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P.E.
12-31-01

P E N W E S T

PHARMACEUTICALS Co

meta•mor•pho•sis \,met-e-'mor-fe-ses\ n, pl -phoses \-fe-,sez\ **1a:** a change of form, structure, or substance **b** a striking alteration in appearance, character, or circumstances **2:** a fundamental change (as of caterpillar into a butterfly) [Latin, from Greek metamorphosis, from metamorphoun "to transform", from meta-=morphe "form"]

2001
Annual Report

PENWEST is engaged in the research, development and commercialization of novel oral drug delivery technologies. The Company is also a leader in the development, manufacture, and distribution of branded excipient ingredients for the pharmaceutical industry. Our TIMERx® controlled release delivery platform can be applied to a broad range of orally administered drugs to create therapeutically enhanced medicines. The new extension of our TIMERx platform, Geminex™, allows for the release of two different drugs at different rates. PROSOLV®, a high-functionality excipient, improves tablet manufacturability and reduces tablet size which improves patient compliance. Through these innovations, we have become a leading provider of novel oral drug delivery technologies with the ability to enhance the therapeutic effect of drugs and extend product life cycles. Taking the next step in our business strategy, we are developing better drug products by combining drugs currently on the market that will benefit from our proprietary drug delivery technologies.

“The future is not some place we are going to, but one we are **CREATING.** The paths are not to be found, but made, and the activity of making them changes both the maker and the destination.”

John Schaar

DEAR FELLOW PENWEST SHAREHOLDERS

2001 was a year of significant progress in Penwest's plan to incorporate product development into our overall drug delivery strategy. This evolution is being carried out through a three-pronged approach:

- Building a pipeline of products in which oral drug delivery can provide therapeutic benefit;
- Establishing the technology infrastructure and hiring the best team to support the clinical development and regulatory affairs of drug product development; and
- Realizing greater economic value of our products by either sharing the financial risk and reward with collaborators or completely developing products ourselves.

Controlling the product development process enables Penwest to control the product selection and subsequent development timelines, increase our patent position, and participate more fully in the revenue stream from future product sales by assuming an equal or full share of the development costs. We believe that this strategy positions Penwest to increase revenue and profitability over the long-term, and thereby grow Penwest's long-term shareholder value.

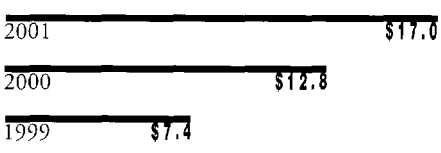
DRUG DELIVERY ACHIEVEMENTS

As part of Penwest's expanded strategic focus, we increased our research and development (R&D) spending in 2001 by 33% to $17.0 million, compared to $12.8 million the prior year. We anticipate further increasing this level of investment over the next couple of years as we identify additional product development opportunities.

Penwest made considerable progress in implementing these initiatives during 2001. Our most notable accomplishments were:

- Important progress in the clinical trials of our oxymorphone extended release pain product being developed with Endo Pharmaceuticals. We are on schedule to complete the clinical development program and anticipate a new drug application (NDA) filing by Endo with the Food and Drug Administration (FDA) in the second half of 2002.
- Expanding the scope of our product portfolio internationally through:
  - Regulatory approval in Brazil for Nifedipine XL, a generic version of Adalat LA® licensed to Merck, S.A. Industrias Quimicas, marking Penwest's first entry into the South American market. We anticipate that Merck, S.A. will begin marketing this product in the second quarter of 2002.
  - A collaboration for European distribution of a pain product developed with Laboratoires Irex S.A., extending our relationship with its parent company, Sanofi-Synthelabo S.A., with whom we have built a strong relationship over many years.

R&D SPENDING
(dollars in millions)

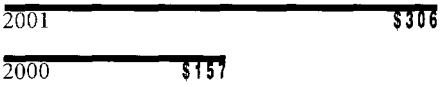


- A collaboration with Ranbaxy Laboratories Limited to market Nifedipine XL in China, Malaysia, Singapore, Thailand, Philippines, South Africa, Sri Lanka and Mexico.
- Forming a strategic alliance with Arakis Limited to develop orally delivered medicines indicated for pain conditions. This alliance expands our existing relationship with Arakis in developing AD 121, a chronotherapeutic formulation that is targeted for rheumatoid arthritis.
- Identifying four new product candidates for initial formulation work. These drugs are indicated for pain and hypertension and we anticipate advancing them into clinical trials during 2002.

Penwest's portfolio now contains four approved products with key development collaborators, including Mylan Pharmaceuticals, Sanofi, and Merck, S.A., in addition we have seven products under development in our pipeline. The expansion of our drug development pipeline demonstrates the flexibility and broad applicability of our technology platform and Penwest's growing commitment to being the innovative technology leader in oral drug delivery products.

(Pictured Above)
Tod R. Hamachek
Chairman of the Board
and Chief Executive Officer

MARKET CAP
(dollars in millions)



ORAL DELIVERY TECHNOLOGIES

Oral drug delivery technologies are the heart and soul of Penwest, enhancing the therapeutic benefits of the products we formulate and develop. TIMERx®, our proprietary oral controlled release technology, is the foundation of our technology platform. It is adaptable to soluble and insoluble drugs, flexible to a variety of release profiles, and provides easy scale-up and technology transfer to more rapidly formulate and advance products into clinical trials.

Based on the TIMERx platform, we have developed two additional and distinct oral delivery systems: Geminex™, which releases drugs at two different rates, and chronotherapeutic delivery, which releases the drug at the desired site and time in the body. We also are seeking to add other unique drug delivery technologies that address specific niche opportunities within the oral drug delivery market.

We feel the oral drug delivery market is large and growing. Our core competency in pharmaceutical powder and tabletting technologies positions Penwest to take advantage of this market opportunity. The drug delivery market was valued at $14 billion in 2001, with oral controlled release products accounting for about 65% of that market. Therefore, for the foreseeable future, our focus will remain exclusively on developing orally administered drugs.

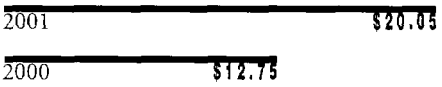
EXCIPIENT PROGRESS

Penwest's excipients business continues to make noteworthy progress. During 2001:

- Our customers received U.S. and European regulatory approvals for ethical pharmaceutical products containing our PROSOLV® product, demonstrating the continued importance of this co-processing technology in driving the growth of Penwest's underlying excipients business.
- Penwest established a new collaboration with Finzelberg, a member of The Martin Bauer Group. In January 2002, Penwest and Finzelberg announced the development of a new line of PROSOLV-enhanced nutritional herbal supplements. Our relationship with Finzelberg is modeled on those of our drug delivery collaborations, using technology to address significant market opportunity and sharing greater economic value of products with our collaborator.
- We increased excipient revenues to $34.2 million in 2001 from $33.3 million in 2000, despite pricing pressure on our core Emcocel® products. Of particular note is the strong sales growth achieved by our European sales team.

Penwest's excipient product offering is the broadest in the industry and our customers include most of the world's largest pharmaceutical companies. Based on the steady

STOCK PRICE



growth of our core products, as well as the forecasted growth of our PROSOLV products, we remain confident of continued progress in this area.

FINANCIAL POSITION

The continued expansion of our drug delivery product pipeline requires a strong cash position. We were pleased by the significant interest Penwest received this year from both current shareholders and new Penwest investors as we raised $30 million in privately placed new equity financing. This cash is being used to expand the product development pipeline. The market has recognized Penwest's opportunity and capability to successfully execute its strategy, as demonstrated by the 95% growth in the Company's market capitalization in 2001 to $306 million at year-end. More importantly, our stock price appreciated approximately 57% during the year.

As we accelerated our drug delivery strategy during 2001, our financial results reflected the increased spending for research and development, particularly as we advanced oxymorphone clinical trials with Endo, worked on new product candidates, developed new drug delivery technologies and identified opportunities to increase our patent portfolio. Comparative revenues for the year declined primarily due to the fact that a one-time shipment of bulk TIMERx made to Mylan in 2000 did not recur in 2001, though excipient revenues grew slightly and royalties from our drug delivery collaborations also increased. While our investment in R&D significantly contributed to our loss for the year, we believe it is necessary to lay the foundation now for our growth in the years ahead.

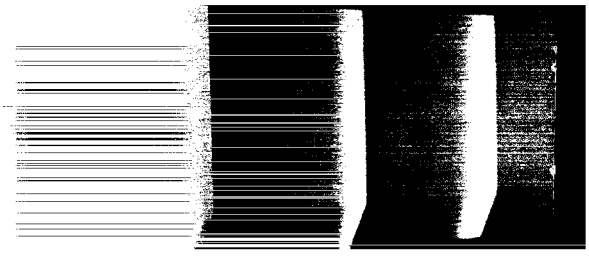
The development cycle for drugs that we develop takes three to five years from beginning to marketing introduction. The increasing R&D investment today is aimed at providing attractive growth opportunities beyond the 2004 introduction of oxymorphone ER.

Penwest has a great deal to look forward to in 2002 in executing its drug delivery strategy. In particular, we anticipate Endo's submission of our oxymorphone product and the initiation of their marketing programs, as well as Penwest's new product collaborations and the advancement of additional pipeline products into clinical development. I am confident that, with the strength and ability of Penwest's people to build upon the success of our technology and expand our product portfolio, Penwest can continue to deliver significant long-term value to you, our shareholders.

Sincerely,

Tod R. Hamachek
Chairman of the Board
and Chief Executive Officer

"You cannot direct
the winds,
but you can adjust
the sails."



*Yawen Gilday,
scientist in the
research and New
Technology group, is
studying the release
of drug over time
with a USP Type III
Dissolution Apparatus.*

TECHNOLOGY

Based on a solid foundation of oral drug delivery expertise and innovative technology platforms, Penwest is advancing in exciting new directions. Extensions of our technology platforms have boosted our drug formulation capabilities. In addition to forming new alliances for drug development, we are developing our own drug product portfolio. We feel these changes will generate greater long-term value for shareholders and better medicines for patients.


CONSUMER ENHANCED MEDICINE
Geminex™
TIMERx TECHNOLOGY
RediRun DC™
Herbal Formulations
TIMERx®
1st Order
TIMERx®
Burst CR
TIMERx®
Z Order
PROSOLV®
TECHNOLOGY
TIMERx®
EMCOCEL®
Microcrystalline Cellulose, NF
MATERIAL SCIENCE

Rooted in a fundamental expertise in tabletting ingredients and oral drug delivery, Penwest has achieved prominence in innovative oral drug delivery technologies and drug development.

In the mid-1990s we developed two powerful proprietary technologies that fueled the Company's growth, PROSOLV and TIMERx. In 2001, we made major strides in leveraging these technologies into new pharmaceutical products.

EXCIPIENT FOUNDATION

Our Company was built on a solid foundation of material science expertise and the global infrastructure of our excipients business, which develops and manufactures the inactive ingredients in tablets. Celebrating over 50 years, this business is renowned for industry firsts — Emcompress®, the first directly compressible excipient; Explotab®, the first super disintegrant; and Pruv®, the first super lubricant.

The PROSOLV platform, a synergistic combination of microcrystalline cellulose and colloidal silicon dioxide, streamlines tablet manufacturing and improves dosage forms, enhancing patient compliance.

PROSOLV

PROSOLV has evolved into a diverse platform that can solve a range of manufacturing and tablet performance challenges. This state-of-the-art co-processing technology provides the pharmaceutical industry with products that enhance both flow and compaction simultaneously. Penwest branded the word "Excipio Economics™" to describe the quantified benefits of PROSOLV: smaller tablets, fewer excipients, elimination of granulations, production yield improvements, enhanced tablet quality, and fast production time. With PROSOLV, content uniformity issues associated with low dose drugs can be corrected with direct compression strategies.

Continuing a tradition of innovation, Penwest and Finzelberg, a global producer of herbal extracts, applied PROSOLV to develop and introduce RediRun DC™ direct-compression formulations in November 2001. An industry first, RediRun DC produces improved tablets and capsules for the herbal supplement industry, reducing tablet size by more than 50 percent and improving manufacturing economics without sacrificing potency.

TIMERx

Our versatile proprietary oral controlled release delivery platform, TIMERx, solves a broad range of drug delivery challenges and improves the therapeutic benefit of medicines.

TIMERx enhances the delivery of a wide range of drugs, including low- to high-dose drugs, insoluble to highly soluble drugs, and drugs with a narrow therapeutic window. It achieves the desired release profile rapidly and cost-effectively, giving our pharmaceutical partners a first-to-market advantage. In 2001, we extended the TIMERx platform with flexible options to optimize the therapeutic benefit of drugs.

- TIMERx *1st Order:* releases drug at a decreasing amount over time.
- TIMERx *Z Order:* releases drug at a constant amount over time.
- TIMERx *Burst CR:* releases drug at two distinct intervals — an immediate release burst followed by controlled release.

The most significant TIMERx advancement was the introduction of Geminex, a unique bi-layer, dual-release tablet technology that can deliver one or more drugs at two different release rates. The dual delivery capability maximizes the therapeutic benefit of many medicines and minimizes side effects by enabling each of two complementary drugs to target unique mechanisms of action. Geminex is particularly effective for disease states such as diabetes, hypertension, depression and pain.

