SCHEDULE 14A
(Rule 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant ☑

Filed by a Party other than the Registrant ☐

Check the appropriate box:

☑ Preliminary Proxy Statement

☐ Confidential, for Use of the Commission Only (as Permitted by Rule 14a-6(e)(2))

☐ Definitive Proxy Statement

☐ Definitive Additional Materials

☐ Soliciting Material Under Rule 14a-12

PENWEST PHARMACEUTICALS CO.
(Name of Registrant as Specified in Its Charter)

Not Applicable.
(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

☐ No fee required.

☐ Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.

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(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

Penwest Pharmaceuticals Co.

January , 2003

Dear Shareholder:

I am writing to you today about the proposed sale of our excipient business to Josef Rettenmaier Holding GmbH & Co. KG, a German manufacturer of cellulosics and organic fiber.

The sale of the excipient business will enable us to focus on and devote more resources to our core business: the development of pharmaceutical products based on innovative extended release oral drug delivery technologies. With the approximately $33.9 million of net cash proceeds available after closing, we intend to grow our drug development and delivery business in the following ways:

- *Expand our product development pipeline.* With the additional resources from the sale, we believe that we can more aggressively add product candidates to our drug development pipeline. For instance, we have cardiovascular product candidates in the formulation stages that we expect to advance into the clinic in 2003.
- *Increase our involvement in the drug development process.* As we identify more product candidates for development, we are evaluating each product candidate to determine if we should out-license the product candidate at an early stage, jointly develop the product candidate in collaboration with a third party or develop the product candidate on our own. The strategy of developing a product candidate on our own or jointly with a third party should allow us to better manage development timelines, diversify risk and retain more of the economic value if the product candidate goes to market. We believe that the sale will provide us with the resources to fund the costs required by this development strategy and to build our marketing, regulatory, clinical and drug development infrastructure.
- *Expand our base technologies.* We have significant expertise in drug delivery technologies. We intend to continue the development of our TIMERx®, Geminex™ and SyncroDose™ technologies and to seek to develop, in-license or acquire new technologies which are synergistic with our product development pipeline.

Our board of directors believes that the growth of Penwest can be best achieved by pursuing the strategies described above. While our excipient business has provided us with substantial positive cash flows and satisfactory growth rates, most excipient products lack the potential to achieve substantially increased revenues or margins. In contrast, the development of pharmaceutical products offers the possibility of substantially greater financial returns. Acknowledging the substantial risks and costs involved in pharmaceutical product development, we believe that a strategy of focusing exclusively on developing drug products based on oral drug delivery technology is the most appropriate way for us to seek to maximize shareholder value.

We carefully considered several alternative strategies for raising funds to support our efforts to build our drug delivery business, and concluded that the sale of our excipient business was the preferable method. The sale of the excipient business should provide sufficient cash to enable us to execute our strategy for at least the next two years. Rettenmaier was selected after a number of prospective buyers participated in a bidding process for the excipient business. Our financial advisor, Banc of America Securities LLC, has rendered its opinion that as of November 1, 2002, based upon and subject to certain matters described in its opinion, the consideration to be received by us from the proposed sale is fair, from a financial point of view, to us.

In order to proceed with the sale, we have called a special meeting of shareholders to approve the asset sale. The special meeting is scheduled for February [ ], 2003 at 10:00 at [ ]. The accompanying proxy statement provides detailed information about the proposed asset sale. Please give all of this information your careful attention, including the discussion of the benefits and risks of the transaction as perceived by the board of directors, which appears beginning on page 5.

The transaction requires the affirmative vote of the holders of a majority of our outstanding common stock. To vote your shares, you may use the enclosed proxy card, attend the special meeting, or vote your shares over the Internet or by telephone. Please refer to the enclosed proxy for instructions. If you so desire, you may withdraw your proxy and vote in person at our special meeting. The board of directors unanimously recommends a vote **FOR** the transaction.

Very truly yours,

Tod R. Hamachek
Chairman and Chief Executive Officer

PENWEST PHARMACEUTICALS CO.

NOTICE OF SPECIAL MEETING OF SHAREHOLDERS
To be Held on February [ ], 2003

To the Shareholders:

Notice is hereby given that a Special Meeting of Shareholders of Penwest Pharmaceuticals Co., a Washington corporation (the "Company"), will be held at [ ], on February [ ], 2003, at 10:00 a.m., for the following purposes:

1. To approve the sale of substantially all of the assets used in the Company's excipient business to Josef Rettenmaier Holding GmbH & Co. KG for $41.75 million in cash, subject to adjustment.

2. To transact such other business as may properly come before the meeting or at any adjournment thereof.

The Board of Directors has no knowledge of any other business to be transacted at the meeting.

The enclosed proxy statement describes the sale of the excipient business in detail.

Only shareholders of record at the close of business on January [ ], 2003 are entitled to notice of, and to vote at, the meeting and at any adjournments thereof. Shareholders are advised that they are or may be entitled to assert dissenters' rights under RCW Chapter 23B.13, a copy of which is attached hereto as Exhibit C.

By Order of the Board of Directors

/s/ Jennifer L. Good

Jennifer L. Good
Corporate Secretary

January [ ], 2003

IMPORTANT

WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING, PLEASE SIGN, DATE AND RETURN PROMPTLY THE ENCLOSED PROXY IN THE ENCLOSED ENVELOPE, WHICH REQUIRES NO POSTAGE IF MAILED IN THE UNITED STATES. ALTERNATIVELY, PLEASE VOTE OVER THE INTERNET OR BY TELEPHONE BY FOLLOWING THE INSTRUCTIONS ON THE ENCLOSED PROXY. PROMPTLY SIGNING, DATING AND RETURNING THE PROXY OR OTHERWISE VOTING YOUR SHARES WILL SAVE THE COMPANY THE ADDITIONAL EXPENSE OF FURTHER SOLICITATION.

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FORWARD-LOOKING STATEMENTS

This proxy statement 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. All statements, other than statements of historical facts, included or incorporated in this report regarding Penwest's strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. The words "believes," "anticipates," "estimates," "plans," "expects," "intends," "may," "projects," "will," and "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Penwest cannot guarantee that Penwest actually will achieve the plans, intentions or expectations disclosed in Penwest's forward-looking statements and you should not place undue reliance on Penwest's forward-looking statements. There are a number of important factors that could cause Penwest's actual results to differ materially from those indicated by forward-looking statements contained in this proxy statement and presented elsewhere by management from time to time. These factors include the risk factors listed under "Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Factors." In addition, any forward-looking statements represent Penwest's estimates only as of the date this proxy statement is first filed with the SEC and should not be relied upon as representing Penwest's estimates as of any subsequent date. Penwest does not assume any obligation to update any forward-looking statements.

PENWEST PHARMACEUTICALS CO.

2981 Route 22
Patterson, New York 12563-2335
(845) 878-3414

PROXY STATEMENT FOR SPECIAL MEETING

The board of directors of Penwest Pharmaceuticals Co., a Washington corporation, is soliciting proxies for a special meeting of shareholders to be held on February [ ], 2003. This proxy statement contains important information for you to consider when deciding how to vote on the proposal to be brought before the meeting.

This proxy statement and proxy card are being mailed to shareholders on or about January [ ], 2003.

SUMMARY TERM SHEET

This summary term sheet highlights selected information contained elsewhere in this proxy statement. It may not contain all of the information that is important to you. Penwest therefore urges you to read carefully the entire proxy statement including the exhibits and other documents that are incorporated by reference into this proxy statement.

Proposed asset sale (page 5)

Penwest's board of directors has unanimously approved the sale of substantially all of the assets used in Penwest's excipient product lines to Josef Rettenmaier Holding GmbH & Co. KG for $41.75 million in cash and the assumption of specified liabilities. The purchase price to be paid by Rettenmaier in the asset sale will be adjusted to the extent that Penwest's net working capital on the closing date is more or less than $13.8 million. The purchase price will be paid in three installments: $39.5 million at closing, $1.0 million on April 25, 2003 and $1.25 million on May 25, 2004.

