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BIOGEN<sup>®</sup>  
ANNUAL REPORT 2002

Walter Schuler  
AMEVIVE<sup>®</sup> PATIENT

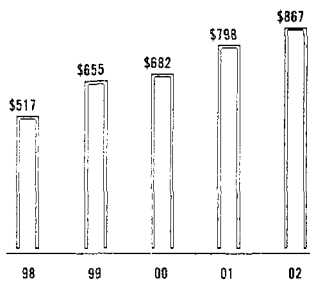
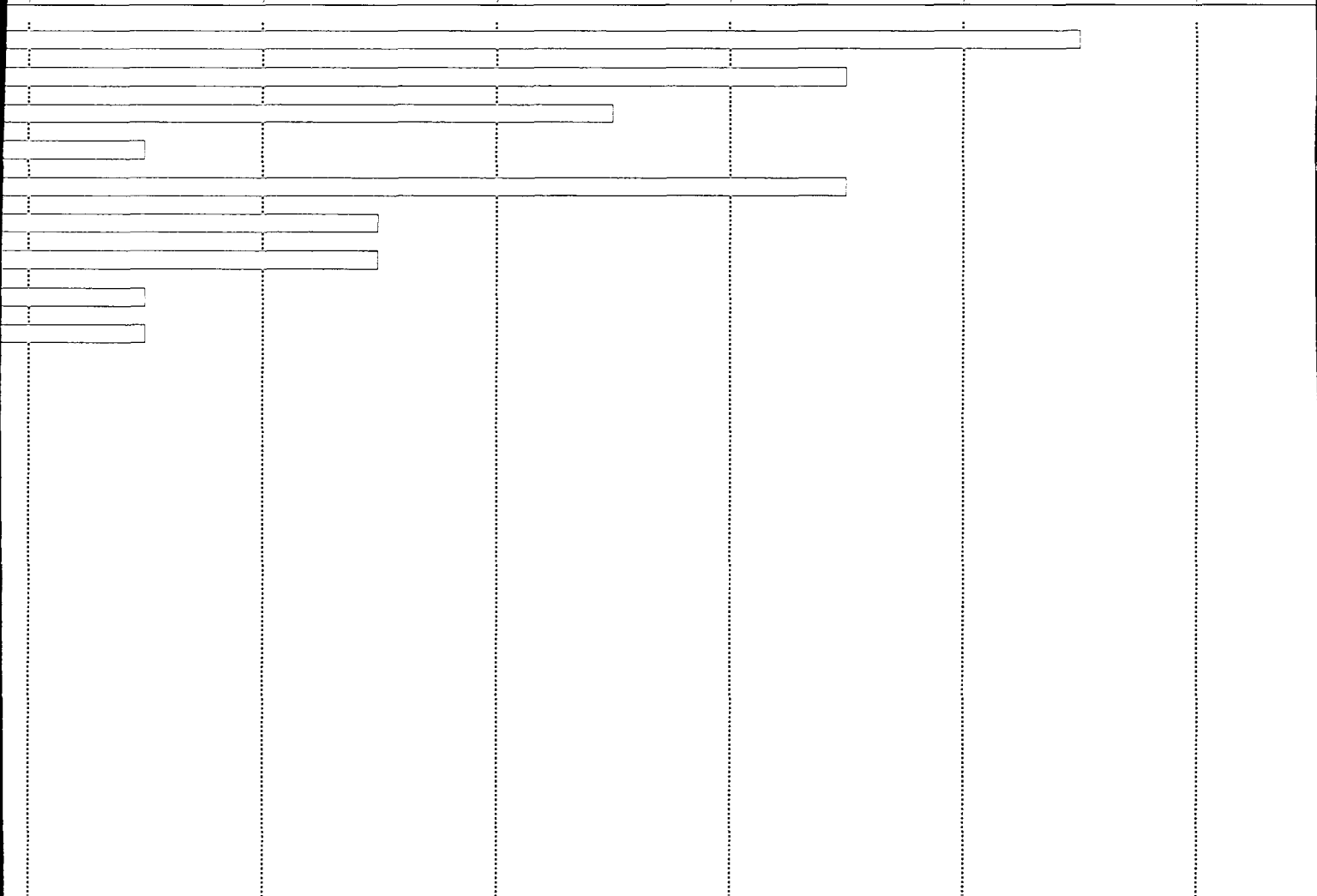
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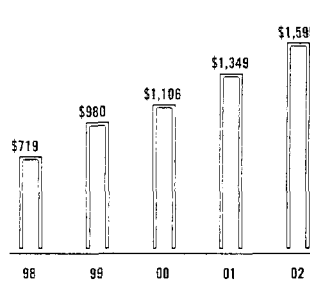
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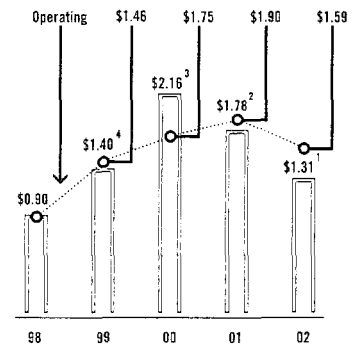
PHASE IV



Cash and Investments



Shareholders' Equity



Diluted Earnings per Share - as reported

- 2 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.
- 3 Includes the effect of non-operational net pre-tax gains of \$101 million or \$0.41 per share.
- 4 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

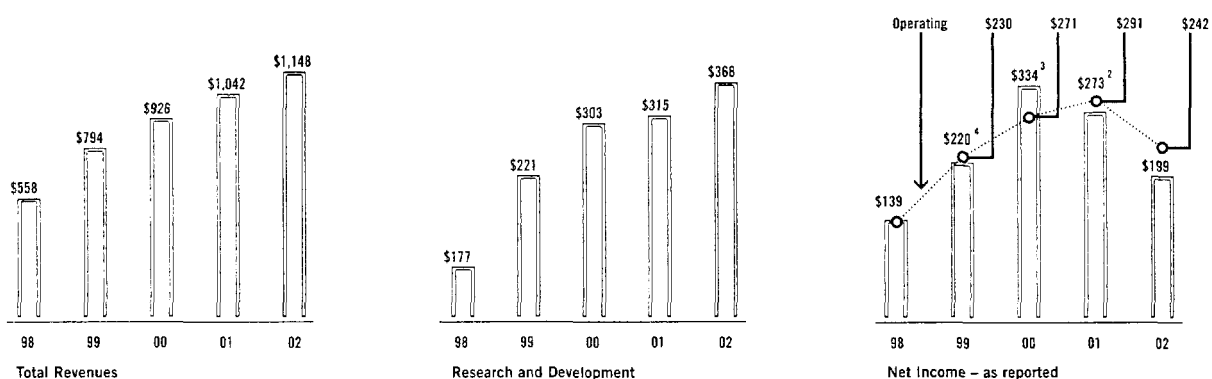
RESEARCH

PRE-CLINICAL

PHASE I

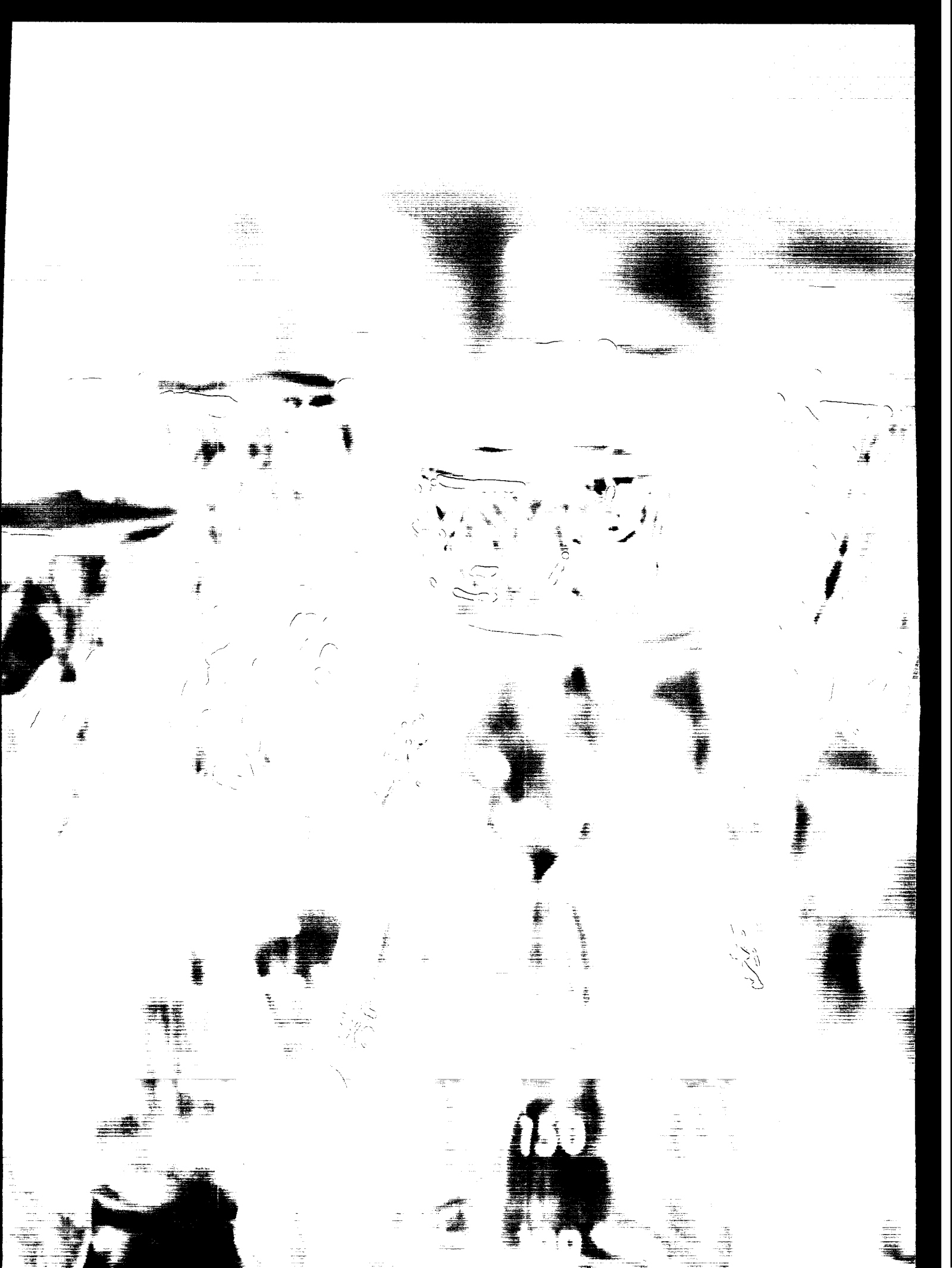
<b>AVONEX® (interferon beta-1a)</b>	MS-Open Label			
	MS-Monosymptomatic (CHAMPS)			
	MS-Secondary Progressive			
	MS-Combination Trials			
<b>AMEVIVE® (alefacept)</b>	Psoriasis			
<b>ANTEGREN® (natalizumab)</b>	MS			
	Crohn's Disease			
<b>ADENTRI™ (adenosine A1 antagonist)</b>	Congestive Heart Failure			
<b>LFA-1</b>	Psoriasis			
<b>Interferon Beta Gene Delivery</b>	Cancer Indications			
<b>Lymphotoxin Beta Receptor Inhibitor</b>	Autoimmune Diseases			
<b>VLA-1 mAb</b>	Inflammation and Fibrosis			
<b>VLA-4 Inhibitor</b>	Inflammation			
<b>LTBR mAb</b>	Solid Tumors			
<b>SELECTED RESEARCH PROGRAMS:</b>				
<b>Neublastin</b>	Neurodegeneration			
<b>BAFF Inhibitor</b>	Autoimmune Diseases			
<b>Sunesis Collaboration</b>	Autoimmune Diseases			
<b>TGFβ Receptor Inhibitor</b>	Fibrosis			
<b>αvβ6</b>	Fibrosis and Cancer			
<b>Cripto</b>	Cancer			
<b>MCP-1 Inhibitor</b>	Autoimmune/Fibrosis			
<b>Nogo</b>	Neurodegeneration			

## BIOGEN FINANCIAL HIGHLIGHTS



Dollars in millions, except for Diluted Earnings per Share

<sup>1</sup> Includes the effect of a \$37 million net gain from the settlement of royalty arbitration, a \$55 million final settlement on a patent infringement suit, a \$15 million charge for the establishment of the Biogen foundation, a \$10 million charge for the write-down of non-current marketable securities, a \$10.5 million reserve for a loan, and \$6 million for severance and post retirement benefits for the former chairman, or \$0.28 per share.



QUALITY OF SCIENCE, QUALITY OF LIFE

AT BIOGEN, WE ARE ALWAYS AWARE OF – AND  
DRIVEN BY – THE VERY REAL CONNECTION THAT  
EXISTS BETWEEN THE QUALITY OF OUR SCIENCE AND  
THE QUALITY OF LIFE OF THE PATIENTS WE SERVE.

OUR RESEARCH EFFORTS ARE DRIVEN, NOT PRIMARILY  
BY INTELLECTUAL CURIOSITY OR A PURE PASSION  
FOR SCIENCE, BUT BY THE HOPE THAT WHATEVER  
WE DEVELOP WILL HAVE A LASTING AND POSITIVE  
IMPACT ON PEOPLE'S HEALTH AND HAPPINESS.

AS ILLUSTRATED BY THE PROFILES OF BIOGEN  
PATIENTS AND SCIENTISTS ON THE FOLLOWING  
PAGES, THIS IS OUR GREATEST MOTIVATION AND  
OUR GREATEST REWARD.

IMPORTANT NOTE TO SHAREHOLDERS: In this Annual Report, we discuss anticipated future financial results, including the potential growth of the market for AVONEX, the ability of AVONEX to maintain its competitive position, the potential market and uses for AMEVIVE, anticipated revenues from AMEVIVE sales, and the Company's expected earnings growth rate and operational efficiency. We also discuss our view of the future of our development programs, including the development, commercialization, and potential efficacy of ANTEGREN, and the potential efficacy and uses of other products in our pipeline. Our statements as to future outcomes are based on our current beliefs and expectations. A number of risks and uncertainties could cause actual results to differ materially. For detailed information on the risks and uncertainties associated with these forward looking-statements and our other activities, see the "Outlook" section in MD&A and the "Risks Associated with Drug Development and Commercialization" section in the business section of our Form 10-K filed with the Securities and Exchange Commission on March 14, 2003. We do not undertake any obligation to publicly update any forward-looking statements.

Please keep in mind that every individual experiences therapy with AVONEX or AMEVIVE differently. A patient's own experience may be different than the ones highlighted in this document.



Tina Cluney     *Jupiter, Florida*

PSORIASIS

AMEVIVE

At age 21, Tina Cluney found herself with a severe case of psoriasis – on her arms, legs, and scalp – that wouldn't go away. It soon took a heavy toll on her confidence, self-esteem, and social life. "People don't realize how difficult psoriasis is to live with, especially at that age," she said. At one point, Tina became so severely depressed that she attempted to burn off her psoriatic lesions.

After receiving treatment for her depression, Tina resolved to give herself one more chance and joined the AMEVIVE clinical trial.

"Within a month of my first AMEVIVE treatment, I began to see a difference," she said. "Eventually, I went from 78 percent coverage to 18 percent. And now, four months after my most recent treatment, none of the lesions have come back."

The difference in Tina's life has been much more than cosmetic. "AMEVIVE gave me hope and an opportunity to get better," she said. "It does change more than your skin."





Roger Bading

*Seguin, Texas*

PSORIASIS

AMEVIVE

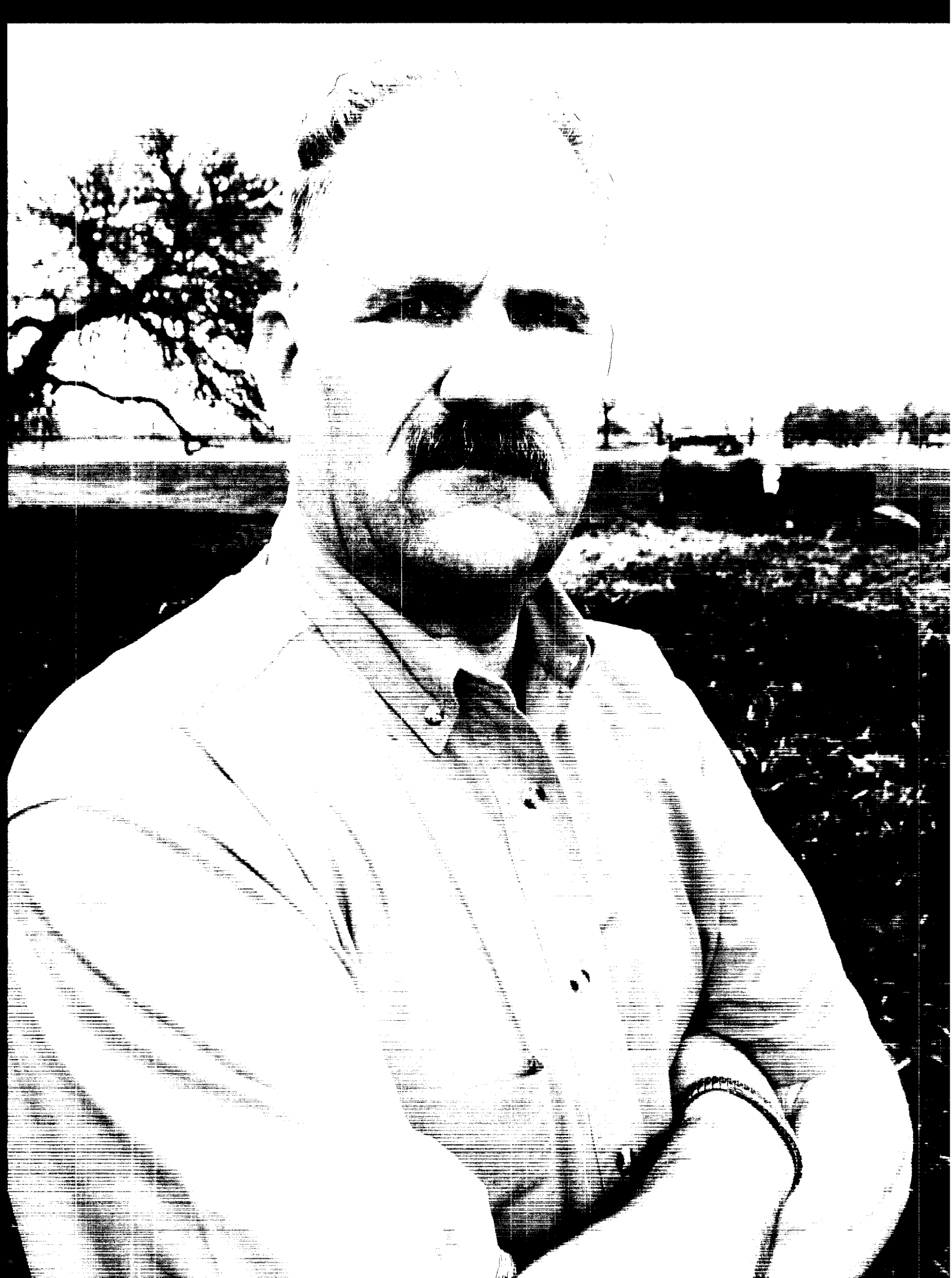
Psoriasis appeared and disappeared throughout Roger Bading's life until his early 30's, when the disease became a chronic problem on his scalp, knees, elbows, and lower back. "I tried different things – steroids, topicals, ultraviolet light," he said. "Sometimes I'd have a little success, but not a great deal. Then in October of 1998, my dermatologist got me into the Biogen clinical trial."

