 million in 1999. The lease agreements contain various clauses for renewal at the option of the Company and, in certain cases, escalation clauses linked generally to rates of inflation.

At December 31, 2001, minimum annual rental commitments under noncancelable leases were as follows:

Year	*(in thousands)*
2002	$ 20,493
2003	18,861
2004	18,472
2005	17,599
2006	12,573
Thereafter	57,579
Total minimum lease payments	$ 145,577

The Company is building a large scale manufacturing plant in Research Triangle Park, North Carolina. The Company expects that construction will be completed early in 2002. The project is expected to cost $175 million, of which $172.5 million had been committed for construction costs at December 31, 2001. Additionally, the Company began expansion of its Research Triangle Park, North Carolina complex by constructing a laboratory office building and adding manufacturing capacity. The projects are expected to be completed by the summer of 2003 at a total cost of approximately $138 million. As of December 31, 2001, the Company had committed $87 million for construction costs. The Company is also completing plans to build a fill finish plant in Denmark. The Company expects that construction will commence in 2002 and be completed early in 2005, at an estimated cost of $130 million. At December 31, 2001, $17 million had been committed for construction costs related to the fill finish plant in Denmark.

On July 3, 1996, Berlex Laboratories, Inc. ("Berlex") filed suit against Biogen in the United States District Court for the District of New Jersey alleging infringement by Biogen of Berlex's "McCormick" patent (U.S. Patent No. 5,376,567) in the United States in the production of Biogen's AVONEX product. In November 1996, Berlex's New Jersey action was transferred to the United States District Court in Massachusetts and consolidated for pre-trial purposes with a related declaratory judgment action previously filed by Biogen. On August 18, 1998, Berlex filed a second suit against Biogen alleging infringement by Biogen of a patent which was issued to Berlex in August 1998 and which is related to the McCormick patent (U.S. Patent No. 5,795,779). On September 23, 1998, the cases were consolidated for pre-trial and trial purposes. Berlex sought a judgment granting it damages, a trebling of any damages awarded and a permanent injunction restraining Biogen from the alleged infringement. A hearing on the parties' summary

judgment motions in the case was completed in March 2000. In September 2000, the District Court rendered final judgment in favor of Biogen and against Berlex determining that Biogen's production of AVONEX did not infringe any of the claims of the Berlex patents. Berlex has appealed this decision with the Court of Appeals for the Federal Circuit. Oral arguments were presented by the parties to the Court of Appeals on November 7, 2001 and a decision is expected in the first half of 2002. In January 2002, Biogen and Berlex reached a settlement of the litigation pursuant to which the parties agreed to end the dispute in return for a payment of $20 million from Biogen to Berlex, and the possibility of a second and final payment from Biogen to Berlex if the Court of Appeals were to reverse the District Court's previous ruling granting summary judgment in favor of Biogen. If the Court of Appeals were to rule against Biogen and return the case to the District Court, Biogen believes that the most likely decision would require it to make a second and final payment of $55 million to Berlex. In the event the ruling is significantly adverse to Biogen, the second and final payment to Berlex would be $230 million. As part of the settlement, Biogen and Berlex agreed not to pursue further litigation about these patents. Biogen has recorded a $20 million charge in "Other Income, net" in the fourth quarter of 2001 to account for the first payment to Berlex. The Company has determined that, based on information currently available, the most probable outcome is that no additional payments will be required.