The terms of the asset sale agreement are summarized under "The Asset Sale Agreement," and the asset sale agreement is attached as Exhibit A to this proxy statement.

Penwest's excipient business involves the development, manufacture and distribution of branded pharmaceutical excipients, which are the inactive ingredients in tablets and capsules. These excipients include ProSolv, a high performance excipient based on co-processing technology which, among other things, improves the performance characteristics of tablets. Penwest's excipient business is described under "Business — Excipient Product Lines."

Business operations following the asset sale (page 31)

Following the sale of the excipient product lines, Penwest will continue its current business of developing pharmaceutical products based on innovative drug delivery technologies. These operations are described under "Business — Drug Delivery Technologies and Products." With the approximately $33.9 million of net cash proceeds available after closing, Penwest intends to grow Penwest's drug development and delivery

business, as described under "The Asset Sale — Background," "— Use of Proceeds" and "Business — Penwest Strategy." For the pro forma effects of the asset sale on Penwest, see "Unaudited Pro Forma Financial Information."

Recommendation of the board of directors (page 9)

Penwest's board of directors unanimously recommends that you vote in favor of the asset sale. The board believes that selling the assets used in connection with the excipient product lines and focusing Penwest's resources on Penwest's drug delivery product lines is the best strategy available to Penwest for maximizing shareholder value. The board's assessment of the benefits and risks of this strategy are set forth under "The Asset Sale — Background" and "— Recommendation of Board of Directors; Reasons; Special Considerations."

Opinion of financial advisor (page 10)

In deciding to approve the asset sale, the board of directors considered the opinion of Banc of America Securities LLC, Penwest's financial advisor in connection with the asset sale. The opinion was rendered orally to the board of directors on October 25, 2002, and subsequently updated and confirmed in writing on November 1, 2002. The opinion states that, as of such dates, based upon and subject to specified matters described in the opinion, the consideration to be received by Penwest in the proposed asset sale is fair, from a financial point of view, to Penwest. The opinion addresses only the fairness, from a financial point of view, of the consideration to be received by Penwest in the proposed asset sale, does not address the merits of the underlying decision by Penwest to engage in the asset sale and does not constitute a recommendation by Banc of America Securities to any of Penwest's shareholders as to how to vote at the special meeting on the proposed asset sale. The opinion is summarized under "The Asset Sale — Opinion of Financial Advisor" and the full text of the written opinion, which sets forth the assumptions made, matters considered and limitations on the review undertaken in connection with the opinion, is set forth in full in Exhibit B to this proxy statement and is incorporated into this proxy statement by reference. Penwest urges you to read this opinion carefully in its entirety.

Required approvals (page 19)

Corporate approval of the proposed sale of the assets of the excipient product lines requires the affirmative vote of the holders of a majority of Penwest's outstanding common stock. Not voting, or abstaining on the vote, has the same effect as a vote against the asset sale. Penwest is seeking approval by the shareholders because of the importance of the excipient business to Penwest. Sales of Penwest's excipient products generated approximately 86% and 87% of Penwest's revenues for the year ended December 31, 2001 and the nine months ended September 30, 2002, respectively.

The asset sale is subject to the absence of any action commenced before any governmental authority challenging the transaction. No filings are required to be made under the Hart-Scott-Rodino Act.

Possible termination of the transaction (page 25)

Penwest and Rettenmaier can mutually agree to terminate the asset sale agreement at any time. The asset sale agreement will terminate automatically if the asset sale does not take place by March 1, 2003.

Penwest may terminate the transaction if:

- Rettenmaier materially breaches, and fails to cure, any representation, warranty or covenant or fails to perform any material condition or obligation contained in the asset sale agreement; or
- Penwest receives a proposal from a third party to acquire the excipient business and Penwest's board of directors determines that it must consider the proposal and terminate the asset sale agreement in order to comply with its fiduciary duties to Penwest's shareholders.

Rettenmaier may terminate the transaction if:

- Penwest materially breaches, and fails to cure, any representation, warranty or covenant or fails to perform any material condition or obligation contained in the asset sale agreement; or
- there is a material adverse change in the excipient business between the date the asset sale agreement was signed and the date the transaction is consummated, and the change reduces the fair market value of the excipient business by 10% or more.

No solicitation of alternative offers; termination fees (page 25)

Penwest has agreed not to solicit, initiate, encourage or participate in discussions about any proposal from a third party involving a sale of a material portion of the excipient business to anyone other than the buyer, for as long as the asset sale agreement is still in effect. However, this restriction does not apply to the extent that the board's fiduciary duties under Washington law otherwise require.

The asset sale agreement provides that Penwest will be required to pay Rettenmaier a termination fee of approximately $1.3 million which equals 3% of the purchase price, if:

- Rettenmaier terminates the asset sale agreement as a result of the failure by Penwest's board of directors to recommend that Penwest's shareholders vote in favor of the sale of the excipient business to Rettenmaier, or as a result of Penwest's material breach of its obligations to file proxy materials and to call and hold a special meeting regarding the transactions contemplated by the asset sale agreement; or
- Penwest terminates the asset sale agreement as a result of Penwest's receipt of a proposal from a third party to acquire the excipient business that the board of directors determines it must consider.

The asset sale agreement provides that Penwest will be required to reimburse Rettenmaier for:

- all out-of-pocket fees and expenses incurred in connection with purchase of the excipient business if Penwest's shareholders fail to approve the sale of the excipient business; or
- up to a maximum of $300,000 of these fees and expenses if Penwest materially breaches, and fails to cure, any representation, warranty or covenant or fails to perform any material condition or obligation contained in the asset sale agreement or if there is a material adverse change in the excipient business between the date the asset sale agreement was signed and the date the transaction is consummated and the change reduces the fair market value of the excipient business by 10% or more.

The asset sale agreement provides that Rettenmaier will be required to pay a termination fee of approximately $1.3 million to Penwest if Rettenmaier breaches its obligations to close the transactions contemplated by the asset sale agreement or breaches in any material respect, and fails to cure, any material representation, warranty or covenant contained in the asset sale agreement.

Accounting treatment (page 19)

For financial reporting purposes, Penwest will report a gain from the asset sale based upon the amount of net proceeds received by Penwest and the net book value of the assets sold. If the asset sale had occurred on September 30, 2002, such gain from the asset sale, net of tax effects, would have been approximately $9.4 million. Penwest intends to account for the sale of the excipient business pursuant to the asset sale agreement as a discontinued operation in accordance with generally accepted accounting principles.

Material federal income tax consequences (page 19)

Penwest will recognize a taxable gain on the asset sale equal to the difference between the amount it realizes from the asset sale and the adjusted tax basis of the assets sold. If the asset sale occurs in the first quarter of 2003, the Company expects that the net taxable gain recognized by it will result in federal and state taxes payable for 2003 (including alternative minimum taxes) of approximately $300,000, after giving

effect to net operating losses and carryforwards. The asset sale should not create any federal or state income tax liabilities for Penwest shareholders since they will not receive any of the proceeds of the asset sale.

Interests of directors and officers in the asset sale (page 18)

Penwest understands that Stephen J. Berté, Penwest's senior vice-president and general manager-excipients, will be hired by Rettenmaier to manage the excipient business at a rate of compensation that is substantially comparable to the compensation that he is currently receiving from Penwest. If Mr. Berté remains employed by Rettenmaier for at least six months after the closing, or is discharged without cause within six months after the closing, Penwest will pay him a retention bonus of $92,500 which is the equivalent of six months' pay. If Mr. Berté is discharged by Rettenmaier without cause within 12 months following the closing, he will receive a severance benefit from Rettenmaier of $277,500 which is the equivalent to 18 months' pay. Stock options to purchase 51,000 shares of Penwest's common stock held by Mr. Berté, which are not currently exercisable, will become immediately exercisable upon closing and will terminate twelve months after the closing.