Roger noticed an improvement in his condition shortly after the sixth treatment. "I started out with about 25 percent coverage, and it

went down to less than 10 percent. It was about three months before it recurred to the point of needing another treatment." The part-time rancher and volunteer firefighter has been most impressed by the staying power of AMEVIVE. "Each time, it kicked in a little faster, the results were a little better, and it lasted a little longer," he said. By the time of his most recent treatment, Roger's psoriasis had remained under control for almost six months.









Susan Krieg

Pittsboro, Indiana

MULTIPLE SCLEROSIS

Susan Krieg used to enjoy running simply for exercise. These days, she's running for a cause – raising public awareness of MS and funds to fight the disease.

In 1997, a major MS attack left Susan immobilized with vertigo and double vision. "I had symptoms before, but I tried to ignore them," she said. "What I didn't realize was that the disease was progressing without me even being aware of it."

"During that dark time, I did a lot of soul-searching," she said. "I asked myself, 'What do I want to accomplish in this world?'" She vowed to run a marathon if and when she ever got her mobility back. After beginning treatment with AVONEX, Susan regained her strength and achieved her goal in 2000 when she ran the Chicago Marathon. She and her growing team of runners have since run in five marathons and raised over \$80,000 for the National Multiple Sclerosis Society.

AVONEX

*DISCIPLINE*

*Run the street, not the highway*

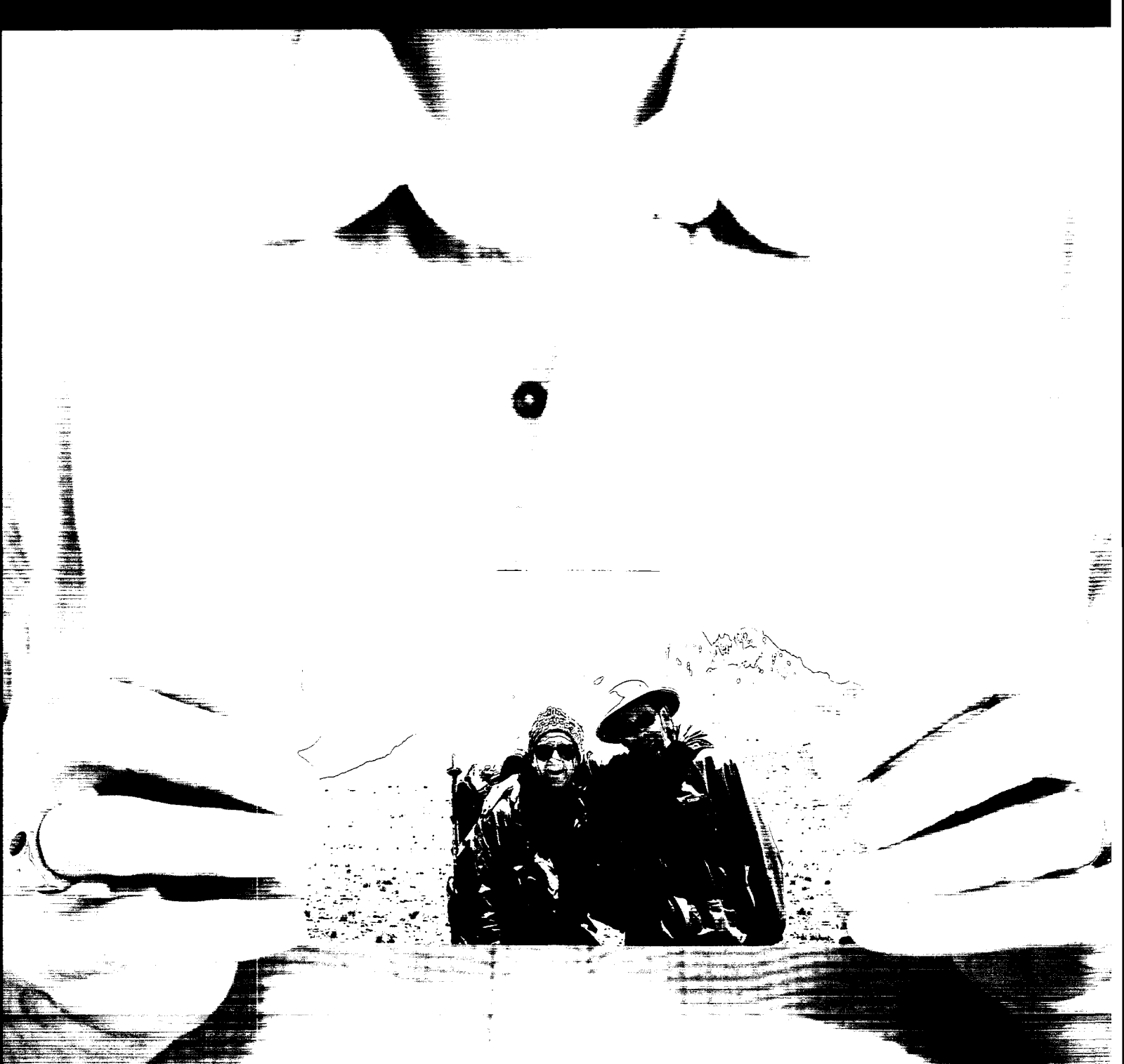
*Run the street, not the highway... Line it!*

 **CITGO**

**13270**



**2002 BOSTON  
MARATHON**



Greg Dunn

*Cedar Rapids, Iowa*

MULTIPLE SCLEROSIS

Fourteen years ago, Greg Dunn suffered an MS attack that caused crushing pain in his head, vision impairment, nausea, and a trip to the emergency room. After receiving the diagnosis, Greg resigned himself to a life of diminished expectations and progressive disability. Then six years ago, Greg received his first AVONEX injection. "Since I've been on AVONEX, I've had no episodes whatsoever," said Greg. "I just had a baseline MRI, and there were no new plaques. And the plaques that were there were smaller."

Encouraged by his progress, Greg fulfilled a dream by participating in the Everest 2000 Environmental Expedition, climbing to 18,000 feet. Then in early 2003, he scaled Mount Kilimanjaro in Tanzania, reaching nearly 19,000 feet. "For me to climb Kilimanjaro is no greater feat than somebody with severe MS walking down the driveway," said Greg. "We all have our own mountains to climb, and it's important to have our own little successes every day."

AVONEX



**BIOGEN®**

## TO OUR SHAREHOLDERS:

In 2000, we decided to make bold investments in our research and development. This was the centerpiece of our strategy to create a strong pipeline of products to sustain our growth through this decade and into the next. By the end of 2002, the payoff for this strategy was becoming more tangible: AMEVIVE® (alefacept) was about to be approved by the FDA for sale in the United States, ANTEGREN® (natalizumab) was well-advanced in Phase III trials for multiple sclerosis, and Crohn's disease and products were advancing in both clinical and pre-clinical development.

In 2002, Biogen took major steps to defend its market strength, further its scientific leadership, broaden its revenue streams, sharpen its strategic focus, and increase its operational efficiency. In doing so, we have effectively laid the groundwork for a new era of growth and profitability.

Revenues for fiscal year 2002 were nearly \$1.2 billion, an increase of 10 percent over 2001. Net income for 2002 was \$199 million, or \$1.31 per share, including \$0.28 per share of net non-operating or unusual charges. Excluding these charges, 2002 operating earnings were \$242 million, or \$1.59 operating earnings per share.

While these numbers indicate a decline in earnings per share compared to 2001's \$1.78 per share, much of the difference can be attributed to increased investments in research and development (R&D) and the launch of AMEVIVE. We should begin to reap the rewards for these investments in late 2003 with expanding margins.

### DEFENDING OUR MARKET POSITION

To accelerate this positive momentum, we must defend our position as the worldwide leader in therapies for multiple sclerosis (MS). One way we're doing that is by continuing to invest in AVONEX® (interferon beta-1a), which in 2002 became the first \$1 billion drug in multiple sclerosis. Despite the entry of new competition into the U.S. market, AVONEX remains the #1 prescribed treatment for MS worldwide, with over 120,000 patients. In fact, AVONEX leads its closest competitor in sales by a margin of almost 2 to 1.

Our AVONEX franchise was further strengthened by three recent accomplishments. In May of 2002, as a result of a decision by the agency overseeing Medicare based on a law passed by Congress, AVONEX became the only MS therapy eligible for Medicare reimbursement. This represents an opportunity to treat between 4,000 and 8,000 patients over the next three years. Days later the European Medicines Agency approved AVONEX for use in the treatment of patients who are at high risk of developing clinically definite multiple sclerosis. Finally, in early 2003, the FDA approved the use of AVONEX to treat patients who have experienced their first MS attack, as indicated by brain scans that show abnormalities characteristic of MS. This means that AVONEX is now the only treatment approved for early use -- after the first MS attack -- in both Europe and the U.S.

#### FURTHERING OUR SCIENTIFIC LEADERSHIP

Of course, the surest way to maintain leadership in MS therapies is to be first to market with the next generation of treatments, which we fully intend to be – and here, too, we had positive news. ANTEGREN, the first in a new class of compounds known as selective adhesion molecule (SAM) inhibitors, is currently in Phase III clinical trials.

Phase II clinical study results published in January of this year in the *New England Journal of Medicine* indicated that ANTEGREN reduced new inflammatory brain lesions by up to 93 percent in patients with relapsing forms of MS compared to a placebo. There was also a reduction of approximately 50 percent in the number of patients experiencing a relapse while being treated with ANTEGREN. An investigational study published in the same issue showed potentially promising results for ANTEGREN on disease remission and improved quality of life for patients with Crohn's disease.

Because ANTEGREN uses a different mechanism of action than current therapies, it attacks MS differently, making it a potentially powerful complement to AVONEX. With the worldwide market for MS therapies expected to grow from approximately \$2.5 billion in 2002 to \$4 billion by 2006, Biogen is well-positioned to strengthen its scientific and market leadership.

#### BROADENING OUR REVENUE STREAMS

While ANTEGREN makes steady progress through the development process, AMEVIVE has already begun to contribute new revenue to Biogen, having been approved by the FDA in January of 2003 for the treatment of adults with moderate-to-severe chronic plaque psoriasis who are candidates for phototherapy or systemic therapy. For the Biogen employees who have devoted their professional lives to researching and developing this breakthrough, the FDA's approval of AMEVIVE represents the culmination of 15 years of commitment and hard work. I congratulate them and the many people who were involved in the approval process for their outstanding efforts in bringing AMEVIVE to market.

While the approval of AMEVIVE in the U.S. is exciting news for Biogen, it is even more thrilling for the millions of people who suffer from psoriasis. For many of them, AMEVIVE offers the opportunity to live their lives, perhaps for the first time, unconstrained by psoriasis or its treatment. As you'll read elsewhere in this report, AMEVIVE is already having a major impact on the quality of life of the psoriasis sufferers who participated in its clinical trials. Some patients have seen the benefit of these changes for months after therapy is completed. In addition, the unique mechanism of action of AMEVIVE may hold promise to treat a range of other T-cell mediated autoimmune diseases, such as rheumatoid arthritis, psoriatic arthritis, and scleroderma. In conjunction with our investigators, we continue to study use of AMEVIVE in these disease areas.

There are 1.5 million people in the U.S. with moderate-to-severe psoriasis. If we achieve a modest market penetration of between 5 percent and 10 percent, we can expect to grow our AMEVIVE revenue to \$500 million in 2005. Ultimately, we hope to develop AMEVIVE into a blockbuster in psoriasis and other T-cell mediated immune diseases.

#### SHARPENING OUR STRATEGIC FOCUS

While many of our efforts in 2002 were devoted to new products, we also made progress in sharpening our strategic focus. To maintain Biogen's scientific and market leadership, it is essential that we invest our energies and resources on the most promising therapeutic opportunities.

After analyzing our core competencies, and the commercial opportunities before us, the management team and I determined that the interests of Biogen, its shareholders, and patients alike would be best served by pursuing a therapeutic franchise strategy with three areas of focus: neurology, with AVONEX and ANTEGREN; dermatology, with AMEVIVE and the LFA-1 antagonist IC747; and rheumatology, with AMEVIVE, ANTEGREN, and numerous pipeline products. Our commercial intentions for the next few years will focus on these areas.

We chose these three areas because Biogen has proven expertise and significant competitive strengths in all of them and many products under development. They are also areas where we believe our unique model of patient and physician education and support are an important competitive advantage.

Focusing primarily on these three areas offers several advantages to Biogen. By allowing us to concentrate our resources more effectively, we will be able to leverage our expertise better, bring promising new treatments to market faster, and market them more effectively. It will also enable us to be more agile and responsive to patient needs, as well as changes in the marketplace.

In contrast to our nearer-term commercial focus, the development of innovative products requires a decade or more. In selecting our research focus areas of immunology, fibrosis, neurobiology and oncology, we challenged our researchers to look over the horizon and beyond.

Over the next few decades, we expect to see exciting advances in immunology. This area has been a core strength for Biogen over the past 15 years, and we will continue to bolster our leadership in this area. Closely aligned with our research in immunology is our research in fibrotic diseases that are often the end result of chronic inflammatory processes caused by an immune system dysfunction. We have several programs with lead molecules in pre-clinical development.

Neurodegenerative diseases, such as amyotrophic lateral sclerosis (also known as Lou Gehrig's disease), chronic inflammatory demyelinating polyneuropathy, and peripheral neuropathies, are another area with tragic consequences for individuals and society. Biogen researchers began work on neurodegenerative diseases several years ago, and we remain excited about the prospects for pioneering treatments over the next several decades.

Several years ago, we selected oncology as an area of focus. We believed we were well-positioned to make contributions in cancer research because of our strengths in biology. And, indeed, we developed some exciting product opportunities in only a few years. In an effort to expedite the delivery of significant therapies, we embarked on a collaboration with IDEC Pharmaceuticals to co-develop three oncology therapeutics from Biogen's early-stage development candidates. IDEC's position as a leader in the development and commercialization of oncology products will help move these unique therapies forward more rapidly. Above all, our collaboration with IDEC demonstrates once again the productivity of Biogen's discovery research and our passion to develop therapies that improve the quality of people's lives.

#### INCREASING OUR OPERATIONAL EFFICIENCY

We expect our new strategic focus will also result in greater operational efficiency – lowering operating costs and reducing time to market. In addition, starting in 2003, we expect to begin reaping the benefits of having multiple products on the market: not only an additional revenue stream, but also increased manufacturing productivity. The net effect of all of these factors will be a greater ability to create sustainable value for you, our shareholders.

#### SETTING NEW GROWTH AND PROFITABILITY GOALS

Confident in our strategy and excited by the prospects of our new products, we have set a goal of reaching an average earnings growth rate of 20 percent over the next three years. We intend to achieve this goal by growing our revenues from nearly \$1.2 billion to \$2 billion and increasing net margin, as we reap the benefits of AMEVIVE sales and R&D expenses as a percentage of sales decrease modestly.

#### EMBARKING ON NEW COLLABORATIONS

While much of this growth will be organic and internally generated, our strategy also calls for the expansion of our neurology, dermatology, and rheumatology franchises through new commercial collaborations that leverage Biogen's global infrastructure – much as we have done with Elan Corporation in developing ANTEGREN, and ICOS Corporation with the LFA-1 antagonist IC747.

#### BUILDING FOR GROWTH

To accommodate our expected growth, we opened two new world-class facilities in North Carolina in 2002 – a \$173 million, large-scale manufacturing plant (LSM) and a 150,000-square-foot laboratory and office building. The LSM, a 250,000-square-foot manufacturing facility with 120,000 liters of bioreactor capacity, was recently named a Project Excellence Award winner by California-based Fluor Corporation. It gives Biogen one of the largest biologic manufacturing capacities in the world and provides the flexibility to produce multiple products in our pipeline.





This project required over 2.5 million man-hours of construction to complete. I am proud to say that this was accomplished with an outstanding safety record. Strong environmental health and safety (EHS) practices are good business – and they protect our employees, communities and the environment. With that in mind, we've woven EHS programs and hazard-prevention activities into all aspects of our business.

#### CLOSING THOUGHTS

Many of our accomplishments in 2002 would not have come to pass without the vision and commitment of Jim Vincent, who stepped down as Biogen's Chairman of the Board in July. During his 16-year tenure with the company, Jim's sure and steady leadership helped transform Biogen into a \$1 billion industry leader. As a result of his years of service, Biogen is well-prepared and fully equipped to advance to the next level as a multi-product, global biotechnology company.

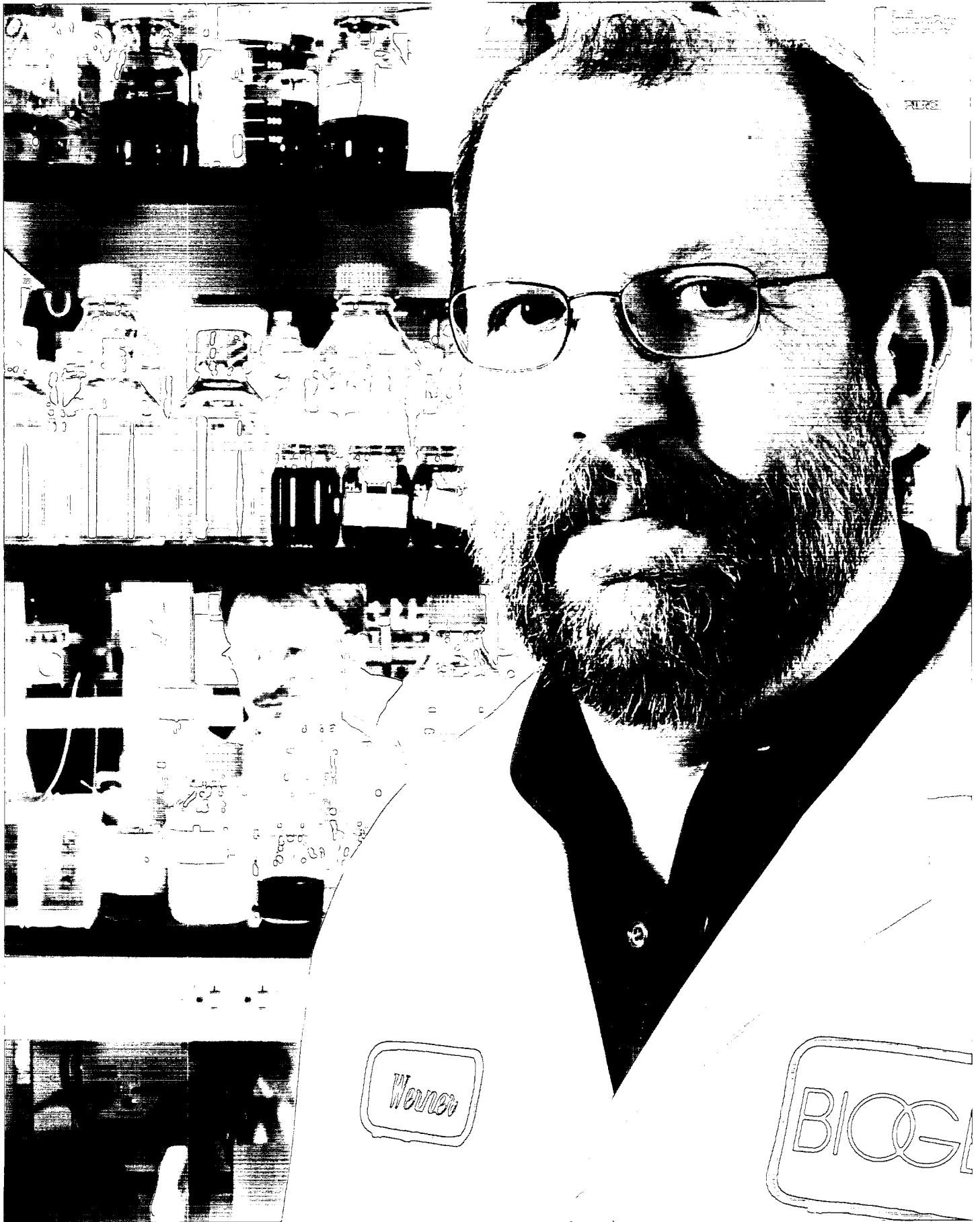
Biogen has entered 2003 re-energized by its accomplishments in 2002, sharply focused in its strategy, and poised for more aggressive, sustained growth. Our high degree of confidence and our palpable sense of excitement are, above all, testament to the quality of Biogen's science and its people. I'd like to thank everyone at Biogen – in particular, our research team and my management colleagues – for their outstanding work. I'd also like to thank you, our shareholders, because your support has made it all possible.