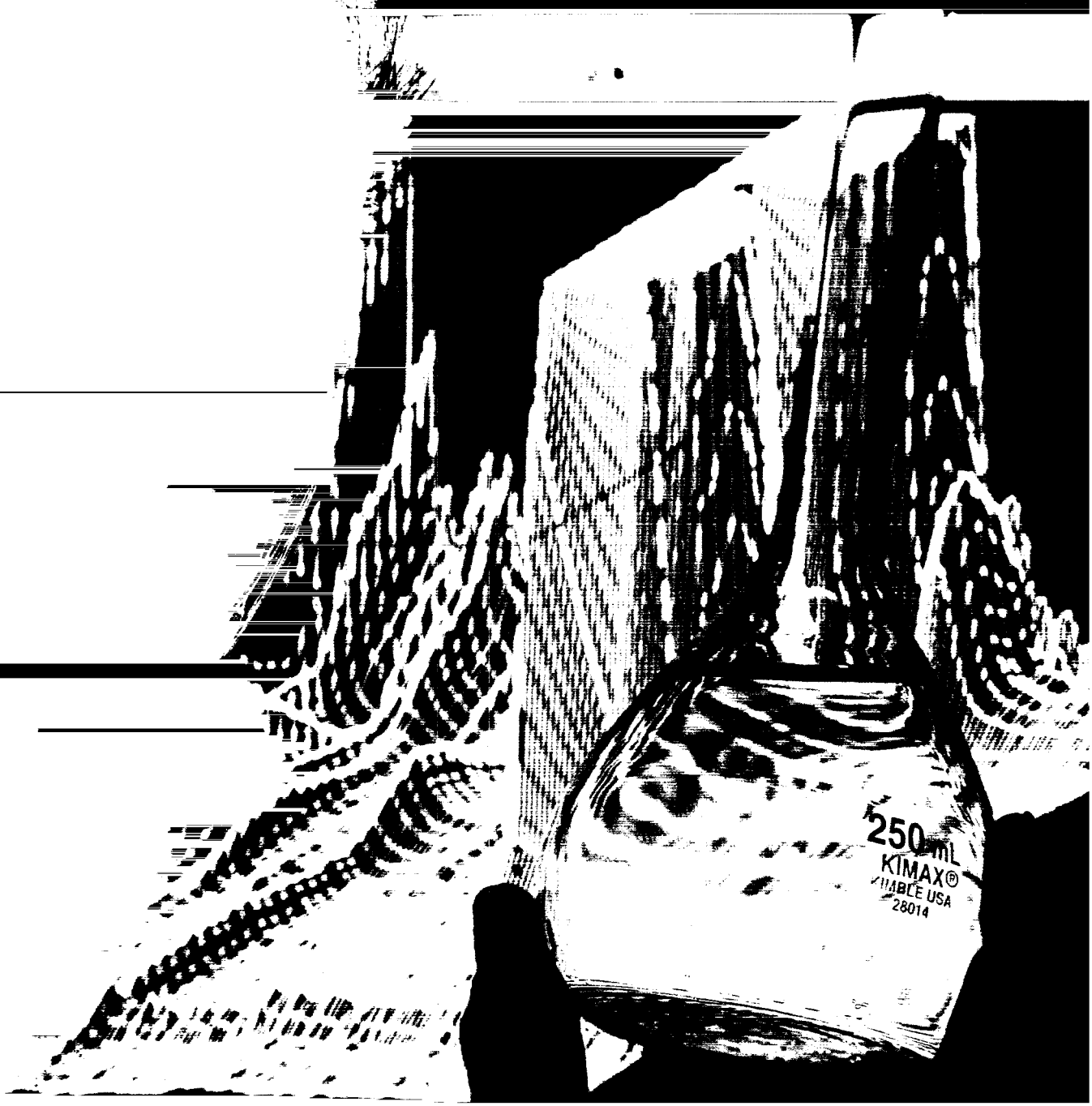
OUR STRATEGY

In 2001, we continued to evolve our strategy. Using our drug delivery technologies, we are developing our own drug product portfolio, now in various stages of clinical development. We have active development programs in therapeutic categories such as pain management, rheumatoid arthritis and hypertension.

As we look ahead, Penwest is focused on expanding the boundaries of drug delivery, through proprietary technologies and developing innovative solutions to meet the rapidly changing needs of the pharmaceutical industry and the trend toward more personalized medicines.

PRODUCT PORTFOLIO

Denwest is developing a diverse pipeline of therapeutically enhanced products. Capitalizing on the strength of our drug delivery technology platforms and drug development expertise, we are evolving our business strategy to create long-term value and strengthen the Company's position in the pharmaceutical industry. Our goal is to build a strong portfolio of products that fulfill unmet medical needs and offer new clinical benefits.



Jim Avanzi, Associate Director of Quality Assurance/Quality Control, is responsible for maintaining the high standards for all Kimble products and accessories.

To build this product portfolio efficiently and cost-effectively, Penwest applies its TIMERx technology platform to develop branded drugs from existing immediate release drugs. By reformulating these drugs we can provide new therapeutic benefits, minimize side effects and/or improve compliance. We believe this product development strategy will enable us to better control product development timelines, have more input into product selection and design, and increase the financial value to Penwest for each of these products.

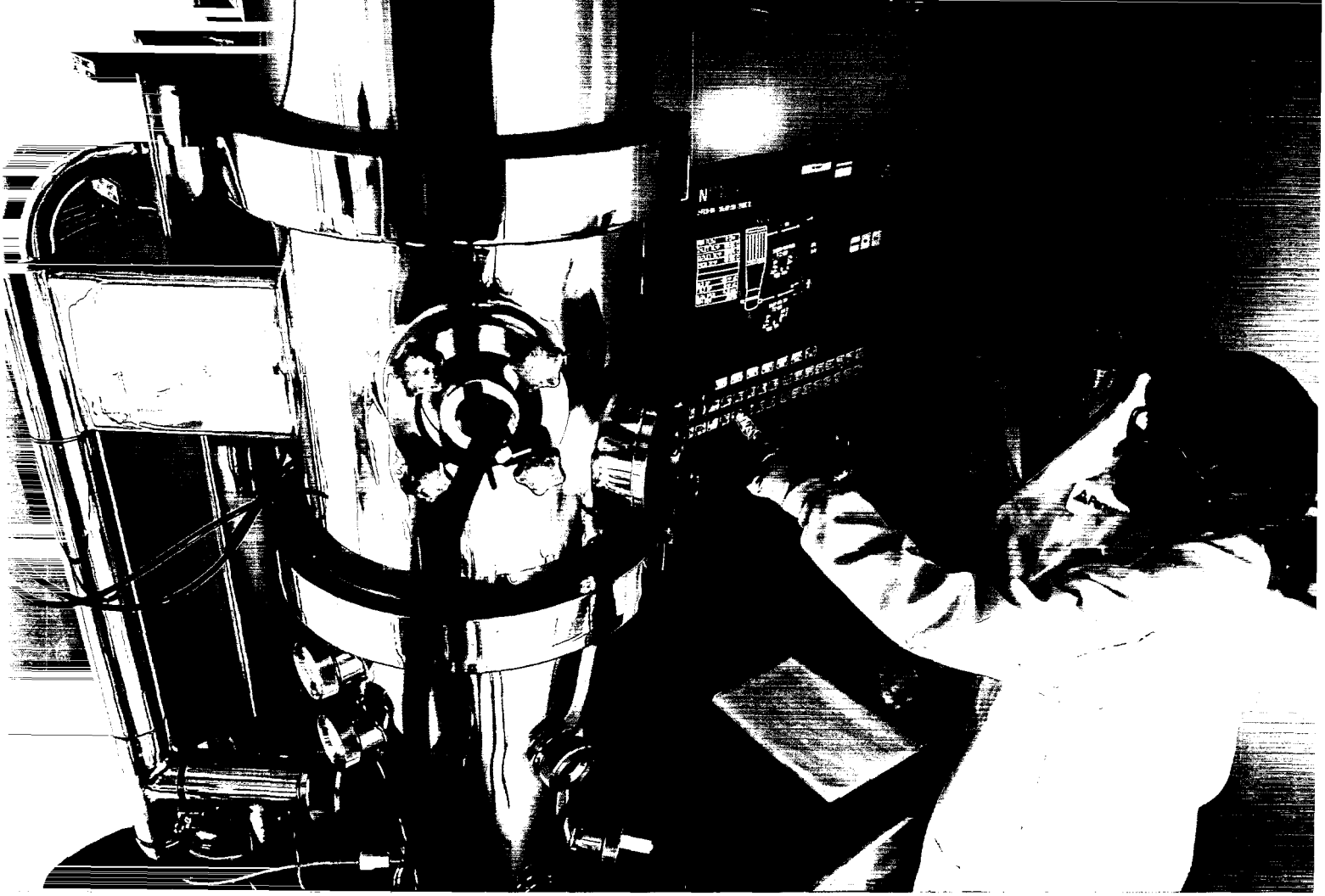
Until 2001, we generally partnered with pharmaceutical companies worldwide for feasibility studies and licensing agreements, using our technology platforms to improve the drug delivery of our partners' products. We also added a new dimension to this strategy: joint collaborations for drug development, incorporating TIMERx. We took an important step from simply licensing our technologies to pharmaceutical companies to being an equal partner in drug development programs with companies that either have marketing expertise or complementary technology.

While collaborations will remain an important component of building our product portfolio, we are also developing our own product pipeline, with the intent of performing the required clinical trials, submitting the regulatory filing, and licensing the final product to a marketing partner. This exciting new initiative will give us greater control over our destiny, retain more of the financial value, and enable us to seize new opportunities in the pharmaceutical marketplace.

ORGANIZATIONAL IMPROVEMENTS

The evolution towards a product development strategy necessitated a number of organizational changes.

To navigate the extensive clinical and regulatory requirements of drug development, we established two new departments — Clinical Affairs and Regulatory Affairs. Our new Vice President of Clinical Affairs, a neurologist, is responsible for assessing and managing the various phases of clinical testing of new products. Our Regulatory Affairs department will oversee and manage the appropriate Food and Drug Administration (FDA) regulatory filings. This is an especially complex role now that we intend to file more new drug applications



Above:
Fatima Pacheco, Manager of Quality Control, and Jonathan Jose, Scientist Pharmaceutical Analysis, are monitoring the output and performance of a fluid bed granulator.

(NDAs) rather than applications to develop generic products. These experts join our scientific, marketing and executive teams to guide our future growth.

Penwest also formed a cross-functional team dedicated to identifying and evaluating new product opportunities. The new team comprises experts from various departments who contribute specialized expertise to ensure the overall success of our product selection and, ultimately, our product portfolio:

- Marketing assesses the marketplace to identify promising drugs that offer growth potential and therapeutic enhancement with the applications of our technologies
- Clinical experts define the therapeutic value of a drug and determine the clinical development program
- Formulation scientists review the drug's formulation and technical development feasibility
- Business Development advises on future licensing strategies with marketing partners
- Regulatory Affairs determines the best filing strategies.

As we increase our product development efforts, product selection and product portfolio management become the most critical components of our success.

AN EVOLVING PRODUCT PORTFOLIO

Penwest's product portfolio is not narrowly limited to specific therapeutic areas, such as heart disease or pain management. The only boundary in our selection of new products is the breadth of unmet medical needs for patients that can be fulfilled by applying our technologies to existing medicines.

We are actively seeking opportunities to develop improved medications in a broad range of therapeutic categories.

Our strategy is to build a drug product portfolio based on the application of oral drug delivery technologies that address very specific unmet medical needs. This is accomplished by using a three-step approach:

- Research and identify existing products that have high growth potential and the ability to solve unmet patient needs when Penwest technologies are applied.
- Apply TIMERx-based technologies to these products to develop new formulations that achieve improved therapeutic benefits.
- Seek regulatory approval for new indications of existing drugs.

A good example of how the TIMERx platform can be applied to improve existing medicines is the use of our Geminex technology for an improved diabetes medication.

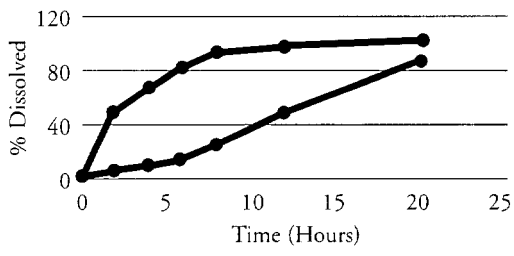
Opposite Page:
Sara Ketsela, Senior Project Leader, is supervising GMP tablet manufacture.

Geminex is a dual-delivery, bi-layer formulation, based on the TIMERx technology, that releases two complementary drugs at different rates from the same tablet. A combination of two glucose-lowering medicines together has been clinically shown to be the most effective therapeutic approach to diabetes management. One drug lowers blood sugar, while the other helps the body use its own insulin more effectively. The Geminex technology can be used to achieve the optimal release rate of each drug, which may maximize the drug's effectiveness, offer patients the convenience of taking two drugs in a single tablet, and thereby improve patient compliance. Delivering the two drugs together at different release rates can enhance overall diabetes management.

REGULATORY APPROACH

At Penwest, we take a balanced approach to our product portfolio in terms of risk and reward. We judiciously choose strategies

IN VITRO PROFILE: GEMINEX DIABETES COMBINATION PRODUCT
(USP Apparatus Type III)



that minimize the risk inherent in drug development, while maximizing long-term financial rewards. We are developing a robust, well-balanced product portfolio by increasing the number of new niche drugs in our pipeline, as well as using various regulatory strategies to diversify risk.

In addition to new drug applications (NDAs) and abbreviated new drug applications (ANDAs) Penwest is utilizing an attractive alternative NDA approval mechanism, the 505(b)(2). This application is advantageous for developing innovative dosage forms or delivery routes for previously approved drugs. It will generally allow us to rely on prior FDA findings of safety and efficacy, eliminating the need for many lengthy, costly clinical tests. We will only be required to provide additional clinical data as requested by the FDA. This efficient approach will spur the development and approval processes, saving considerable effort and cost.

When Penwest launched the TIMERx platform in the mid-1990s, the primary focus was on generic drugs. However, the launch of our lead product was being delayed by at least thirty months due to litigation under the Waxman Hatch Act, a tactic commonly used by branded companies to delay generic drug approvals.

This recognition was fundamental in our decision to chart a new course for greater control over our future — to diversify our pipeline beyond generic products and by adding medicines that are therapeutically enhanced and differentiated by our drug delivery technologies. Currently, we have active drug development programs in the following therapeutic areas: cardiovascular, migraine, pain management and others.

BALANCING RISK, BUILDING VALUE

To expand our product portfolio, balance risk and enhance value, we select drugs based on clinical benefit, technical feasibility and market opportunity and utilize collaborations to diversify financial risk and maximize reward.