In 1995, the Company filed an opposition with the Opposition Division of the European Patent Office to oppose a European patent (the "Rentschler I Patent") issued to Dr. Rentschler Biotechnologie GmbH ("Rentschler") relating to compositions of matter of beta interferon. In 1997, the European Patent Office issued a decision to revoke the Rentschler I Patent. Rentschler appealed that decision and an oral hearing on the appeal took place in December 2000. At the oral hearing in order to gain reinstatement of the patent, Rentschler narrowed the patent claims so as to claim only a specific cell line. Biogen does not use the specific cell line now claimed. On October 13, 1998, the Company filed another opposition with the Opposition Division of the European Patent Office to oppose a second European patent issued to Rentschler (the "Rentschler II Patent") with certain claims regarding compositions of matter of beta interferon with specific regard to the structure of the glycosylated molecule. A hearing on the Company's opposition previously scheduled for October 2000 has been postponed, and will likely be held in 2002. While Biogen believes that the Rentschler II Patent will be revoked, if the Rentschler II Patent were to be upheld and if Rentschler were to obtain, through legal proceedings, a determination that the Company's sale of AVONEX in Europe infringes a valid Rentschler II Patent, such result could have a material adverse effect on the Company's results of operation and financial position.

10. SHAREHOLDERS' EQUITY

Convertible Exchangeable Preferred Stock

The Company has authority to issue 20,000,000 shares of $.01 par value preferred stock.

Shareholder Rights Plan

In 1989, the Company's Board of Directors declared a dividend to holders of the Company's common stock of rights (the "Old Rights") to purchase shares of Series A Junior Participating Preferred Stock (the "Old Preferred Stock"). Each Old Right entitled the registered holder to purchase from the Company one one-hundredth of a share of Old Preferred Stock upon the terms and subject to the conditions set forth in a Rights Agreement, dated as of May 8, 1989, between the Company and The First National Bank of Boston (the "Old Plan"). The Old Plan and the Old Rights expired on May 8, 1999. Consequently, on April 16, 1999, the Board of Directors declared a dividend to holders of the Company's common stock of one new preferred share purchase right (a "New Right") for each outstanding share of common stock. The New Rights were granted on May 8, 1999 pursuant to a new Rights Agreement, dated May 8, 1999, between the Company and State Street Bank and Trust Company, as Rights Agent (the "New Plan"). Each New Right entitles the registered holder to purchase from the Company one one-thousandth of a share of Series A-1 Junior Participating Preferred Stock, par value $.01 per share ("New Preferred Stock"), at a price of $850 per one one-thousandth of a share of New Preferred Stock, subject to adjustment. Each one one-thousandth of a share of
pg 22 New Preferred Stock has rights, privileges and preferences which make its value approximately equal to the value of one share of the Company's common stock. The New Rights are exercisable only if a person or group acquires 20% or more of the outstanding common stock of the Company or commences a tender or exchange offer, the consummation of which would result in the ownership of 20% or more of the outstanding common stock of the Company. Once the New Rights become exercisable, and in some circumstances if additional conditions are met, each New Right will entitle the Company's shareholders (other than the acquirer) to, among other things, purchase common stock at a substantial discount. Unless earlier redeemed or exchanged by the Company, the New Rights expire on May 8, 2009. The Company is entitled to redeem the New Rights at a price of $.001 per New Right.

The Old Preferred Stock has been eliminated and replaced with the New Preferred Stock. At December 31, 2001, the Company had 250,000 shares of New Preferred Stock authorized for use in connection with the New Plan.

Share Option and Purchase Plans

The Company has several stock-based compensation plans. The Company applies APB Opinion No. 25 "Accounting for Stock Issued to Employees" in accounting for its plans and applies Statement of Financial Accounting Standards No. 123 "Accounting for Stock Issued to Employees" ("SFAS 123") for disclosure purposes only. The SFAS 123 disclosures include pro forma net income and earnings per share as if the fair value-based method of accounting had been used. Stock issued to non-employees is accounted for in accordance with SFAS 123 and related interpretations. Included in compensation expense for the periods ending December 31, 2001, 2000 and 1999 were approximately $829,000, $(249,000), and $7.5 million, respectively, related to stock based compensation plans.

The Company has several plans and arrangements under which it may grant options to employees, Directors and Scientific Board members to purchase common stock. Under the terms of the Company's stock-based compensation plans, approximately 54 million options may be granted. Option grants are typically made under the 1985 Non-Qualified Stock Option Plan and the 1987 Scientific Board Stock Option Plan (the "Plans"). Options under the Plans are granted at no less than 100% of the fair market value on the date of grant. Options generally become exercisable over various periods, typically 5 to 7 years for employees and 3 years for Directors and Scientific Board members, and have a maximum term of 10 years.