Sincerely,

A handwritten signature in black ink that reads "James C. Mullen". The signature is written in a cursive, flowing style.

James C. Mullen  
Chairman and Chief Executive Officer

PSORIASIS



**Werner Meier**  
*Director of Validation Biochemistry*

Werner Meier has been involved in the development of AMEVIVE since 1988, shortly after the LFA-3 gene was first cloned. His initial work as a protein chemist revolved around Biogen's efforts to express the LFA-3 protein.

"Looking at it in hindsight, it was truly fascinating because it was a true story of bench-to-bedside," he said. "We started with a biological pathway, and we didn't really know how we would exploit it from a patient point of view, but we knew that if we could manipulate it, it would be good for at least some people suffering from an autoimmune disease."

Over the next 15 years, Werner continued his work as a protein chemist on the project team, trying to unlock the LFA-3 pathway and the mysteries of the molecule that would become AMEVIVE.

"The goal that we all have here is to make a drug that will ultimately help patients. That's what makes a lot of us tick. So it was exciting to see how well-tolerated it was in the safety trials. And when it was finally given to psoriasis patients, it was incredibly exciting to see the response."

"I was in my local pharmacy about six months ago, and I saw somebody getting their prescription of AVONEX, and it was really exciting to actually see somebody who's really using it."

As director of validation biochemistry, Werner is now heading up the group responsible for facilitating the transition of research projects into development. "Our goal is to make the transition simpler and faster so that promising treatments like AMEVIVE can make an impact on patients' lives sooner."

### D e r m a t o l o g y

Biogen's dermatology franchise made major progress in 2002 as AMEVIVE accelerated its progress toward FDA approval for its use in the treatment of moderate-to-severe chronic plaque psoriasis. According to the American Academy of Dermatology, psoriasis affects 4.5 million adults in the United States and about 80 million people worldwide. Although individuals with mild psoriasis can often control their disease with topical agents, more than 1 million patients worldwide require ultraviolet or systemic immunosuppressive therapy.

In late January of 2003, 15 years of research and development came to fruition when AMEVIVE became the first biologic psoriasis treatment approved by the FDA. Biogen expects AMEVIVE to deliver \$85 million in sales in 2003 as it initially targets adults in the U.S. with moderate-to-severe psoriasis who are candidates for systemic or phototherapy.

The availability of AMEVIVE for patients in Europe will unfortunately be delayed. The application was recently withdrawn to allow submission of additional clinical data. Psoriasis patients' need for new therapies in Europe and elsewhere in the world continues to be high. Biogen remains committed to helping them.

Biogen launched two Web sites in support of AMEVIVE. AMEVIVE.com provides comprehensive information for both patients and healthcare professionals to help them better understand AMEVIVE and how it works. Visitors can request a free support kit, including a videotape and a booklet, read patient case studies, and get all the facts they need to evaluate AMEVIVE as a prospective treatment option with their physicians. The other Web site, psoriasis-support.com, is an in depth online resource designed to educate people about psoriasis and its treatment. It includes information from the National Psoriasis Foundation; articles and tips from a variety of sources; community resources, such as a message board and "buddy system," that foster information-sharing among psoriasis sufferers; and a continuously updated news section that keeps visitors apprised of the latest scientific developments and treatment options.

In addition to exploring new indications for AMEVIVE in the treatment of other autoimmune diseases, Biogen scientists are exploring other potential treatments for psoriasis. These include IC747, a small molecule Biogen is developing with ICOS Corporation. IC747, currently in Phase II trials, interferes with T-cell activation and leukocyte trafficking by inhibiting the binding of LFA-1 (Leukocyte Function-associated Antigen-1) to its ligand.



MULTIPLE SCLEROSIS



**Susan Goelz**  
*Principal Scientist*

For the past five years, Susan Goelz has acted as the liaison between the science organization and other areas of Biogen's business, such as regulatory affairs and clinician education. Her work demonstrates a key truth about any biotech medication: FDA approval is only one step in a larger, ongoing process of understanding and sharing knowledge about what a medication can do, how it works, and how best to use it.

"Our real mission is to figure out the best way to treat MS," she said. That includes making sure that both Biogen sales people and neurologists have the latest information about MS from a cell biology perspective, including an understanding of the mechanism of how interferon works in MS.

"Cytokine drugs are different from traditional drugs, which are generally blockers, and therefore work differently," she explained. "That means the dosing paradigms are not the same as with traditional drugs and very often, more isn't better." By sharing this kind of information with clinicians, Susan is able to show them how to achieve the best results from AVONEX, and in the process, what makes AVONEX the leading therapy in MS.

Susan's work as a liaison also extends to the academic and scientific communities, coordinating and directing as many as 20 AVONEX studies at any given time. "In order to optimize the treatment of MS, we're always trying to take the next step forward by doing basic science," she said. "One of the things we're trying to understand now is interferon's role in repair of the brain after the inflammation has died down." Other studies are focused on the potential use of AVONEX in treating other diseases.

For someone who first started working with interferon 10 years ago, the subject has not lost its fascination. "Interferons are wonderful molecules," she said. "These are natural proteins that can help with cancer, hepatitis, and immune-mediated disorders. They're fabulous molecules and fascinating to study."

## Neurology

For Biogen, 2002 was a year of both milestones and challenges in neurology. AVONEX became the world's first \$1 billion drug in MS last year, and we remain confident that AVONEX, based on its profile of long-term efficacy, safety, and convenience, will maintain its established position as the leading MS therapy in the world.

That position was further strengthened in May. First, Biogen was notified that Medicare will provide coverage for MS patients treated with AVONEX as part of physician services. Later that month the European regulatory agency for pharmaceuticals, approved AVONEX for use in the treatment of patients who are at high risk of developing clinically definite multiple sclerosis. In countries throughout Europe, AVONEX can now be prescribed after a patient has had one MS attack and when alternative diagnoses have been excluded. AVONEX is the only drug to carry this approved indication of use.

Biogen received more good news in November, when the FDA approved a label change that lowers the rate of occurrence of neutralizing antibodies to 5 percent from the original label rate of 24 percent, based on recent studies. The lower rate of antibodies is believed to be linked to improvements made in Biogen's manufacturing processes.

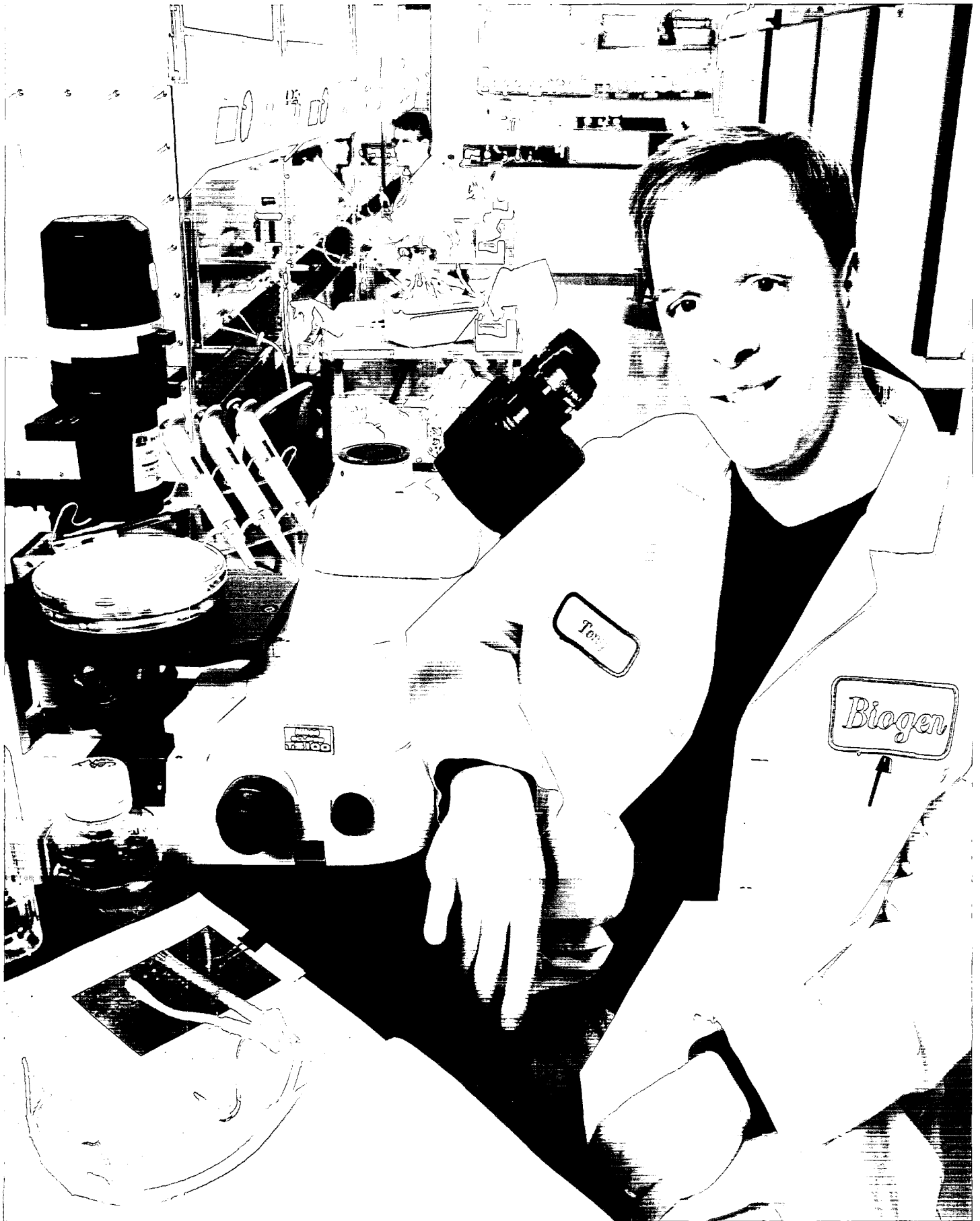
As AVONEX continued to lead the world in MS treatment, the first of a new generation of MS treatments – ANTEGREN – continued its progress through clinical trials. In early January of 2003, Biogen and its partner Elan Corporation announced the results of a study published in the *New England Journal of Medicine*. In the study, ANTEGREN reduced new inflammatory brain lesions and relapses in patients with relapsing forms of MS.

Based on the potentially promising findings in Phase II, Biogen and Elan are now collaborating on two Phase III trials in MS, both of which are fully enrolled. One trial is designed to determine whether ANTEGREN is effective in slowing the rate of disability in MS and reducing the rate of clinical relapses; the second trial is designed to determine whether the treatment of MS with ANTEGREN in combination with AVONEX is more effective than AVONEX treatment alone in slowing the rate of disability in MS and in reducing the rate of clinical relapses.

Finally, as part of Biogen's ongoing commitment to keeping patients and healthcare professionals informed about MS, its treatment, and research results, we launched an enhanced version of the MSActiveSource<sup>SM</sup>.com Web site in 2002. The premier destination on the Internet for information on MS, the site serves nearly half a million Americans whose lives are touched by the disease. This latest version of the site features the one-of-a-kind MS Learning System<sup>™</sup> for current, rich, scientific information on the disease, a helpful "Living with MS" section, and resources for its growing MSActiveSource<sup>SM</sup> interactive community.







**Tony deFougerolles**  
*Principal Scientist*

In 1998, Tony de Fougerolles, a Harvard- and Cambridge-trained scientist doing post-doctoral work in the adhesion field, came to Biogen to give a talk on the subject. He ended up taking a job.

"What attracted me to Biogen, besides the world-class people, was the ability to do translational research – to do work that could translate into actual products that would help people," he said. Biogen also offered Tony an opportunity to explore areas he could not have otherwise. "We can answer very complicated biological questions in vivo, which the typical academic lab wouldn't be able to do because of the expense."

Since joining Biogen, Tony has been leading the inflammation and immunology research effort for the VLA-1 program. "VLA-1 looks to have promise across a whole range of diseases," he said. "That makes it very exciting because if the drug makes it to market, we're going to be able to help people with a whole range of conditions – for instance, those with psoriasis, Crohn's disease, and rheumatoid arthritis."

As a scientist, Tony finds the Biogen work environment a stimulating one. "Biogen's focus on in vivo biology makes it relatively unique," he said. "This approach brings together a whole range of fields. You're not just looking at a particular molecule or pathway in isolation. This also speeds up the process of research because we can determine right away whether or not something has potential."

"Without a doubt, I've been able to accomplish a lot more within Biogen than I would have had I stayed in the academic world. I've been able to address questions I couldn't before."

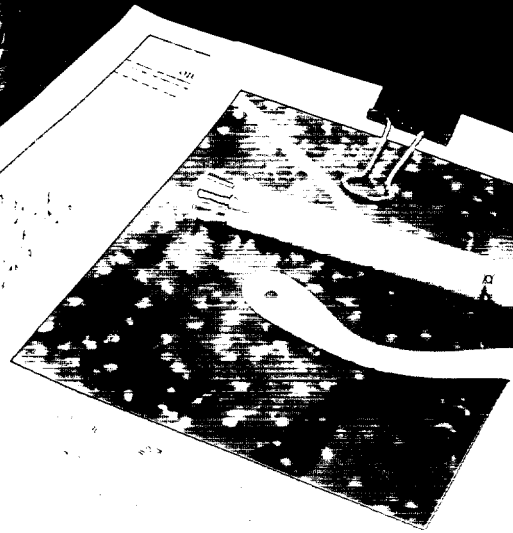
## **R h e u m a t o l o g y**

All of Biogen's major product assets – AVONEX, AMEVIVE, and ANTEGREN – are designed to affect the interaction of critical cells and inflammatory pathways within the human immune system. These products have demonstrated clinical benefit in a number of autoimmune diseases, including MS, psoriasis, and Crohn's disease. These product successes have encouraged us to pursue other therapeutic areas in which autoimmune disease is prominent. The specialty of rheumatology encompasses such progressive and incurable conditions as rheumatoid arthritis, psoriatic arthritis, systemic lupus erythematosus, and scleroderma.

Because of Biogen's leadership in the study and treatment of autoimmune diseases, rheumatology is a natural fit within our strategic focus. Biogen is actively exploring ways in which AMEVIVE, ANTEGREN, and other products in our robust product pipeline may be applied to the treatment of rheumatological diseases.



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# FINANCIALS

## 2002

### **Biogen, Inc. and Subsidiaries**

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## SELECTED FINANCIAL DATA

Biogen, Inc. and Subsidiaries

(in thousands, except per share amounts)

Years Ended December 31,	2002	2001	2000	1999	1998
Product revenues	\$ 1,034,357	\$ 970,546	\$ 760,292	\$ 620,636	\$ 394,863
Royalty revenues	114,007	71,766	165,373	173,799	162,724
Total revenues	1,148,364	1,042,312	925,665	794,435	557,587
Total costs and expenses	851,727	682,114	597,309	478,184	366,948
Income before income taxes	276,595	389,497	487,105	329,016	210,193
Net income	199,148	272,683	333,577	220,450	138,697
Diluted earnings per share	1.31	1.78	2.16	1.40	0.90
Cash, cash equivalents and short-term marketable securities	867,109	798,107	682,412	654,539	516,914
Total assets	2,006,988	1,721,046	1,431,856	1,277,973	924,715
Long-term debt, less current portion	37,410	42,297	47,185	52,073	56,960
Shareholders' equity	1,595,421	1,348,832	1,106,402	979,530	718,613
Shares used in calculating diluted earnings per share	151,930	152,916	154,602	157,788	154,270

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

Biogen, Inc. and Subsidiaries

## Overview

Biogen, Inc. ("Biogen" or the "Company") is a global biopharmaceutical company that develops, manufactures and markets novel human therapeutic products. Biogen's primary focus is developing pharmaceutical products that meet unmet medical needs, particularly in its core therapeutic areas of neurology, dermatology and rheumatology. Biogen currently sells AVONEX® (Interferon beta-1a) for the treatment of relapsing multiple sclerosis ("MS") and, commencing in 2003, AMEVIVE® (alefacept) for the treatment of adult patients with moderate-to-severe chronic plaque psoriasis who are candidates for systemic therapy or phototherapy. Biogen also receives revenues from royalties on sales by our licensees of a number of products covered under patents that Biogen controls. In addition, Biogen has a pipeline of development stage products and a number of research programs in our core therapeutic areas and in other areas of interest.

## RESULTS OF OPERATIONS 2002 AS COMPARED TO 2001

### Revenues

Total revenues consist of the following:

(in millions)

December 31,	2002	2001	% Change
Product revenues*			
United States	\$ 743.5	\$ 710.0	5%
Rest of world	290.9	260.5	12%
Total	1,034.4	970.5	7%
Royalty revenues	114.0	71.8	59%
Total revenues	\$ 1,148.4	\$ 1,042.3	10%

\* Certain items in prior years' product revenues and selling, general & administrative expenses have been reclassified to conform to the current year's presentation as a result of the FASB Emerging Issues Task Force ("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)". See "Critical Accounting Estimates."

### Product Revenues

Product revenues from AVONEX represented approximately 90% of the Company's total revenues in 2002 as compared to 93% in 2001. Product revenue growth in 2002 was attributable to an increase in the sales price in the United States ("U.S.") and an increase in sales volume of AVONEX worldwide. U.S. product revenue growth was affected by increased competition and a softening of the MS marketplace growth rate in the U.S. Product revenues outside of the U.S. increased 12% compared to 2001, consisting of a 13% increase based on higher sales volume in 2002, offset by a 1% decrease from the impact of foreign exchange rate changes. The Company expects sales from AVONEX outside the U.S. 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 U.S. from existing and new MS treatments that may impact sales of AVONEX. The Company expects future growth in AVONEX revenues to be dependent to a large extent on the Company's ability to compete successfully. Biogen also expects that future AVONEX sales may be affected by slower growth in the MS market. See "Outlook - Competition" and "Outlook - Dependence on AVONEX and AMEVIVE Sales". 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 and sell AVONEX worldwide, and begins marketing and selling AMEVIVE.

The Company expects product revenues to grow in 2003 due mostly to sales of AMEVIVE. AMEVIVE was approved by the U.S. Food and Drug Administration ("FDA") in January 2003 for the treatment of adult patients with moderate-to-severe chronic plaque psoriasis who are candidates for systemic therapy or phototherapy. For further discussion of AMEVIVE and the factors that may affect the revenues generated by AMEVIVE sales, see "Outlook - Competition" and "Outlook - Dependence on AVONEX and AMEVIVE Sales."

### Royalty Revenues

Revenues from royalties represented approximately 10% of total revenues in 2002 as compared to 7% in 2001. The increase in royalty revenues in 2002 over the comparable period in 2001 is primarily attributable to the resumption of royalty payments from Schering-Plough Corporation ("Schering-Plough") in the fourth quarter of 2002 on U.S. sales of its alpha interferon products, and, to a lesser extent, attributable to increased sales of alpha interferon products in certain European Union ("EU") markets.