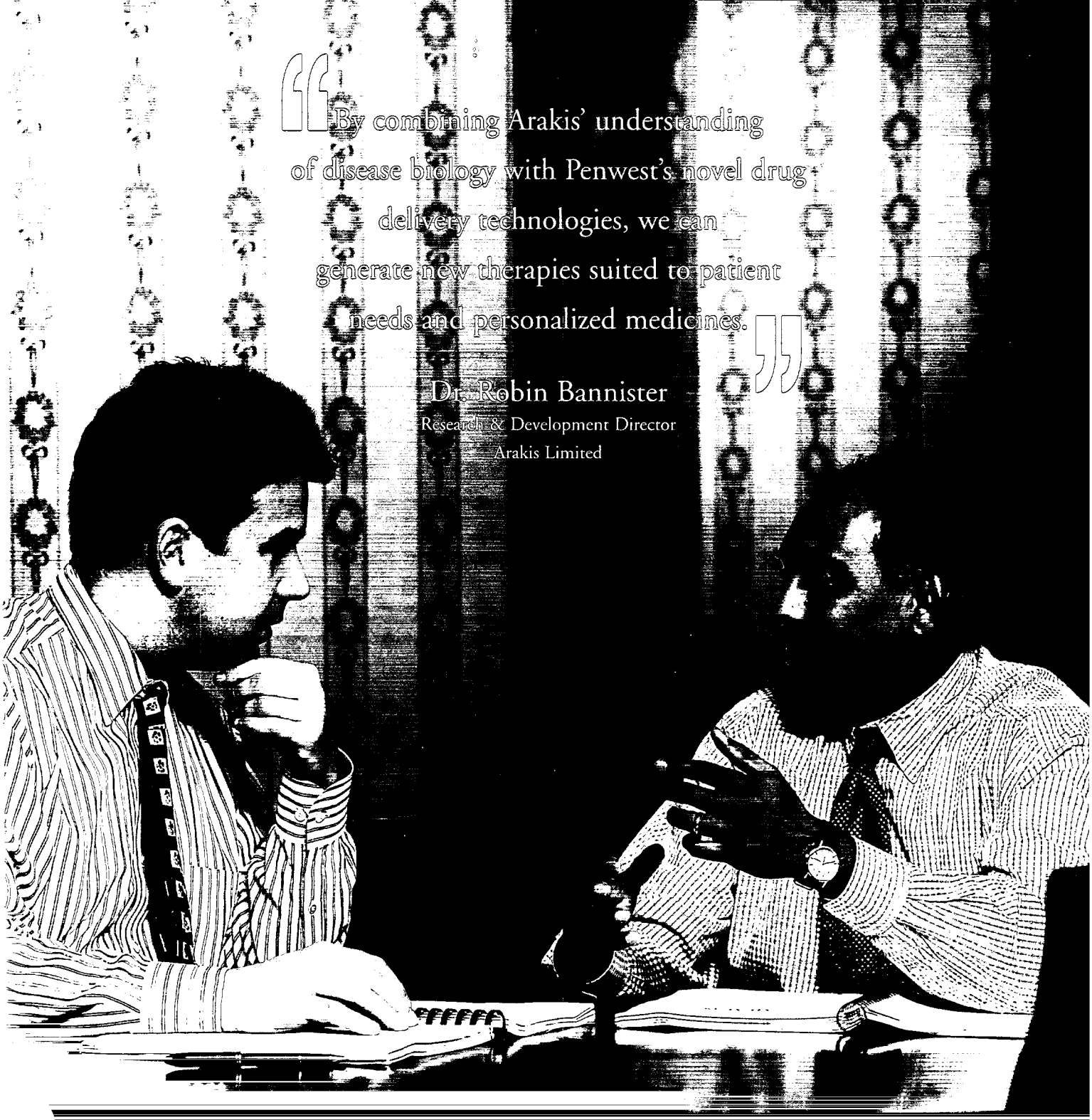
Our approach in selecting products for development is to choose currently marketed immediate release drugs whose active ingredients can be enhanced with the TIMERx platform to provide new therapeutic benefits that fulfill unmet medical needs. By choosing clinically proven drugs, we seek to save significant time and cost for clinical testing, considerably reduce risk, and avoid competing with large pharmaceutical companies that develop new chemical entities. Our current product pipeline, in various stages of development, reflects this approach.

Collaborations have always been an important means of building our product portfolio. While collaborations will remain important, our next step is funding our own product pipeline, including performing the required clinical trials and licensing the final product to a marketing partner. We expect that this exciting new initiative will give us greater control over our destiny, and enable us to seize opportunities in the pharmaceutical marketplace with diversified cost and risk.

Below:
Dean DiNicola, Senior Project Leader, is measuring the temperature of the powder bed during a granulation process.

PROFITABLE NEW PARTNERSHIPS

At Penwest we recognize that we are only as successful as our collaborations. That is why we are truly committed to each of them, culturing innovation and striving to make pharmaceutical products better. By leveraging each other's expertise, we strive to make 1+1=3.



Dr. Robin Bannister, Research and Development Director of Arakis, and Dr. Anand Baichwal of Penwest, review product developments in the area of pain management.

Collaborations with market-leading pharmaceutical companies continue to a play a significant role in Penwest's business growth. Our philosophy is to work with companies that bring a unique expertise and complement our own expertise in formulation and new technology development. Each development program has a clear clinical and commercial strategy, intellectual property protection and a development plan.

Generally, our collaborations have evolved to more equal financial arrangements, with equal funding and profit sharing. However, we will continue to opportunistically do straight licensing arrangements. Below are some examples of Penwest's important alliances. In each of these collaborations, we share equally in the drug development process and rewards.

ARAKIS PAIN ALLIANCE

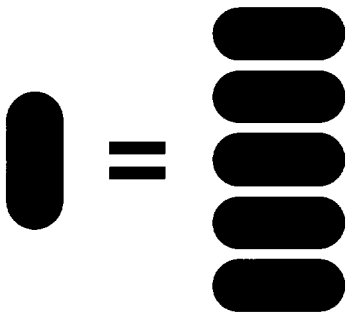
In 2001, we entered into a three-year strategic alliance with Arakis Limited, to develop up to six orally delivered enhanced medicines for pain management. Pain is a major market of unmet medical need. These medications will be jointly developed by combining our drug delivery capabilities with Arakis' ability to use new biological information to enhance pharmacological agents.

PROSOLV REDIRUN

We have applied our successful alliance strategy/business model to joint drug development programs based on the application of the PROSOLV technology. We formed an alliance with Finzelberg GmbH & Company to jointly develop and market a new line of herbal supplement formulations called RediRun DC.

PROSOLV was applied to overcome the common manufacturing challenges of nutritional products. As a result, RediRun DC formulations produce significantly smaller, lower-cost tablets that improve compliance. This alliance expands our participation in PROSOLV drug development programs by patenting and co-marketing our own formulated products.

	RediRun DC Herbal Formulation (actual size)	Granulation (actual size)
Weight Per Tab/Cap	752 mg	780 mg
Dose Per Tab/Cap	500 mg Each	100 mg Each



ENDO ALLIANCE

In 1998, we established a strategic alliance with Endo to develop oxymorphone ER. This alliance clearly demonstrates the value of leveraging complementary expertise.

Endo, a pharmaceutical company focused in pain management, brought an understanding of the oxymorphone molecule as well as an expertise in clinical development and marketing of pain management products. Penwest contributed its proprietary technology and drug formulation expertise.

Oxymorphone is a narcotic analgesic which is utilized in the treatment of moderate to severe pain. It is currently marketed by Endo in injectable and suppository forms. Oxymorphone ER, being developed for twice-a-day dosing, would represent the first oral extended release version of oxymorphone and would compete in the severe analgesic market with products such as MS Contin® and OxyContin®, which had aggregate sales in the United States in 2001 of approximately $1.6 billion.

Oxymorphone is the Company's most advanced product candidate and is currently completing Phase III trials. We expect Endo will submit the NDA for this product in the second half of 2002.

Penwest and Endo will share the costs involved in the development and commercialization of oxymorphone ER. Once the product is marketed, the companies will share equally in net profits up to pre-determined thresholds. The collaboration is managed by an alliance committee which is made up of three senior managers from each company. The committee meets at least quarterly to discuss strategic decisions concerning the program as well as review timelines and budgets.

We have used this alliance model in subsequent collaborations. We feel that sharing in the development costs can be an important way to diversify the financial risk of our product portfolio while still retaining up to fifty percent of the financial value.

FINANCIAL REVIEW

SELECTED FINANCIAL DATA

in Thousands Except for Per Share Data	Year Ended December 31, 2001	2000	1999	1998	1997
Statement of Operations Data:					
Revenues [a]	**$ 40,003**	$ 42,058	$ 37,307	$ 29,149	$ 26,999
Cost of product sales [a]	**24,810**	25,303	25,889	21,183	20,415
Gross profit	**15,193**	16,755	11,418	7,966	6,584
Selling, general and administrative	**13,855**	12,054	11,425	11,354	8,708
Research and product development	**17,003**	12,820	7,371	6,054	3,681
Asset write-off [b]	**—**	—	—	1,341	—
IPO transaction costs [c]	**—**	—	—	—	1,367
Loss before cumulative effect of change in accounting principle	**(15,981)**	(8,376)	(7,681)	(8,829)	(7,316)
Cumulative effect of change in accounting principle [d]	**—**	(410)	—	—	—
Net loss	**$(15,981)**	$ (8,786)	$ (7,681)	$ (8,829)	$ (7,316)
Basic and diluted loss per share before cumulative effect of change in accounting principle	**$ (1.15)**	$ (0.68)	$ (0.69)	$ (0.80)	$ (0.66)
Cumulative effect of change in accounting principle per share	**—**	(0.03)	—	—	—
Net loss per share	**$ (1.15)**	$ (0.71)	$ (0.69)	$ (0.80)	$ (0.66)
Weighted average shares of common stock outstanding	**13,905**	12,330	11,103	11,037	11,037

in Thousands	December 31, 2001	2000	1999	1998 [e]	1997
Balance Sheet Data:					
Cash and cash equivalents	**$ 12,903**	$ 2,204	$ 739	$ 1,476	$ 938
Marketable securities	**9,609**	—	—	—	—
Working capital	**27,059**	11,129	7,713	7,648	(33,049)
Total assets	**59,613**	42,294	38,120	41,082	37,820
Long-term debt	**—**	—	6,700	—	—
Accumulated deficit	**(60,926)**	(44,945)	(36,159)	(28,478)	(19,649)
Shareholders' equity (deficit)	**45,624**	31,017	22,509	30,032	(12,297)

[a] Reclassification recorded of amounts prior to 2000 for the adoption of EITF No. 00-10 "Accounting for Shipping and Handling Fees and Costs."

[b] Represents a one time charge relating to the write-off of costs associated with the decision to outsource certain manufacturing as opposed to constructing a new facility.

[c] Represents a write-off of transaction costs associated with an abandoned initial public offering.

[d] Cumulative effect of adopting Staff Accounting Bulletin No. 101 ("SAB No. 101").

[e] In conjunction with the August 31, 1998 distribution, in which the Company's former parent, Penford Corporation, distributed to the shareholders of record of Penford common stock on August 10, 1998 all of the shares of the Company's common stock (the "Distribution"), Penford contributed to the Company's capital, all existing intercompany indebtedness.

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements which involve risks and uncertainties. The Company's actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth under "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2001. See "Forward Looking Statements".

OVERVIEW

Penwest is engaged in the research, development and commercialization of novel drug delivery technologies. The Company is also a leader in the development, manufacture, and distribution of branded pharmaceutical excipients which are the inactive ingredients in tablets and capsules. Based on its fundamental expertise in tabletting ingredients, the Company has developed its proprietary TIMERx controlled release drug delivery technology, which is applicable to a broad range of orally administered drugs, and PROSOLV, a high functional excipient based on co-processing technology, which, among other things, improves the performance characteristics of tablets. The Company is also exploring and developing other drug delivery technologies. The Company had revenues in 2001, 2000, and 1999 of $40.0, $42.1, and $37.3 million, respectively.

The Company has incurred net losses since 1994. As of December 31, 2001, the Company's accumulated deficit was approximately $60.9 million. Management expects operating losses and negative cash flows during 2002 and 2003. A substantial portion of the Company's revenues to date have been generated from the sales of the Company's pharmaceutical excipients. The Company's future profitability will depend on several factors, including the successful commercialization of TIMERx controlled release products, including in particular Oxymorphone ER, royalties from Mylan's sales of Pfizer's 30 mg generic version of Procardia XL, sales growth of the Company's pharmaceutical excipients products, as well as the level of investment in research and development activities. The Company's strategy includes a significant commitment to spending on research and development targeted at identifying and developing extended release products which will be formulated using the Company's drug delivery technologies. The Company also expects to expend significant resources on the development of new drug delivery technologies, both internally and through in-licenses or acquisition. The Company's spending in this area, however, is discretionary and is dependent on identifying good opportunities and the availability of funds from the Company's operations, cash resources, collaborative research and development arrangements, as well as external financing. There can be no assurance that the Company will achieve profitability or that it will be able to sustain profitability on a quarterly basis, if at all.

On March 2, 2000, Mylan announced that it had signed a supply and distribution agreement with Pfizer to market a generic version of all three strengths (30 mg, 60 mg, 90 mg) of Pfizer's Procardia XL. As a result of the agreement, Pfizer agreed to dismiss all pending litigation against Mylan. In connection with that agreement, Mylan agreed to pay Penwest a royalty on all future net sales of Pfizer's 30 mg strength of generic Procardia XL, which Mylan launched at the end of March 2000. The royalty percentage is comparable to those called for in Penwest's original agreement with Mylan for Nifedipine XL, the TIMERx-based generic equivalent to Procardia XL. Mylan has retained the marketing rights to the 30 mg strength of Nifedipine XL.

The Company's collaborative agreements include licensing arrangements in which the Company is entitled to receive milestone payments, royalties on the sale of the products covered by such collaborative agreements and payments for the purchase of formulated TIMERx material, as well as licensing arrangements which include revenue and cost sharing components in which the Company shares in the costs and profitability in predetermined percentages, but does not generally receive milestone payments. There can be no assurance that the Company's controlled release product development efforts will be successfully completed, that required regulatory approvals will be obtained or that approved products will be successfully manufactured or marketed.

The Company's business is conducted internationally and may be affected by fluctuations in currency exchange rates, as well as by governmental controls and other risks associated with international sales (such as export licenses, collectibility of accounts receivable, trade restrictions, and changes in tariffs). The Company's international subsidiaries transact a substantial portion of their sales and purchases in European currencies other than their functional currency, which can result in the Company having gains or losses from currency exchange rate fluctuations. The Company does not use derivatives to hedge the impact of fluctuations in foreign currencies.

The Company's results of operations may fluctuate from quarter to quarter depending on the volume and timing of orders of the Company's pharmaceutical excipients, royalties on Mylan's sales of the 30 mg strength of generic Procardia XL, and on variations in payments under the Company's collaborative agreements including payments upon the achievement of specified milestones. The Company's quarterly operating results may also fluctuate depending on other factors, including variations in gross margins of the Company's products, the mix of products sold, competition, regulatory actions, litigation and currency exchange rate fluctuations.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The consolidated financial statements of the Company are prepared in accordance with accounting principles generally accepted in the United States, which requires us to make estimates and assumptions. The Company's significant accounting policies are more fully described in the notes to the consolidated financial statements. These policies are important to the portrayal of the Company's financial condition and results of operations. Application of these policies requires the Company to make significant judgments and estimates about matters that are inherently uncertain.

The following accounting policies meet these characteristics and are considered most significant:

Revenue Recognition
Revenues from product sales are recognized when title transfers and customer acceptance provisions have lapsed, provided collections of the related accounts receivable are probable. Revenue received from non-refundable upfront licensing fees are recognized ratably over the development period of the collaboration agreement, when this period involves development risk associated with the incomplete stage of a product's development or over the estimated or contractual licensing and supply term when the Company is obligated to supply inventory for manufacture after the development risk has substantially ended. Non-refundable milestone fees received for the development funding of a product are partially recognized upon receipt based on the Company's proportionate development efforts achieved to date relative to the total expected development efforts and the remainder is generally recognized ratably over the remaining expected development period. Other contractual fees received in connection with a collaborator's launch of a product are also recognized ratably over the estimated or contractual licensing and supply term. Product royalty fees are recognized when earned.

Allowance for Doubtful Accounts
Allowances for doubtful accounts receivable are maintained based on historical payment patterns, aging of accounts receivable and actual write-off history.

Inventory
The Company writes down its inventory to net realizable value. Product obsolescence may be caused by shelf-life expiration, replacement products in the marketplace or other competitive situations.