Activity under these plans for the periods ending December 31, is as follows:

(shares are in thousands)	**2001**		2000		1999	
	Shares	**Weighted Average Exercise Price**	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding, Jan.1	**16,917**	**$ 31.70**	17,938	$ 24.53	22,376	$ 15.97
Granted	**3,840**	**57.13**	2,731	55.34	3,099	60.24
Exercised	**(2,079)**	**15.48**	(3,250)	11.61	(5,435)	10.45
Canceled	**(921)**	**37.24**	(502)	34.17	(2,102)	22.41
Outstanding, Dec. 31	**17,757**	**$ 38.81**	16,917	$ 31.70	17,938	$ 24.53
Options exercisable	**9,466**		9,093		9,384	
Available for grant	**9,081**		1,578		3,807	
Weighted average fair value of options granted		**$ 31.77**		$ 24.34		$ 26.23

The table below summarizes options outstanding and exercisable at December 31, 2001:

(shares are in thousands)	Options Outstanding			Options Exercisable	
Range of Exercise Price	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
$0.00-$10.00	1,505	1.98	$ 8.26	1,504	$ 8.26
$10.01-$20.00	5,122	4.38	15.90	4,328	15.60
$20.01-$30.00	665	6.04	22.88	428	22.97
$30.01-$40.00	186	6.76	33.20	157	33.13
$40.01-$50.00	2,295	7.02	41.41	1,505	41.16
$50.01-$60.00	5,772	9.30	55.72	648	54.43
$60.01-$70.00	660	8.90	64.29	108	64.25
$70.01-$80.00	1,369	7.95	72.37	706	72.18
Over $80.00	183	7.79	85.93	82	86.13
Total	17,757		$ 38.81	9,466	$ 27.16

The Company also has two employee stock purchase plans covering substantially all of its employees. The plans allow employees to purchase common stock at 85% of the lower of the fair market value at either the date of the beginning of the plan period or the purchase date. Purchases under the plans are subject to certain limitations and may not exceed an aggregate of 1,000,000 shares; no shares may be issued after December 31, 2007. Through December 31, 2001, 465,189 shares have been issued under the stock purchase plans.

If compensation cost for the Company's 2001, 2000 and 1999 grants under the stock-based compensation plans had been determined based on SFAS 123, the Company's pro forma net income, and pro forma diluted earnings per share for the years ending December 31, would have been as follows:

(in thousands, except per share data)	**2001**	2000	1999
Pro forma net income	**$ 224,424**	$ 294,412	$ 196,965
Pro forma diluted earnings per share	**$ 1.47**	$ 1.90	$ 1.25

The fair value of options granted is estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions:

	2001	2000	1999
Expected dividend yield	**0%**	0%	0%
Expected stock price volatility	**44%**	45%	36%
Risk-free interest rate	**5.5%**	6.9%	5.5%
Expected option term in years	**7.5**	5.5	5.6

The effects of applying SFAS 123 in this pro forma disclosure are not indicative of future amounts. SFAS 123 did not apply to awards prior to 1995, and additional awards in future years are anticipated.

Stock Repurchase Program

On December 18, 2000, the Company announced that its Board of Directors had authorized the repurchase of up to 4 million shares of the Company's common stock. The repurchased stock provides the Company with treasury shares for general corporate purposes, such as stock to be issued under employee stock option and stock purchase plans. During 2001, the Company repurchased approximately 1.5 million shares of its common stock at a cost of $88.3 million. Approximately 2.5 million shares remain authorized for repurchase under this program at December 31, 2001.