Under a royalty agreement with John N. Staniforth, a member of Penwest's board of directors, Penwest is obligated to pay Dr. Staniforth on an annual basis one-half of one percent of the net sales of products covered by Penwest's ProSolv patents. These payments will continue through the life of the ProSolv patents. These obligations to Dr. Staniforth will remain with Penwest after the asset sale. Penwest is in discussions with Dr. Staniforth regarding the possibility of making a lump sum payment to Dr. Staniforth in consideration for the termination of the ProSolv royalty payments.

The board of directors was aware of the interests of Mr. Berté and Dr. Staniforth in the transaction when it approved the asset sale. Dr. Staniforth took part in board discussions of the proposed asset sale but abstained from voting on the asset sale and all related matters. Mr. Berté did not participate at any board meeting in any discussions with respect to the asset sale.

The buyer (page 19)

Josef Rettenmaier Holding GmbH & Co. KG is primarily engaged in the manufacturing of cellulosics and organic fiber, and sells products into various industries, including pharmaceutical excipients. Its headquarters are located at Holzmuehle 1, Rosenberg, Germany D-73494. The telephone number is 49(0) 7967-152-0.

Dissenters' rights (page 19)

Under Washington law, a Penwest shareholder can dissent from the asset sale and have the fair value of such shareholder's Penwest stock appraised by a court and paid in cash by Penwest. **To do this, the shareholder must follow required procedures, including delivering a notice to Penwest, and must not vote in favor of the sale**. We have attached the provisions of Washington law governing dissenters' rights to this document as Exhibit C.

Market prices of common stock (page 71)

Information about market prices of Penwest's common stock through January 3, 2003 is set forth in this proxy statement. These market prices do not necessarily correspond to the fair value of such stock, as determined under Washington law, for purposes of dissenters' rights.

How to vote (page 74)

Holders of record of Penwest's common stock on January [ ], 2003 may vote by mail, by telephone, over the internet, or in person, as described in this proxy statement.

THE ASSET SALE

Background

Penwest is engaged in the development of pharmaceutical products based on innovative extended release oral drug delivery technologies. The Company also develops, manufactures and distributes branded pharmaceutical excipients. Pharmaceutical excipients are the inactive ingredients in tablets and capsules, primarily consisting of binders, disintegrants and lubricants. The branded excipients that Penwest develops, manufactures and distributes include ProSolv, a high performance excipient based on co-processing technology which, among other things, improves the performance characteristics of tablets.

The Company has derived a substantial portion of its revenues from sales of its excipient products. During 2001 and the nine months ended September 30, 2002, the Company derived 86% and 87%, respectively, of its revenues from sales of its excipient products and sales of its excipient products generated positive cash flows from operations, although the Company as a whole had negative cash flows from operations. The Company expects operating losses and negative cash flows from operations to continue until substantial sales of products commercialized using the Company's drug delivery technologies occur, whether or not the asset sale is completed.

The Company has financed its operations with cash flows from the sale of excipient products, the sale of formulated bulk TIMERx®, royalties and milestone payments from collaborators, advances under credit facilities and proceeds from the sale and issuance of shares of common stock. The Company expects that, if the asset sale does not occur, its existing capital resources, including funds available under the existing line of credit, and anticipated internally generated funds from the sale of excipient products and formulated bulk TIMERx, royalties and other payments from collaborators will enable the Company to fund its currently planned operations through mid 2003.

In 2001, the Company adopted a strategy to take a more active role in the development of pharmaceutical products. The Company contemplates developing products on its own or licensing products to third party collaborators under collaborations in which the Company will share more of the control and fund more of the development costs of the products covered by the collaboration. This strategy requires a significant commitment of resources by the Company, including spending on research and development by the Company.

Financing Alternatives Considered. On October 5, 2000, Banc of America Securities made a presentation to the board outlining the comparative advantages and disadvantages of four alternative methods of obtaining capital with which to fund the expansion of the drug delivery business:

- bank borrowings;
- private offerings of subordinated debt securities;
- public or private offerings of common stock; and
- sale of the excipient business for cash.

The board considered the following important characteristics with respect to each of the four alternatives:

1. Bank borrowings typically represent the lowest cost of capital of the four alternatives and offer considerable short-term flexibility as to repayment. However, bank borrowings are not a permanent source of financing; they would have to be amortized over the next several years or else renegotiated periodically. The amount of funding available under a bank credit facility would be limited, depending primarily on the cash flow and other financial parameters of the excipient business. Credit facilities typically contain many restrictive covenants that restrict the borrower's operations and limit management's discretion in key respects. Bank borrowings would leverage the Company's balance sheet. Bank borrowings would also expose the Company to the risk of interest rate fluctuations.

2. Privately placed subordinated debt would provide longer-term capital than bank borrowings. However, subordinated debt would need to be repaid within approximately ten years and could

not be replaced with lower interest rate financing without paying substantial redemption premiums. Subordinated debt typically represents a higher cost of capital than bank borrowings, although a lower cost of capital than equity. The Company's prospects for placing subordinated debt in markets appeared to be relatively good at that time. However, the subordinated debt would probably need to be accompanied by warrants in order to be placed. Therefore, this type of financing would dilute the equity position of the Company's current shareholders as well as leverage the Company's balance sheet.

3. Selling common stock in the public or private markets would provide permanent equity funding instead of limited-life debt. However, equity typically represents a higher cost of capital than debt. The issuance of additional equity at the then prevailing price levels in the public markets or at a discount to public market prices in private placements would significantly dilute the Company's shareholders, although the increased number of shares outstanding might provide some increased market depth and liquidity. In light of the volatility of market conditions at that time, it would be difficult to predict whether any equity could be publicly or privately placed, or how much, or at what price per share. The cost, risk of failure and length of time involved in a public equity offering (or, to a lesser extent, in a private placement) would therefore present special risks.

4. A sale of the excipient business represents potentially the lowest cost of capital of the four alternatives. Such funds would be permanently available. The Company's balance sheet would not be leveraged and the Company's shareholders would not be diluted. However, transaction costs, amount of time and management attention required, and risk of failure to close a transaction, would all be greater than in the case of the other alternatives. Strategically, selling the excipient business would re-align the Company's focus entirely on new product development and enhance its ability to proceed with the drug development strategy adopted in 2001. Although selling the excipient business would eliminate the business that had historically generated most of the Company's revenues and provided the Company with substantial positive cash flows, Penwest did not believe that most excipient products had the potential to achieve substantially increased revenues or margins in the future or maximize shareholder value.

After considering all of these factors, the board determined that the Company should pursue a sale of the excipient business. On October 13, 2000 the Company engaged Banc of America Securities LLC as financial advisor with respect to a sale of the excipient business.

Bidding Process. To help to attain the goal of maximizing shareholder value from an asset sale, Banc of America Securities and the Company adopted and followed procedures designed to obtain a number of bids for the excipient business within a common timeframe. Together, they developed a list of approximately 15 companies expected to have a strategic or financial interest in acquiring the excipient business. Banc of America Securities provided prospective buyers with a disclosure memorandum describing the excipient business, a confidentiality agreement and a form of asset sale agreement prepared by the Company's counsel, Hale and Dorr LLP. This form of agreement contemplated an all-cash purchase price payable in its entirety at closing, without any adjustments, escrows or holdbacks, and with only limited representations, warranties, covenants, conditions and indemnification provisions. The Company assembled and made available to the prospective bidders, for their preliminary due diligence, various records and documents relating to the excipient business. Bidders were requested to submit by February 28, 2001 a bid stating the price to be paid, accompanied by a marked copy of the draft asset sale agreement showing any changes that the bidder proposed in the terms of the transaction from those set forth in the draft asset sale agreement. Five companies submitted preliminary bids and, following extensive discussions with Banc of America Securities, two submitted final bids.

After extensive due diligence and comprehensive negotiations with both final bidders, the board determined that it was not in the Company's best interest to enter into an asset sale transaction at the price and on the terms that could then be negotiated. The board concluded that the Company would operate the excipient business and consider recommencing the process with prospective bidders in one year. In order to

provide cash for the Company's operations and capital expenditures during this interim period, the Company issued and sold 2,447,187 shares of its common stock for approximately $30 million, less expenses, in a private placement which closed on July 11, 2001.