Deferred Taxes – Valuation Allowance
The Company records a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized. While the Company has considered any potential future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance, in the event the Company were to determine that it would be able to realize its deferred tax assets in the future in excess of its net recorded amount, an adjustment to the deferred tax asset would increase income in the period such determination was made. At December 31, 2001, the Company had recorded full valuation allowances totaling approximately $14.9 million against its deferred tax assets.

Impairment of Intangible Assets
In assessing the recoverability of the Company's intangible assets, the Company must make assumptions regarding estimated future cash flows and other factors to determine the fair value of the respective assets. If these estimates or their related assumptions change in the future, the Company may be required to record impairment charges for these assets. Effective January 1, 2002, the Company will adopt Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets."

RESULTS OF OPERATIONS

Years Ended December 31, 2001 and 2000
Total revenues decreased 4.9% for the year ended December 31, 2001 to $40.0 million from $42.1 million for the year ended December 31, 2000. Product sales decreased to $34.8 million for 2001 compared to $37.1 million for 2000, representing a decrease of 6.4%. The decrease in product sales was due to lower revenues on sales of formulated bulk TIMERx during 2001, reflecting the formulated bulk TIMERx shipments to Mylan in 2000, totaling $3.2 million, under the Company's arrangement with Mylan relating to Nifedipine XL, which did not recur in 2001. The lower revenues on sales of formulated bulk TIMERx was partially offset by increased excipient sales in 2001, primarily in Europe. Royalties and licensing revenues increased 6.4% from $4.9 million in 2000 to $5.2 million in 2001, primarily as a result of increased royalties earned on Mylan's sales of the 30 mg strength of generic Procardia XL, as Mylan captured greater market share in 2001. This royalty, however, did trend down in the second quarter of 2001 compared to the previous two quarters, due to the entrant of a competitor, and remained fairly flat through the remainder of 2001.

Gross profit decreased to $15.2 million, or 38.0% of total revenues for 2001, from $16.8 million, or 39.8% of total revenues for 2000. Gross profit percentage on product sales decreased to 28.7% for 2001, from 31.9% for 2000. These decreases reflect competitive pressure on prices of the Company's excipients during 2001, primarily in North America. Also contributing to the lower gross profit in 2001 as compared with 2000, were the bulk TIMERx shipments to Mylan in 2000, which did not recur in 2001.

Selling, general and administrative expenses increased by 14.9% for 2001, to $13.9 million, from $12.1 million for 2000. The increase is primarily due to increased expenses for market research, business insurance, professional fees, including those associated with the Company's evaluation and pursuit of financing alternatives, and increased information technology and hiring costs associated with the Company strengthening its information technology infrastructure to prepare for anticipated increasing drug development activities.

The effective tax rates for 2001 and 2000, were expenses of 3% and 4%, respectively. The effective tax rates are higher than the federal statutory rate of a 34% benefit, due primarily to valuation allowances recorded to offset deferred tax assets relating to the Company's net operating losses, and state and foreign income taxes.

Research and product development expenses increased by 32.6% for 2001 to $17.0 million from $12.8 million for 2000. This increase was partly due to the Company's share of increased expenses associated with clinical trials being conducted for the development of Oxymorphone ER under the Company's collaboration with Endo. In addition, the Company increased its investment on developing new products utilizing TIMERx technology for its drug development pipeline and on the research of new drug delivery technologies.

As of December 31, 2001, the Company had ten product candidates utilizing TIMERx technology, in various stages of clinical trials. Completion of clinical trials and commercialization of these product candidates may take several years and the length of time can vary substantially according to the type, complexity, and novelty of a product candidate.

The Company's most advanced product candidate, Oxymorphone ER, is currently in Phase II/Phase III clinical trials. Endo is currently conducting these clinical trials, which are scheduled to be completed in the second quarter of 2002. Assuming the results of the clinical trials are consistent with the results of previous trials, the Company expects that Endo will submit the NDA for this product in the second half of 2002. The Company anticipates spending an additional $7.5 million on this development program in 2002.

There are four product candidates that the Company is developing with collaborators whereby the collaborators are responsible for conducting and funding the clinical trials and submitting the regulatory filings. The Company has five compounds that are in the early stages of development whereby the Company is either funding the development costs of the project, or they are being shared equally with a collaborator. There can be no assurance that any of our products will be successfully developed, will receive regulatory approval, or will be successfully commercialized.

Years Ended December 31, 2000 and 1999

Total revenues increased 12.7% for the year ended December 31, 2000 to $42.1 million from $37.3 million for the year ended December 31, 1999. Product sales increased to $37.1 million for 2000 compared to $36.8 million for 1999. The increase in product sales was primarily due to shipments of formulated bulk TIMERx to Mylan in the first and third quarters of 2000. The first quarter's shipments to Mylan were in anticipation of their launch of Nifedipine XL, and prior to Mylan signing the supply and distribution agreement with Pfizer. The third quarter's shipments to Mylan were made pursuant to Penwest's March 2000 agreement with Mylan noted above. Partially offsetting the increased sales of formulated bulk TIMERx included in product sales was a decrease in excipients revenues during the year ended December 31, 2000. This decrease in excipient revenues was due to a milder-than-expected cough/cold season resulting in reduced orders from customers, a decrease in sales volumes to two primary customers, as well as pricing pressure on Emcocel products, primarily in Europe. Royalties and licensing fees increased to $4.9 million for the year ended December 31, 2000 compared to $0.5 million for the year ended December 31, 1999. This increase was due primarily to royalties from Mylan on its sales of Pfizer's 30 mg generic version of Procardia XL.

Gross profit increased to $16.7 million, or 39.8% of total revenues, for 2000 from $11.4 million, or 30.6% of total revenues, for 1999. The increase in gross profit was primarily due to increased royalties and licensing fees noted above. Gross profit percentage on product sales increased to 31.9% from 29.6% for the year ended December 31, 2000 and 1999, respectively, primarily due to increased sales of formulated bulk TIMERx and PROSOLV, which have higher overall margins than the Company's other excipient products.

Selling, general and administrative expenses increased 5.5% for the year ended December 31, 2000 to $12.1 million from $11.4 million for the year ended December 31, 1999. This increase was primarily due to additional personnel hired in sales and marketing and increased professional fees.

Research and product development expenses increased 73.9% for the year ended December 31, 2000 to $12.8 million from $7.4 million for the year ended December 31, 1999. This increase was primarily due to the Company's share of increased expenses associated with the recently completed Phase II clinical trials, as well as other studies being conducted for the development of extended release oxymorphone under the Company's collaboration with Endo, as well as increased activity in the Company's drug development pipeline.

The effective tax rates for the years ended December 30, 2000 and 1999, were an expense of 4% and a benefit of 1%, respectively. The effective rates are higher than the federal statutory rate of a 34% benefit, due primarily to the valuation allowance recorded to offset deferred tax assets relating to the Company's net operating losses, and state and foreign income taxes.

LIQUIDITY AND CAPITAL RESOURCES

Subsequent to August 31, 1998, the date the Company became an independent, publicly-owned company, the Company has funded its operations and capital expenditures with revenues from the sale of excipients, sale of formulated bulk TIMERx, royalties and milestone payments from Mylan and other collaborators, advances under credit facilities and proceeds from the sale and issuance of shares of common stock.

On July 11, 2001, the Company completed a private placement of 2,447,187 shares of its common stock to selected institutional investors, resulting in proceeds of approximately $30 million, less expenses.

As of December 31, 2001, the Company had cash, cash equivalents, and short-term investments of $22.5 million. The Company has no committed sources of capital at year-end other than the Company's revolving line of credit ("Revolver") with CIT Group/Business Credit, Inc. Under the Revolver, generally 85% of the Company's U.S. and Canadian receivables, as well as generally 60% of the Company's U.S. saleable inventories, are included in the borrowing base. Amounts outstanding under the Revolver are collateralized by the Company's U.S. and Canadian accounts receivable, and its inventory and general intangibles. The Revolver has an initial term of three years, and provides for annual renewals thereafter. The Revolver bears interest at a specified bank's prime rate plus 1% per annum, on the greater of $3.0 million or on the average outstanding balance. The Revolver also requires that fees be paid of .5% per annum on unused portions of the Line of Credit. It also provides for early termination fees of up to .75% in the event the Company terminates the Revolver prior to the end of the initial term. The Revolver contains covenants, including the requirement that the Company maintain at all times, certain minimum levels of tangible net worth as defined, at varying specified amounts during the intial term of the agreement, and restrictions on the incurrence of additional indebtedness. Under the terms of the Revolver, the Company may borrow up to $10.0 million ("Line of Credit") as determined by a formula based on the Company's Eligible Accounts Receivable and Eligible Saleable Inventory, as defined in the agreement. As of March 22, 2002, there was approximately $2.9 million outstanding under the terms of the Revolver.

As of December 31, 2001, the Company did not have any material commitments for capital expenditures. As of December 31, 2001, the Company's trade receivables were $6.2 million, a decrease of $1.9 million from the December 31, 2000 balance of $8.2 million. This decrease primarily reflects the trade receivable as of December 31, 2000 associated with shipments of formulated bulk TIMERx to Mylan in 2000, which were paid by Mylan in the first half of 2001. In connection with its strategic alliance agreement with Endo, the Company expects to expend an additional $7.5 million through 2002 on the development and pre-marketing costs of Oxymorphone ER to fund its cash needs.

The Company's major outstanding contractual obligations relate to its Revolver and its operating leases, primarily of equipment. Below is a table summarizing the contractual obligations and commercial commitments as of December 31, 2001 (in thousands):

	Total	Less than One Year	1-3 Years	4-5 Years	After 5 Years
Loan Payable under Revolver	$2,668	$2,668	$ —	$ —	$—
Operating Leases	2,743	760	1,323	609	51
Total Contractual Cash Obligations	$5,411	$3,428	$1,323	$609	$51

At December 31, 2001, the Company has federal net operating loss ("NOL") carryforwards of $41,482,000 for income tax purposes, of which approximately $6,188,000, $8,407,000, $9,135,000, and $17,752,000 expire in 2018, 2019, 2020 and 2021, respectively. In addition, the Company has research and development tax credit carryforwards of approximately $455,000, of which $149,000 and $306,000 expire in 2020 and 2021, respectively. The use of the NOLs and research and development tax credit carryforwards are limited to future taxable earnings of the Company. Due to the degree of uncertainty related to the ultimate realization of such carryforwards, at December 31, 2001, a valuation allowance of $14.9 million has been recognized to offset net deferred tax assets, primarily attributable to the NOL carryforward. Utilization of the operating losses are subject to a limitation due to the ownership change provisions of the Internal Revenue Code.

The Company had negative cash flow from operations in the year ended December 31, 2001 of $11.1 million, primarily due to the net loss in the period, partially offset by net reductions of accounts receivable as noted above. The Company had negative cash flow from operations in the year ended December 31, 2000 of $7.3 million, primarily due to net losses for the period. Funds expended in 2001 for the acquisition of fixed assets were primarily related to additions at the Company's manufacturing facilities in Iowa and Finland, and information technology associated with the Company strengthening its technology infrastructure to prepare for increasing drug development activities. Funds expended for intangible assets include costs to secure and defend patents on technology developed by the Company and to secure trademarks.

The Company intends to utilize available cash and short-term investments, cash from operations, and funds available under the Revolver. The Company's requirements for additional capital are substantial and will depend on many factors, including (i) the timing and amount of payments received under existing and possible future collaborative agreements; (ii) the structure of any future collaborative or development agreements, including the costs of funding research and development and clinical trials as part of cost-sharing arrangements with collaborators such as Endo; (iii) the progress of the Company's collaborative and independent development projects; (iv) revenues from the Company's sales of excipients; (v) the costs to the Company of bioequivalence studies for the Company's products and other development activities; (vi) the prosecution, defense and enforcement of patent claims and other intellectual property rights; and (vii) the costs and timing of adding drug development capabilities.

The Company anticipates that its existing capital resources, including funds available under the Revolver as well as anticipated internally generated funds from the sale of excipients and formulated bulk TIMERx, royalties from Mylan and other payments from collaborators, will enable the Company to maintain currently planned operations through the first quarter of 2003. The Company may need to raise additional funds to maintain its operations beyond such date. The Company may seek to obtain additional funds through transactions relating to its business lines and/or debt or equity financings. The additional financing may not be available to the Company on acceptable terms, if at all. If adequate funds are not available, Penwest may be required to (i) significantly curtail its product commercialization efforts, including terminating existing collaborative agreements; (ii) obtain funds through arrangements with collaborators or others on adverse terms to Penwest that may require Penwest to relinquish rights to certain of its technologies, product candidates, or products which Penwest would otherwise pursue on its own or that would significantly dilute the Company's stockholders; (iii) significantly scale back or terminate operations and/or; (iv) seek relief under applicable bankruptcy laws.

MARKET RISK AND RISK MANAGEMENT POLICIES

Market risk is the risk of loss to future earnings, to fair values or to future cash flows that may result from changes in the price of a financial instrument. The value of a financial instrument may change as a result of changes in interest rates, foreign currency exchange rates and other market changes. Market risk is attributed to all market sensitive financial instruments, including debt instruments. The operations of the Company are exposed to financial market risks, including changes in interest rates and foreign currency exchange rates. The Company's interest rate risk primarily relates to its investments in marketable securities and its revolving line of credit which bears interest at variable rates. The Company's foreign currency exchange risk primarily relates to its international subsidiaries. The Company does not use derivatives to hedge the impact of fluctuations in foreign currencies or interest rates.

The primary objectives for the Company's investment portfolio are liquidity and safety of principal. Investments are made to achieve the highest rate of return to the Company, consistent with these two objectives. The Company's investment policy limits investments to certain types of instruments issued by institutions with investment grade credit ratings and places restrictions on maturities and concentration by issuer. Marketable securities, consisting of corporate debt and U.S. Government Agency-backed discounted notes, approximated $9.6 million at December 31, 2001. These securities have contractual maturity dates of up to two years. Due to the relatively short term maturities of these securities, management believes there is no significant market risk. At December 31, 2001, market values approximated carrying values. At December 31, 2001, the Company had approximately $22.5 million in cash, cash equivalents and investments in marketable securities, and accordingly, a sustained decrease in the rate of interest earned of 1% would cause a decrease in the annual amount of interest earned of up to approximately $225,000.

The Company has a revolving line of credit with a financial institution which bears interest at a specified bank's prime rate plus 1% per annum (5.75% at December 31, 2001) on the greater of $3.0 million or on the average outstanding balance. At December 31, 2001, there was approximately $2.7 million outstanding under the line and, accordingly, a sustained increase in the interest rate of 1% would cause increased annual interest expense of approximately $30,000.

The Company's international subsidiaries transact a substantial portion of their sales and purchases in European currencies other than their functional currency, which can result in the Company having gains or losses from currency exchange rate fluctuations. Where practical, the Company seeks to manage expected local currency revenues in relation to local currency costs, and manage local currency assets in relation to local currency liabilities. The Company does not believe that the potential exposure is significant in light of the size of the Company and its business. The effect of an immediate 10% change in exchange rates would not have a material effect on the Company's results of operations, financial position or cash flows.