On February 22, 1999, the Company announced that its Board of Directors had authorized the repurchase of up to 8 million shares of the Company's common stock. The repurchased stock provided the Company with treasury shares for general corporate purposes, such as stock to be issued under employee stock option and stock purchase plans. During 1999, the Company repurchased approximately 3.4 million shares of its common stock at a cost of $197.7 million. During 2000, the Company repurchased approximately 4.6 million shares of its common stock at a cost of $300.2 million, completing this program.

To enhance the 1999 stock repurchase program, the Company sold put warrants to and purchased call options from independent third parties for a total of 4 million shares of which 2.2 million shares were outstanding at December 31, 1999, at a strike price of $49.47. None of the put warrants and call options were outstanding at December 31, 2000 or 2001. Additionally, during 1999 in a separate put warrant program to facilitate its purchase of common stock, the Company sold put warrants for total proceeds of $22.1 million. The Company had put warrants to purchase 1.6 million shares outstanding at December 31, 1999, at an average strike price of $68.99 relating to this put warrant program. None of the put warrants were outstanding at December 31, 2000. The outstanding put warrants permitted a net-share settlement at the Company's option and, therefore, did not result in a put obligation liability on the Company's Consolidated Balance Sheets. The put warrants sold in connection with the Company's stock repurchase program did not have a significant additional dilutive effect.

11. SEGMENT INFORMATION

The Company operates in one segment, which is the business of developing, manufacturing and marketing drugs for human health care. The chief operating decision-makers review the profit and loss of the Company on an aggregate basis and manage the operations of the Company as a single operating segment. The Company currently derives product revenues from sales of its AVONEX product for the treatment of relapsing forms of multiple sclerosis. The Company also derives revenue from royalties on worldwide sales by the Company's licensees of a number of products covered under patents controlled by the Company, including alpha interferon and hepatitis B vaccines and diagnostic products. Revenues are primarily attributed from external customers to individual countries where earned based on location of the customer or licensee. At December 31, 2001, and 2000, respectively, product and royalty revenues from external customers in The Netherlands were approximately 11% and 10% of total revenues. As of December 31, 1999, no material amounts of product or royalty revenue could be attributable to an individual foreign country.

The Company's geographic information is as follows:

(in thousands)	US	Europe	Asia	Other	Total
December 31, 2001:					
Product revenue from external customers	$ 711,143	$ 246,581	$ --	$ 13,870	$ 971,594
Royalty revenue from external customers	45,164	21,911	4,468	223	71,766
Long-lived assets	614,026	9,214	--	79	623,319
December 31, 2000:	US	Europe	Asia	Other	Total
Product revenue from external customers	$ 552,591	$ 199,714	$ --	$ 8,774	$ 761,079
Royalty revenue from external customers	120,578	26,414	16,479	1,902	165,373
Long-lived assets	497,347	6,125	--	113	503,585
December 31, 1999:	US	Europe	Asia	Other	Total
Product revenue from external customers	$ 442,278	$ 173,640	$ --	$ 4,718	$ 620,636
Royalty revenue from external customers	117,182	38,391	15,871	2,355	173,799
Long-lived assets	346,706	20,910	--	131	367,747

The Company received revenue from three wholesale distributors and a specialty distributor in 2001 accounting for a total of 21%, 16%, 14%, and 14% of total product and royalty revenue. The Company received revenue from five unrelated parties in 2000 accounting for a total of 18%, 13%, 12%, 11% and 10% of total product and royalty revenue. The Company received revenue from five unrelated parties in 1999 accounting for a total of 15%, 13%, 13%, 11% and 11% of total product and royalty revenue.