In April 2002, the Company retained Banc of America Securities again to act as its financial advisor in connection with a potential transaction involving the excipient business. In May 2002, Banc of America Securities contacted the five companies that had submitted preliminary bids in 2001, as well as one other company. None of the bidders was affiliated with the Company or its officers and directors.

Three of these six prospective bidders submitted preliminary bids in June and July 2002, and all three subsequently submitted revised bids. All of the bids were subject to the results of further due diligence. The bids differed from one another in price, in the degree to which such price was subject to adjustment or payable in installments with or without an escrow, and in many other respects including, but not limited to, closing conditions, allocation of accrued liabilities and costs between the parties, the scope of indemnification, and whether the buyer would purchase Penwest's headquarters building. Rettenmaier's original bid was for $46.0 million, subject to decrease if working capital was less than $12.8 million on the closing date; provided for a hold back of $7.0 million in escrow; provided for indemnification generally over a 24 month period with a threshold of $58,000 and a maximum exposure of $46.0 million; conditioned the closing on negotiation of key employee contracts; retained discretion as to the number of employees to whom it would offer employment; and allowed Penwest to occupy a portion of the Patterson facility for 12 months following closing.

Between July and September 2002, the Company, Banc of America Securities and Hale and Dorr had extensive contacts with each of the three final bidders. The bidders performed additional due diligence, including review of tax, environmental, employee benefits and other matters. The Company negotiated the terms of the asset sale agreement with each bidder and achieved clear understandings with respect to most of the significant open issues. The directors discussed the bidding process and the specifics of each of the three bids with representatives of Banc of America Securities and Hale and Dorr at telephonic meetings held on July 31, August 6, and August 28, at a meeting held on September 5, and at telephonic meetings held on September 19, October 16 and October 25, 2002.

As part of the negotiations, between July and October 2002 Rettemaier withdrew its request for an escrow; agreed that the working capital adjustment could increase, as well as decrease, the purchase price; agreed to indemnification generally through March 31, 2004 with a threshold of $250,000 and a maximum exposure of approximately $10.4 million; agreed not to condition the closing on the negotiation of agreements with key employees; agreed to offer employment to substantially all the employees of the excipient business; and agreed to allow Penwest to occupy part of the Patterson facility for up to five years (the first two years on a rent-free basis).

On August 28, 2002 the Company entered into an agreement with J. Rettenmaier & Soehne GmbH + Co., a subsidiary of the buyer, which at that time was one of three active bidders. The agreement provided that the Company would reimburse the bidder for documented out-of-pocket costs incurred and to be incurred by it, up to a maximum of $300,000, if the Company entered into a binding acquisition agreement with another bidder before November 27, 2002 at a time when the bidder was continuing its negotiations in good faith and had not decreased its bid by 10% or more. The bidder had insisted on such an agreement as a condition to its proceeding further with the due diligence and negotiation process.

On September 19, 2002, after further meetings among business people, financial advisors and legal counsel, the board concluded that the diligence and negotiation process had reached a stage where the bids of the three bidders were well understood and none of the bids were likely to be improved further. The net value of each of the three bids had decreased by at least $2.0 million between July and September due primarily to Penwest's loss of a major contract, but the terms of Rettenmaier's proposal had improved in many other respects. The board compared the net value to Penwest of each of the three bids, after taking into account such matters as the potential adjustments to the purchase price, the allocation of accrued liabilities and costs between the parties and the value of the headquarters building (which would be sold to Rettenmaier but retained by Penwest under the terms of the other bids). The board determined that the net value of the Rettenmaier bid exceeded the other bids and that the terms of Rettenmaier's bid were more attractive in other

ways (for example, under Rettenmaier's proposal Penwest would immediately receive at closing substantially more cash than under the next highest bid). In order to address the board's concern that the likelihood of Rettenmaier raising sufficient financing in order to close the transaction might not be as high as with the other bidders, Rettenmaier agreed to pay a termination fee of approximately $1.3 million if it was unable to close the transaction, and it began taking steps to obtain assured financing for the bulk of the purchase price in the form of an irrevocable letter of credit from a bank. Assuming receipt of satisfactory assurances of payment, the board then concluded that Rettenmaier's bid was superior to the other bids.

Rettenmaier then conducted further due diligence and the parties further negotiated final language for the asset sale agreement. Neither of the other two bidders indicated that it intended to increase its bid.

At a telephonic board meeting on October 25, 2002, Banc of America Securities and Hale and Dorr reviewed and commented on Rettenmaier's proposal and discussed various factors relating to the likelihood of a successful consummation of such a transaction including the anticipated delivery of a $31.5 million irrevocable letter of credit from Commerzbank. Rettenmaier had reduced its adjusted purchase price since September 19 by approximately $2.0 million as a result of its additional due diligence and in response to recent trends in the excipient industry, but the board concluded that the net value of Rettenmaier's reduced bid was still higher than the net value of the other remaining bid, even before allowing for the fact that the next highest bidder might reduce its bid if it performed similar additional due diligence, that the Rettenmaier bid provided substantially more cash at closing and that the terms of the Rettenmaier bid were more attractive in other ways.

At the meeting, representatives of Banc of America Securities provided their valuation analyses of the excipient business, and discussed the financial terms of the buyer's proposal with the board. After discussion of its analyses and the financial terms of the buyer's proposal, Banc of America Securities rendered to the board of directors its oral opinion that, as of October 25, 2002, the consideration to be received by the Company in the proposed asset sale was fair, from a financial point of view, to the Company. Representatives of Hale and Dorr reviewed with the directors the terms of the proposed asset sale agreement, copies of which had previously been circulated to the directors. The directors noted that the asset sale agreement with the buyer would permit the directors to consider and act upon competing offers from other bidders, to the extent required by their fiduciary duty, between the signing of the asset sale agreement and the date of the consummation of the asset sale, subject to payment of a termination fee of approximately $1.3 million if Penwest terminated the transaction with the buyer to pursue another acquisition proposal or if Penwest's board withdrew its recommendation of the asset sale. After further discussions with the Company's financial and legal advisors and further deliberations, and taking into account the various factors described below under "The Asset Sale — Recommendation of Board of Directors; Reasons; Special Considerations," the directors unanimously approved the proposed asset sale to Rettenmaier (the "Asset Sale") on October 25, 2002.

On November 1, 2002, the Company and its advisors met with the buyer to reach final agreement on the terms of the transaction, including a $300,000 reduction to the purchase price based upon the buyer's final due diligence. Banc of America Securities updated and confirmed in writing the oral opinion it rendered to the board on October 25, 2002, as to the fairness, from a financial point of view, to the Company of the consideration to be received by the Company in the proposed Asset Sale.

The final form of asset sale agreement (the "Asset Sale Agreement") was negotiated and signed on November 1, 2002.

Recommendation of Board of Directors; Reasons; Special Considerations

The Company's board of directors unanimously recommends that the shareholders approve the Asset Sale.

In reaching this conclusion, the board consulted with the Company's management as well as its legal counsel and its financial advisor, and considered the following material factors:

- Its belief that the Company's strategy of building its drug delivery business is the Company's best course to maximize shareholder value. Although the excipient business has historically provided the Company with substantial positive cash flows and satisfactory growth rates, the board believes that most excipient products lack the potential to achieve substantially increased revenues or margins in the future. In contrast, the board believes that the development and commercialization of drug delivery products offers the possibility of substantially greater revenues and margins than the excipient business, although the drug delivery business is subject to greater risks than the excipient business. Moreover, the financial markets generally value the shares of speciality pharmaceutical companies at higher price/earnings ratios than the shares of speciality chemicals companies that provide ingredients or materials to manufacturers of finished products, including healthcare or pharmaceutical products. For this reason, a dollar of earnings from drug development typically results in a higher value to shareholders than a dollar of earnings from the manufacture of excipients.