RECENT ACCOUNTING PRONOUNCEMENTS

In June 2001, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standard ("SFAS") No. 141, "Business Combinations" and SFAS No. 142, "Goodwill and Other Intangible Assets" effective for fiscal years beginning after December 15, 2001. Under the new rules, goodwill will no longer be amortized but will be subject to annual impairment tests. Other intangible assets will continue to be amortized over their estimated useful lives. The Company will apply the new rules on accounting for goodwill and other intangible assets beginning in the first quarter of 2002. The adoption of the new standards is not expected to have a material effect on the results of operations, financial position, or cash flows of the Company.

In October 2001, the FASB issues SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of." The primary objectives of SFAS No. 144 are to develop one accounting model based on the framework established in SFAS No. 121 for long-lived assets to be disposed of by sale, and to address significant implementation issues. The Company's adoption of SFAS No. 144 in the first quarter of 2002 is not expected to have a material effect on the results of operations, financial position, or cash flows of the Company.

Other pronouncements issued by the FASB or other authoritative accounting standards groups with future effective dates are either not applicable or not significant to the financial statements of the Company.

CONSOLIDATED BALANCE SHEETS

in Thousands, Except Share Amounts	December 31, 2001	2000
Assets		
Current assets:		
Cash and cash equivalents	**$ 12,903**	$ 2,204
Marketable securities	**9,609**	—
Trade accounts receivable, net of allowance for doubtful accounts of $220 and $235	**6,228**	8,154
Inventories	**7,857**	8,196
Prepaid expenses and other current assets	**1,166**	745
Total current assets	**37,763**	19,299
Fixed assets, net	**15,567**	17,473
Patents, net	**3,545**	2,827
Other assets	**2,738**	2,695
Total assets	**$ 59,613**	$ 42,294
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	**$ 2,174**	$ 3,199
Accrued expenses	**2,275**	1,790
Accrued development costs	**3,139**	2,911
Taxes payable	**448**	270
Loan payable	**2,668**	—
Total current liabilities	**10,704**	8,170
Deferred income taxes	**205**	205
Deferred revenue	**369**	378
Deferred compensation	**2,711**	2,524
Total liabilities	**13,989**	11,277
Shareholders' equity:		
Preferred stock, par value $.001, authorized 1,000,000 shares, none outstanding	—	—
Common stock, par value $.001, authorized 39,000,000 shares, issued and outstanding 15,276,630 shares at December 31, 2001 and 12,669,780 shares at December 31, 2000	**15**	13
Additional paid in capital	**108,054**	77,276
Accumulated deficit	**(60,926)**	(44,945)
Accumulated other comprehensive loss	**(1,519)**	(1,327)
Total shareholders' equity	**45,624**	31,017
Total liabilities and shareholders' equity	**$ 59,613**	$ 42,294

See accompanying notes.

CONSOLIDATED STATEMENTS OF OPERATIONS

in Thousands, Except Per Share Data	Year Ended December 31, 2001	2000	1999
Revenues			
Product sales	**$ 34,778**	$37,148	$36,768
Royalties and licensing fees	**5,225**	4,910	539
Total revenues	**40,003**	42,058	37,307
Cost of product sales	**24,810**	25,303	25,889
Gross profit	**15,193**	16,755	11,418
Operating expenses			
Selling, general and administrative	**13,855**	12,054	11,425
Research and product development	**17,003**	12,820	7,371
Total operating expenses	**30,858**	24,874	18,796
Loss from operations	**(15,665)**	(8,119)	(7,378)
Investment income	**477**	217	—
Interest expense	**290**	172	371
Loss before income taxes and cumulative effect of change in accounting principle	**(15,478)**	(8,074)	(7,749)
Income tax expense (benefit)	**503**	302	(68)
Loss before cumulative effect of change in accounting principle	**(15,981)**	(8,376)	(7,681)
Cumulative effect of change in accounting principle (Note 3)	—	(410)	—
Net loss	**$(15,981)**	$ (8,786)	$ (7,681)
Basic and diluted amounts per share:			
Loss before cumulative effect of change in accounting principle	**$ (1.15)**	$ (0.68)	$ (0.69)
Cumulative effect of change in accounting principle (Note 3)	—	(0.03)	—
Net loss	**$ (1.15)**	$ (0.71)	$ (0.69)
Weighted average shares of common stock outstanding	**13,905**	12,330	11,103
Pro forma amounts assuming the accounting change is applied retroactively:			
Net loss		$ (8,376)	$ (7,733)
Basic and diluted net loss per share		$ (0.68)	$ (0.70)

See accompanying notes.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

in Thousands	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total
Balances, January 1, 1999	11,043	$11	$ 59,025	$(28,478)	$ (526)	$ 30,032
Net loss				(7,681)		(7,681)
Translation adjustments					(535)	(535)
Comprehensive loss						(8,216)
Issuance of common stock pursuant to stock compensation plans	80	—	539			539
Issuance of common stock pursuant to Stock Purchase Plan	26	—	154			154
Balances, December 31, 1999	11,149	11	59,718	(36,159)	(1,061)	22,509
Net loss				(8,786)		(8,786)
Translation adjustments					(266)	(266)
Comprehensive loss						(9,052)
Issuance of common stock — private placement	1,399	2	16,823			16,825
Issuance of common stock pursuant to stock compensation plans	102	—	557			557
Issuance of common stock pursuant to Stock Purchase Plan	20	—	178			178
Balances, December 31, 2000	12,670	13	77,276	(44,945)	(1,327)	31,017
Net loss				(15,981)		(15,981)
Translation adjustments					(244)	(244)
Unrealized gain on marketable securities					52	52
Comprehensive loss						(16,173)
Issuance of common stock — private placement	2,447	2	29,669			29,671
Issuance of common stock pursuant to stock compensation plans	149	—	985			985
Issuance of common stock pursuant to Stock Purchase Plan	11	—	124			124
Balances, December 31, 2001	**15,277**	**$15**	**$108,054**	**$(60,926)**	**$(1,519)**	**$ 45,624**

See accompanying notes.

CONSOLIDATED STATEMENTS OF CASH FLOWS

in Thousands	Year Ended December 31, 2001	2000	1999
Operating activities:			
Net loss	**$(15,981)**	$ (8,786)	$ (7,681)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	**2,831**	2,879	2,881
Amortization	**265**	213	189
Deferred income taxes	**—**	(18)	(353)
Deferred revenue	**(10)**	378	—
Deferred compensation	**187**	183	164
Stock compensation	**119**	105	142
Changes in operating assets and liabilities:			
Trade accounts receivable	**1,926**	(3,111)	(662)
Inventories	**340**	(547)	1,155
Accounts payable, accrued expenses and other	**(729)**	1,378	96
Net cash used in operating activities	**(11,052)**	(7,326)	(4,069)
Investing activities:			
Acquisitions of fixed assets, net	**(955)**	(1,412)	(1,116)
Intangible asset costs	**(1,078)**	(507)	(490)
Purchases of marketable securities	**(11,511)**	—	—
Proceeds from maturities of marketable securities	**2,000**	—	—
Net cash used in investing activities	**(11,544)**	(1,919)	(1,606)
Financing activities:			
Borrowings from credit facility	**29,616**	2,800	11,600
Repayments of credit facility	**(26,947)**	(9,500)	(7,100)
Issuance of common stock, net	**30,661**	17,454	551
Net cash provided by financing activities	**33,330**	10,754	5,051
Effect of exchange rate changes on cash and cash equivalents	**(35)**	(44)	(113)
Net increase (decrease) in cash and cash equivalents	**10,699**	1,465	(737)
Cash and cash equivalents at beginning of year	**2,204**	739	1,476
Cash and cash equivalents at end of year	**$ 12,903**	$ 2,204	$ 739

See accompanying notes.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. BUSINESS

Penwest Pharmaceuticals Co. ("Penwest" or the "Company") is engaged in the research, development and commercialization of novel drug delivery technologies. The Company is also a leader in the development, manufacture, and distribution of branded pharmaceutical excipients which are the inactive ingredients in tablets and capsules. Based on its fundamental expertise in tabletting ingredients, the Company has developed its proprietary TIMERx controlled release drug delivery technology, which is applicable to a broad range of orally administered drugs, and PROSOLV, a high functional excipient based on co-processing technology, which, among other things, improves the performance characteristics of tablets. The Company is also exploring and developing other drug delivery technologies. The Company had revenues in 2001, 2000, and 1999 of $40.0, $42.1, and $37.3 million, respectively. The Company has manufacturing facilities in Iowa and Finland and has customers primarily throughout North America and Europe.

The Company is subject to the risks and uncertainties associated with a drug delivery company actively engaged in research and development. These risks and uncertainties include, but are not limited to, a history of net losses, a requirement for additional funding, technological changes, dependence on collaborators and key personnel, the successful completion of development efforts and of obtaining regulatory approval, the successful commercialization of TIMERx controlled release products, compliance with government regulations, patent infringement litigation and competition from current and potential competitors, some with greater resources than the Company.

The Company has incurred recurring operating losses and has had negative cash flows from operations for each of the three years in the period ended December 31, 2001 and, based on anticipated levels of operations, management expects operating losses and negative cash flows during 2002 and 2003. Management anticipates that its existing capital resources as well as internally generated funds will be sufficient to fund operations through the first quarter of 2003. The Company may require additional capital to fund its future operations and working capital needs depending on its discretionary level of research and development spending to develop new products for its drug development pipeline and for research of new drug delivery technologies. Although the Company believes that it would be successful in raising additional capital, there is no guarantee that it will be able to raise such funds on terms that will be satisfactory to the Company.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying consolidated financial statements include the accounts of Penwest and its wholly owned subsidiaries. Material intercompany balances and transactions have been eliminated. The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Certain other amounts in the financial statements for prior years have been reclassified to conform with the current year presentation. These reclassifications had no effect on previously reported results of operations or financial position.

Cash and Cash Equivalents

All highly liquid investments with maturities of three months or less when purchased are considered cash equivalents.

Marketable Securities

The Company accounts for marketable securities in accordance with Statement of Financial Accounting Standards No. 115 ("SFAS No. 115"), "Accounting for Certain Investments in Debt and Equity Securities." The Company classifies its marketable securities as available-for-sale securities. Such securities are stated at fair value and primarily consist of corporate bonds, commercial paper, and discounted notes backed by U.S. government agencies. Unrealized holding gains or losses are included in shareholders' equity as a separate component of accumulated other comprehensive loss. The specific identification method is used to compute the realized gains and losses, if any, on marketable securities.

Credit Risk and Fair Value of Financial Instruments

The Company performs ongoing credit evaluations of its customers and generally does not require collateral. Revenues from product sales and licensing fees are primarily derived

from major pharmaceutical companies that have significant cash resources. The Company maintains an allowance for doubtful accounts which management believes is sufficient to cover potential credit losses. One customer of the Company accounted for approximately 12% and 19% of total revenues in 2001 and 2000, respectively. No customers of the Company accounted for 10% or more of total revenues in 1999.

The primary objectives for the Company's investment portfolio are liquidity and safety of principal. Investments are made to achieve the highest rate of return to the Company, consistent with these two objectives. The Company's investment policy limits investments to certain types of instruments issued by institutions with investment grade credit ratings and places restrictions on maturities, and concentration by issuer.

The carrying value of financial instruments, which includes cash, cash equivalents, marketable securities, receivables, obligations under the Company's credit facility (see Note 10) and accounts payable, approximates fair value due to the short term nature of these instruments.

Long-Lived Assets
Fixed assets are recorded at cost and depreciated by the straight-line method over their estimated useful lives. Estimated useful lives by class of assets are substantially as follows:

Buildings	20 – 25 years
Machinery and equipment	10 – 12 years
Office furniture, equipment and software	5 – 10 years

The Company systematically reviews the recoverability of its long-lived and intangible assets by comparing the unamortized carrying value of such assets to the related anticipated undiscounted future cash flows. Any impairment related to long-lived assets is measured by reference to the assets' fair market value, and any impairment related to goodwill is measured against discounted cash flows. Impairments are charged to expense when such determination is made.

Foreign Currencies
Assets and liabilities of the Company's foreign operations are translated into U.S. dollars at year-end exchange rates and revenue and expenses are translated at average exchange rates. For each of the foreign operations, the functional currency is the local currency. Accumulated other comprehensive loss includes the cumulative translation adjustments, which is a component of other comprehensive loss included in the Company's financial statements. Realized gains and losses from foreign currency transactions are reflected in the consolidated statements of operations. Foreign currency transaction gains and losses were not significant in each year in the three year period ended December 31, 2001.

Comprehensive Loss
Comprehensive loss is comprised of net loss and other comprehensive loss. Other comprehensive loss includes certain changes in shareholders' equity that are excluded from net loss and include unrealized gains on marketable securities and foreign currency translation adjustments. Comprehensive loss for the years ended December 31, 2001, 2000, and 1999 has been reflected in the Consolidated Statements of Shareholders' Equity.

Income Taxes
The liability method, prescribed by SFAS No. 109, "Accounting for Income Taxes," is used in accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities. The Company recorded no income tax benefits relating to the net operating losses generated during 2001, 2000, and 1999, as such losses were offset by valuation allowances. Valuation allowances are established against the recorded deferred income tax assets to the extent that management believes it is more likely than not that a portion of the deferred income tax assets are not realizable.

Revenue Recognition
Revenues from product sales are recognized when title transfers and customer acceptance provisions have lapsed, provided collections of the related accounts receivable are probable. Revenue received from non-refundable upfront licensing fees are recognized ratably over the development period of the collaboration agreement, when this period involves development risk associated with the incomplete stage of a product's development or over the estimated or contractual licensing and supply term when the Company is obligated to supply inventory for manufacture when the development risk has substantially ended. Non-refundable milestone fees received for the development funding of a product are partially recognized upon receipt based on the Company's proportionate development efforts achieved to date relative to the total expected development efforts and the remainder is generally recognized ratably over the remaining expected development period. Other contractual fees received in connection with a collaborator's launch of a product are also recognized ratably over the estimated or contractual licensing and supply term. Product royalty fees are recognized when earned.

Shipping and Handling
Shipping and handling costs incurred by the Company in connection with products sold are included in "cost of product sales" on the Consolidated Statements of Operations.

Advertising Costs
Advertising costs are accounted for as expenses in the period in which they are incurred.

Research and Development
Research and development expenses consist of costs related to products being developed internally as well as costs related to products subject to licensing agreements. Research and development costs are charged to expense as incurred. Certain reimbursements of costs, generally related to drug formulation on feasibility studies, are netted against research and development expense.

Per Share Data
Loss per common share is computed based on the weighted average number of common shares outstanding during the period. For all years reported, diluted loss per share was the equivalent of basic loss per share due to the respective net losses. No dilution for common share equivalents is included in 2001, 2000, and 1999, as the effects would be antidilutive.