In the fourth quarter of 2002, the Company settled its dispute with Schering-Plough over royalties on U.S. sales of alpha interferon products. As part of the settlement, Schering-Plough agreed to commence royalty payments to Biogen beginning in the fourth quarter of 2002 on U.S. sales of alpha interferon products based on a 1998 agreement between the two companies. As a result of the resumption of royalties from Schering-Plough, Biogen expects royalty revenues in 2003 to be higher than in 2002. See "Outlook-Royalty Revenue". 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 royalty revenues as a percentage of total revenues to continue to decrease in the near and long term as the Company continues to market and sell AVONEX worldwide, and begins marketing and selling AMEVIVE. See "Outlook - Royalty Revenue" and "Outlook - Patents and Other Proprietary Rights".

## Costs and Expenses

Total costs and expenses consist of the following:

(in millions)

December 31,	2002	2001	% Change
Cost of product revenues	\$ 151.4	\$ 131.9	15%
Cost of royalty revenues	8.7	4.6	89%
Research and development	367.6	314.6	17%
Selling, general & administrative*	324.0	231.0	40%
Total costs and expenses	\$ 851.7	\$ 682.1	25%

The increase in cost of product revenues in 2002 compared to 2001 was primarily attributable to the higher sales volume of AVONEX, and, to a lesser extent, to a decrease in certain product yield and \$2.7 million of writedowns of commercial inventory which did not meet quality specifications to its net realizable value in 2002. Gross margins on product sales were approximately 85% for the period ended December 31, 2002 compared to 86% for the same period in 2001. The Company expects that gross margins on product revenues will fluctuate in the future based on changes in product mix and new product initiatives. The increase in cost of royalty revenues was primarily attributable to increased sales on alpha interferon products sold in 2002 over 2001. Gross margins on royalty revenue decreased to approximately 92% for the period ended December 31, 2002 compared to 94% for the same period in 2001. The Company expects that gross margins on royalty revenues will fluctuate in the future based on changes in sales volumes for specific products from which the Company receives royalties.

Research and development expenses in 2002 were \$367.6 million, an increase of \$53 million or 17% as compared to \$314.6 million in 2001. The increase was primarily due to increases in early stage research activities of \$13 million, clinical trial costs of \$17 million primarily for ANTEGREN, \$14 million related to Phase IV AVONEX studies, and \$9 million related to other production, development, and infrastructure costs. Costs for upfront fees and milestone payments may cause variability in future research and development expense. See "Critical Accounting Estimates".

Selling, general and administrative expenses in 2002 were \$324 million, an increase of \$93 million or 40% as compared to 2001. This increase was primarily due to an increase in selling and marketing expenses of \$43 million related to the sale of AVONEX, and increased spending of \$32 million in preparation for the launch of AMEVIVE. AVONEX-related increases were driven by heightened competition in the U.S. market. AMEVIVE increases in spending were driven by preparation for the launch of a product, which received FDA approval in the U.S. in January 2003. The Company expects that selling, general and administrative expenses will continue to increase in the near and long 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 continues to expand its sales and marketing organizations and efforts necessary to sell AMEVIVE, and in preparation for the possible future approval of additional products.

## Other Income (Expense), Net

Total other income (expense), net consists of the following (in thousands):

December 31,	2002	2001
Interest income	\$ 41,217	\$ 44,128
Interest expense	(3,546)	(3,954)
Other expense	(57,713)	(10,875)
Total other income (expense), net	\$ (20,042)	\$ 29,299

Total other income (expense), net consists primarily of interest income, partially offset by interest expenses and other non-operating income and expenses. Total other income (expense), net in 2002 was an expense of \$20 million as compared to income of \$29.3 million in 2001, a decrease of \$49.3 million.

Interest income in 2002 was \$41.2 million compared to \$44.1 million in 2001, a decrease of \$2.9 million or 7% primarily due to lower average yields on invested funds in 2002. The Company expects interest income to vary based on changes in the amount of funds invested and fluctuations in interest rates.

Interest expense decreased from \$4 million in 2001 to \$3.6 million for 2002. The decrease in interest expense of \$0.4 million or 10% in 2002 from 2001 was due to lower borrowing outstanding under building loan agreements.

Other income (expense) decreased by \$46.8 million in 2002 from 2001. Other income (expense) included the following (in thousands):

December 31,	2002	2001
Impairments of non-current marketable securities	\$ (10,095)	\$ (27,942)
Reserve for outstanding loan to collaborator	(10,500)	-
Gain (loss) on sale of non-current marketable securities	(301)	32,143
Donation for establishment of Biogen Foundation	(15,000)	-
Settlement of Schering-Plough dispute	37,240	-
Settlement of Berlex dispute	(55,000)	(20,000)
Equity in net income (loss) of unconsolidated affiliate	(3,392)	610
Gain on sale of current marketable securities	2,703	6,147
Miscellaneous	(3,368)	(1,833)
Total other expense	\$ (57,713)	\$ (10,875)

As discussed in the Company's critical accounting estimates, the Company assessed the unrealized losses on its investments in Curis Inc. and Targeted Genetics Corporation ("Targeted") at each quarter (see "Financial Condition"), 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 those dates. Accordingly, the related unrealized losses of approximately \$10.1 million and \$28 million were reclassified from other comprehensive income to current expense in 2002 and 2001, respectively. Sales of non-current marketable securities resulted in a loss of \$0.3 million and a gain of \$32.1 million for the years ended December 31, 2002 and 2001, respectively.

During the third quarter of 2002, the Company recorded a \$10.5 million charge for the establishment of a reserve related to an outstanding loan to Targeted. Based on a review of the financial condition of Targeted in 2002, the Company determined that it was no longer probable that the loan would be repaid.



In October 2002, the Company established The Biogen Foundation, a private, U.S. based, non-profit philanthropic organization. In December 2002, the Company made a charitable contribution of \$15 million to fund The Biogen Foundation. The Foundation is to operate exclusively for the benefit of charitable, educational and scientific purposes. Certain executive officers and other employees of the Company serve as directors and officers of the Foundation. The Company classifies charitable contributions to other income (expense).

During the fourth quarter of 2002, the Company and Schering-Plough settled their dispute on the issue of whether and to what extent Schering-Plough has an obligation to pay royalties in the U.S. on sales of its alpha interferon products. The Company received a final settlement payment resulting in a net gain of \$37.2 million, which was classified to other income (expense). See "Royalty Revenues".

In the fourth quarter of 2002, the Company recorded a \$55 million charge related to the final settlement of a patent infringement dispute with Berlex. In 2001, the Company reported an initial charge of \$20 million as part of the settlement agreement. See "Legal Matters".

### Income Taxes

The Company's effective tax rate in 2002 was 28%. Income tax expense for 2002 varied from the amount computed at the U.S. federal statutory rates primarily due to earnings in European jurisdictions with lower tax rates and to the utilization of research and development tax credits. The Company expects its effective tax rate during 2003 to remain consistent.

## RESULTS OF OPERATIONS 2001 AS COMPARED TO 2000

### Revenues

Total revenues consist of the following:

<i>(in millions)</i>				
December 31,		2001	2000	% Change
Product revenues*				
United States		\$ 710.0	\$ 551.8	29%
Rest of world		260.5	208.5	25%
Total		970.5	760.3	28%
Royalty revenues		71.8	165.4	(57)%
Total revenues		\$ 1,042.3	\$ 925.7	13%

\* Certain items in prior years' product revenues and selling, general & administrative expenses have been reclassified to conform to the current year's presentation as a result of the FASB Emerging Issues Task Force ("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)". See "Critical Accounting Estimates."

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 U.S. and in the fifteen member countries of the EU.

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 with 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.

### Costs and Expenses

Total costs and expenses consist of the following:

<i>(in millions)</i>				
December 31,		2001	2000	% Change
Cost of product revenues		\$ 131.9	\$ 112.9	17%
Cost of royalty revenues		4.6	12.3	(63)%
Research and development		314.6	302.8	4%
Selling, general & administrative*		231.0	169.3	36%
Total costs and expenses		\$ 682.1	\$ 597.3	14%

The increase in cost of product revenues was attributable to the higher sales volume of AVONEX. 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.

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 in research and development expense in 2001 compared to 2000 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.

Selling, general and administrative expenses in 2001 were \$231 million, an increase of \$61.7 million or 36% as compared to 2000. This increase in selling, general and administrative expense in 2001 was primarily due to an increase in selling and marketing expenses related to the sale of AVONEX.

## Other Income, Net

Total 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

Total 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.

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 \$131 million in 2001 from 2000. Other income (expense) included the following (*in thousands*):

December 31,	2001	2000
Impairments of non-current marketable securities	\$ (27,942)	\$ -
Gain on sale on non-current marketable securities	32,143	101,129
Initial settlement of Berlex dispute	(20,000)	-
Realized gains in third party acquisition of investment	-	24,132
Equity in net income of unconsolidated affiliate	610	-
Gain on sale of current marketable securities	6,147	(1,846)
Miscellaneous	(1,833)	(3,321)
Total other income (expense)	\$ (10,875)	\$ 120,094

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. Sales of non-current marketable securities resulted in gains of \$32.1 million and \$101.1 million for the full year ended December 31, 2001 and 2000, respectively.

In 2001, the Company reported a charge of \$20 million as part of the settlement of a patent infringement dispute with Berlex. See "Legal Matters".

In 2000, the Company realized gains of approximately \$24.1 million upon the acquisition by third parties of two companies in which the Company had invested.

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## 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.

## Financial Condition

At December 31, 2002, cash, cash equivalents and short-term marketable securities were \$867.1 million compared with \$798.1 million at December 31, 2001, an increase of \$69 million. Working capital increased \$86.9 million to \$889.7 million. Net cash from operating activities which included net income, for the year ended December 31, 2002 was \$267.1 million compared with \$316.8 million in 2001, and included tax benefits related to stock options of \$19.6 million, and non-cash charges of \$10.1 million related to the write-down of non-current marketable securities, and \$10.5 million for the establishment of a reserve related to an outstanding loan to a collaborator. Cash outflows from investing activities during 2002 included investments in property and equipment and patents of \$221.6 million; net purchases of marketable securities totaling \$62 million, and a \$6 million investment in a collaborator. Significant cash outflows from financing activities included \$8.4 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 \$27.4 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, 2002, the Company had \$29.8 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, 2002, the Company had \$12.5 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.

The Company's construction of the large scale manufacturing plant and a laboratory office building in Research Triangle Park, North Carolina was substantially completed in the first quarter of 2002. The Company continued its further expansion of its Research Triangle Park, North Carolina complex in 2002 with ongoing construction of several projects to create additional manufacturing capacity. These additional projects are expected to be completed by the summer of 2003 at a total cost of approximately \$93.3 million. As of December 31, 2002, the Company had committed \$81.7 million for construction costs related to these additional projects, of which \$73.5 million has been spent. The Company is also completing plans to build a manufacturing plant in Denmark. The Company expects that construction will commence in 2003 and be completed early in 2005, at an estimated cost of \$250 million. At December 31, 2002, \$47 million had been committed for construction costs related to the manufacturing plant in Denmark, of which \$36.8 million has been spent.

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 2002, the Company repurchased approximately 145,000 shares of its common stock at a cost of \$8.4 million. During 2001, the Company repurchased approximately 1.5 million shares of its common stock at a cost of \$88.3 million. Approximately 2.4 million shares remain authorized for repurchase under this program at December 31, 2002. In the first quarter of 2003, the Company began open market repurchases for additional shares of its common stock under the program.

In 2002, the Company was an investor in an equity fund that invested in biotechnology entities. In the first quarter of 2003, Biogen opted out of the equity fund and will receive a distribution of approximately \$7.2 million, its remaining partnership interest, in the first quarter of 2003. Biogen had accounted for its interest in this fund under the equity method of accounting. The Company's share of the earnings or losses from the equity investment consisted of a loss of \$3.4 million in 2002 and income of \$0.6 million in 2001, which were recorded within other income and expenses.

In January 2003, the Company signed a collaboration agreement (the "IDEC Agreement") with IDEC Pharmaceuticals Corporation ("IDEC"), under which Biogen and IDEC will collaborate on the development of three oncology therapeutics from Biogen's pipeline of early-stage product candidates: an anti-lymphotoxin beta receptor (LTBR) monoclonal antibody, an anti-CRIPTO monoclonal antibody, and an interferon beta (INF-b) gene delivery product. Under the terms of the IDEC agreement, IDEC initially will be responsible for the development costs of the product candidates, until that time, if any, when the Company exercises its opt-in rights (which must be done within a certain timeframe) with respect to each specific product candidate. If the Company exercises its opt-in rights for a specific product, IDEC and the Company will share all subsequent costs related to that specific product and the Company will retain fifty percent of any economic benefit related to the product. If the Company chooses not to exercise its opt-in rights, the Company will be entitled to receive royalty payments from future sales of the specific products.

In December 2002, Biogen signed a collaboration agreement (the "Sunesis Agreement") with Sunesis Pharmaceuticals, Inc. ("Sunesis") under which Biogen and Sunesis will collaborate on the discovery and development of oral therapeutics for the treatment of inflammatory and autoimmune diseases. The parties will apply Sunesis' proprietary fragment-based drug discovery technology, known as "tethering," to generate small molecule leads that target select cytokines in the immune system. Under the terms of the Sunesis Agreement, the Company purchased 1.25 million shares of preferred stock of Sunesis for \$6 million, the fair value of the shares. In addition, the Company paid a one-time non-refundable license fee of \$3 million which was charged to research and development expense and acquired certain exclusive licenses to develop and commercialize certain compounds resulting from the collaboration. The Company accounts for its investment in Sunesis, which is included in other assets, using the cost method of accounting, subject to periodic review of impairment. The Company will pay Sunesis a quarterly license maintenance fee of \$357,500 during the period commencing on April 1, 2004 through July 1, 2005. Additionally, Biogen agreed to enter into a Credit Facility Agreement ("Loan Agreement") with Sunesis under which Biogen is obligated to loan Sunesis up to \$4 million. No borrowings from the loan agreement were outstanding as of December 31, 2002. The Company has committed to paying Sunesis additional amounts upon the completion of certain future research milestones and first and second indication development milestones. If all the milestones were to be achieved, the Company would be required to pay up to an additional \$60.5 million over the life of the agreement.

In April 2002, the Company signed a development and marketing collaboration agreement (the "Celltech Agreement") with Celltech R&D Limited ("Celltech") under which the Company and Celltech agreed to collaborate on the development and commercialization of a humanized anti-TNF alpha antibody known as "CDP571" with potential value in treating gastrointestinal disorders (including Crohn's disease), psoriasis and other autoimmune disease conditions. Under the terms of the Celltech Agreement, Biogen and Celltech agreed to share costs for on-going development activities. In April 2002, the Company paid a one-time non-refundable initiation fee of \$500,000, which was charged to research and development expense. Biogen incurred development expenses for CDP571 during the second and third quarter of 2002, and in the third quarter of 2002, ceased participation in development expenses associated with CDP571 due to unfavorable Phase III data. Through December 31, 2002, the Company incurred approximately \$7 million of research and development expenses associated with CDP571. The Company does not expect to pay any additional amounts in this collaboration.

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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 are collaborating worldwide on the development and commercialization of orally active, small molecule LFA-1 antagonists. Biogen and ICOS are currently developing an oral small molecule LFA-1 antagonist as a potential treatment for psoriasis. 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 in 2001. Additionally, as part of the agreement, Biogen made available to ICOS a line of credit in the amount of \$20 million, of which \$10 million was available at December 31, 2002. The Company provided \$6.8 million and \$2.3 million from the line of credit to ICOS that was recorded as a loan receivable and was later charged to research and development expense in 2002 and 2001, respectively, upon the achievement of certain clinical milestones by ICOS. As of December 31, 2002, there was \$1.0 million in 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 future milestones were to be 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 \$92.5 million over the remaining life of the agreement.

In September 2000, the Company signed a collaborative research 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. 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 2002, \$1.5 million in 2001 and \$250,000 in 2000. The research program under the Eos Agreement was terminated in December 2002, thereby relieving Biogen of any future commitments. In February 2003, Eos and Protein Design Labs, Inc. ("PDLI") announced a definitive merger agreement under which PDLI would acquire 100% of the outstanding stock of Eos in a stock-for-stock transaction valued at \$37.5 million. Upon completion of the merger, Biogen's preferred shares of EOS would be converted into common stock of PDLI. The Company expects to record a writedown of approximately \$3 million in the first quarter of 2003 related to its investment in Eos.

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 are collaborating in the development, manufacture and commercialization of ANTEGREN® (natalizumab), a humanized monoclonal antibody. The Company and Elan are currently developing ANTEGREN as a potential treatment for MS and Crohn's disease. Under the terms of the Antegren Agreement, Biogen and Elan 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. The Company provided \$7 million and \$16 million to Elan for certain milestones achieved during the years 2002 and 2001, respectively, which were charged to research and development expense. As of December 31, 2002, Elan owed the Company \$14.8 million, representing development expenses incurred by Biogen to be reimbursed by Elan. The Company has committed to paying Elan additional amounts upon the completion of certain future milestones. If all the future milestones were to be achieved, the Company would be required to pay up to an additional \$14 million over the remaining life of the agreement. Elan is in the process of implementing a recovery plan to re-build its business. The Company does not believe that business issues facing Elan will have a material adverse impact on the Company's rights to develop or commercialize ANTEGREN.

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 proteins. 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 of research funding to Ontogeny in 2000. Additionally, the Company provided \$1.5 million upon termination of the Ontogeny Agreement, which was charged to research and development expense in 2000. At December 31, 2002 the Company retained approximately 166,000 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 amount of \$3.9 million in 2000. 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. Also as part of the Targeted Merger Agreement, an existing \$500,000 promissory note payable by Genovo to Biogen was converted into a no-interest promissory note from Targeted with a term of five years. 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. The Targeted Agreements provide for a \$10 million credit facility, of which \$10 million of borrowings were outstanding as of December 31, 2002. Targeted also had an option to sell to the Company an additional \$10 million of Targeted common stock at fair value. In September 2002, Targeted exercised an option to issue \$4 million of common stock to Biogen. During the third quarter of 2002, the Company incurred a \$10.5 million charge for the establishment of a reserve related to an outstanding loan to Targeted. Based on a review of the financial condition of Targeted at September 30, 2002, the Company determined that it was no longer probable that the loan would be repaid. The Company provided \$1 million in 2002, \$1 million in 2001 and \$250,000 in 2000 for research funding to Targeted. The Company expects to fund research activities of Targeted related to the collaboration of \$750,000 in 2003. At December 31, 2002 the Company retained approximately 8,963,402 shares of Targeted common stock, and included the investment in long-term marketable securities available-for-sale.

The following summarizes the Company's contractual obligations (excluding contingent milestone payments totaling \$167 million) at December 31, 2002, and the effects such obligations are expected to have on its liquidity and cash flows in future periods.

(in thousands)	Payments due by period				
	Total Years	Less than 1 Year	1-3 Years	4-5 Years	After 5 Years
Long-term debt	\$ 42,298	\$ 4,888	\$ 17,276	\$ 20,134	\$ -
Non-cancelable operating leases	122,038	20,411	33,150	24,501	43,976
Other long-term obligations	2,895	750	2,145	-	-
<b>Total contractual cash obligations</b>	<b>\$ 167,231</b>	<b>\$ 26,049</b>	<b>\$ 52,571</b>	<b>\$ 44,635</b>	<b>\$ 43,976</b>

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

The Company maintains a 50% equity interest in two joint ventures outside the U.S. The primary purpose of these entities is the distribution of AVONEX in Switzerland and AMEVIVE in Italy. All material intercompany balances and transactions have been eliminated. The Company records its share of the earnings or losses of these entities to other income (expense). 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 currently generates cash from operations primarily due to the sale of AVONEX and from royalties on sales generated by the Company's licensees. In the future, the Company expects to continue generating cash from these sources. Additionally, in 2003 and beyond, the Company expects to generate cash from the sale of AMEVIVE. 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

In January 2002, the Company settled litigation with Berlex Laboratories, Inc. ("Berlex"). Berlex had claimed that the Company's production of AVONEX in the U.S. infringed certain U.S. patents which the Company refers to as the "McCormick" patents. A District Court decision in 2000 rendered final judgment in the Company's favor determining that the manufacture, use and sale of AVONEX in the U.S. did not infringe any of the claims of the asserted McCormick patents, but Berlex appealed the decision to the Court of Appeals for the Federal Circuit. Under the settlement agreement, the Company agreed to pay Berlex \$20 million, and to make a second and final payment to Berlex if the Court of Appeals were to reverse the District Court's previous ruling granting summary judgment in the Company's favor. As part of the settlement, both parties agreed not to pursue further litigation about these patents. Biogen recorded a \$20 million charge in "Other Income, net" in the fourth quarter of 2001 to account for the first payment to Berlex. 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 than 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 at the time of the settlement that \$20 million was 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 the settlement in its December 31, 2001 financial statements.