- Its belief that, for the reasons described under "The Asset Sale — Background," a sale of the excipient business is the preferable way to fund the drug delivery business as compared to alternative ways of raising capital, such as bank borrowings, privately placed subordinated debt or a public or private offering of stock.

- Its expectation that the net cash proceeds to be received by the Company from the Asset Sale (approximately $33.9 million), together with the Company's existing and expected sources of cash, will enable the Company to fund the Company's planned operations, including its planned increase in drug development and commercialization efforts, for at least the next two years.

- The fact that the purchase price was arrived at through a process in which a number of prospective acquirors submitted bids with the expectation that such a bidding process would tend to produce an attractive purchase price.

- The fact that Banc of America Securities has rendered its opinion that consideration to be received by the Company in the proposed Asset Sale is fair, from a financial point of view, to the Company.

- The fact that the terms and conditions of the Asset Sale Agreement were arrived at as part of an arm's-length bidding process, including those terms which are designed to ensure that the board could fulfill its fiduciary duties if presented with an acquisition proposal that is more favorable to the Company and its shareholders than the Asset Sale.

In reaching its conclusion, the board concluded that the factors described above generally figured positively, as advantages or opportunities, and as reasons to consummate the Asset Sale. The board also gave careful attention to the following uncertainties and potentially negative factors implicated by a sale of the excipient business:

- *Loss of revenues and cash flows from excipient business.* Selling the excipient business will eliminate the current source of most of the Company's revenues and all of its positive cash flows from operations. Sales of the Company's excipient products have generated and currently generate most of the Company's revenues, and the assets to be sold to Rettenmaier represent most of the Company's tangible assets. During 2001 and during the nine months ended September 30, 2002, Penwest derived approximately 86% and 87%, respectively, of its revenues from the excipient business. Sales of its excipient products generated substantial positive cash flows from operations, although the Company as a whole had negative cash flows from operations. The Company has applied the cash flows from the excipient business towards funding some of the costs of its operations during these periods.

- *Risks of pharmaceutical development.* The Company's strategy of relying solely on its drug delivery business will intensify its exposure to many risks relating to the business of drug development and commercialization, including reliance on third-party collaborators at various stages of development and commercialization, competition against companies which have much greater financial and human resources, problems posed by the lengthy and expensive testing and regulatory approval process, possible lack of market acceptance for products that may be successfully commercialized, possible conflict with intellectual property rights of other companies and exposure to product liability claims. See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Factors."

- *Possibility of a failure to complete the Asset Sale.* If the Asset Sale is not completed, the Company would be materially adversely affected. The Company would be forced to determine whether to attempt to sell the excipient business again, continue to operate the excipient business or explore another strategic alternative. If it tried to sell the excipient business, it would need to expend significant time and resources that would otherwise be devoted to the drug delivery business and it would likely have to sell the excipient business on terms that are less favorable to the Company than the terms currently being offered by Rettenmeier. The announcement of the proposed sale may impair the Company's ability to continue to operate the excipient business due to, among other things, customer concerns regarding the Company's commitment to the excipient business.

The board believed that these potentially negative factors were outweighed by the potential benefits of the Asset Sale.

The foregoing discussion of factors considered by the board is not intended to be exhaustive but includes all material factors that the board considered. In light of the wide variety of factors considered, the board did not find it necessary or practical to, and did not, quantify or otherwise assign relative weights to the foregoing factors or determine that any factor was of particular importance. Rather, the board views its recommendation as being based on the totality of the factors considered by it. The board considered all these factors and determined that these factors, as a whole, supported its conclusion and recommendation. Individual members of the board may have given different weights to different factors.

Opinion of Financial Advisor

The Company has retained Banc of America Securities to act as its financial advisor in connection with the Asset Sale and related matters. Banc of America Securities is an internationally recognized investment banking firm and regularly engages in the valuation of businesses and securities in connection with mergers and acquisitions, negotiated underwritings, secondary distributions of listed and unlisted securities, private placements and valuations for corporate and other purposes. The Company selected Banc of America Securities to act as its financial advisor on the basis of Banc of America Securities' experience and expertise in transactions similar to the Asset Sale, its reputation in the healthcare industry, its familiarity with Penwest's business and its long-standing working relationship with the Company.

In connection with Banc of America Securities' engagement, the Company requested that Banc of America Securities evaluate the fairness, from a financial point of view, to the Company of the consideration to be received by the Company in the proposed Asset Sale. The Company did not request Banc of America Securities to make, and Banc of America Securities did not make, any recommendation to the Company as to the amount of such consideration, which was determined through arm's length negotiations between the principal parties. The Company did not limit the investigations made or procedures followed by Banc of America Securities in rendering its opinion. On October 25, 2002, at a meeting of the board of directors of the Company held to evaluate the Asset Sale, Banc of America Securities delivered to the board of directors of the Company its oral opinion, which opinion was subsequently updated and confirmed by delivery of a written opinion dated November 1, 2002, that, as of those dates, and based on and subject to the matters described in the opinion, the consideration to be received by the Company in the proposed Asset Sale was fair, from a financial point of view, to the Company.

The full text of Banc of America Securities' written opinion to the board of directors of the Company, which sets forth, among other things, the procedures followed, assumptions made, matters considered and limitation on the review undertaken, is attached as Exhibit B, which is incorporated into this proxy statement by reference. Banc of America Securities has consented to the use of its opinion in this document. Penwest shareholders are encouraged to, and should, read this opinion carefully and in its entirety. However, Penwest also has included the following summary of Banc of America Securities' opinion, which is qualified in its entirety by reference to the full text of the opinion.

Banc of America Securities' opinion is addressed to the board of directors of the Company and relates only to the fairness of the consideration to be received by the Company in the proposed Asset Sale, from a financial point of view, to the Company. Banc of America Securities' opinion does not address any other aspect of the Asset Sale or any related transaction and does not constitute a recommendation to any shareholder as to how the shareholders of the Company should vote at the shareholder meeting held in connection with the Asset Sale. In furnishing its opinion, Banc of America Securities does not admit that it is an expert within the meaning of the term "expert" as used in the Securities Act of 1933, as amended, nor does Banc of America Securities admit that its opinion constitutes a report or valuation within the meaning of the Securities Act of 1933, as amended. Statements to this effect are included in Banc of America Securities' opinion.

In arriving at its opinion, Banc of America Securities:

- reviewed certain publicly available financial statements and other business and financial information of the Company;
- reviewed certain internal financial statements and other financial and operating data concerning the excipient business prepared by the management of the Company;
- analyzed certain financial estimates related to the excipient business prepared by the management of the Company;
- discussed the past and current operations, financial condition and prospects of the excipient business with senior executives of the Company, including executives of the excipient business;
- compared the financial performance of the excipient business with that of certain publicly traded companies that Banc of America Securities deemed relevant;
- compared certain financial terms of the Asset Sale to financial terms, to the extent publicly available, of certain acquisition transactions that Banc of America Securities deemed relevant;
- participated in discussions and negotiations among representatives of the Company and Rettenmaier and their financial and legal advisors;
- reviewed the Asset Sale Agreement and certain related documents; and
- performed such other analyses and considered such other factors as Banc of America Securities deemed appropriate.

Banc of America Securities did not assume any responsibility to independently verify the financial and other information, including the information listed above, that it reviewed for purposes of its opinion. Instead, with the consent of the Company, Banc of America Securities relied on that information as being accurate and complete. With respect to the financial estimates, Banc of America Securities has assumed that they were reasonably prepared on bases reflecting management's best currently available estimates and good faith judgments of the future financial performance of the excipient business. See "— Certain Excipient Business Estimates." For purposes of its opinion, Banc of America Securities was not requested to make, and did not make, any independent valuation or appraisal of the assets or liabilities of the excipient business, nor was Banc of America Securities furnished with any such valuation or appraisal.

Banc of America Securities' opinion was necessarily based on financial, economic, market and other conditions in effect on, and the information made available to it as of, the date of its opinion. Accordingly,

although subsequent developments may affect its opinion, Banc of America Securities did not assume any obligation to update, revise or reaffirm its opinion. Banc of America Securities did not express any opinion as to what the value of the excipient business will be when sold to Rettenmaier pursuant to the Asset Sale.