Stock Based Compensation
The Company accounts for stock option grants in accordance with Accounting Principles Board Opinion ("APB") No. 25, "Accounting for Stock Issued to Employees," and, accordingly, recognizes no compensation expense for stock options granted for which the exercise price of the options was the same as the market price of the Company's common stock on the date of grant. The Company has elected to continue to account for its employee stock compensation plans under APB No. 25. As prescribed under SFAS No. 123, "Accounting for Stock Based Compensation," the Company has disclosed in Note 11, the pro forma effects on net loss and loss per share of recording compensation expense for the fair value of the options granted.

NOTE 3. CHANGE IN ACCOUNTING PRINCIPLE

Prior to the fourth quarter of 2000, the Company recognized revenue for upfront non-refundable fees when received and when all contractual obligations of the Company relating to the fees had been fulfilled. In addition, the Company previously recognized revenue relating to development milestones and other contractual fees as achieved, in accordance with the terms of the collaboration agreements. Effective January 1, 2000, the Company changed its method of accounting for upfront non-refundable fees and milestone fees. Revenue received from non-refundable upfront licensing fees are recognized ratably over the development period of the collaboration agreement, when this period involves development risk associated with the incomplete state of a product's development or over the estimated or contractual licensing and supply term when the Company is obligated to supply inventory for manufacture, when the development risk has substantially ended. Non-refundable milestone fees received for the development funding of a product are partially recognized upon receipt based on the Company's proportionate development efforts achieved to date relative to the total expected development efforts and the remainder is generally recognized ratably over the remaining expected development period. Other contractual fees received in connection with a collaborator's launch of a product are also recognized ratably over the estimated or contractual licensing and supply term. The Company believes the change in accounting principle is preferable based on guidance provided in SEC Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" ("SAB No. 101").

In the fourth quarter of 2000, the Company adopted SAB No. 101 effective January 1, 2000. The cumulative effect of the change in accounting principle was reported as a change in the year ended December 31, 2000. The cumulative effect was initially recorded as deferred revenue that will be recognized as revenue over the remaining related collaborative or licensing and supply agreements, as appropriate. For the year ended December 31, 2000, the cumulative effect of the change on prior years was to increase the net loss by $410,000 or $0.03 per share. The effect of the change on loss before cumulative effect of the change for the year ended December 31, 2000 was to decrease the net loss by $32,000. The pro forma amounts presented on the statement of operations were calculated assuming the accounting change was made retroactively to prior years. During the years ended December 31, 2001 and 2000, the Company recognized $59,000 and $204,000, respectively, of revenue/income that is included in its cumulative effect adjustment as of January 1, 2000.

NOTE 4. RECENT ACCOUNTING PRONOUNCEMENTS

In June 2001, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standard ("SFAS") No. 141, "Business Combinations" and SFAS No. 142, "Goodwill and Other Intangible Assets" effective for fiscal years beginning after December 15, 2001. Under the new rules, goodwill will no longer be amortized but will be subject to annual impairment tests. Other intangible assets will continue to be amortized over their estimated useful lives. The Company will apply the new rules on accounting for goodwill and other intangible assets beginning in the first quarter of 2002. The adoption of the new standards is not expected to have a material effect on the results of operations, financial position, or cash flows of the Company.

In October 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 supersedes FAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of." The primary objectives of FAS No. 144 are to develop one accounting model based on the framework

established in FAS No. 121 for long-lived assets to be disposed of by sale, and to address significant implementation issues. The Company's adoption of FAS No. 144 in the first quarter of 2002 is not expected to have a material effect on the results of operations, financial position, or cash flows of the Company.

Other pronouncements issued by the FASB or other authoritative accounting standards groups with future effective dates are either not applicable or not significant to the financial statements of the Company.

NOTE 5. MARKETABLE SECURITIES

The amortized costs and estimated fair values of marketable securities at December 31, 2001 are as follows:

(in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Corporate debt securities	$7,562	$52	$—	$7,614
U.S. government agency-backed discounted notes	1,995	—	—	1,995
Total debt securities	$9,557	$52	$—	$9,609

Maturities of debt securities at fair value as of December 31, 2001, are as follows (in thousands):

Contractual maturity:	
Maturing in one year or less	$5,371
Maturing after one year through two years	4,238
Total debt securities	$9,609

The primary objectives for the Company's investment portfolio are liquidity and safety of principal. Investments are made to achieve the highest rate of return to the Company, consistent with these two objectives. The Company's investment policy limits investments to certain types of instruments issued by institutions with investment grade credit ratings and places restrictions on maturities, and concentration by issuer.

NOTE 6. INVENTORIES

Inventories, which consist of raw materials, pharmaceutical excipients manufactured by the Company, pharmaceutical excipients held for distribution, including manufactured bulk TIMERx, are stated at the lower of cost (first-in, first-out) or market.

Inventories are summarized as follows:

	December 31,	
(in thousands)	**2001**	2000
Raw materials	**$1,558**	$2,611
Finished products	**6,299**	5,585
Total inventories	**$7,857**	$8,196

Included in inventories are approximately $191,000 and $466,000 of TIMERx raw materials and bulk TIMERx as of December 31, 2001 and 2000, respectively. The ability to continue to sell TIMERx related inventory is dependent, in part, upon the commercialization of products by third parties utilizing bulk TIMERx and the continued use by the Company and third parties of the TIMERx related inventory in existing and new research efforts.

The Company periodically reviews and quality tests its inventory to identify obsolete, slow moving or otherwise unsaleable inventories. Inventories at December 31, 2001 and 2000, are net of allowances of $255,000 and $26,000, respectively.

In September 1999, the Company entered into a five-year contract (plus automatic renewals of one year each) for the manufacturing of TIMERx material with another third party pharmaceutical company. There are a limited number of third party manufacturers capable of producing the TIMERx material. There can be no assurance that third parties upon which the Company relies for supply of its TIMERx materials will perform and any failures by third parties may delay development, or the submission of products for regulatory approval, impair the Company's collaborators' ability to commercialize products as planned and deliver products on a timely basis or otherwise impair the Company's competitive position, which could have a material adverse effect on the Company's business, financial condition, cash flows and results of operations.

The Company's TIMERx drug delivery system is a hydrophilic matrix combining primarily two natural polysaccharides, xanthan and locust bean gums, in the presence of dextrose. The Company purchases these gums from a sole source supplier. Most of the Company's other excipients are manufactured from a specialty grade of wood pulp, which the Company also purchases from a sole source supplier. Although the Company has qualified alternate suppliers with respect to these materials, there can be no assurance that interruptions in supplies will not occur in the future or that the Company will not have to obtain substitute suppliers. Any of these events could have a material adverse effect on the Company's ability to manufacture bulk TIMERx for delivery to its collaborators or manufacture its other excipients, which could have a material adverse effect on the Company's business, financial condition, cash flows and results of operations.

NOTE 7. FIXED ASSETS

Fixed assets, at cost, summarized by major categories, consist of the following:

(in thousands)	December 31, 2001	2000
Buildings, equipment and software	**$34,264**	$33,844
Land	**696**	696
Construction in progress	**700**	441
	35,660	34,981
Less: accumulated depreciation	**20,093**	17,508
	$15,567	$17,473

NOTE 8. INTANGIBLE ASSETS

Intangible assets, net of accumulated amortization, consist of the following:

(in thousands)	December 31, 2001	2000
Patents, net of accumulated amortization of $770 and $640	**$3,545**	$2,827
Goodwill, (included in other assets) net of accumulated amortization of $540 and $468	**—**	72

Patents include costs to secure patents on technology developed by the Company and secure trademarks. Patents are amortized on a straight-line basis over their useful lives of 17 to 20 years. Amortization expense of $193,000, $155,000, and $131,000 was recorded in the years ended December 31, 2001, 2000, and 1999, respectively.

Recorded intangibles are evaluated for potential impairment whenever events or circumstances indicate that the undiscounted cash flows are not sufficient to recover their carrying amounts. An impairment loss is recorded to the extent the asset's carrying value is in excess of related discounted cash flows. During the fourth quarter of 2001, the Company recorded an impairment loss of $167,000, net of accumulated amortization, relating to its patents. Such impairment loss is reflected in research and product development expense on the consolidated statement of operations.

Goodwill was amortized on a straight-line basis over ten years and was recorded upon the acquisition of the Company by its former parent company. Amortization expense approximated $72,000 for 2001 and $58,000 for 2000.

NOTE 9. OTHER ASSETS

Other assets relate to cash surrender values of officer's life insurance policies, and totaled $2,738,000 and $2,623,000 as of December 31, 2001 and 2000, respectively.

NOTE 10. CREDIT FACILITIES

On January 17, 2001, the Company completed arrangements for a revolving line of credit ("Revolver") with a financial institution. Under the terms of the Revolver, the Company may borrow up to $10.0 million ("Line of Credit") as determined by a formula based on the Company's Eligible Accounts Receivable and Eligible Saleable Inventory, as defined in the agreement. Under the formula, generally 85% of the Company's U.S. and Canadian receivables, as well as generally 60% of the Company's U.S. saleable inventories, are included in the borrowing base. Amounts outstanding under the Revolver are collateralized by the Company's U.S. and Canadian accounts receivable, and its inventory and general intangibles. The Revolver has an initial term of three years, and provides for annual renewals thereafter.

The Revolver bears interest at a specified bank's prime rate plus 1% per annum, on the greater of $3.0 million or on the average outstanding balance. The Revolver also requires fees be paid of 0.5% per annum on unused portions of the Line of Credit and provides for early termination fees of up to 0.75%, in the event the Company terminates the Revolver prior to the end of the initial term.

The Revolver contains covenants, including the requirement that the Company maintain at all times, certain minimum levels of tangible net worth as defined, at varying specified amounts during the initial term of the agreement, and restrictions on the incurrence of additional indebtedness and the payment of dividends. The Revolver includes a lockbox requirement under the control of the lender, whereby collections of certain trade receivables are used to immediately reduce the balance of the Revolver.

As of December 31, 2001, the interest rate on the Revolver was 5.75% and approximately $2.7 million was outstanding.

A $15 million unsecured revolving credit facility, previously obtained by the Company in July 1998, was repaid in March 2000 in connection with the Company's private placement of common stock. (See Note 11).

Approximately $214,000, $147,000, and $303,000, of interest was paid in 2001, 2000, and 1999, respectively.

NOTE 11. SHAREHOLDERS' EQUITY

On March 6, 2000, the Company completed a private placement of its common stock to selected institutional and other accredited investors, resulting in the sale of 1,399,232 shares for approximately $18.2 million, less expenses. Approximately $7.7 million was used to repay the existing outstanding balance under a credit facility as required by its terms. Such credit facility is no longer available to the Company.

On July 11, 2001, the Company completed a private placement of 2,447,187 shares of common stock to selected institutional investors, resulting in proceeds of approximately $30 million, less expenses. The Company is using the net proceeds of this offering primarily for the development of drug delivery products as well as to fund the research and development of new oral drug delivery technologies.

Penwest Stock Option Plans

As of December 31, 2001 the Company had two stock option plans: the 1997 Equity Incentive Plan (the "1997 Plan"), and the 1998 Spin-off Option Plan (the "Spin-off Plan"). The 1997 Plan provides for the grant of incentive stock options, nonstatutory stock options, restricted stock awards and other stock-based awards, including the grant of securities convertible into Common Stock and the grant of stock appreciation rights (collectively "Awards"). A total of 2,660,000 shares of Common Stock may be issued pursuant to Awards granted under the 1997 Plan. Awards may be granted at an exercise price which may be less than, equal to or greater than the fair market value of the Common Stock on the date of grant subject to certain limitations. Restricted stock awards entitle recipients to acquire shares of Common Stock, subject to the right of the Company to purchase all or part of such shares from the recipient in the event that the conditions specified in the applicable Award are not satisfied prior to the end of the applicable restriction period established for such Award. In 1998, a total of 52,500 restricted shares were granted. No such shares were granted in 2001, 2000, or 1999.

On August 31, 1998, Penford Corporation ("Penford") distributed to the shareholders of Penford common stock, all of the outstanding shares of the Company's common stock (the "Distribution"). In connection with such transaction, the Company's 1998 Spin-off Option Plan was adopted in June 1998 to provide for the grant of stock options to employees of Penwest and non-employee directors of Penford who held options to purchase Penford Common Stock as of the Distribution date and who ceased to be employees of Penford under the terms of Penford's stock option plans. As of the Distribution date, options to purchase 1,000,722 shares of Common Stock were granted to the Company's employees and non-employee directors of Penford under the Spin-off Plan. The exercise price and number of options was calculated so as to preserve the Penford options' approximate value as of the Distribution date. The Board may not grant any additional options under the Spin-off Plan. If any option expires or is terminated, surrendered, canceled or forfeited, the unused Common Stock covered by such option will cease to be available for grant under the Spin-off Plan.

	Shares	Option Price Range	Wtd. Average Exercise Price
Balance, December 31, 1998	1,694,688	$ 3.70 – 8.67	$ 6.21
1999			
Granted	332,307	$ 4.78 – 9.21	$ 7.33
Exercised	(85,160)	$ 5.26 – 7.03	$ 6.19
Cancelled	(35,092)	$ 5.26 – 6.75	$ 6.35
Balance, December 31, 1999	1,906,743	$ 3.70 – 9.21	$ 6.41
Options Exercisable	722,818	$ 3.70 – 9.21	$ 6.00
2000			
Granted	597,925	$ 7.35 – 14.38	$11.82
Exercised	(105,302)	$ 4.06 – 8.67	$ 5.98
Cancelled	(136,010)	$ 5.26 – 12.75	$ 7.59
Balance, December 31, 2000	2,263,356	$ 3.70 – 14.38	$ 7.77
Options Exercisable	1,072,947	$ 3.70 – 10.78	$ 6.30
2001			
Granted	**382,501**	**$8.58 – 18.18**	**$12.65**
Exercised	**(135,842)**	**$3.70 – 8.88**	**$ 6.38**
Cancelled	**(230,000)**	**$6.38 – 11.81**	**$11.72**
Balance, December 31, 2001	**2,280,015**	**$3.70 – 18.18**	**$ 8.26**
Options Exercisable	**1,381,264**	**$3.70 – 14.38**	**$ 7.28**

Stock Compensation

Statement of Financial Accounting Standard No. 123 "Accounting for Stock Based Compensation" requires the Company to disclose the pro forma impact on net loss and loss per basic and diluted share as if compensation expense associated with employee stock options granted to employees of Penwest had been calculated under the fair value method of SFAS No. 123 as follows:

	Years Ended December 31,		
(in thousands, except per share data)	**2001**	2000	1999
Net loss — as reported	**$(15,981)**	$(8,786)	$(7,681)
Net loss — pro forma	**$(17,602)**	$(9,579)	$(9,286)
Net loss per share, basic and diluted — as reported	**$ (1.15)**	$ (0.71)	$ (0.69)
Net loss per share, basic and diluted — pro forma	**$ (1.27)**	$ (0.78)	$ (0.84)

The fair value of each option grant was estimated using the Black-Scholes option-pricing model with the following weighted average assumptions:

	2001	2000	1999
Expected dividend yield	**None**	None	None
Risk free interest rate	**5.5%**	6.1%	5.80%
Expected volatility	**52%**	82%	75%
Expected life of options	**7.5 years**	7.5 years	7.5 years

The weighted average fair value of options granted during the years ended December 31, 2001, 2000, and 1999, was $8.03, $11.92, and $5.73, respectively. The weighted average remaining contractual life of options outstanding at December 31, 2001 is 8.2 years. The weighted effect of applying SFAS No. 123 for providing pro forma disclosures for the years ended December 31, 2001, 2000, and 1999, is not likely to be representative of the effects in future years because the amounts above reflect only the options granted before 1995 that vest over four to five years. No additional Penford shares were granted to the Company employees subsequent to December 31, 1997.