On January 31, 2003, the Court of Appeals decided that the District Court had properly construed the claims of the McCormick patents and that the Company did not literally infringe the McCormick patents. The Court of Appeals remanded the case to the District Court to determine if one of the Berlex patents might be infringed under a redefinition of the "doctrine of equivalents" recently handed down by the U.S. Supreme Court. As a result of the decision, the Company was required to make a final payment to Berlex of \$55 million under the settlement agreement which was recorded in December 2002. The previously negotiated contingent settlement eliminated the need for further litigation and resolved the entire dispute. The settlement agreement provides that Biogen receive a fully paid up, royalty free, non-exclusive license under the McCormick patent and a related patent held by Berlex. The Company negotiated a license in order to avoid future uncertainty surrounding the rights to the Berlex patent for Biogen and its distribution channel partners. The McCormick patents are not utilized by Biogen and, as such, do not hold value and will not provide future economic benefit to the Company. The \$55 million payment for settlement of litigation was charged to other income (expense) in the fourth quarter of 2002.

On October 13, 1998, the Company filed an opposition with the Opposition Division of the European Patent Office opposing the grant of a European patent (the "Rentschler II Patent") issued to Dr. Rentschler Biotechnologie GmbH ("Rentschler") claiming compositions of matter of beta interferon having specific glycosylation patterns. On November 6, 2002, a hearing took place with regard to the Company's opposition of the Rentschler II Patent in the European Patent Office. The Opposition Board of the European Patent Office ruled in an appealable decision that the present claims of the Rentschler II Patent should be maintained. Following this decision, Rentschler Biotechnologie GmbH & Co. KG sued our German subsidiary, Biogen GmbH, for infringement of the Rentschler II Patent in Germany. The Company intends to appeal the decision of the Opposition Division to the European Patent Office's Technical Board of Appeals. The Company believes that it has arguments to support the invalidation of the Rentschler II Patent before the Technical Board of Appeals. A decision on the appeal is not likely to be issued until at least two years after the Company files the appeal. Biogen also believes that it has solid arguments to support its defense against Rentschler's infringement claims in the German infringement lawsuit. A hearing in the German proceeding is scheduled to occur in September 2003, with a decision likely to follow within a month or two after the hearing. The non-prevailing party will then have the right to appeal the decision. A ruling on such an appeal would likely take another 12 to 18 months. The Company is closely examining the Opposition Board's recent written ruling and the claims made in the German infringement suit and exploring various alternatives for handling these matters. If the Company were to be enjoined from selling AVONEX in Germany by the German district court pending our appeal of an adverse judgment, or, if the Company lost any appeal of the German infringement suit, or if, through other legal proceedings Rentschler were to obtain a determination that the Company's sales of AVONEX in other European countries infringes a valid Rentschler II patent, such a result or results could have a material adverse effect on the Company's results of operations and financial condition. As a result, an estimate of any potential loss or range of loss cannot be made at this time.

Along with most other major pharmaceutical and biotechnology companies, the Company has been named as a defendant in a lawsuit filed by the County of Suffolk, New York, in the U.S. District Court in the Eastern District of New York in January 2003. In March 2003, the case was conditionally transferred to the United States District Court for the District of Massachusetts. The complaint alleges that the defendants overstated the Average Wholesale Price ("AWP") for drugs for which Medicaid provides reimbursement ("Covered Drugs"), marketed and promoted the sale of Covered Drugs to providers based on the providers ability to collect inflated payments from the government and Medicaid beneficiaries that exceeded payments possible for competing drugs, provided financing incentives to providers to over-prescribe Covered Drugs or prescribe Covered Drugs in place of competing drugs, and overcharged Medicaid for illegally inflated Covered Drugs reimbursements. The complaint further alleges that the defendants failed to accurately report the "best price" on the Covered Drugs to New York's Medicaid program. Under Medicaid, pharmaceutical and biotechnology companies agree to pay Medicaid programs a rebate for each product reimbursed by Medicaid. The amount of the rebate is often the difference between the average manufacturers price and the best price reported by companies to the Medicaid program. Plaintiff claims that it was harmed because it could have allotted the dollars that it wrongfully spent on Medicaid to other public needs. Plaintiff has brought the action under the Racketeering Influence and Corrupt Organizations Act (RICO), and for breach of contract, unjust enrichment, Medicaid fraud and common law fraud. The Company intends to vigorously defend itself against all of the allegations and claims in this lawsuit. As a result, an estimate of any potential loss or range of loss cannot be made at this time.

### **Critical Accounting Estimates**

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 and bad debts, marketable securities, derivatives and hedging activities, inventories, patents, income taxes, research and development, loans, 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") 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.

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, rather than a sales and marketing expense. The Company has various contracts with distributors that provide for discounts and rebates. These contracts are classified as a reduction of revenue. The Company also maintains select customer service contracts with distributors and other customers in the distribution channel. In accordance with EITF 01-09, the Company has established the fair value of these contracts and, as provided by EITF 01-09, classified these customer service contracts as sales and marketing expense. *If the Company had concluded that sufficient evidence of the fair value did not exist for these contracts, the Company would have been required to classify these costs as a reduction of revenue.*

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. 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 the fair market value of the common stock, the duration of the stock's decline, 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. In connection with the Company's assessment at December 31, 2002, \$1.5 million of unrealized losses related to these marketable securities were determined to be temporary. The fair market value of these marketable securities totaled \$3.8 million at December 31, 2002.

The Company also invests in equity securities of certain companies whose securities are not publicly traded and fair value is not readily available. These investments are recorded using the cost method of accounting and, as a matter of policy, the Company monitors these investments in private securities on a quarterly basis, and determines whether any impairment in their value would require a charge to current earnings. At December 31, 2002, the Company included approximately \$15.3 million of investments in private securities in other assets. There were no charges to current earnings in 2002, 2001, or 2000 for impairments of these investments. Recognition of impairments for these securities may cause variability in earnings.

#### **Derivatives and Hedging Activities**

Biogen has operations in Europe, 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 Euro, Swedish krona, 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. SFAS 133, "Accounting for Derivative Instruments and Hedging Activities", 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. Under this policy, and in accordance with SFAS 133, earnings may vary if the forecasted transaction does not occur, or if there is material hedge ineffectiveness or if the hedge ceases to be highly effective.

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#### **Inventory Capitalization**

Inventories are stated at the lower of cost or market with cost determined under the first-in/first-out ("FIFO") method. 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 capitalizes inventory costs associated with certain products prior to regulatory approval, based on management's judgment of probable future commercialization. Biogen could 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, 2002, capitalized inventory related to AMEVIVE, which received regulatory approval in the U.S. in January 2003, was \$25 million. At December 31, 2002, capitalized inventory related to the pre-filled syringe formulation of AVONEX, which has not yet received regulatory approval, was \$3.7 million.

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 wrote down \$6.8 million of unmarketable inventory during 2002, of which \$4.2 million was charged to research and development expense for product not yet commercialized, and the remainder was charged to cost of product revenues.

#### **Patents**

The costs associated with successful defenses and patent applications are capitalized and amortized on a straight-line basis over estimated useful lives up to 15 years. 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 patents is less than the carrying value. Recognition of patent impairments may cause variability in earnings.

#### **Income Taxes**

Income tax expense includes a provision for income tax contingencies which management believes is adequate and appropriate.

#### **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 collaborators, are expensed as incurred. The timing of upfront fees and milestone payments in the future may cause variability in future research and development expense. Clinical trial costs include costs associated with contract research organizations ("CROs"). The invoicing from CROs for services rendered can lag several months. The Company accrues the cost of services rendered in connection with CRO activities based on its estimate of management fees, site management and site monitoring costs, and data management costs. The Company maintains regular communication with its CRO vendors to gauge the reasonableness of its estimates. Differences between actual clinical trial costs and estimated clinical trial costs have not been material and are adjusted for in the period which they become known. Under this policy, research and development expense can vary due to accrual adjustments related to clinical trials.

## Loans

In connection with certain of its research collaborations, the Company has extended loans or made loan commitments to collaborators. On a quarterly basis, the loans are monitored for potential impairment, based on the probability of the collection of the full amount due under the loan according to each loan's terms. Should it be determined that it is not probable that the Company will be able to collect all interest and principal due, the Company recognizes a corresponding impairment charge to current earnings.

## Pensions

The Company has a defined benefit pension plan (the "Plan") which provides benefits to all of its full-time U.S. employees. The Company assumed an expected long-term rate of return on Plan assets of 9.00% for 2002. This rate is based on a review of historical returns for both the equity and fixed income portfolios and the current Plan asset allocation of 80% equity and 20% fixed income. The assumed rate of return is reviewed periodically and adjusted, as appropriate, to reflect trends in returns and changes in asset allocation assumptions.

Based on recent discussions about the current economic climate and a review of industry benchmarks, it is anticipated that the assumption for long-term rate of return for 2003 will be lowered to 8.75%. Based on sensitivity analysis, the Company expects that a 25 basis point rate reduction will result in an increase in pension expense of approximately \$70,000.

The market-related value of Plan assets is determined using the fair value method.

## Contingencies and Litigation

There has been, and Biogen expects there may be significant litigation in the industry regarding regulatory, pricing, and patents and other intellectual rights. The Company has determined that no liabilities are required to be recorded at this time for potential losses relating to current and potential litigation, as the Company will accrue for losses when they become probable and estimable. Certain adverse unfavorable rulings or decisions in the future could create variability or have a material adverse effect on the Company's future results of operations and financial position.

## New Accounting Pronouncements

In July 2002, the FASB issued SFAS 146, "Accounting for Costs Associated with Exit or Disposal Activities." SFAS 146 requires that a liability for a cost associated with an exit or disposal activity be recognized at its fair market value when the liability is incurred, rather than at the date of an entity's commitment to an exit plan. The provisions of SFAS 146 are effective for exit or disposal activities that are initiated after December 31, 2002. The adoption of SFAS 146 is not expected to have a material effect on the Company's financial statements.

In November 2002, the FASB issued FASB Interpretation No. 45 ("FIN 45"), "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others, an interpretation of FASB Statements No. 5, 57, and 107 and Rescission of FASB Interpretation No. 34." FIN 45 elaborates on the disclosures to be made by a guarantor in its interim and annual financial statements about its obligations under certain guarantees that it has issued. It also requires that a guarantor recognize, at the inception of a guarantee, a liability for the fair value of certain guarantees. The initial recognition and initial measurement provisions of FIN 45 are applicable on a prospective basis to guarantees issued or modified after December 31, 2002. The disclosure requirements of FIN 45 are effective for financial statement periods ending after December 15, 2002.

Under its charter, the Company has agreed to indemnify any person who is made a party to any action or threatened with any action as a result of such person's serving or having served as an officer or director of the Company or having served, at the Company's request, as an officer or director of another company. The indemnification does not apply if the person is adjudicated not to have acted in good faith in the reasonable belief that his or her actions were in the best interests of the Company. The indemnification obligation survives termination of the indemnified party's involvement with the Company but only as to those claims arising from such person's role as an officer or director. The Company has separate indemnification agreements with certain of its officers and directors that mirror the charter provisions. The maximum potential amount of future payments that the Company could be required to make under the charter provision and the corresponding indemnification agreements is unlimited; however, the Company has Director and Officer insurance policies that, in most cases, would limit its exposure and enable it to recover a portion of any future amounts paid. As a result of the insurance policy coverage, the estimated fair value of these indemnification provisions is minimal. All of these indemnification provisions were grandfathered under the provisions of FIN 45 as they were in effect prior to December 31, 2002. Accordingly, we have no liabilities recorded for these provisions as of December 31, 2002.

The Company enters into indemnification provisions under its agreements with other companies in its ordinary course of business, typically with business partners, contractors, clinical sites and customers. Under these provisions the Company generally indemnifies and hold harmless the indemnified party for losses suffered or incurred by the indemnified party as a result of the Company's activities. These indemnification provisions generally survive termination of the underlying agreement. The maximum potential amount of future payments the Company could be required to make under these indemnification provisions is unlimited. The Company has not incurred material costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, the estimated fair value of these agreements is minimal. Accordingly, the Company has no liabilities recorded for these agreements as of December 31, 2002.

In December 2002, the FASB issued SFAS 148, "Accounting for Stock-Based Compensation-Transition and Disclosure - An Amendment of SFAS No. 123." SFAS 148 amends SFAS 123, "Accounting for Stock-Based Compensation" to provide alternative methods of transition for those companies who voluntarily change to the fair value based method of accounting for stock-based employee compensation. In addition, this Statement amends the disclosure requirements of SFAS 123 to require prominent disclosures in both the annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. The transition and annual disclosure provision of SFAS 148 are effective for fiscal years ending after December 15, 2002. The Company has not adopted the fair value method of accounting for stock-based compensation, and will continue to apply APB 25 for its stock-based compensation plans. The Company has incorporated the disclosure requirements of SFAS 148 at December 31, 2002, which require a tabular pro forma presentation of net income had SFAS 123 been adopted by the Company in the "Summary of Significant Accounting Policies" footnote of the financial statements.

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities, an interpretation of ARB No. 51." FIN 46 requires existing unconsolidated variable interest entities to be consolidated by their primary beneficiaries if the entities do not effectively disperse risks among parties involved. Variable interest entities that effectively disperse risk will not be consolidated unless a single party holds an interest or combination of interests that effectively recombines risks that were previously dispersed. FIN 46 also requires enhanced disclosure requirements related to variable interest entities. FIN 46 applies immediately to variable interest entities created after January 31, 2003, and to variable interest entities in which an enterprise obtains an interest after that date. It applies in the first fiscal year or interim period beginning after June 15, 2003 to variable interest entities in which an enterprise holds a variable interest that it acquired before February 1, 2003. The adoption of FIN 46 is not expected to have a material effect on the Company's financial statements.

## OUTLOOK

### Safe Harbor

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, the timing of clinical trials, the potential outcome of clinical programs, regulatory approvals, the marketing of additional products, the impact of competitive products, the anticipated outcome of pending or anticipated litigation and patent-related proceedings, facility expansion and the value of 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 and elsewhere in this annual report. Unless required by law, Biogen does not undertake any obligation to publicly update any forward-looking statements.

### Dependence on AVONEX and AMEVIVE Sales

Biogen's ability to sustain increases in revenues and profitability is primarily dependent on the level of revenues and profitability from AVONEX and AMEVIVE 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"), continued market acceptance of AVONEX worldwide; Biogen's ability to maintain a high level of physician and patient satisfaction with AVONEX; the nature of regulatory and pricing decisions related to AVONEX worldwide; the overall growth of the MS market; the extent to which AVONEX continues to receive and maintains reimbursement coverage; the success of ongoing development related to AVONEX in expanded MS indications; the success of ongoing development of the pre-filled syringe formulation of AVONEX; and the continued accessibility of third parties to vial, label, and distribute AVONEX on acceptable terms.

AMEVIVE was approved in the U.S. in January 2003. In February 2003, Biogen withdrew its application for approval to market AMEVIVE in the EU. Biogen's decision was based on a determination by the Committee for Proprietary Medicinal Products, the scientific advisory board of the regulatory authority in the EU, that more clinical information is needed to approve AMEVIVE.

Biogen plans to develop the additional information necessary to obtain approval of AMEVIVE for psoriasis patients in the EU. Developing the data and re-filing the application may take several years and there is no assurance that Biogen will ever obtain approval of AMEVIVE in the EU. There is also no assurance that our commercial efforts in the U.S. will be successful. The level of revenues from sales of AMEVIVE in the U.S. will depend on a number of factors, including: the ability to gain and to sustain market share and to continue to increase market share of AMEVIVE as the competitive landscape for AMEVIVE becomes more challenging; Biogen's ability to maintain a high level of physician and patient satisfaction with AMEVIVE; the nature of regulatory and pricing decisions related to AMEVIVE worldwide; the extent to which AMEVIVE receives and maintains adequate reimbursement coverage; and the accessibility of third parties to vial, label, and distribute AMEVIVE on acceptable terms.

### Competition

Biogen faces increasing competition from other products for the treatment of relapsing forms of MS. In 2002, AVONEX competed in the U.S. and EU markets primarily with four products: COPAXONE<sup>®</sup> glatiramer acetate, sold by Teva Neuroscience, Inc. ("Teva") in the U.S. and co-promoted in by Teva and Aventis Pharma in the EU; BETASERON<sup>®</sup>, sold by Berlex in the U.S. and sold under the name BETA FERON<sup>®</sup> by Schering A.G. in the EU; NOVANTRONE<sup>®</sup> (mitoxantrone for injection) sold by Amgen, Inc. ("Amgen") and Serono S.A. in the U.S. and sold by Amgen in the EU; and REBIF<sup>®</sup>, which was launched in the U.S. by Serono, Inc. ("Serono") in March 2002. Serono announced in July 2002 that it reached an agreement to co-promote REBIF in the U.S. with Pfizer Inc. A number of companies, including Biogen, are working to develop products to treat MS which may in the future compete with AVONEX. AVONEX also faces 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.

AMEVIVE competes with existing therapies for moderate-to-severe psoriasis, such as oral retinoids, steroids, methotrexate and cyclosporin, along with other drugs, as discussed below, approved for other indications. In the future, AMEVIVE will also compete with new drugs currently in development for psoriasis, drugs now approved for other indications that may be approved for psoriasis, and off-label uses of drugs approved for other indications. Genentech and Xoma Corporation are co-developing RAPTIVA<sup>®</sup>(efalizumab), an antibody designed to block certain immune cells as a potential treatment for moderate-to-severe psoriasis. Genentech has filed for regulatory approval of the drug in the U.S. Serono has an exclusive license to RAPTIVA in the EU and other countries and has filed for regulatory approval of the drug in the EU. ENBREL<sup>®</sup> (etanercept), a drug sold by Amgen, Inc., has been approved by the FDA as a treatment for psoriatic arthritis, a joint disease that can be associated with the skin plaques of moderate to severe chronic plaque psoriasis. In January 2003, Amgen announced positive results from a Phase 3 clinical study of ENBREL in the treatment of moderate to severe plaque psoriasis and is conducting a second Phase 3 clinical study in psoriasis. Centocor, Inc. sells REMICADE<sup>®</sup> (infliximab) worldwide as a treatment for other indications, including rheumatoid arthritis, and has completed a Phase 2 proof of concept study for REMICADE as a potential treatment for psoriasis. HUMIRA<sup>®</sup> (adalimumab), a drug sold by Abbott Laboratories, was also recently approved by the FDA as a treatment for rheumatoid arthritis. Abbott is undertaking clinical trials in psoriasis and psoriatic arthritis. 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 decreased significantly in recent years and through the third quarter of 2002 primarily as the result of patent expirations and a royalty dispute with Schering-Plough. In October 2002, Biogen settled its dispute with Schering-Plough over royalties on U.S. sales of alpha interferon products. The Company received a final settlement payment resulting in a net gain of \$37.2 million. In addition, Schering-Plough agreed, effective October 1, 2002, to commence royalty payments on U.S. sales of alpha interferon products under an interference settlement entered into in 1998. Under the terms of the interference settlement, Schering-Plough agreed to pay Biogen royalties commencing in mid-2002 under certain patents to be issued to Hoffman-La Roche Inc. ("Roche") and Genentech in consideration of Biogen's assignment to Schering-Plough of the alpha interferon patent application that had been the subject of the settled interference with a Roche/Genentech patent. Schering-Plough entered into an agreement with Roche as part of settlement of the interference. The first of the Roche/Genentech patents was issued on November 19, 2002 and has a seventeen-year term. Even with resolution of the dispute with Schering-Plough, royalty revenues may fluctuate as a result of future patent expirations and other factors such as 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 by Biogen. 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 U.S. 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 U.S. 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. 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 is also aware that Genentech has been granted patents and is presently prosecuting other patent applications in the U.S. and certain other countries pertaining to technology referred to as immunoadhesion technology. Genentech may allege that its patents on such immunoadhesion technology are infringed by Biogen's commercial activities with AMEVIVE. Biogen has had discussions with Genentech and is evaluating these patents to determine if a license should be taken. The ultimate scope and validity of Genentech's immunoadhesion patents and the availability and ultimate cost of acquiring such rights, currently cannot be determined.