12. QUARTERLY FINANCIAL DATA (UNAUDITED)

(in thousands, except per share amounts)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year
2001					
Total revenues	$ 237,047	$ 260,662	$ 265,193	$ 280,458	$ 1,043,360
Product revenue	219,997	243,217	249,203	259,177	971,594
Royalties revenue	17,050	17,445	15,990	21,281	71,766
Total expenses and taxes	181,387	200,343	205,517	212,729	799,976
Other income (expense), net	16,463	11,533	10,147	(8,844)	29,299
Net income	72,123	71,852	69,823	58,885	272,683
Basic earnings per share	0.49	0.48	0.47	0.40	1.84
Diluted earnings per share	0.47	0.47	0.46	0.39	1.78
2000					
Total revenues	$ 216,848	$ 230,514	$ 233,754	$ 245,336	$ 926,452
Product revenue	174,596	190,009	193,242	203,232	761,079
Royalties revenue	42,252	40,505	40,512	42,104	165,373
Total expenses and taxes	194,506	175,191	198,577	183,350	751,624
Other income, net	99,024	16,737	33,204	9,784	158,749
Net income	121,366	72,060	68,381	71,770	333,577
Basic earnings per share	0.81	0.48	0.46	0.49	2.24
Diluted earnings per share	0.77	0.47	0.44	0.47	2.16

13. NEW ACCOUNTING PRONOUNCEMENTS

In July 2001, the FASB issued SFAS 141, "Business Combinations" and SFAS 142, "Goodwill and Other Intangible Assets." SFAS 141 requires that all business combinations be accounted for under the purchase method only and that certain acquired intangible assets in a business combination be recognized as assets apart from goodwill. SFAS 142 requires that ratable amortization of goodwill be replaced with periodic tests of the goodwill's impairment and that intangible assets other than goodwill be amortized over their useful lives. SFAS 141 is effective for all business combinations initiated after June 30, 2001 and for all business combinations accounted for by the purchase method for which the date of acquisition is after June 30, 2001. The provisions of SFAS 142 will be effective for fiscal years beginning after December 15, 2001, and will thus be adopted by the Company, as required, in fiscal year 2002. The impact of SFAS 141 and SFAS 142 on the Company's financial statements is not expected to be material.

In August 2001, the FASB issued SFAS 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS 144 requires that those long-lived assets be measured at the lower of carrying amount or fair value less cost to sell, whether reported in continuing operations or in discontinued operations. SFAS 144 is effective for financial statements issued for fiscal years beginning after December 15, 2001, and will thus be adopted by the Company, as required, in fiscal year 2002. The adoption of SFAS 144 is not expected to have a material effect on the Company's financial statements.

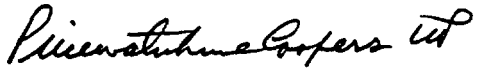
In February 2002, the FASB Emerging Issues Task Force ("EITF") released EITF Issue No. 01-09 ("EITF 01-09"), "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)". EITF 01-09 states that cash consideration (including a sales incentive) given by a vendor to a customer is presumed to be a reduction of the selling prices of the vendor's products or services and, therefore, should be characterized as a reduction of revenue when recognized in the vendor's income statement. The provisions of EITF 01-09 will be effective for fiscal years beginning after December 15, 2001, and will thus be adopted by the Company , as required, in 2002. The Company is currently evaluating the effect on the Company's financial statements of adoption of EITF 01-09.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and

Shareholders of Biogen, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, of cash flows and of shareholders' equity present fairly, in all material respects, the financial position of Biogen, Inc. and its subsidiaries at December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.



/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
January 17, 2002

SENIOR EXECUTIVES AND BOARD MEMBERS

Biogen, Inc. and Subsidiaries

Senior Executives

James L. Vincent
Chairman of the Board

James C. Mullen
President and Chief Executive Officer

Burt A. Adelman, M.D.
Executive Vice President – Research and Development

Cornelis "Kees" Been
Senior Vice President – Oncology Business Unit

Thomas J. Bucknum, Esq.
Executive Vice President – General Counsel, Secretary and Clerk

Frank A. Burke, Jr.
Executive Vice President – Human Resources

Nadine D. Cohen, Ph.D.
Senior Vice President – Regulatory Affairs

Michael Gilman, Ph.D.
Senior Vice President – Research

Sylvie L. Gregoire, Pharm. D.
Executive Vice President – Technical Operations

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Robert A. Hamm
Senior Vice President – Europe, Canada, Africa and Middle East

Hans Peter Hasler
Executive Vice President – Commercial Operations

Peter N. Kellogg
Executive Vice President – Finance and Chief Financial Officer

Toshio Nakata, D. Sc.
President – Biogen Japan, Ltd. and Senior Vice President – Biogen, Inc.