In addition, for purposes of its opinion, Banc of America Securities was not requested to opine as to, and its opinion did not address, the relative merits of the Asset Sale as compared with any alternative transaction or strategy that may be available to the Company or the basic business decision to proceed with or effect the Asset Sale. Banc of America Securities assumed with the Company's consent that the transaction will be consummated in accordance with the Asset Sale Agreement without any material amendments thereto and without waiver by either the Company or Rettenmaier of any of the conditions to their obligations thereunder.

The following description is merely a summary of the analyses and examinations that Banc of America Securities considered to be material to its opinion. It is not a comprehensive description of all analyses and examinations actually conducted by Banc of America Securities. The preparation of a fairness opinion is a complex process involving various determinations as to the most appropriate and relevant methods of financial analyses and the application of those methods to the particular circumstances. Therefore, the preparation of a fairness opinion is not readily susceptible to partial analysis or summary description. In arriving at its opinion, Banc of America Securities made qualitative judgments as to the significance and relevance of each analysis and factor that it considered. Accordingly, Banc of America Securities believes that selecting portions of its analyses and factors considered or focusing on the information presented in tabular format, without considering all analyses and factors or the narrative description of the analyses, would create an incomplete view of the process underlying its analyses and opinion. Banc of America Securities did not assign any specific weight to any of the analyses described below. The fact that any specific analysis has been referred to in the summary below is not meant to indicate that such analysis was given greater weight than any other analysis.

In performing its analyses, Banc of America Securities considered industry performance, regulatory, general business, economic, market and financial conditions and other matters, many of which are beyond the control of the Company. No company, transaction or business used in Banc of America Securities' analyses as a comparison is identical to the excipient business or the sale of the excipient business. Accordingly, an evaluation of the results of those analyses is not entirely mathematical. Rather, the analyses involve complex considerations and judgments concerning differences in financial and operating characteristics and other factors that could affect the transaction, public trading or other values of the companies, business segments or transactions being analyzed. The estimates contained in Banc of America Securities' analyses and the ranges of valuations resulting from any particular analysis are not necessarily indicative of actual values or predictive of future results or values, which may be significantly more or less favorable than those suggested by the analyses. The analyses were prepared solely as part of Banc of America Securities' analysis of the financial fairness of the consideration to be received by the Company and were provided to the board of directors of the Company in connection with the delivery of Banc of America Securities' opinion. The analyses relating to the value of companies, businesses or securities do not purport to be appraisals or to reflect the prices at which companies or businesses might actually be sold or the prices at which any securities may trade at any time in the future. Accordingly, Banc of America Securities' analyses and estimates are inherently subject to substantial uncertainty.

Summary of Analyses Performed. Banc of America Securities believes that the valuation analyses it chose to perform are widely accepted standard methodologies for valuing a business in connection with the preparation of a fairness opinion. Banc of America Securities did not conduct any other valuation analyses, based on its belief that the analyses conducted are the most appropriate for a transaction of this type.

The analysis of selected public companies is used to provide an indication of how publicly traded companies with operating characteristics similar to those of the excipient business are valued by investors. Banc of America Securities performed such an analysis and concluded that the consideration to be received by Penwest in the Asset Sale represented multiples of estimated revenue and EBITDA (defined as earnings before interest, taxes, depreciation and amortization) similar to the mean and median multiples at which the selected public companies traded at the date on which Banc of America Securities rendered its opinion.

The analysis of selected acquisitions is used to provide a record of how companies with operating characteristics similar to those of the excipient business have historically been valued by acquirors. Banc of America Securities performed such an analysis and concluded from such analysis that the consideration to be received by Penwest in the Asset Sale represented multiples of estimated revenue, EBITDA and EBIT (defined as earnings before interest and taxes) similar to the mean and median multiples of revenue, EBITDA and EBIT in the selected transactions.

The discounted cash flow analysis is used to calculate a range of theoretical values for the excipient business based on the net present value of the excipient business' implied annual cash flows and a terminal value for the excipient business at calendar year-end 2007, calculated based upon management's estimates. Banc of America Securities performed two discounted cash flow analyses for the excipient business: a Base Case discounted cash flow analysis and a Sensitivity Case discounted cash flow analysis. The Base Case discounted cash flow analysis used estimates prepared by Penwest management, and the Sensitivity Case discounted cash flow analysis used estimates prepared by Penwest management adjusted to reflect the possibility of growth rates and margins in future years that are consistent with the past performance of the excipient business. The Base Case discounted cash flow analysis yielded a valuation range for the excipient business of approximately $50.0 to $65.0 million, which is above the consideration to be received by Penwest in the Asset Sale. The Sensitivity Case discounted cash flow analysis indicated a valuation range for the excipient business of approximately $35.0 to $45.0 million, a range which is consistent with the consideration to be received by Penwest in the Asset Sale;

Analysis of Selected Public Companies. Banc of America Securities compared selected financial and operating results of the excipient business to corresponding data of the following publicly traded companies in the specialty chemicals and ingredients industry:

- Arch Chemicals, Inc.
- Balchem Corporation
- Cambrex Corporation
- Cytec Industries Inc.
- FMC Corporation
- Ferro Corporation
- Great Lakes Chemical Corporation
- Hercules Incorporated
- International Specialty Products Inc.
- The Lubrizol Corporation
- OM Group, Inc.
- Penford Corporation

These companies were chosen for comparison because they are publicly traded companies with operating characteristics that Banc of America Securities considered generally similar to those of the excipient business. Banc of America Securities selected specialty chemicals companies for its analysis of selected public companies and analysis of selected acquisitions based on certain similarities between those businesses and the excipient business. Like the excipient business, all selected companies provide ingredients or materials to manufacturers of finished products, including healthcare or pharmaceutical products and thus possess "operating characteristics" similar to the excipient business. Additionally, Banc of America Securities considered the gross profit, EBITDA and EBIT margins of the selected companies, which in general are similar to those of excipient business. Banc of America Securities selected the companies and transactions by searching SEC filings, public company disclosures, industry publications, press releases, databases and other sources. Banc of America Securities did not specifically exclude any companies from its analysis of selected public companies.

Based on public and other available information, for each company, Banc of America Securities calculated enterprise value, which Banc of America Securities defined as diluted equity market value, plus net debt plus preferred stock plus minority interest minus cash and cash equivalents, as a multiple of estimated revenue and as a multiple of estimated EBITDA, for the periods ending December 31, 2002 and December 31, 2003 and compared these multiples to those for the excipient business for the periods ending December 31, 2002 and December 31, 2003 (on a pro forma basis after giving effect to the termination of a substantial customer contract as if it had occurred on December 31, 2001). This analysis indicated the ranges for, and mean and median of multiples as set forth below.

	Enterprise Value as a Multiple of			
	2002 Estimated		2003 Estimated	
	Revenue	EBITDA	Revenue	EBITDA
High	1.92x	9.6x	1.87x	9.1x
Mean	1.17	7.1	1.13	6.9
Median	0.99	7.6	0.97	7.3
The Asset Sale	1.08x	7.5x	0.93x	4.9x

Banc of America Securities then applied a range of selected multiples of revenue and EBITDA for calendar years 2002 and 2003 derived from the selected companies to corresponding financial data of the excipient business. The analysis of calendar year 2002 multiples indicated an implied enterprise value reference range for the excipient business of $35.0 to $40.0 million, and the analysis of calendar year 2003 multiples indicated an implied enterprise value reference range of $40.0 to $47.0 million. Estimated financial data for the selected comparable companies were based on publicly available information and recent Wall Street research analyst estimates. Estimated financial data for the excipient business were based on Company management estimates.

Analysis of Selected Acquisitions. Using publicly available information, Banc of America Securities reviewed the purchase prices and implied transaction multiples in the following transactions in the specialty chemicals and ingredients industries announced since January 1999.