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 and AMEVIVE are currently the only products 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 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 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 Biogen'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.

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## Pricing Pressures

In the U.S., many pharmaceutical and biologic products are subject to increasing pricing pressures, which could be significantly impacted by the outcome of the current national debate over Medicare reform. If the Medicare program provided outpatient pharmaceutical coverage for its beneficiaries, the federal government, through its enormous purchasing power under the program, could demand discounts from pharmaceutical and biotechnology companies that may implicitly create price controls on prescription drugs. On the other hand, a Medicare drug reimbursement provision may increase the volume of pharmaceutical drug purchases, offsetting at least in part these potential price discounts. In addition, Managed Care Organizations ("MCOs"), institutions and other government agencies continue to seek price discounts. Government efforts to reduce Medicare and Medicaid expenses are expected to increase the use of MCOs. This may result in managed care's influencing prescription decisions for a larger segment of the population. In addition, certain states have proposed and certain other states have adopted various programs to control prices for their seniors' drug programs, including price or patient reimbursement constraints, restrictions on access to certain products, importation from other countries and bulk purchasing of drugs.

Biogen encounters similar regulatory and legislative issues in most other countries. In the EU and some other international markets, the government provides health care at low direct cost to consumers and regulates pharmaceutical prices or patient reimbursement levels to control costs for the government-sponsored health care system. This international patchwork of price regulation may lead to inconsistent prices and some third-party trade in Biogen's products from markets with lower prices. Such trade exploiting price differences between countries could undermine our sales in markets with higher prices.

## Manufacturing

Biogen currently produces all of its bulk drug products at its manufacturing facilities located in Cambridge, Massachusetts and Research Triangle Park, North Carolina. Problems with manufacturing processes could result in product defects, which could require Biogen to delay shipment of products, recall products previously shipped or be unable to supply products at all. In addition, any prolonged interruption in the operations of Biogen's manufacturing facilities could result in cancellations of shipments or loss of product in the process of being manufactured. Because Biogen's manufacturing processes are highly complex and are subject to a lengthy FDA approval process, alternative qualified production capacity may not be available on a timely basis or at all. Biogen sources all of its fill-finish and final product storage operations, along with a substantial portion of its packaging operations, to a concentrated group of third party contractors. Problems with the operations of these third party contractors could also require Biogen to delay shipment of saleable products, recall products previously shipped or be unable to supply products at all. Difficulties or delays in Biogen's manufacturing of existing or new products, including difficulties or delays in the operations of third party contractors retained by Biogen to perform fill-finish, packaging and storage of saleable products, could increase Biogen's costs, cause Biogen to lose revenue or market share and damage Biogen's reputation.

## Litigation and Government Regulation

Biogen encounters, and may in the future encounter, legal difficulties, any of which could preclude commercialization of products or adversely affect its business or financial condition, including: claims asserting antitrust violations, claims asserting securities law violations, claims asserting violations of the Federal False Claim Act, Anti-Kickback Act, the Prescription Drug Marketing Act or other violations in connection with Medicare and/or Medicaid reimbursement, derivative actions, product liability claims, disputes over intellectual property rights (including patents) and environmental matters. There is no assurance that Biogen will be successful in asserting its rights in current or future litigation, including the current litigation with Rentschler and the current AWP litigation described under "Legal Matters". Biogen's business is also subject to extensive government regulation and oversight. Biogen may

also become subject to governmental actions which could adversely affect its business or financial condition, including: (i) new laws, regulations and judicial decisions related to health care availability, method of delivery and payment for health care products and services, (ii) changes in the Federal Food and Drug Administration and foreign regulatory approval processes that may delay or prevent the approval of new products and result in lost market opportunity, (iii) new laws, regulations and judicial decisions affecting pricing or marketing and (iv) changes in the tax laws relating to Biogen's operations.

#### **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. See "Critical Accounting Estimates" for information regarding Biogen's accounting policies for financial instruments and disclosures of financial instruments.

#### **Foreign Exchange**

Biogen has operations in Europe, 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 Euro, Swedish krona, 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 (for example, a strengthening of the Euro) would result in a hypothetical loss in fair value of approximately \$10 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, 2002, 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, 2002, representing the cash requirements of Biogen to settle the agreements, was approximately \$5.1 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.

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#### **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,	2002	2001	2000
Revenues:			
Product	\$ 1,034,357	\$ 970,546	\$ 760,292
Royalties	114,007	71,766	165,373
Total revenues	1,148,364	1,042,312	925,665
Costs and expenses:			
Cost of product revenues	151,440	131,870	112,928
Cost of royalty revenues	8,719	4,640	12,270
Research and development	367,567	314,556	302,840
Selling, general & administrative	324,001	231,048	169,271
Total costs and expenses	851,727	682,114	597,309
Income from operations	296,637	360,198	328,356
Other income (expense), net	(20,042)	29,299	158,749
Income before income taxes	276,595	389,497	487,105
Income taxes	77,447	116,814	153,528
Net Income	\$ 199,148	\$ 272,683	\$ 333,577
Basic earnings per share	\$ 1.33	\$ 1.84	\$ 2.24
Diluted earnings per share	\$ 1.31	\$ 1.78	\$ 2.16
Shares used in calculating:			
Basic earnings per share	149,337	148,355	148,743
Diluted earnings per share	151,930	152,916	154,602

See accompanying notes to consolidated financial statements.

## CONSOLIDATED BALANCE SHEETS

Biogen, Inc. and Subsidiaries

*(in thousands, except share amounts)*

As of December 31,	2002	2001
<b>Assets</b>		
<i>Current assets</i>		
Cash and cash equivalents	\$ 45,113	\$ 54,042
Marketable securities	821,996	744,065
Accounts receivable, less allowance for doubtful accounts of \$1,920 and \$2,082, respectively	171,067	177,582
Deferred tax assets	38,592	44,108
Inventory	95,378	51,919
Other current assets	43,878	26,011
Total current assets	1,216,024	1,097,727
Property and equipment, net	738,059	555,998
Patents, net	15,994	16,562
Marketable securities	3,757	12,183
Other assets	33,154	38,576
Total assets	\$ 2,006,988	\$ 1,721,046
<b>Liabilities and Shareholders' Equity</b>		
<i>Current liabilities</i>		
Accounts payable	\$ 64,876	\$ 50,944
Current portion of long-term debt	4,888	4,888
Current taxes payable	73,824	90,131
Accrued expenses and other	182,745	148,979
Total current liabilities	326,333	294,942
Long-term debt, less current portion	37,410	42,297
Long-term deferred tax liability	33,678	16,789
Other long-term liabilities	14,146	18,186
Commitments and contingencies	-	-
<i>Shareholders' equity</i>		
Common stock, par value \$0.01 per share (375,000,000 shares authorized; 151,705,636 shares issued in 2002 and 2001)	1,517	1,517
Additional paid-in capital	829,993	808,076
Treasury stock, at cost, 1,618,195 and 3,233,351 shares in 2002 and 2001, respectively	(90,844)	(176,123)
Retained earnings	838,756	705,893
Accumulated other comprehensive income	15,999	9,469
Total shareholders' equity	1,595,421	1,348,832
Total liabilities and equity	\$ 2,006,988	\$ 1,721,046

*See accompanying notes to consolidated financial statements.*

## CONSOLIDATED STATEMENTS OF CASH FLOWS

Biogen, Inc. and Subsidiaries

(in thousands)

For the years ended December 31,	2002	2001	2000
<b>Cash Flows from Operating Activities</b>			
Net Income	\$ 199,148	\$ 272,683	\$ 333,577
Adjustments to reconcile net income to net cash provided from operating activities			
Depreciation and amortization	45,100	37,023	39,035
Equity in net loss (income) of unconsolidated affiliate	3,392	(610)	-
Stock based compensation	2,356	829	(249)
Deferred income taxes	22,642	(18,100)	25,203
Realized loss (gain) on sale of non-current marketable securities	301	(32,143)	(101,129)
Tax benefit of stock options	19,561	35,075	81,023
Impairment of non-current marketable securities	10,095	27,942	-
Loan loss reserve	10,500	-	-
Write down of inventory to net realizable value	6,831	-	-
Changes in:			
Accounts receivable	11,788	(35,442)	(7,357)
Inventory	(50,290)	(12,391)	502
Other current and other assets	(26,883)	(29,285)	(35,332)
Accounts payable, accrued expenses and other current and long-term liabilities	12,536	71,227	31,114
Net cash flows from operating activities	<b>267,077</b>	<b>316,808</b>	<b>366,387</b>
<b>Cash Flows from Investing Activities</b>			
Purchases of current marketable securities	(467,256)	(827,807)	(627,168)
Proceeds from sales and maturities of current marketable securities	404,808	734,599	606,087
Proceeds from sales of non-current marketable securities	493	35,827	120,199
Investment in collaborators	(6,000)	-	(5,000)
Acquisitions of property and equipment, net	(220,341)	(191,019)	(194,892)
Additions to patents	(1,214)	(4,781)	(4,713)
Net cash flows from investing activities	<b>(289,510)</b>	<b>(253,181)</b>	<b>(105,487)</b>
<b>Cash Flows from Financing Activities</b>			
Repayments on long-term debt	(4,887)	(4,888)	(4,888)
Purchases of treasury stock	(8,384)	(88,284)	(300,192)
Issuance of common stock and option exercises	27,379	35,034	35,955
Other	153	(17)	(13)
Net cash flows from financing activities	<b>14,261</b>	<b>(58,155)</b>	<b>(269,138)</b>
Effect of exchange rate changes on cash	(757)	(167)	55
Net increase (decrease) in cash and cash equivalents	<b>(8,929)</b>	<b>5,305</b>	<b>(8,183)</b>
Cash and cash equivalents, beginning of the year	<b>54,042</b>	<b>48,737</b>	<b>56,920</b>
Cash and cash equivalents, end of the year	<b>\$ 45,113</b>	<b>\$ 54,042</b>	<b>\$ 48,737</b>
<b>Supplemental Cash Flow Data</b>			
Cash paid during the year for:			
Interest	\$ 3,491	\$ 3,954	\$ 4,314
Income taxes	\$ 51,548	\$ 79,002	\$ 42,683

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, 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)
<b>Total comprehensive income</b>						<b>310,335</b>
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
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)
<b>Total comprehensive income</b>						<b>259,776</b>
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
Net income				199,148		199,148
Unrealized gains/losses on marketable securities, net of tax of \$3,427					6,820	6,820
Unrealized gains/losses on foreign currency forward contracts, net of tax of \$3,064					(5,369)	(5,369)
Unrealized gains/losses on interest rate swaps, net of tax of \$601					(1,198)	(1,198)
Translation adjustment					6,277	6,277
<b>Total comprehensive income</b>						<b>205,678</b>
Exercise of options and related tax benefits		19,561	93,663	(66,285)		46,939
Treasury stock purchased			(8,384)			(8,384)
Compensation expense related to stock options		2,356				2,356
Balance, December 31, 2002	\$ 1,517	\$ 829,993	\$ (90,844)	\$ 838,756	\$ 15,999	\$ 1,595,421

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 global biopharmaceutical company that develops, manufactures and markets novel human therapeutic products. Biogen's primary focus is developing pharmaceutical products that meet unmet medical needs particularly in its core therapeutic areas of neurology, dermatology and rheumatology. Biogen currently sells AVONEX® (Interferon beta-1a) for the treatment of relapsing multiple sclerosis ("MS") and, commencing in 2003, AMEVIVE® (alefacept) for the treatment of adult patients with moderate-to-severe chronic plaque psoriasis who are candidates for systemic therapy or phototherapy. Biogen also receives revenues from royalties on sales by our licensees of a number of products covered under patents that Biogen controls. In addition, Biogen has a pipeline of development stage products and a number of research programs in our core therapeutic areas and in other areas of interest. Certain items in prior years' financial statements have been reclassified to conform to the current year's presentation.

### Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. Additionally, the Company maintains a 50% equity interest in two joint ventures outside the U.S. The primary purpose of these entities is the distribution of AVONEX in Switzerland and AMEVIVE in Italy. All material intercompany balances and transactions have been eliminated. The Company records its share of the earnings or losses of these entities to other income (expense).

### Use of Estimates

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 and bad debts, marketable securities, derivatives and hedging activities, inventories, patents, income taxes, research and development, loans, 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.

### 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. The Company had foreign exchange gains totaling \$2.2 million in 2002, and foreign exchange losses of \$1.2 million and \$2.8 million in 2001 and 2000, respectively.

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### 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 and foreign currency forward contracts 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. 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:

<i>(in thousands)</i>	2002	2001
Raw materials	\$ 27,027	\$ 14,754
Work in process	25,892	17,004
Finished goods	42,459	20,161
	<b>\$ 95,378</b>	<b>\$ 51,919</b>

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, 2002, capitalized inventory related to AMEVIVE, which received regulatory approval in the U.S. in January 2003, was \$25 million. At December 31, 2002, capitalized inventory related to pre-filled syringe formulation of AVONEX, which has not yet received regulatory approval, was \$3.7 million.

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 wrote down \$6.8 million of unmarketable inventory during 2002, of which \$4.2 million was charged to research and development expense for product not yet commercialized, and the remainder was charged to cost of product revenues. The Company did not have any material writedowns of inventory for the years ended December 31, 2001 or 2000.

#### **Marketable Securities**

The Company invests its excess cash balances in short-term marketable securities, principally corporate notes and government securities. At December 31, 2002, 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 the fair market value of the common stock, the duration of the stock's decline, prospects for favorable clinical trial results, new product initiatives and new collaborative agreements.

The Company also invests in equity securities of certain companies whose securities are not publicly traded and fair value is not readily available. These investments are recorded using the cost method of accounting and, as a matter of policy, the Company monitors these investments in private securities on a quarterly basis and determines whether any impairment in their value would require a charge to current earnings.

#### **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 costs are expensed as incurred. Buildings and equipment are depreciated over estimated useful lives ranging from 15 to 40 and 3 to 20 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. 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 \$11.3 million and \$15.7 million as of December 31, 2002 and 2001, 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. For the year ending December 31, 2002, 2001, and 2000 the Company wrote off certain of its patents, which resulted in a charge of \$2 million in 2002.

#### **Loans**

In connection with certain of its research collaborations, the Company has extended loans or made loan commitments to collaborators. On a quarterly basis, the loans are monitored for potential impairment, based on the probability of the collection of the full amount due under the loan according to each loan's terms. Should it be determined that it is not probable that the Company will be able to collect all interest and principal due, the Company recognizes a corresponding impairment charge to current earnings.

#### **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, "Reporting Comprehensive Income", ("SFAS 130"), 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, 2002, 2001 and 2000 of \$205.7 million, \$259.8 million and \$310.3 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 2000, the Company recorded \$1.5 million of unrealized losses, net of tax 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, net of tax 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. During 2002, the Company recorded \$1.2 million of unrealized losses, net of tax to other comprehensive income reflecting the decrease in the fair value of the interest rate swaps and at December 31, 2002 had a cumulative unrealized loss, net of tax, of \$3.3 million.

The Company has foreign currency forward contracts to hedge specific transactions denominated in foreign currencies. 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, net of tax. At December 31, 2001, the Company had cumulative unrealized gains, net of tax, of \$1.3 million on its foreign currency forward contracts. During 2002, the fair value of the Company's foreign currency forward contracts decreased by approximately \$5.4 million, net of tax. At December 31, 2002, the Company had cumulative unrealized losses, net of tax, of \$4.1 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") 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.

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, rather than a sales and marketing expense. The Company has various contracts with distributors that provide for discounts and rebates. These contracts are classified as a reduction of revenue. The Company also maintains select customer service contracts with distributors and other customers in the distribution channel. In accordance with EITF 01-09, the Company has established the fair value of these contracts and, as provided by EITF 01-09, classified these customer service contracts as sales and marketing expense. If the Company had concluded that sufficient evidence of the fair value did not exist for these contracts, the Company would have been required to classify these costs as a reduction of revenue. The adoption of EITF 01-09 did not have a significant impact on the Company's financial statements.

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.

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.

### 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 collaborators, are expensed as incurred. The Company has entered into certain research agreements in which it shares costs with its collaborator. The Company records these costs as research and development expenses. Certain of these costs are reimbursed by the Company's collaborator and are recorded as a reduction of research and development expense.

### 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, as determined using the treasury stock method.

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

<i>(in thousands)</i>	2002	2001	2000
Weighted average number of shares of common stock outstanding	149,337	148,355	148,743
Dilutive stock options and warrants	2,593	4,561	5,859
Shares used in calculating diluted earnings per share	151,930	152,916	154,602

Dilutive securities include options outstanding under the Company's stock option plans. Options to purchase 11.2 million shares, 3.8 million shares and 2.7 million shares were outstanding at December 31, 2002, 2001, and 2000, 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.

## Accounting for Stock Based Compensation

The Company has several stock-based compensation plans which are described more fully in Note 10. 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.

If compensation cost for the Company's 2002, 2001 and 2000 grants under the stock-based compensation plans, including costs related to prior years grants had been determined based on SFAS 123, the Company's pro forma net income, and pro forma earnings per share for the years ending December 31, would have been as follows:

<i>(in thousands, except per share data)</i>	2002	2001	2000
Reported net income	\$ 199,148	\$ 272,683	\$ 333,577
Pro forma stock compensation expense, net of tax	49,387	48,259	39,165
Pro forma net income	\$ 149,761	\$ 224,424	\$ 294,412
Reported basic earnings per share	\$ 1.33	\$ 1.84	\$ 2.24
Pro forma basic earnings per share	\$ 1.00	\$ 1.51	\$ 1.98
Reported diluted earnings per share	\$ 1.31	\$ 1.78	\$ 2.16
Pro forma diluted earnings per share	\$ 0.99	\$ 1.47	\$ 1.90

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

	2002	2001	2000
Expected dividend yield	0%	0%	0%
Expected stock price volatility	45%	44%	45%
Risk-free interest rate	5.75%	5.5%	6.9%
Expected option term in years	7.4	7.5	5.5

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.

## 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, 2002 and 2001 was 28 months and 29 months, respectively. Proceeds from maturities and other sales of marketable securities, which were primarily reinvested, for the years ended December 31, 2002, 2001 and 2000 were approximately \$405 million, \$735 million and \$606 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, 2002, 2001 and 2000 were \$2.7 million, \$6.1 million and \$(1.8) million, respectively.