John W. Palmer
Senior Vice President – Corporate Development

Patrick J. Purcell
Senior Vice President – Chief Information Officer

Craig Schneier
Senior Vice President – Strategic Organization, Design and Effectiveness

Board of Directors

James L. Vincent [2,4]
Chairman of the Board
Biogen, Inc.

Alan Belzer [1,4]
President, Chief Operating Officer and Director, Allied-Signal, Inc. (retired)

Harold W. Buirkle [1,2,3]
Managing Director, The Henley Group, Inc. (retired)

Mary L. Good, Ph.D. [2]
Former Undersecretary for Technology, U.S. Department of Commerce; Managing Member, Venture Capital Investors, LLC; Donaghey University Professor at University of Arkansas at Little Rock; Dean, Donaghey College of Information Science and System Engineering

Thomas F. Keller, Ph.D. [1]
R. J. Reynolds Professor and Former Dean, Fuqua School of Business, Duke University

Roger H. Morley [2,3]
Vice President, Schiller International University
Co-Managing Director, R&R Inventions Ltd.;
Former President, American Express Co.

James C. Mullen
President and Chief Executive Officer
Biogen, Inc.

Sir Kenneth Murray, Ph.D. [4]
Biogen Professor of Molecular Biology, Emeritus University of Edinburgh; Fellow of The Royal Society

Eckhard Pfeiffer [2]
President and Chief Executive Officer, Compaq Corporation (retired)

Phillip A. Sharp, Ph.D. [2]
Institute Professor and Director of the McGovern Institute for Brain Research, Massachusetts Institute of Technology; Nobel Laureate

Alan K. Simpson [4]
Director of the Institute of Politics and Visiting Lecturer, John F. Kennedy School of Government, Harvard University; Visiting Lecturer, University of Wyoming; Former U.S. Senator

James W. Stevens [1,4]
Former Chairman, Prudential Asset Management Group

[1] Member of the Finance and Audit Committee
[2] Member of the Compensation and Management Resources Committee
[3] Member of the Stock and Option Plan Administration Committee
[4] Member of the Nominating Committee

BIOGEN, INC. AND SUBSIDIARIES

Offices Worldwide

Biogen, Inc.
14 Cambridge Center
Cambridge, MA 02142
United States
Tel 617 679-2000
Fax 617 679-2617

Biogen Europe
Le Capitole
55 avenue des Champs Pierreux
92012 Nanterre Cedex
France
Tel 33 1 41 37 95 95
Fax 33 1 41 37 24 00

Biogen, Inc. - RTP
P.O. Box 14627
5000 Davis Drive
Research Triangle Park,
NC 27709-4627
Tel 919 941-1100
Fax 919 941-1112

Biogen Australia Pty Ltd.
Level 9
123 Epping Road
North Ryde NSW 2113 Australia
Tel 02 8875 7880
Fax 02 8875 7777

Biogen GmbH
Effingergasse 21
1160 Vienna
Austria
Tel 43 1 48 44 61 3
Fax 43 1 48 44 61 311

Biogen Belgium S.A.
Avenue de Tyras 111
1120 Neder-Over-Heembeek
Belgium

Biogen Canada, Inc.
3-Robert Speck Parkway
Mississauga, Ontario L4Z 2G5
Canada
Tel 1 888 456-2263

Biogen (Denmark) A/S
Lyngbyvej 28
2100 Copenhagen
Denmark
Tel 45 39 16 91 91
Fax 45 39 16 91 99

Biogen Finland Oy
Pakkalankuja 6
SF-0150 Vantaa
Finland
Tel 358 9 77 43 700
Fax 358 9 77 43 70 40