Announcement Date	Acquiror	Target
07/23/02	E.I. du Pont de Nemours and Company	ChemFirst Inc.
01/10/02	Sobel NV	SKW Gelatin & Specialties
10/15/01	Compass Minerals Group, Inc.	IMC Global Inc. — Salt & Ogden
07/12/01	Cinven	Burmah Castrol — Metallurgical and Releasants business
07/09/01	PVB business	Clariant AG — PVA
06/01/01	Dow Chemical	Ascot
04/30/01	Cambrex Corporation	Bio Science Contract Production Corp.
04/23/01	Johnson Matthey	Pharm-Eco Labs
12/11/00	Ecolab	Henkel 50% of JV with Ecolab
08/30/00	Bayer AG	Sybron Chemicals Inc.
08/02/00	DSM	Catalytica, Inc. (Pharmaceutical Operations)
07/24/00	Rhodia SA	ChiRex
07/06/00	Arch Chemicals	Hickson International
06/26/00	The Valspar Corporation	Lilly Industries, Inc.
08/24/00	Loctite Corporation	Dexter Electronic Materials, Adhesives Polymers
05/04/00	Eastman Chemical Company	McWhorter Technologies, Inc.
12/31/99	MGPE	Ciba (Performance Polymers)
12/22/99	BASF AG	Rohm & Haas Industrial Coatings
12/13/99	Cookson Group	Enthone-OMI (Asarco)
11/23/99	BASF AG	AMCOL (Chemdal)
11/11/99	Solutia	Vianova Resins (MGPE)
09/21/99	St. Gobain (Norton)	Furon Co.
08/02/99	Dow Chemical	Angus Chemical (Transcanada)
06/22/99	SKW Trostberg	Witco Corp. — Oleochemicals
04/09/99	Great Lakes Chemical Corporation	NSC Technologies (Monsanto)
03/08/99	Rhodia SA	Albright & Wilson plc
02/18/99	MacDermid	Polyfibron Technologies
02/18/99	Quad-C, Inc.	Cookson Fibers

These transactions were selected because Banc of America Securities believed that the acquired companies have operating characteristics that are generally similar to those of the excipient business and because the transactions were relatively recent. Banc of America Securities excluded two transactions from this analysis that had been included in an earlier presentation to Penwest's board of directors. Banc of America Securities concluded that the two transactions — the September 2000 acquisition of Dexter's nonwoven materials business by Ahlstrom Paper Group, and the June 1999 acquisition of Imetal SA's Calgon water treatment business — were not primarily specialty chemicals businesses and therefore were not sufficiently similar to the excipient business to merit inclusion in the definitive selected transactions analysis.

Banc of America Securities reviewed the enterprise value at the announcement of the transaction, which Banc of America Securities defined as equity value plus net debt plus preferred stock plus minority interest minus cash and cash equivalents, in each of the selected transactions as a multiple of revenue, EBITDA and

EBIT during the last twelve months ("LTM"). Based on these calculations, Banc of America Securities noted the ranges for, and mean and median of, the multiples in each of the selected acquisitions as summarized in the following table and compared these multiples to those for the excipient business.

	Enterprise Value at Announcement of Transaction as a Multiple of LTM		
	Revenue	EBITDA	EBIT
High	6.00x	13.4x	20.2x
Mean	1.68	8.7	13.1
Median	1.30	8.6	12.7
Low	0.50	5.1	8.7
The Asset Sale	1.08x	7.5x	12.5x

Banc of America Securities then applied a range of selected multiples of LTM revenue, EBITDA and EBIT from the selected transactions to the estimated 2002 results of the excipient business (on a pro forma basis after giving effect to the termination of a significant customer contract as if it had occurred on December 31, 2001). This analysis indicated an implied enterprise value reference range for the excipient business of $40.0 to $46.0 million. All multiples for the selected transactions were based on financial information publicly available at the time of the announcement of the relevant transaction.

Discounted Cash Flow Analysis. Banc of America Securities performed a discounted cash flow analysis in order to estimate the present value of the sum of the excipient business' estimated future stand-alone, unlevered, after-tax cash flows plus its terminal value, which was derived from estimated calendar year 2007 EBITDA, valued at a multiple range of 6.0x to 8.0x and discounted at rates ranging from 13.5% to 16.5%. Banc of America Securities performed its analysis for the excipient business using two scenarios, the Base Case and the Sensitivity Case. The Base Case reflects Company management's estimates for the excipient business, and the Sensitivity Case reflects adjustments to those estimates to allow for the possibility of growth rates and margins in future years that are consistent with the past performance of the excipient business. This analysis indicated an implied enterprise value range for the excipient business of $50.0 to $65.0 million based on the Base Case and $35.0 to $45.0 million based on the Sensitivity Case.

Banc of America Securities' opinion and the financial analyses described above were among the many factors considered by the board of directors of the Company in its evaluation of the Asset Sale and should not be viewed as determinative of the views of the board of directors of the Company or its management with respect to the Asset Sale or the consideration to be received by the Company.

Under an engagement letter dated April 1, 2002, the Company has agreed to pay Banc of America Securities for its financial advisory services in connection with the transaction a fee of $1,076,563 (based on the value of the consideration), of which $75,000 had been paid previously to Banc of America Securities in the form of a retainer fee, $400,625 was payable upon execution of the Asset Sale Agreement and $600,938 will be payable upon completion of the Asset Sale. The board of directors of the Company was aware of this fee structure and took it into account in considering Banc of America Securities' opinion and in approving the Asset Sale. The engagement letter also calls for the Company to reimburse Banc of America Securities for its reasonable out-of-pocket expenses, including reasonable fees and expenses of Banc of America Securities' legal counsel, and to indemnify Banc of America Securities and related parties against liabilities, including liabilities under the federal securities laws, arising out of its engagement.

Banc of America Securities and its affiliates have in the past performed certain financial advisory and financing services for the Company and have received customary fees for those services. In the ordinary course of business, Banc of America Securities and its affiliates may actively trade the debt and equity securities of the Company for their own accounts and for the accounts of customers and, accordingly, may at any time hold long or short positions in those securities.

Certain Excipient Business Estimates. In the course of its due diligence review of the excipient business, Rettenmaier received from Penwest certain estimates for the excipient business' future operating perform-

ance. Banc of America Securities was furnished with the same estimates in connection with rendering and preparing its fairness opinion.

The estimates that Rettenmaier and Banc of America Securities received from Penwest included, among other things, the following estimates of the excipient business' net sales, gross profit, EBITDA and EBIT for the years 2002 through 2006, which estimates were prepared on or about March 20, 2002, and revised on or about September 18, 2002 following Penwest's loss of a major excipient contract. The 2002 estimates are pro forma, giving effect to the termination of the contract as though it had occurred on December 31, 2001. According to Penwest, these estimates assumed a modest decline in the Company's MCC business, modest growth in distributed products, and rapid growth of ProSolv products. The estimates also assumed a gradual expansion of gross profit, EBITDA and EBIT margins as sales increase.

The Excipient Business
Selected Estimated Income Statement Items

	Fiscal Year Ending December 31,				
	2002	2003	2004	2005	2006
	(Dollars in millions)				
Revenue	$36.6	$42.9	$44.8	$46.9	$50.4
Gross Profit	20.6	13.7	14.6	16.2	18.4
EBITDA	5.3	8.1	8.8	10.0	11.9
EBIT	3.2	6.0	6.6	7.8	9.7

Actual results may vary materially from these estimates. This information has been provided for the limited purpose of giving Penwest stockholders access to certain estimates provided by Penwest to Rettenmaier in connection with Rettenmaier's due diligence review of the excipient business, and to Banc of America Securities in connection with Banc of America Securities rendering and preparing its fairness opinion.

Penwest has advised Rettenmaier and Banc of America Securities that Penwest did not prepare the estimates described above with a view to public disclosure or compliance with published guidelines of the Securities and Exchange Commission regarding projections. At the time these analyses were made, Penwest had not yet prepared the GAAP basis financial statements for the excipients business that appear in this proxy statement. Management's estimates of EBIT, EBITDA and cash flows allocated various costs in a different manner than the GAAP basis financial statements. In addition, Penwest's independent accountants did not examine or compile any of the estimates described above, or express any conclusion or provide any assurance with respect to such estimates.