The following is a summary of marketable securities:

<i>(in thousands)</i>	Fair Value	Gross Unrealized Gains	Gross Unrealized Losses	Amortized Cost
December 31, 2002:				
U.S. Government securities	\$ 296,419	\$ 12,568	\$ 122	\$ 283,973
Corporate debt securities	525,577	18,569	468	507,476
	\$ 821,996	\$ 31,137	\$ 590	\$ 791,449
Marketable securities, noncurrent	\$ 3,757	\$ -	\$ 1,537	\$ 5,294
December 31, 2001:				
U.S. Government securities	\$ 252,838	\$ 6,760	\$ 346	\$ 246,424
Corporate debt securities	491,227	12,794	445	478,878
	\$ 744,065	\$ 19,554	\$ 791	\$ 725,302
Marketable securities, noncurrent	\$ 12,183	\$ -	\$ -	\$ 12,183

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, 2002, representing the cash requirements of the Company to settle the agreements, approximated \$5.1 million and was included in accrued expenses and other. The fair value of the interest rate swap agreements at December 31, 2001, representing the cash requirements of the Company to settle the agreements, was approximately \$3.3 million and was included in accrued expenses and other. 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 2002 and 2001, 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 \$2.7 million in losses related to its interest rate swaps to affect earnings in 2003.

The Company has foreign currency forward contracts to hedge specific forecasted 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, 2002 was approximately \$91.9 million. These contracts had a fair value of \$6.4 million, representing an unrealized loss, and were included in other current liabilities at December 31, 2002. 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 2002, approximately \$1.3 million of losses were recognized in earnings due to hedge ineffectiveness. Additionally, in 2002, approximately \$1.1 million of losses were recognized in earnings 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 \$6.4 million of losses in product revenue and \$2.1 million of losses in royalty revenue for the settlement of certain effective cash flow hedge instruments during the year ended December 31, 2002. These settlements were recorded in the same period as the related forecasted transactions affecting earnings. The Company expects approximately \$6.4 million of unrealized losses at December 31, 2002 to affect earnings in 2003 related to its foreign currency forward contracts.

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.

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.

### 3. BORROWINGS

As of December 31, 2002, the Company had \$12.5 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, 2002, the Company had \$29.8 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.

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

<i>(in thousands)</i>	2002	2001
Term Loan due 2005	\$ 12,501	\$ 14,168
Construction Loan due 2007	29,797	33,017
	42,298	47,185
Current portion	(4,888)	(4,888)
	\$ 37,410	\$ 42,297

### 4. CONSOLIDATED BALANCE SHEETS DETAILS

Property and equipment:

<i>(in thousands)</i>	December 31,	
	2002	2001
Land	\$ 32,687	\$ 23,532
Buildings	233,436	170,504
Leasehold improvements	47,504	65,381
Equipment	309,521	249,887
Construction in progress	330,657	218,521
Total cost	953,805	727,825
Less accumulated depreciation	215,746	171,827
	\$ 738,059	\$ 555,998

Depreciation expense was \$45.6 million, \$36.9 million and \$27.8 million for 2002, 2001 and 2000, respectively.

Accrued expenses and other:

<i>(in thousands)</i>	December 31,	
	2002	2001
Royalties and licensing fees	\$ 37,921	\$ 34,361
Legal settlement accrual	55,000	20,000
Other	89,824	94,618
	<b>\$ 182,745</b>	<b>\$ 148,979</b>

## 5. PENSIONS

The Company has a defined benefit pension plan which provides benefits to all of its full-time U.S. 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:

<i>(in thousands)</i>	2002	2001	2000
Service cost	\$ 5,098	\$ 3,644	\$ 3,314
Interest cost	2,678	2,039	1,799
Expected return on plan assets	(2,130)	(1,655)	(1,258)
Amortization of prior service cost	14	43	43
Amortization of net actuarial loss	271	16	86
Net pension cost	<b>\$ 5,931</b>	<b>\$ 4,087</b>	<b>\$ 3,984</b>

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

<i>(in thousands)</i>	2002	2001
<b>Change in projected benefit obligation</b>		
Net projected benefit obligation at the beginning of the year	\$ (29,990)	\$ (24,434)
Service cost	(5,098)	(3,644)
Interest cost	(2,678)	(2,039)
Actuarial loss	(5,271)	(190)
Gross benefits paid	734	317
Net projected benefit obligation at the end of the year	<b>(42,303)</b>	<b>(29,990)</b>
<b>Change in plan assets</b>		
Fair value of plan assets at the beginning of the year	18,728	15,256
Actual return on plan assets	(3,779)	(1,090)
Employer contributions	10,550	5,000
Gross benefits paid	(596)	(182)
Administrative expenses	(143)	(256)
Fair value of plan assets at the end of the year	<b>24,760</b>	<b>18,728</b>
<b>Funded status at the end of the year</b>		
Funded status at the end of the year	(17,543)	(11,262)
Unrecognized net actuarial loss	15,239	4,295
Unrecognized prior service cost	219	229
Net amount recognized at the end of the year	<b>\$ (2,085)</b>	<b>\$ (6,738)</b>
<b>Weighted average assumptions at the end of the year</b>		
Discount rate	6.75%	7.25%
Expected return on plan assets	9.00%	9.00%
Rates of compensation increase	5.00%	5.00%

The Company's unfunded supplemental retirement plan, as of December 31, 2002 has the projected benefit and the accumulated benefit obligations of \$8.4 million and \$5.7 million, respectively. As of December 31, 2001 the projected benefit and the accumulated benefit obligations were \$5.9 million and \$4.6 million, respectively.

## 6. OTHER INCOME (EXPENSE), NET

Total other income (expense), net consists of the following:

<i>(in thousands)</i>	December 31,		
	2002	2001	2000
Interest income	\$ 41,217	\$ 44,128	\$ 42,965
Interest expense	(3,546)	(3,954)	(4,310)
Other income (expense)	(57,713)	(10,875)	120,094
Total other income (expense), net	<b>\$ (20,042)</b>	<b>\$ 29,299</b>	<b>\$ 158,749</b>

Other income (expense) included the following:

<i>(in thousands)</i>	December 31,		
	2002	2001	2000
Impairments of non-current marketable securities	\$ (10,095)	\$ (27,942)	\$ -
Reserve for outstanding loan to a collaborator	(10,500)	-	-
Gain (loss) on sale on non-current marketable securities	(301)	32,143	101,129
Donation for establishment of Biogen Foundation	(15,000)	-	-
Settlement of Schering-Plough dispute	37,240	-	-
Settlement of Berlex dispute	(55,000)	(20,000)	-
Realized gains in third party acquisition of investment	-	-	24,132
Equity in net income (loss) of unconsolidated affiliate	(3,392)	610	-
Gain (loss) on sale of current marketable securities	2,703	6,147	(1,846)
Miscellaneous	(3,368)	(1,833)	(3,321)
<b>Total other income (expense)</b>	<b>\$ (57,713)</b>	<b>\$ (10,875)</b>	<b>\$ 120,094</b>

As part of its quarterly assessments, the Company assessed the unrealized losses on its investments in Curis Inc. and Targeted Genetics Corporation (see "Note 1 - Summary of Significant Accounting Policies"), 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 those dates. Accordingly, the related unrealized losses of approximately \$10.1 million and \$28 million were reclassified from other comprehensive income to current expense in 2002 and 2001, respectively. Sales of non-current marketable securities resulted in losses of \$0.3 million in 2002, gains of \$32.1 million in 2001, and gains of \$101.1 million in 2000.

In connection with the Company's assessment at December 31, 2002, \$1.5 million of unrealized losses related to these marketable securities were determined to be temporary.

In connection with the Company's loan policy described in Note 1, during the third quarter of 2002, the Company recorded a \$10.5 million charge for the establishment of a reserve related to an outstanding loan to Targeted. Based on a review of the financial condition of the borrower at September 30, 2002, the Company determined that it was no longer probable that the loan would be repaid.

In October 2002, the Company established The Biogen Foundation, a private, U.S. based, non-profit philanthropic organization. In December 2002, the Company made a charitable contribution of \$15 million to fund The Biogen Foundation. The Foundation is to operate exclusively for the benefit of charitable, educational and scientific purposes. Certain executive officers and other employees of the Company serve as directors and officers of the Foundation. The Company classifies charitable contributions to other income (expense).

During the fourth quarter of 2002, the Company and Schering-Plough settled their dispute on the issue of whether and to what extent Schering-Plough has an obligation to pay royalties in the U.S. on sales of its alpha interferon products. The Company received a final settlement payment resulting in a net gain of \$37.2 million, which was classified to other income (expense).

In the fourth quarter of 2002, the Company recorded a \$55 million charge related to the final settlement of a patent infringement dispute with Berlex. The \$55 million payment for settlement of litigation was charged to other income (expense) in the fourth quarter of 2002. In 2001, the Company reported an initial charge of \$20 million as part of the settlement agreement. See Note 9.

In 2000, the Company realized gains of approximately \$24.1 million upon the acquisition by third parties of two companies in which the Company had invested.

## 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:

<i>(in thousands)</i>	2002	2001	2000
<b>Income before income taxes:</b>			
Domestic	\$ 244,515	\$ 298,669	\$ 379,489
Foreign	32,080	90,828	107,616
	<b>\$ 276,595</b>	<b>\$ 389,497</b>	<b>\$ 487,105</b>
<b>Income tax expense:</b>			
Current			
Federal	\$ 45,655	\$ 119,930	\$ 115,696
State	6,173	12,911	11,969
Foreign	2,975	1,917	1,098
	<b>\$ 54,803</b>	<b>\$ 134,758</b>	<b>\$ 128,763</b>
Deferred			
Federal	\$ 22,938	\$ (16,257)	\$ 25,344
State	(294)	(1,687)	(579)
	<b>22,644</b>	<b>(17,944)</b>	<b>24,765</b>
<b>Total income tax expense</b>	<b>\$ 77,447</b>	<b>\$ 116,814</b>	<b>\$ 153,528</b>

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

<i>(in thousands)</i>	2002	2001
Tax credits	\$ 831	\$ 25,440
Inventory and other reserves	37,761	18,288
Other	-	380
Deferred tax asset	\$ 38,592	\$ 44,108
Depreciation, amortization and other	\$ (27,494)	\$ (10,365)
Unrealized gain on investments	(6,184)	(6,424)
Deferred tax liabilities	\$ (33,678)	\$ (16,789)

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

	2002	2001	2000
Statutory rate	35.0%	35.0%	35.0%
State taxes	1.8	2.5	3.2
Foreign taxes	(5.6)	(4.2)	(2.6)
Credits and net operating loss utilization	(3.4)	(3.4)	(3.3)
Other	0.2	0.1	(0.8)
Effective tax rate	28.0%	30.0%	31.5%

At December 31, 2002, the Company had tax credits of approximately \$831,000, which can be carried forward indefinitely. During 2002, management concluded that the likelihood of the Company realizing state tax benefits relating to research, development and investment credits previously recognized as deferred tax assets is remote. Accordingly, the Company's deferred tax assets relating to tax credits were reduced by \$24.6 million in 2002.

As of December 31, 2002, undistributed foreign earnings of non-U.S. subsidiaries included in consolidated retained earnings aggregated \$339.4 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 U.S. It is not practicable to estimate the amount of additional tax that might be payable if such earnings were remitted to the U.S.

## 8. RESEARCH COLLABORATIONS

In January 2003, the Company signed a collaboration agreement (the "IDEC Agreement") with IDEC Pharmaceuticals Corporation ("IDEC"), under which Biogen and IDEC will collaborate on the development of three oncology therapeutics from Biogen's pipeline of early-stage product candidates: an anti-lymphotoxin beta receptor (LTBR) monoclonal antibody, an anti-CRIPTO monoclonal antibody, and an interferon beta (INF-b) gene delivery product. Under the terms of the IDEC agreement, IDEC initially will be responsible for the development costs of the product candidates, until that time, if any, when the Company exercises its opt-in rights (which must be done within a certain timeframe) with respect to each specific product candidate. If the Company exercises its opt-in rights for a specific product, IDEC and the Company will share all subsequent costs related to that specific product and the Company will retain fifty percent of any economic benefit related to the product. If the Company chooses not to exercise its opt-in rights, the Company would be entitled to receive royalty payments from future sales of the specific products.

In December 2002, Biogen signed a collaboration agreement (the "Sunesis Agreement") with Sunesis Pharmaceuticals, Inc. ("Sunesis") under which Biogen and Sunesis will collaborate on the discovery and development of oral therapeutics for the treatment of inflammatory and autoimmune diseases. The parties will apply Sunesis' proprietary fragment-based drug discovery technology, known as "tethering," to generate small molecule leads that target select cytokines in the immune system. Under the terms of the Sunesis Agreement, the Company purchased 1.25 million shares of preferred stock of Sunesis for \$6 million, the fair value of the shares. In addition, the Company paid a one-time non-refundable license fee of \$3 million which was charged to research and development expense and acquired certain exclusive licenses to develop and commercialize certain compounds resulting from the collaboration. The Company accounts for its investment in Sunesis, which is included in other assets, using the cost method of accounting, subject to periodic review of impairment. The Company will pay Sunesis a quarterly license maintenance fee of \$357,500 during the period commencing on April 1, 2004 through July 1, 2005. Additionally, Biogen agreed to enter into a Credit Facility Agreement ("Loan Agreement") with Sunesis under which Biogen is obligated to loan Sunesis up to \$4 million. No borrowings from the loan agreement were outstanding as of December 31, 2002. The Company has committed to paying Sunesis additional amounts upon the completion of certain future research milestones and first and second indication development milestones. If all the milestones were to be achieved, the Company would be required to pay up to an additional \$60.5 million over the life of the agreement.

In April 2002, the Company signed a development and marketing collaboration agreement (the "Celltech Agreement") with Celltech R&D Limited ("Celltech") under which the Company and Celltech agreed to collaborate on the development and commercialization of a humanized anti-TNF alpha antibody known as "CDP571" with potential value in treating gastrointestinal disorders (including Crohn's disease), psoriasis and other autoimmune disease conditions. Under the terms of the Celltech Agreement, Biogen and Celltech agreed to share costs for on-going development activities. In April 2002, the Company paid a one-time non-refundable initiation fee of \$500,000, which was charged to research and development expense. Biogen incurred development expenses for CDP571 during the second and third quarter of 2002, and in the third quarter of 2002, ceased participation in development expenses associated with CDP571 due to unfavorable Phase III data. Through December 31, 2002, the Company incurred approximately \$7 million of research and development expenses associated with CDP571. The Company does not expect to pay any additional amounts in this collaboration.

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 are collaborating worldwide on the development and commercialization of orally active, small molecule LFA-1 antagonists. Biogen and ICOS are currently developing an oral small molecule LFA-1 antagonist as a potential treatment for psoriasis. 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 in 2001. Additionally, as part of the agreement, Biogen made available to ICOS a line of credit in the amount of \$20 million, of which \$10 million was available at December 31, 2002. The Company provided \$6.8 million and \$2.3 million from the line of credit to ICOS that was recorded as a loan receivable and later was charged to research and development expense in 2002 and 2001, respectively, upon the achievement of certain clinical milestones by ICOS. As of December 31, 2002, there was \$1.0 million in 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 future milestones were to be 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 \$92.5 million over the remaining life of the agreement.

In September 2000, the Company signed a collaborative research 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. 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 2002, \$1.5 million in 2001 and \$250,000 in 2000. The research program under the Eos Agreement was terminated in December 2002, thereby relieving Biogen of any future commitments. In February 2003, Eos and Protein Design Labs, Inc. ("PDLI") announced a definitive merger agreement under which PDLI would acquire 100% of the outstanding stock of Eos in a stock-for-stock transaction valued at \$37.5 million. Upon completion of the merger, Biogen's preferred shares of EOS would be converted into common stock of PDLI. The Company expects to record a writedown of approximately \$3 million in the first quarter of 2003 related to its investment in Eos.

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 are collaborating in the development, manufacture and commercialization of ANTEGREN® (natalizumab), a humanized monoclonal antibody. The Company and Elan are currently developing ANTEGREN as a potential treatment for MS and Crohn's disease. Under the terms of the Antegren Agreement, Biogen and Elan 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. The Company provided \$7 million and \$16 million to Elan for certain milestones achieved during the years 2002 and 2001, respectively, which were charged to research and development expense. As of December 31, 2002, Elan owed the Company \$14.8 million, representing development expenses incurred by Biogen to be reimbursed by Elan. The Company has committed to paying Elan additional amounts upon the completion of certain future milestones. If all the future milestones were to be achieved, the Company would be required to pay up to an additional \$14 million over the remaining life of the agreement. Elan is in the process of implementing a recovery plan to re-build its business. The Company does not believe that business issues facing Elan will have a material adverse impact on the Company's rights to develop or commercialize ANTEGREN.

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 proteins. 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 of research funding to Ontogeny in 2000. Additionally, the Company provided \$1.5 million upon termination of the Ontogeny Agreement, which was charged to research and development expense in 2000. At December 31, 2002 the Company retained approximately 166,000 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 amount of \$3.9 million in 2000. 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. Also as part of the Targeted Merger Agreement, an existing \$500,000 promissory note payable by Genovo to Biogen was converted into a no-interest promissory note from Targeted with a term of five years. 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. The Targeted Agreements provide for a \$10 million credit facility, of which \$10 million of borrowings were outstanding as of December 31, 2002. Targeted also had an option to sell to the Company an additional \$10 million of Targeted common stock at fair value. In September 2002, Targeted exercised an option to issue \$4 million of common stock to Biogen. During the third quarter of 2002, the Company incurred a \$10.5 million charge for the establishment of a reserve related to an outstanding loan to Targeted. Based on a review of the financial condition of Targeted at September 30, 2002, the Company determined that it was no longer probable that the loan would be repaid. The Company provided \$1 million in 2002, \$1 million in 2001 and \$250,000 in 2000 for research funding to Targeted. The Company expects to fund research activities of Targeted related to the collaboration of \$750,000 in 2003. At December 31, 2002 the Company retained approximately 8,963,402 shares of Targeted common stock, and included the investment in long-term marketable securities available-for-sale.

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## 9. COMMITMENTS AND CONTINGENCIES

The Company rents laboratory and office space and certain equipment under noncancellable operating leases. The rental expense under these leases, which terminate at various dates through 2015, amounted to \$22.7 million in 2002, \$17.2 million in 2001, \$14.9 million in 2000. 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, 2002, minimum annual rental commitments under noncancellable leases were as follows:

Year	(in thousands)
2003	\$ 20,411
2004	17,712
2005	15,438
2006	12,364
2007	12,137
Thereafter	43,976
<b>Total minimum lease payments</b>	<b>\$ 122,038</b>

The Company's construction of a large scale manufacturing plant and a laboratory office building in Research Triangle Park, North Carolina was substantially completed in the first quarter of 2002. The Company continued its further expansion of its Research Triangle Park, North Carolina complex in 2002 with ongoing construction of several projects to create additional manufacturing capacity. These additional projects are expected to be completed by the summer of 2003 at a total cost of approximately \$93.3 million. As of December 31, 2002, the Company had committed \$81.7 million for construction costs related to these additional projects, of which \$73.5 million has been spent. The Company is also completing plans to build a manufacturing plant in Denmark. The Company expects that construction will commence in 2003 and be completed early in 2005, at an estimated cost of \$250 million. At December 31, 2002, \$47 million had been committed for construction costs related to the manufacturing plant in Denmark, of which \$36.8 million has been spent.