Biogen France S.A.
Le Capitole
55 Avenue des Champs Pierreux
92012 Nanterre Cedex
France
Tel 33 1 41 37 95 95
Fax 33 1 40 97 00 53

Biogen GmbH
Carl-Zeiss Ring 6
85737 Ismaning
Germany
Tel 49 89 99 61 70
Fax 49 89 99 61 71 99

Biogen Japan, Ltd.
AIG Building 9th Floor
1-1-3 Marunouchi
Chiyoda-ku
Tokyo 100-0005
Japan

Biogen International B.V.
Robijnlaan 8
2132 WX Hoofddorp
The Netherlands
Tel 31 23 566 81 81
Fax 31 23 566 81 82

Biogen Norway AS
Karenslyst Allé 8b
N-0277 Oslo
Norway
Tel 47 23 12 06 38
Fax 47 23 12 05 98

Biogen Sweden AB
Kanalvägen 10C/12
S-194 61 Upplands Väsby
Stockholm, Sweden
Tel 46 8 590 041 70
Fax 46 8 590 042 02

Biogen (Switzerland) AG
Seestrasse 200
8700 Kusnacht
Switzerland
Tel 41 191 44 100
Fax 41 191 44 101

Biogen Limited
5d Roxborough Way
Foundation Park
Maidenhead, Berkshire SL6 2UD
United Kingdom
Tel 44 1628 501000
Fax 44 1628 501010

SHAREHOLDER INFORMATION

Biogen, Inc. and Subsidiaries

Corporate Headquarters:

Biogen, Inc.
14 Cambridge Center
Cambridge, MA 02142
Telephone: (617) 679-2000
Fax: (617) 679-2617

Annual Meeting

Friday, June 14, 2002 at 10:00 a.m.
at the Company's offices in 15 Cambridge Center,
Cambridge, MA
All shareholders are welcome.

Market for Securities

Biogen's securities are quoted on the
NASDAQ National Market System.

Common stock symbol: **BGEN**.

As of March 26, 2002 there were approximately 2,514 holders of record of the Company's Common Stock. The Company has not paid any cash dividends on its Common Stock since its inception, and does not intend to pay any dividends in the foreseeable future. The quarterly high and low closing prices of the Company's Common Stock on the NASDAQ National Market System for 2001 and 2000 are as follows:

	High	Low
Fiscal 2001		
First Quarter	$ 74.50	$ 51.31
Second Quarter	$ 66.80	$ 52.03
Third Quarter	$ 61.99	$ 49.45
Fourth Quarter	$ 59.63	$ 52.68
Fiscal 2000		
First Quarter	$ 119.50	$ 69.87
Second Quarter	$ 72.75	$ 49.75
Third Quarter	$ 74.75	$ 53.00
Fourth Quarter	$ 64.25	$ 50.25

SEC Form 10-K

A copy of the Company's annual report to the Securities and Exchange Commission on Form 10-K is available upon written request to the:
Public Affairs Department
Biogen, Inc.
14 Cambridge Center
Cambridge, MA 02142

Transfer Agent

For shareholder questions regarding lost certificates, address changes and changes of ownership or name in which the shares are held, direct inquiries to:

EquiServe
150 Royall Street
Canton, MA 02021
(877) 282 - 1168
www.equiserve.com

Independent Accountants

PricewaterhouseCoopers LLP
160 Federal Street
Boston, MA 02110

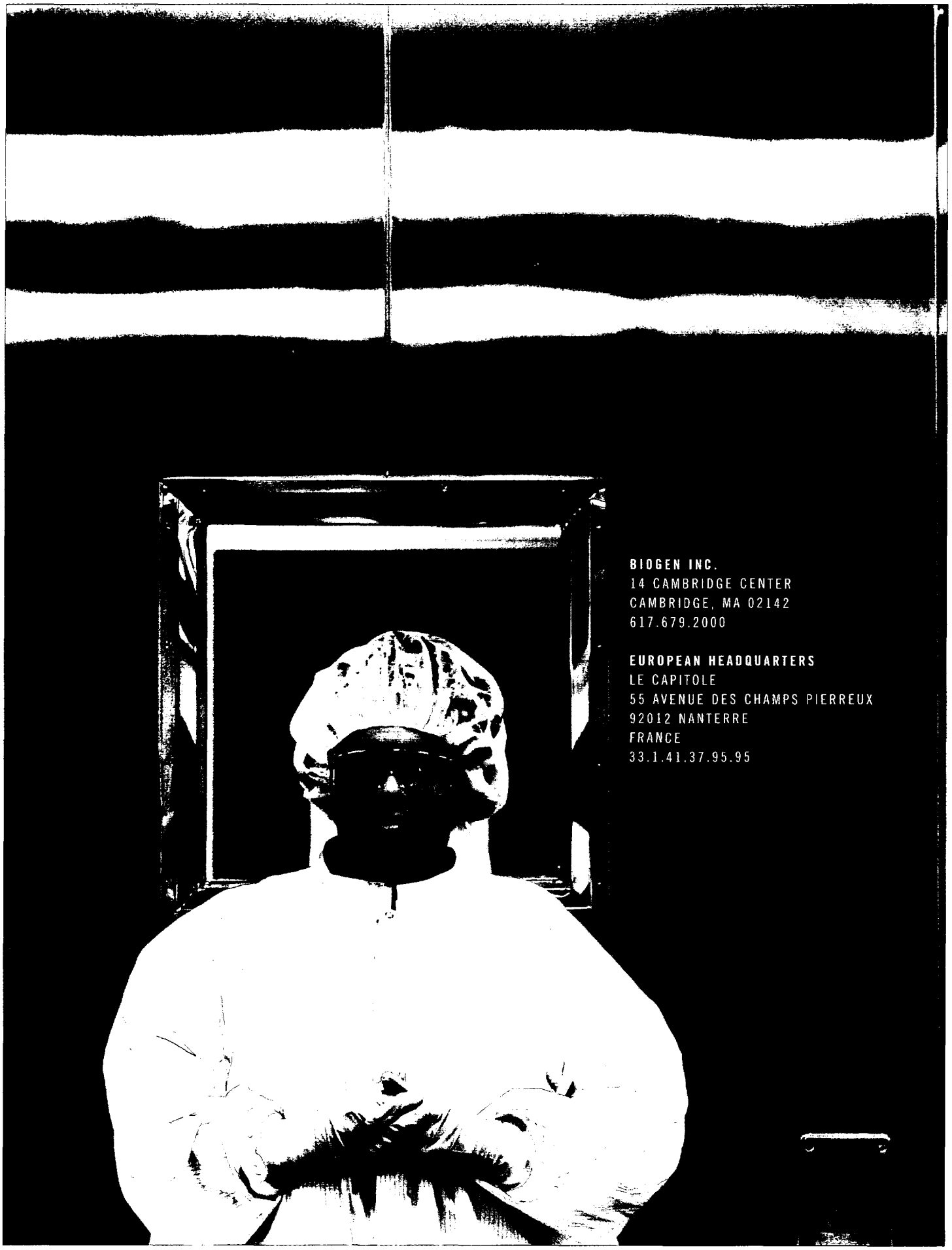
U.S. Legal Counsel

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
One Financial Center
Boston, MA 02111

News Releases

As a service to our shareholders and prospective investors, copies of Biogen news releases issued in the last 12 months are now available almost immediately 24 hours a day, seven days a week, on the Internet's World Wide Web at http://www.prnewswire.com. Biogen news releases are usually posted within one hour of being issued and are available at no cost.

WWW.FOSTERDESIGN.COM



BIOGEN INC.
14 CAMBRIDGE CENTER
CAMBRIDGE, MA 02142
617.679.2000

EUROPEAN HEADQUARTERS
LE CAPITOLE
55 AVENUE DES CHAMPS PIERREUX
92012 NANTERRE
FRANCE
33.1.41.37.95.95