Employee Stock Purchase Plan

The Employee Stock Purchase Plan was approved in October 1997 and enables all employees to subscribe "during specified offering periods" to purchase shares of common stock at the lower of 85% of the fair market value of the shares on the first or last day of such offering period. A maximum of 228,000 shares are authorized for issuance under the Plan. There were 10,696 shares, 20,415 shares, and 25,930 shares issued under the Plan during 2001, 2000, and 1999, respectively.

Rights Agreement

On June 25, 1998, the Company's Board of Directors declared a dividend of one right for each outstanding share of the Company's Common Stock (the "Right") to shareholders of record at the close of business on July 28, 1998. Each Right entitles the registered holder to purchase from the Company one one-thousandth of a share of the Series A Preferred Stock, at a purchase price of $60 in cash, subject to adjustment.

The Rights are not currently exercisable and will not be exercisable until the earlier of (i) 10 business days (or such later date as may be determined by the Board) following the later of (a) a public announcement that a person or group of affiliated or associated persons (a "Rights Acquiring Person") has acquired, or obtained the right to acquire, beneficial ownership of 15% or more of the outstanding shares of Common Stock or (b) the first date on which an executive officer of the Company has actual knowledge that a Rights Acquiring Person has become such, or (ii) 10 business days (or such later date as may be determined by the Board) following the commencement of a tender offer or exchange offer that would result in a person or group beneficially owning 15% or more of such outstanding shares of Common Stock. The Rights will expire upon the close of business on July 27, 2008 unless earlier redeemed or exchanged.

NOTE 12. COMMITMENTS

Leases

The Company's manufacturing facility in Finland is leased under a three-year operating lease which includes renewal options with annual rental expense of approximately $216,000 plus additional charges determined on a month-to-month basis for equipment and warehouse usage. In addition, certain of the Company's property, plant and equipment is leased under operating leases ranging from one to fifteen years and includes periodic escalation clauses based on rental market conditions as well as insurance rent payments. Rental expense under operating leases was $683,000, $583,000, and $343,000 for the years ended December 31, 2001, 2000, and 1999, respectively.

Future minimum lease payments as of December 31, 2001 for noncancellable operating leases having initial lease terms of more than one year are as follows:

(in thousands)	Operating Leases
2002	$ 760
2003	696
2004	627
2005	307
2006	302
Thereafter	51
Total minimum lease payments	$2,743

NOTE 13. INCOME TAXES

The provision (benefit) for federal, state and foreign income taxes consists of the following:

(in thousands)	**2001**	2000	1999
Federal:			
Deferred	**$ —**	$ —	$(218)
Foreign:			
Current	**473**	290	283
Deferred	**—**	(18)	(87)
State:			
Current	**30**	30	2
Deferred	**—**	—	(48)
	$503	$302	$ (68)

The reconciliation between the statutory tax rate and those reflected in the Company's income tax provision (benefit) is as follows:

	2001	2000	1999
Statutory tax rate	**(34)%**	(34)%	(34)%
Valuation allowance	**40**	36	35
Foreign taxes	**(1)**	1	(1)
Other	**(2)**	1	(1)
	3%	4%	(1)%

The components of deferred income tax (assets) and liabilities at December 31 are as follows:

(in thousands)	2001	2000
Receivable allowance	$ (85)	$ (91)
Inventory reserves and basis differences	(331)	(185)
Deferred compensation and SERP liability	(1,047)	(975)
Deferred revenue	(142)	(146)
Tax credit carryforward	(467)	(149)
Net operating loss carryforwards	(16,021)	(8,999)
Other	(164)	—
Total deferred tax assets	(18,257)	(10,545)
Depreciation and amortization	3,232	3,302
Other	337	102
Total deferred tax liabilities	3,569	3,404
Net deferred tax asset before valuation allowance	(14,688)	(7,141)
Valuation allowance	14,893	7,346
Net deferred tax liability	$ 205	$ 205

The Company's income tax payments, primarily comprised of foreign income taxes, approximated $342,000, $371,000, and $243,000, for the years ended December 31, 2001, 2000, and 1999, respectively.

At December 31, 2001, the Company has federal net operating loss ("NOL") carryforwards of $41,482,000 for income tax purposes, of which approximately $6,188,000, $8,407,000, $9,135,000, and $17,752,000 expire in 2018, 2019, 2020, and 2021, respectively. In addition, the Company has research and development tax credit carryforwards of approximately $455,000, of which $149,000 and $306,000 expire in 2020 and 2021, respectively. The use of the NOLs and research and development tax credit carryforwards are limited to future taxable earnings of the Company. For financial reporting purposes at December 31, 2001, a valuation allowance of $14.9 million has been recognized to offset net deferred tax assets, primarily attributable to the NOL carryforward. Utilization of the operating losses are subject to a limitation due to the ownership change provisions of the Internal Revenue Code.

The Company's policy is to permanently reinvest foreign earnings. Accumulated foreign earnings, for which no deferred taxes have been provided, amounted to $5,043,000, $3,794,000, and $3,372,000 as of December 31, 2001, 2000, and 1999, respectively. If such earnings were to be repatriated, the income tax effect would not be significant.

Included in the loss before income taxes is foreign income of $1,651,000, $977,000, and $971,000, for the years ended December 31, 2001, 2000, and 1999, respectively.

NOTE 14. RETIREMENT PLANS AND OTHER EMPLOYEE BENEFITS

Savings Plan

Company employees participate in the Penwest Pharmaceuticals Co. Savings Plan, a defined contribution plan generally covering all of its U.S. employees. Under the Plan, the Company may make quarterly employer matching contributions as defined in the Plan agreement, in an amount equal to a percentage of each participant's pre-tax contributions to the Plan up to 6% of earnings. Participants are immediately vested in their contributions, as well as any earnings thereon. Vesting in the employer contribution portion of their accounts, as well as any earnings thereon is based on years of credited service and vest over a four-year period. The Company's expense under the Plan was $227,000, $237,000, and $212,000 for 2001, 2000, and 1999, respectively.

The Plan also includes a discretionary annual profit-sharing component that is awarded by Penwest's Board of Directors generally based on achievement of predetermined corporate goals. This feature is available to all employees who meet the eligibility requirements of the Plan. There was no profit sharing expense in 2001, 2000, or 1999.

Supplemental Executive Retirement Plan

The Company has a Supplemental Executive Retirement Plan ("SERP"), a nonqualified plan, which covers the Chairman and Chief Executive Officer of Penwest. For 2001, 2000, and 1999, the net expense for the SERP incurred by Penwest was $125,000, $122,000, and $141,000, respectively. The Company does not fund this liability and no assets are held by the Plan. The following disclosures summarize information relating to the Plan.

Change in benefit obligation (in thousands):

	2001	2000
Benefit obligation at beginning of period	$1,453	$1,318
Service cost	(19)	(16)
Interest cost	108	97
Actuarial gains	38	54
Benefit obligation at December 31	$1,580	$1,453

Funded status (in thousands):

	2001	2000
Funded status (unfunded)	$(1,580)	$(1,453)
Unrecognized net transition obligation	160	220
Unrecognized prior service cost	51	99
Unrecognized net actuarial gain	(550)	(661)
Net amount recognized at December 31, (included in deferred compensation)	$(1,919)	$(1,795)

Components of net periodic benefit cost (in thousands):

	2001	2000
Service cost	$ (19)	$ (16)
Interest cost	108	97
Amortization of unrecognized transition obligation	60	60
Amortization of prior service cost	49	63
Amortization of gains	(73)	(82)
Net periodic benefit cost	$125	$122

The Plan's accumulated benefit obligation at December 31, 2001 and 2000 was $1,356,000 and $1,216,900, respectively. The Company's benefit obligation was measured using a weighted average discount rate of 7.25% and 7.50% in 2001 and 2000, respectively, and a compensation increase of 4% and 3%, in 2001 and 2000, respectively. The amortization of prior service cost is determined using a straight-line amortization of the cost over the average remaining service period of the employee expected to receive benefits under the Plan.

Health Care and Life Insurance Benefits

The Company offers health care and life insurance benefits to most active employees. Costs incurred for these benefits were $732,000, $682,000, and $491,000, in 2001, 2000, and 1999, respectively.

NOTE 15. LICENSING AGREEMENTS

The Company enters into collaborative arrangements with pharmaceutical companies to facilitate and expedite the commercialization of its TIMERx drug delivery technology.

In September 1997, the Company entered into a strategic alliance agreement with Endo with respect to the development of an extended release formulation of oxymorphone based on the Company's TIMERx technology (the "Endo Product"). Endo is a fully integrated specialty pharmaceutical company with a market leadership in pain management. Endo has a broad product line including 12 branded products that include the established brands such as Percodan® and Percocet®. Endo is registered with the U.S. Drug Enforcement Administration as a developer, manufacturer and marketer of controlled narcotic substances.

Under the strategic alliance agreement, the responsibilities of the Company and Endo with respect to the Endo Product are determined by a committee comprised of an equal number of members from each of the Company and Endo (the "Alliance Committee"). However, the Company formulated the Endo Product and Endo is conducting all clinical studies and will prepare and file all regulatory applications and submissions. The Company has agreed to manufacture and supply TIMERx material to Endo, and Endo has agreed to manufacture and market the Endo Products in the United States. The manufacture and marketing of the Endo Product outside of the United States may be conducted by the Company, Endo or a third party, as determined by the Alliance Committee. The strategic alliance agreement may be terminated upon a material breach of the agreement by a party.

The Company and Endo share the costs involved in the development and commercialization of the Endo Product and have agreed that the party marketing the Endo Product will pay the other party royalties initially equal to 50% of net profits (as defined in the agreement). This percentage will decrease if the total U.S. net profits exceed pre-determined thresholds. This cost-sharing is subject to each party's right to terminate its participation in the funding of development and commercialization of the Endo Product. In general, the royalty payable by the marketing party to the other party will not drop below 40%; however, a one-third royalty reduction provision does apply in limited circumstances, including material breaches of the agreement by the royalty receiving party and certain bankruptcy and insolvency events involving the royalty receiving party. Endo will purchase formulated TIMERx material for use in the Endo Product exclusively from the Company at specified prices. Such prices will be reflected in the determination of net profits.

On March 2, 2000, Mylan announced that it had signed a supply and distribution agreement with Pfizer to market a generic version of all three strengths (30 mg, 60 mg, 90 mg) of Pfizer's Procardia XL. In connection with that agreement, Mylan decided not to market Nifedipine XL and agreed to pay Penwest a royalty on all future net sales of the 30 mg strength of Pfizer's generic Procardia XL. The royalty percentage was comparable to the percentage called for in Penwest's original agreement with Mylan for Nifedipine XL. Mylan has retained the marketing rights to the 30 mg strength of Nifedipine XL. Mylan's sales in the United States in 2001 of the 30 mg dosage strength version of Pfizer's generic Procardia XL totaled approximately $48.2 million. The term of this agreement continues until such time as Mylan permanently ceases to market generic Procardia XL.

Approximately $16,093,000, $12,102,000, and $6,429,000, for the years ended December 31, 2001, 2000, and 1999, respectively, of research and development expense principally related to applications of TIMERx technology to products covered by the Company's collaborative agreements. Since the collaborative agreements can be terminated by either party, the costs associated with such agreements could be discontinued by the Company. Such costs are typically incurred prior to the receipt of milestones, royalties and other payments.

NOTE 16. CONTINGENCIES

Substantial patent litigation exists in the pharmaceutical industry. Patent litigation generally involves complex legal and factual questions, and the outcome frequently is difficult to predict. An unfavorable outcome in any patent litigation affecting the Company could cause the Company to pay substantial damages, alter its products or processes, obtain licenses and/or cease certain activities. Even if the outcome is favorable to the Company, the Company could incur substantial litigation costs. Although the legal costs of defending litigation relating to a patent infringement claim (unless such claim relates to TIMERx) are generally the contractual responsibility of the Company's collaborators, the Company could nonetheless incur significant unreimbursed costs in participating and assisting in the litigation.

NOTE 17. SEGMENT INFORMATION

The Company is engaged in the research, development and commercialization of novel oral drug delivery products and technologies, and has extensive expertise in developing, manufacturing, and selling excipient ingredients for the pharmaceutical industry. The Company's product portfolio ranges from excipients that are sold in bulk, to more technically advanced and patented excipients that are licensed to customers, and conducts its business primarily in North America and Europe. The European operations consist of a manufacturing facility in Nastola, Finland and sales offices in Reigate, England, and Bodenheim, Germany. None of the European locations, other than Finland, is individually significant. Intercompany sales include a profit component for the selling company. Intercompany sales and profits are eliminated in consolidation. Corporate operating expenses are not allocated to the European operations. Operating profit represents gross profit less selling, general and administrative expenses and, for North America, research and development expense.

The Company's geographic area data for each of the three fiscal years ended December 31, 2001, 2000, and 1999 were as follows:

(in thousands)	North America	Finland	Other	Elimi-nations	Total
December 31, 2001					
Total Revenues	**$38,412**	**$6,912**	**$3,650**	**$(8,971)**	**$40,003**
Long-lived Assets	**$21,268**	**$ 557**	**$ 25**		**$21,850**
December 31, 2000					
Total Revenues	$40,922	$5,708	$2,948	$(7,520)	$42,058
Long-lived Assets	$22,371	$ 604	$ 20		$22,995
December 31, 1999					
Total Revenues	$35,290	$5,490	$4,038	$(7,511)	$37,307
Long-lived Assets	$23,377	$ 650	$ 34		$24,061

Neither the revenues nor long-lived assets in Germany or the United Kingdom, individually or in the aggregate, exceed 10% of total revenues or long-lived assets, respectively, of the Company.