In January 2002, the Company settled litigation with Berlex Laboratories, Inc. ("Berlex"). Berlex had claimed that the Company's production of AVONEX in the U.S. infringed certain U.S. patents which the Company refers to as the "McCormick" patents. A District Court decision in 2000 rendered final judgment in the Company's favor determining that the manufacture, use and sale of AVONEX in the U.S. did not infringe any of the claims of the asserted McCormick patents, but Berlex appealed the decision to the Court of Appeals for the Federal Circuit. Under the settlement agreement, the Company agreed to pay Berlex \$20 million, and to make a second and final payment to Berlex if the Court of Appeals were to reverse the

District Court's previous ruling granting summary judgment in the Company's favor. As part of the settlement, both parties agreed not to pursue further litigation about these patents. Biogen recorded a \$20 million charge in "Other Income, net" in the fourth quarter of 2001 to account for the first payment to Berlex. 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 than 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 at the time of the settlement that \$20 million was 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 the settlement in its December 31, 2001 financial statements.

On January 31, 2003, the Court of Appeals decided that the District Court had properly construed the claims of the McCormick patents and that the Company did not literally infringe the McCormick patents. The Court of Appeals remanded the case to the District Court to determine if one of the Berlex patents might be infringed under a redefinition of the "doctrine of equivalents" recently handed down by the U.S. Supreme Court. As a result of the decision, the Company was required to make a final payment to Berlex of \$55 million under the settlement agreement which was recorded in December 2002. The previously negotiated contingent settlement eliminated the need for further litigation and resolved the entire dispute. The settlement agreement provides that Biogen receive a fully paid up, royalty free, non-exclusive license under the McCormick patent and a related patent held by Berlex. The Company negotiated a license in order to avoid future uncertainty surrounding the rights to the Berlex patent for Biogen and its distribution channel partners. The McCormick patents are not utilized by Biogen and, as such, do not hold value and will not provide future economic benefit to the Company. The \$55 million payment for settlement of litigation was charged to other income (expense) in the fourth quarter of 2002.

On October 13, 1998, the Company filed an opposition with the Opposition Division of the European Patent Office opposing the grant of a European patent (the "Rentschler II Patent") issued to Dr. Rentschler Biotechnologie GmbH ("Rentschler") claiming compositions of matter of beta interferon having specific glycosylation patterns. On November 6, 2002, a hearing took place with regard to the Company's opposition of the Rentschler II Patent in the European Patent Office. The Opposition Board of the European Patent Office ruled in an appealable decision that the present claims of the Rentschler II Patent should be maintained. Following this decision, Rentschler Biotechnologie GmbH & Co. KG sued our German subsidiary, Biogen GmbH, for infringement of the Rentschler II Patent in Germany. The Company intends to appeal the decision of the Opposition Division to the European Patent Office's Technical Board of Appeals. The Company believes that it has arguments to support the invalidation of the Rentschler II Patent before the Technical Board of Appeals. A decision on the appeal is not likely to be issued until at least two years after the Company files the appeal. Biogen also believes that it has solid arguments to support its defense against Rentschler's infringement claim in the German infringement lawsuit. A hearing in the German proceeding is scheduled to occur in September 2003, with a decision likely to follow within a month or two after the hearing. The non-prevailing party will then have the right to appeal the decision. A ruling on such an appeal would likely take another 12 to 18 months. The Company is closely examining the Opposition Board's recent written ruling and the claims made in the German infringement suit, and exploring various alternatives for handling these matters. If the Company were to be enjoined from selling AVONEX in Germany by the German district court pending our appeal of an adverse judgment, or if the Company lost on appeal in the German infringement suit, or if, through other legal proceedings Rentschler were to obtain a determination that the Company's sales of AVONEX in other European countries infringes a valid Rentschler II patent, such a result or results could have a material adverse effect on the Company's results of operations and financial condition. As a result, an estimate of any potential loss or range of loss cannot be made at this time.

Along with most other major pharmaceutical and biotechnology companies, the Company has been named as a defendant in a lawsuit filed by the County of Suffolk, New York, in the U.S. District Court in the Eastern District of New York in January 2003. In March 2003, the case was conditionally transferred to the United States District Court for the District of Massachusetts. The complaint alleges that the defendants overstated the Average Wholesale Price ("AWP") for drugs for which Medicaid provides reimbursement ("Covered Drugs"), marketed and promoted the sale of Covered Drugs to providers based on the providers ability to collect inflated payments from the government and Medicaid beneficiaries that exceeded payments possible for competing drugs, provided financing incentives to providers to over-prescribe Covered Drugs or prescribe Covered Drugs in place of competing drugs, and overcharged Medicaid for illegally inflated Covered Drugs reimbursements. The complaint further alleges that the defendants failed to accurately report the "best price" on the Covered Drugs to New York's Medicaid program. Under Medicaid, pharmaceutical and biotechnology companies agree to pay Medicaid programs a rebate for each product reimbursed by Medicaid. The amount of the rebate is often the difference between the average manufacturers price and the best price reported by companies to the Medicaid program. Plaintiff claims that it was harmed because it could have allotted the dollars that it wrongfully spent on Medicaid to other public needs. Plaintiff has brought the action under the Racketeering Influence and Corrupt Organizations Act (RICO), and for breach of contract, unjust enrichment, Medicaid fraud and common law fraud. The Company intends to vigorously defend itself against all of the allegations and claims in this lawsuit. As a result, an estimate of any potential loss or range of loss cannot be made at this time.

## 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 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, 2002, 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, 2002, 2001 and 2000 were approximately \$2.4 million, \$829,000, and \$(249,000), respectively, related to stock based compensation plans for employees and non-employees.

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 4 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:

<i>(shares are in thousands)</i>	2002		2001		2000	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding, Jan. 1	17,757	\$ 38.81	16,917	\$ 31.70	17,938	\$ 24.53
Granted	3,956	43.41	3,840	57.13	2,731	55.34
Exercised	(1,797)	13.05	(2,079)	15.48	(3,250)	11.61
Canceled	(706)	52.40	(921)	37.24	(502)	34.17
Outstanding, Dec. 31	19,210	\$ 41.67	17,757	\$ 38.81	16,917	\$ 31.70
Options exercisable	10,351		9,466		9,093	
Available for grant	6,035		9,081		1,578	
Weighted average fair value of options granted		\$ 24.65		\$ 31.77		\$ 24.34

The table below summarizes options outstanding and exercisable at December 31, 2002:

<i>(shares are in thousands)</i>	Options Outstanding			Options Exercisable	
	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
Range of Exercise Price					
\$0.00-\$10.00	914	1.54	\$ 8.74	914	\$ 8.74
\$10.01-\$20.00	3,973	3.41	16.08	3,884	16.03
\$20.01-\$30.00	613	5.63	23.79	456	23.17
\$30.01-\$40.00	446	8.10	33.05	168	33.11
\$40.01-\$50.00	5,327	8.37	42.49	1,769	41.39
\$50.01-\$60.00	5,925	8.23	55.68	1,954	55.37
\$60.01-\$70.00	595	7.90	64.33	236	64.32
\$70.01-\$80.00	1,264	6.90	72.41	862	72.30
Over \$80.00	153	6.81	86.11	108	86.40
Total	19,210		\$ 41.67	10,351	\$ 34.27

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, 2002, 556,557 shares have been issued under the stock purchase plans.

### 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 2002, the Company repurchased approximately 145,000 shares of its common stock at a cost of \$8.4 million. During 2001, the Company repurchased approximately 1.5 million shares of its common stock at a cost of \$88.3 million. Approximately 2.4 million shares remain authorized for repurchase under this program at December 31, 2002. In the first quarter of 2003, the Company began open market repurchases for additional shares of its common stock under the program.

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.

## 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, 2002, 2001, and 2000, product and royalty revenues from external customers in The Netherlands were approximately 11%, 11%, and 10% of total revenues, respectively.

The Company's geographic information is as follows:

<i>(in thousands)</i>	US	Europe	Asia	Other	Total
<b>December 31, 2002:</b>					
Product revenue from external customers	\$ 743,419	\$ 275,657	\$ -	\$ 15,281	\$ 1,034,357
Royalty revenue from external customers	65,518	42,493	5,827	169	114,007
Long-lived assets	734,215	55,129	1,163	457	790,964
<b>December 31, 2001:</b>					
Product revenue from external customers	\$ 710,095	\$ 246,581	\$ -	\$ 13,870	\$ 970,546
Royalty revenue from external customers	45,164	21,911	4,468	223	71,766
Long-lived assets	614,026	9,214	-	79	623,319
<b>December 31, 2000:</b>					
Product revenue from external customers	\$ 551,804	\$ 199,714	\$ -	\$ 8,774	\$ 760,292
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

The Company received revenue from three wholesale distributors and a specialty distributor in 2002 accounting for a total of 20%, 19%, 17%, and 16% of total product and royalty revenue. 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.

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## 12. QUARTERLY FINANCIAL DATA (UNAUDITED)

<i>(in thousands, except per share amounts)</i>	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year
<b>2002</b>					
Total revenues	\$ 288,343	\$ 269,263	\$ 288,328	\$ 302,430	\$ 1,148,364
Product revenue	265,985	250,542	261,563	256,267	1,034,357
Royalties revenue	22,358	18,721	26,765	46,163	114,007
Total expenses and taxes	223,230	233,992	235,661	236,291	929,174
Other income (expense), net	7,028	8,104	(10,459)	(24,715)	(20,042)
Net income	72,141	43,375	42,208	41,424	199,148
Basic earnings per share	0.49	0.29	0.28	0.28	1.33
Diluted earnings per share	0.47	0.29	0.28	0.27	1.31
<b>2001</b>					
Total revenues	\$ 237,047	\$ 260,585	\$ 264,097	\$ 280,583	\$ 1,042,312
Product revenue	219,997	243,140	248,107	259,302	970,546
Royalties revenue	17,050	17,445	15,990	21,281	71,766
Total expenses and taxes	181,387	200,266	204,421	212,854	798,928
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

## 13. NEW ACCOUNTING PRONOUNCEMENTS

In July 2002, the FASB issued SFAS 146, "Accounting for Costs Associated with Exit or Disposal Activities." SFAS 146 requires that a liability for a cost associated with an exit or disposal activity be recognized at its fair market value when the liability is incurred, rather than at the date of an entity's commitment to an exit plan. The provisions of SFAS 146 are effective for exit or disposal activities that are initiated after December 31, 2002. The adoption of SFAS 146 is not expected to have a material effect on the Company's financial statements.

In November 2002, the FASB issued FASB Interpretation No. 45 ("FIN 45"), "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others, an interpretation of FASB Statements No. 5, 57, and 107 and Rescission of FASB Interpretation No. 34." FIN 45 elaborates on the disclosures to be made by a guarantor in its interim and annual financial statements about its obligations under certain guarantees that it has issued. It also requires that a guarantor recognize, at the inception of a guarantee, a liability for the fair value of certain guarantees.

The initial recognition and initial measurement provisions of FIN 45 are applicable on a prospective basis to guarantees issued or modified after December 31, 2002. The disclosure requirements of FIN 45 are effective for financial statement periods ending after December 15, 2002.

Under its charter, the Company has agreed to indemnify any person who is made a party to any action or threatened with any action as a result of such person's serving or having served as an officer or director of the Company or having served, at the Company's request, as an officer or director of another company. The indemnification does not apply if the person is adjudicated not to have acted in good faith in the reasonable belief that his or her actions were in the best interests of the Company. The indemnification obligation survives termination of the indemnified party's involvement with the Company but only as to those claims arising from such person's role as an officer or director. The Company has separate indemnification agreements with certain of its officers and directors that mirror the charter provisions. The maximum potential amount of future payments that the Company could be required to make under the charter provision and the corresponding indemnification agreements is unlimited; however, the Company has Director and Officer insurance policies that, in most cases, would limit its exposure and enable it to recover a portion of any future amounts paid. As a result of the insurance policy coverage, the estimated fair value of these indemnification provisions is minimal. All of these indemnification provisions were grandfathered under the provisions of FIN 45 as they were in effect prior to December 31, 2002. Accordingly, we have no liabilities recorded for these provisions as of December 31, 2002.

The Company enters into indemnification provisions under its agreements with other companies in its ordinary course of business, typically with business partners, contractors, clinical sites and customers. Under these provisions the Company generally indemnifies and hold harmless the indemnified party for losses suffered or incurred by the indemnified party as a result of the Company's activities. These indemnification provisions generally survive termination of the underlying agreement. The maximum potential amount of future payments the Company could be required to make under these indemnification provisions is unlimited. The Company has not incurred material costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, the estimated fair value of these agreements is minimal. Accordingly, the Company has no liabilities recorded for these agreements as of December 31, 2002.

In December 2002, the FASB issued SFAS 148, "Accounting for Stock-Based Compensation-Transition and Disclosure - An Amendment of FAS No. 123." SFAS 148 amends SFAS 123, "Accounting for Stock-Based Compensation" to provide alternative methods of transition for those companies who voluntarily change to the fair value based method of accounting for stock-based employee compensation. In addition, this Statement amends the disclosure requirements of SFAS 123 to require prominent disclosures in both the annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. The transition and annual disclosure provision of SFAS 148 are effective for fiscal years ending after December 15, 2002. The Company has not adopted the fair value method of accounting for stock-based compensation, and will continue to apply APB 25 for its stock-based compensation plans. The Company has incorporated the disclosure requirements of SFAS 148 at December 31, 2002, which require a tabular pro forma presentation of net income had SFAS 123 been adopted by the Company in the "Summary of Significant Accounting Policies" footnote of the financial statements.

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities, an interpretation of ARB No. 51." FIN 46 requires existing unconsolidated variable interest entities to be consolidated by their primary beneficiaries if the entities do not effectively disperse risks among parties involved. Variable interest entities that effectively disperse risk will not be consolidated unless a single party holds an interest or combination of interests that effectively recombines risks that were previously dispersed. FIN 46 also requires enhanced disclosure requirements related to variable interest entities. FIN 46 applies immediately to variable interest entities created after January 31, 2003, and to variable interest entities in which an enterprise obtains an interest after that date. It applies in the first fiscal year or interim period beginning after June 15, 2003 to variable interest entities in which an enterprise holds a variable interest that it acquired before February 1, 2003. The adoption of FIN 46 is not expected to have a material effect on the Company's financial statements.

## 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, 2002 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2002 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  
February 14, 2003

## SENIOR EXECUTIVES AND BOARD MEMBERS

Biogen, Inc. and Subsidiaries

### Senior Biogen Executives

**James C. Mullen**

Chairman of the Board of Directors, President and Chief Executive Officer

**Burt A. Adelman, M.D.**

Executive Vice President – Research and Development

**Thomas J. Bucknum, Esq**

Executive Vice President – General Counsel and Clerk

**Sylvie L. Gregoire, Pharm. D**

Executive Vice President – Technical Operations

**Hans Peter Hasler**

Executive Vice President – Commercial Operations

**Peter N. Kellogg**

Executive Vice President – Finance and Chief Financial Officer

**Craig Schneier, Ph.D.**

Executive Vice President – Human Resources

### Board of Directors

**James C. Mullen**

Chairman of the Board of Directors, President and Chief Executive Officer

**Alan Belzer**<sup>1,3</sup>

President, Chief Operating Officer and Director, Allied-Signal, Inc. (retired)

**Lawrence C. Best**<sup>1</sup>

Senior Vice President and Chief Financial Officer, Boston Scientific Corporation

**Harold W. Buirkle**<sup>1,2</sup>

Managing Director, The Henley Group, Inc. (retired)

**Mary L. Good, Ph.D.**<sup>2</sup>

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.**<sup>1</sup>

R. J. Reynolds Professor and Former Dean, Fuqua School of Business, Duke University

**Roger H. Morley**<sup>2</sup>

Vice President, Schiller International University; Co-Managing Director, R&R Inventions Ltd.; Former President, American Express Co.

**Sir Kenneth Murray, Ph.D.**<sup>3</sup>

Biogen Professor of Molecular Biology, Emeritus University of Edinburgh; Fellow of The Royal Society

**Eckhard Pfeiffer**<sup>2</sup>

President and Chief Executive Officer, Compaq Corporation (retired)

**Phillip A. Sharp, Ph.D.**

Institute Professor and Director of the McGovern Institute for Brain Research, Massachusetts Institute of Technology; Nobel Laureate

**Alan K. Simpson**<sup>3</sup>

Former Director of the Institute of Politics and Former Visiting Lecturer, John F. Kennedy School of Government, Harvard University; Visiting Lecturer, University of Wyoming; Former U.S. Senator

**James W. Stevens**<sup>1,3</sup>

Former Chairman, Prudential Asset Management Group

<sup>1</sup> Member of the Finance and Audit Committee

<sup>2</sup> Member of the Compensation and Management Development Committee

<sup>3</sup> Member of the Corporate Governance and Nominating Committee

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## 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 6, 2003 at 10:00 am  
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 7, 2003 there were approximately 2,346 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 2002 and 2001 are as follows:

	High	Low
<b>Fiscal 2002</b>		
First Quarter	57 <sup>42</sup>	49 <sup>06</sup>
Second Quarter	50 <sup>04</sup>	39 <sup>19</sup>
Third Quarter	38 <sup>05</sup>	29 <sup>08</sup>
Fourth Quarter	46 <sup>23</sup>	28 <sup>89</sup>
<b>Fiscal 2001</b>		
First Quarter	74 <sup>50</sup>	51 <sup>31</sup>
Second Quarter	66 <sup>80</sup>	52 <sup>03</sup>
Third Quarter	61 <sup>99</sup>	49 <sup>45</sup>
Fourth Quarter	59 <sup>63</sup>	52 <sup>68</sup>

### SEC Form 10-K

A copy of Biogen's Annual Report on Form 10-K filed with the Securities and Exchange Commission is available upon written request to the:

Investor Relations 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  
One Post Office Square  
Boston, MA 02109

### 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.

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## 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

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

### Biogen Australia Pty Ltd.

Suite 2601  
100 Miller Street  
North Sydney NSW 2060  
Australia  
Tel 02 8907 3300  
Fax 02 8907 3332

### Biogen GmbH

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

### Biogen Farmaceutica S.L.

Paseo de la Castellana 141  
Edificio Cuzco IV  
Madrid 28046, Spain  
Tel 34 91 572 67 50  
Fax 34 91 572 66 21

### Biogen Belgium N.V./S.A.

Rue des Colonies 11  
B-1000 Bruxelles  
Belgium  
Tel 32 2 219 12 18  
Fax 32 2 219 23 56

### Biogen Canada, Inc.

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

### Biogen (Denmark) A/S

Lynbyvej 16-28  
2100 Copenhagen  
Denmark  
Tel 45 39 16 91 91  
Fax 45 39 16 91 99

### Biogen Finland Oy

Ayritie 12A  
SF-01510 Vantaa  
Finland  
Tel 358 9 77 43 70 00  
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.

Atago Green Hills MORI Tower 26F  
5-1 Atago 2-chome  
Minato-ku  
Tokyo 105-6226 Japan  
Tel 81 3 6402 7803  
Fax 81 3 6402 7850

### Biogen International B.V.

Robijnlaan 8  
NL-2132 WX Hoofddorp  
The Netherlands  
Tel 31 23 566 81 81  
Fax 31 23 566 81 82

### Biogen Norway AS

Karenslyst All, 8b  
N-0278 Oslo  
Norway  
Tel 47 23 12 06 38  
Fax 47 23 12 05 98

### Biogen Sweden AB

Kanalvägen 1A, plan 2  
S-194 61 Upplands Väsby  
Sweden  
Tel 46 8 594 113 60  
Fax 46 8 594 113 69

### Biogen (Switzerland) AG

Bahnhofstrasse 12  
6300 ZUG  
Switzerland  
Tel 41 728 74 44  
Fax 41 728 74 40

### Biogen Limited

5d Roxborough Way  
Foundation Park  
Maidenhead, Berkshire SL6 3UD  
United Kingdom  
Tel 44 16 28 50 10 00  
Fax 44 16 28 50 10 10





BIODEN INC.  
14 CAMBRIDGE CENTER  
CAMBRIDGE, MA 02142  
617.679.2000