NOTE 18. QUARTERLY FINANCIAL DATA (UNAUDITED)

Summarized quarterly financial data for the years ended December 31, 2001 and 2000 is as follows (in thousands, except per share data):

	Quarter Ended			
	March 31, 2001 (Unaudited)	June 30, 2001 (Unaudited)	Sept. 30, 2001 (Unaudited)	Dec. 31, 2001 (Unaudited)
Total revenues	**$10,939**	**$ 9,515**	**$ 9,801**	**$ 9,748**
Gross profit	**4,376**	**3,698**	**3,633**	**3,486**
Net loss	**$ (2,123)**	**$(3,166)**	**$(4,125)**	**$(6,567)**
Net loss per share	**$ (0.17)**	**$ (0.25)**	**$ (0.28)**	**$ (0.43)**

	Quarter Ended			
	March 31, 2000 (Unaudited)	June 30, 2000 (Unaudited)	Sept. 30, 2000 (Unaudited)	Dec. 31, 2000 (Unaudited)
Total revenues	$11,375	$ 8,903	$11,224	$10,556
Gross profit	4,558	3,619	4,144	4,434
Loss before cumulative effect of change in accounting principle	(1,309)	(2,108)	(2,145)	(2,812)
Cumulative effect of change in accounting principle	(410)	—	—	—
Net loss	$ (1,719)	$(2,108)	$ (2,145)	$ (2,812)
Basic and diluted amounts per share:				
Loss per share before cumulative effect of change in accounting principle	$ (0.11)	$ (0.17)	$ (0.17)	$ (0.22)
Cumulative effect of change in accounting principle	(0.04)	—	—	—
Net loss per share	$ (0.15)	$ (0.17)	$ (0.17)	$ (0.22)

REPORT OF MANAGEMENT

The Company's management is responsible for the accompanying consolidated financial statements, prepared in conformity with accounting principles generally accepted in the United States. As such, management selects appropriate accounting policies and uses its judgment and best estimates to report the Company's events and transactions as they occur. Management has determined such amounts on a reasonable basis in order to ensure that the financial statements are presented fairly, in all material respects. Financial data included throughout this Annual Report is prepared on a basis consistent with that of the financial statements.

The Company's system of internal accounting controls is designed to provide reasonable assurance that assets are safeguarded, and that transactions are executed and recorded in accordance with management's authorization. Management believes the Company's system of internal controls provides such reasonable assurance to the Board of Directors and shareholders, regarding the preparation of reliable financial statements.

Ernst & Young LLP, our independent auditors, appointed by the Board of Directors and ratified by the Company's shareholders, was engaged to audit the consolidated financial statements. During the course of their audit, Ernst & Young LLP evaluated the Company's system of internal controls to the extent necessary to render their opinion on the consolidated financial statements. The report of the independent auditors is contained in this Annual Report.

The Audit Committee, composed solely of Directors who are not officers of the Company, meets with the independent auditors and management periodically to discuss the adequacy of internal controls and the integrity of the Company's accounting and financial reporting. The Committee reviews with the independent auditors the overall scope and plan of the audit. The Committee also meets periodically with the independent auditors, both with and without management present, to discuss the results of their audit, their evaluation of the Company's internal controls, and the overall quality of the Company's financial reporting.

Tod R. Hamachek
Chairman of the Board
and Chief Executive Officer

Jennifer L. Good
Senior Vice President, Finance
and Chief Financial Officer

REPORT OF INDEPENDENT AUDITORS

To the Board of Directors and Shareholders
Penwest Pharmaceuticals Co.

We have audited the accompanying consolidated balance sheets of Penwest Pharmaceuticals Co. as of December 31, 2001 and 2000, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Penwest Pharmaceuticals Co. at December 31, 2001 and 2000, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States.

As discussed in Note 3 to the consolidated financial statements, Penwest Pharmaceuticals Co. changed its method of accounting for revenue recognition in 2000.

Ernst & Young LLP

Stamford, Connecticut
March 4, 2002

BOARD OF DIRECTORS

Paul E. Freiman
Mr. Freiman is the Chief Executive Officer and President of Neurobiological Technologies Inc. and the former Chairman and Chief Executive Officer of Syntex Corporation. He is Chairman of the Board of Digital Gene Technologies and also serves on the boards of Calypte Biomedical Corporation, PHYTOS Inc., and Otsuka America Pharmaceuticals, Inc. He has been chairman of the Pharmaceutical Manufacturers Association of America (PhARMA) and has also chaired a number of key committees. Mr. Freiman holds a B.S. degree from Fordham University and an honorary doctorate from the Arnold & Marie Schwartz College of Pharmacy.

Jere E. Goyan, Ph.D.
Dr. Goyan is President of Goyan and Hart Associates. He is Chairman of the Board of SciClone Pharmaceuticals, a member of the Board of Emisphere Technology, PharmQuest, Inc., and Slil Pharmaceuticals. Dr. Goyan was President and COO of Alteon, Inc. from 1993 to 1998. From 1979 to 1981, Dr. Goyan served as Commissioner of the Food and Drug Administration. He is currently Dean Emeritus and Professor Emeritus of the School of Pharmacy, University of California, San Francisco after serving as Dean from 1967 to 1992 and Professor from 1956 to 1992. Dr. Goyan is a member of numerous associations and served as President of the American Association of Colleges of Pharmacy in 1978 and of the American Association of Pharmaceutical Scientists in 1990. He has received meritorious awards from the University of California, San Francisco, the American Pharmaceutical Association, the Department of Health and Human Services and others. He obtained a Bachelor of Science degree from the School of Pharmacy, University of California, San Francisco in 1952 and his Doctor of Philosophy, Pharmaceutical Chemistry, from the University of California, Berkeley in 1957.

Tod R. Hamachek
Mr. Hamachek is Chief Executive Officer and Chairman of the Board of Penwest Pharmaceuticals Co. Prior to that, he served as President, Chief Operating Officer and Director of Penford Corporation. He is also a director of Northwest Natural, The Seattle Times, and the National Peace Garden Foundation. Mr. Hamachek holds an M.B.A. from the Harvard Business School and a B.A. from Williams College.

Rolf H. Henel
Mr. Henel currently serves as a consultant to the health care industry. He is Director and Member of the Audit Committee of SciClone Pharmaceuticals, President of American Association of Individual Investors, and a member and past Chairman of the Global Economic Council Executive Committee for the National Planning Association. Additionally, he is the past President of Cyanamid International, Lederle Division, and Director and Chief Operating Officer of Immunomedics, Inc. Mr. Henel holds an M.B.A. from New York University and a B.A. from Yale University.

Robert Hennessey
Mr. Hennessey is the former President and CEO of Genome Therapeutics Corporation and currently serves as its Chairman of the Board. Additionally, he was previously an independent consultant of Hennessey & Associates, Ltd. Prior to that, Mr. Hennessey was Senior Vice President of Corporate Development for Sterling Drug, Inc. and also served in various executive assignments at Merck & Co., Inc., SmithKline Beecham PLC, and Abbott Laboratories. Mr. Hennessey is also a director of Repligen Corporation. Mr. Hennessey holds an M.A. and an A.B. from the University of Connecticut.

N. Stewart Rogers
Mr. Rogers was Senior Vice President of Univar Corporation until his retirement in 1991. From 1990 on, he served as Chairman of Penford Corporation, retiring from that responsibility in 2001. He has served as director of a number of public companies, including U.S. Bancorporation, Univar Corporation, John Fluke Mfg. Co., Royal Vopak, N.V. (The Netherlands), and VWR Scientific Inc. He is a graduate of Stanford University with a B.A. in Economics.

John N. Staniforth, Ph.D.
Dr. Staniforth is Chief Scientific Officer of Vectura Ltd, a UK biosciences company. Dr. Staniforth serves as a scientific advisor to a number of international pharmaceutical companies and has extensive teaching and research experience. He is an Honorary Professor of the University of Bath in England and has past associations with a number of US universities as well as Monash University in Australia. His research in the field of powder technology has been widely published and is the recipient of numerous research awards. Dr. Staniforth is a Churchill Fellow and has been elected Fellow of a number of scientific societies around the world, including the American Association of Pharmaceutical Sciences. Dr. Staniforth has been affiliated with Penwest as a consultant since its inception and is the co-inventor of two of its flagship technology platforms: TIMERx and PROSOLV SMCC.

Anne M. VanLent
Ms. VanLent is currently a partner and founder of The Technology Compass Group, LLC, an emerging growth technology company consulting firm. From October 2000 to October 2001, Ms. VanLent served as Executive Vice President, Portfolio Management for Sarnoff Corporation, which creates and commercializes electronic, biomedical, and informational technologies. From mid-1997 through October 2000, Ms. VanLent served as Sarnoff Corporation's Vice President of Ventures and Licensing. Previously, Ms. VanLent served as President of AMV Associates, an emerging growth healthcare consulting firm from March 1994 through August 1997, and as Senior Vice President and Chief Financial Officer of The Liposome Company, Inc., a biotechnology company, from 1985 through 1993. She currently serves on the board of directors of i-STAT Corporation, a public company engaged in development and commercialization of point of care diagnostics and serves as a director of a private fuel cell development company. Ms. VanLent received a B.A. in Physics from Mount Holyoke College.

CORPORATE DIRECTORY AND SHAREHOLDER INFORMATION

OFFICERS

Tod R. Hamachek
Chairman of the Board
and Chief Executive Officer

Jennifer L. Good
Senior Vice President, Finance
and Chief Financial Officer

Anand R. Baichwal, Ph.D.
Chief Scientific Officer and Senior Vice President, Research & New Technology

Stephen J. Berté, Jr.
Senior Vice President, General Manager — Excipients Business

BOARD COMMITTEES

Executive Committee
Tod R. Hamachek
Paul E. Freiman
Robert J. Hennessey

Audit Committee
N. Stewart Rogers, Chair
Rolf H. Henel
Anne M. VanLent

Compensation and Benefits Committee
Robert J. Hennessey, Chair
Paul E. Freiman
N. Stewart Rogers

Scientific Advisory Board
Jere E. Goyan, Ph.D., Chair
John N. Staniforth, Ph.D.
Darrell R. Abernethy, M.D., Ph.D.
Kenneth Cartwright, M.B., Ch.B., M.F.C.M. D.P.M., M.R.C.P.
Marvin E. Jaffe, M.D.
Vincent H.L. Lee, Ph.D.
Marvin Meyer, Ph.D.
Stephen E. Rudolph, Ph.D.

PENWEST HEADQUARTERS

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Penwest Pharmaceuticals GmbH
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Germany

Penwest Pharmaceuticals Oy
Maitotie 4
15560 Nastola
Finland

SHAREHOLDER INFORMATION

Market Price of and Dividends on the Registrant's Common Stock and Related Shareholder Matters
Penwest's common stock, $.001 par value, is listed with and trades on the Nasdaq National Market under the symbol "PPCO." The high and low closing prices of the Company's common stock during 2001 and 2000 are set forth below. The quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

Period 2001	High	Low
Quarter Ended March 31	$14.63	$ 9.81
Quarter Ended June 30	$16.05	$11.06
Quarter Ended September 30	$20.30	$14.20
Quarter Ended December 31	$20.19	$15.00
Period 2000	**High**	**Low**
Quarter Ended March 31	$19.50	$12.25
Quarter Ended June 30	$13.63	$ 8.75
Quarter Ended September 30	$13.25	$ 8.63
Quarter Ended December 31	$12.94	$ 8.13

On March 22, 2002 there were 861 shareholders of record.

The Company has never paid cash dividends on its common stock. The Company presently intends to retain earnings, if any, for use in the operation of its business, and therefore does not anticipate paying any cash dividends in the foreseeable future. The Company is prohibited from paying dividends on its common stock under its existing credit facility with the CIT Group/Business Credit, Inc.

Annual Meeting
10:00 a.m., June 5, 2002

Form 10-K
The Company files an annual report with the SEC on Form 10-K, pursuant to the Securities Exchange Act of 1934. Shareholders may obtain a copy of this report without charge by written request, or view the 10-K in its entirety on our website.

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Auditors
Ernst & Young LLP
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Stamford, CT 06905

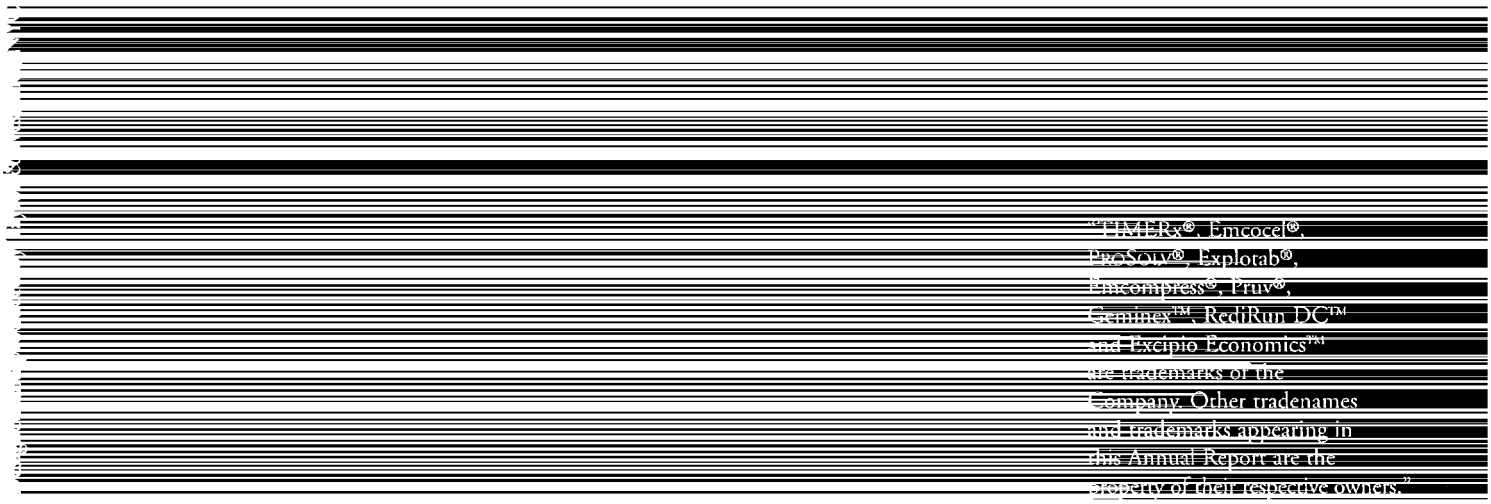
Investor Relations
Kekst and Company, Inc.
437 Madison Avenue
New York, NY 10022

Transfer Agent & Registrar
Mellon Investor Services LLC
111 Founders Plaza
Eleventh Floor
East Hartford, CT 06108

Shareholder Information
Mellon Investor Services LLC
(800) 288-9541

FORWARD-LOOKING STATEMENTS

This Annual Report contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words "believes", "anticipates", "plans", "expects", "intends", "may", and other similar expressions are intended to identify forward-looking statements. There are a number of important factors that could cause the Company's actual results to differ materially from those indicated by forward-looking statements contained in this report and presented elsewhere by management from time to time. These factors include the factors under the caption "Risk Factors" in Penwest's Annual Report on Form 10-K for the year ended December 31, 2001, which is on file with the Securities and Exchange Commission and which risk factors are incorporated herein by reference.



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