The estimates described above constitute forward-looking statements and are subject to certain risks and uncertainties that could cause actual results to differ materially from the results reflected in such estimates including, without limitation, those described in Penwest's most recently filed Quarterly Report on Form 10-Q. See "Forward-Looking Statements." At the time of receipt, Penwest advised Rettenmaier and Banc of America Securities that the estimates described above were subjective in many respects and thus susceptible to interpretations and periodic revision based on actual experience and business developments. The estimates described above also reflect numerous assumptions (not all of which were provided to Rettenmaier or Banc of America Securities), all of which were made by Penwest's management, with respect to industry performance, general business, economic, market and financial conditions, competition and other matters that are inherently subject to significant uncertainties, all of which are difficult to predict and many of which are beyond Penwest's control. Neither Rettenmaier nor Banc of America Securities approved the assumptions or the methodology used to produce the estimates. Accordingly, there can be no assurance that the assumptions made in preparing the estimates described above will prove reasonable or accurate, and actual results may be materially higher or lower than those contained in such estimates.

The inclusion of the estimates described above in this proxy statement should not be regarded as an indication that Rettenmaier, Penwest, Banc of America Securities or their respective affiliates or representa-

tives considered in the past or currently consider such estimates to be a reliable prediction of future events, and such estimates should not be relied upon as such. Neither Rettenmaier, Penwest and Banc of America Securities, nor any of their respective affiliates or representatives has made or makes any representation to any person regarding the information contained in the estimates described above, and none of them intends to update or otherwise revise such estimates to reflect circumstances existing after the date that Penwest prepared such estimates or to reflect the occurrence of future events even in the event that any or all of the assumptions underlying such estimates are shown to be in error.

Use of Proceeds

The Company expects to use the gross proceeds of the Asset Sale, which are expected to be approximately $41.75 million, for the following purposes:

	Amount
Repayment of outstanding indebtedness under credit facility	$ 2,800,000
Repayment of outstanding indebtedness to AstraZeneca AB	2,250,000
Transaction expenses	2,500,000
Federal and state taxes	300,000
Otherwise available for use in the drug delivery business, including working capital	33,900,000
Total	$41,750,000

The Company is party to a revolving line of credit with a financial institution. The Company expects that the principal outstanding under the line of credit upon the closing of the Asset Sale will be approximately $2.8 million. The outstanding principal, $2.6 million as of September 30, 2002, bears interest at 5.75%. The other terms of such indebtedness are described under "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources."

As part of the Company's agreement to acquire assets related to an excipient product, Pruv, the Company issued a note to the seller, AstraZeneca AB, in the principal amount of $2.25 million. The indebtedness under the note does not bear interest. The note requires the Company to pay all indebtedness outstanding under the note upon the closing of the Asset Sale.

Estimated transaction expenses include fees of the Company's financial advisor, legal counsel, accountants and proxy solicitors; employee stay bonuses; and settlement of a royalty obligation.

Pending application of the net proceeds, the Company intends to invest the net proceeds in accordance with its investment policy that includes investing in certain types of instruments issued by institutions with investment grade credit ratings and subject to certain diversification restrictions.

Interests of Certain Persons

Penwest understands that Stephen J. Berté, Penwest's senior vice-president and general manager-excipients, will be hired by the buyer to manage the excipient business' operations at rate of compensation that is substantially comparable to the compensation that he is currently receiving from Penwest. Mr. Berté currently receives an annual base salary of $185,000 and received bonuses of $26,250, $17,000 and $40,000 in 2001, 2000 and 1999, respectively. Penwest understands that, in lieu of offering Mr. Berté any equity based compensation, Rettenmaier will increase his potential cash bonus. If Mr. Berté remains employed by the buyer for at least six months after the closing or is discharged without cause within six months after the closing, Penwest will pay him a retention bonus of $92,500 which is the equivalent of six months' pay. If Mr. Berté is discharged by Rettenmaier without cause within 12 months following the closing, he will receive a severance benefit from Rettenmaier of $277,500 which is the equivalent to 18 months' pay. Stock options to purchase 51,000 shares of the Company's common stock held by Mr. Berté, which are not currently exercisable, will become immediately exercisable upon closing and will terminate twelve months after the closing. These options were granted at exercise prices that equaled the fair market value of Penwest's common stock on each date of grant, ranging from $12.75 to $19.13 per share. All of the options have exercise prices

that exceeded the closing price of Penwest's common stock on December 31, 2002 which was $10.60 per share. The trading prices of the Company's common stock at the time the Asset Sale closes cannot be predicted.

Under a royalty agreement with John N. Staniforth, a member of the Penwest's board of directors, Penwest is obligated to pay Dr. Staniforth on an annual basis one-half of one percent of the net sales of products covered by Penwest's ProSolv patents. These payments will continue through the life of the ProSolv patents. These obligations to Dr. Staniforth will remain with Penwest after the Asset Sale. Penwest is in discussions with Dr. Staniforth regarding the possibility of making a lump sum payment to Dr. Staniforth in consideration for the termination of the ProSolv royalty payments. Neither party has yet proposed a specific dollar amount.

The board of directors was aware of the interests of Mr. Berté and Dr. Staniforth in the transaction when it approved the Asset Sale. Dr. Staniforth took part in board discussions of the proposed Asset Sale but abstained from voting on the Asset Sale and all related matters. Mr. Berté did not participate at any board meeting in any discussions with respect to the Asset Sale.

The Buyer

Josef Rettenmaier Holding GmbH & Co. KG is primarily engaged in the manufacturing of cellulosics and organic fiber, and sells products into various industries, including pharmaceutical excipients. Its headquarters are located at Holzmuehle 1, Rosenberg, Germany D-73494. The telephone number is 49(0) 7967-152-0.

Regulatory Approvals; Third-Party Consents

The Asset Sale is subject to the absence of any action commenced before any governmental authority challenging the transaction. No filings are required to be made under the Hart-Scott-Rodino Act and no governmental consents are believed to be required under U.S. or foreign merger laws.

The transaction is conditioned on receiving required consents from parties to contracts and leases, except where such consents are not, in the aggregate, material. Penwest believes that all such consents which are individually material have already been received.

Accounting Treatment

For financial reporting purposes, Penwest will report a gain from the Asset Sale based upon the amount of net proceeds received by Penwest and the net book value of the assets sold. If the Asset Sale had occurred on September 30, 2002, such gain from the asset sale, net of tax effects, would have been approximately $9.4 million. The Company intends to account for the sale of the excipient business pursuant to the Asset Sale agreement as a discontinued operation in accordance with generally accepted accounting principles.

Material Federal Income Tax Consequences

Penwest will recognize a taxable gain on the Asset Sale equal to the difference between the amount it realizes from the Asset Sale and the adjusted tax basis of the assets sold. If the Asset Sale occurs in the first quarter of 2003, the Company expects that the net taxable gain recognized by Penwest will result in federal and state taxes payable for 2003 (including alternative minimum taxes) of approximately $300,000, after giving effect to net operating losses and carryforwards. The asset sale should not create any federal or state income tax liabilities for Penwest shareholders since they will not receive any of the proceeds of the asset sale.

Dissenters' Rights

Under Washington law, shareholders of a Washington corporation are entitled to dissent from any sale of substantially all of the assets of the corporation if the sale requires shareholder approval, is not court ordered and is not a sale for cash pursuant to a plan by which substantially all of the net proceeds of the sale will be

distributed to shareholders within one year after the date of sale. Generally, shareholders who dissent from such a sale are entitled to "dissenters' rights," requiring the corporation to purchase, in certain circumstances, the shares held by the dissenting shareholders at fair value. Under Washington law, the proposed Asset Sale is a transaction that entitles Penwest's shareholders to exercise dissenters' rights with respect to their shares.

The following is a summary of the provisions relating to dissenters' rights under Chapter 23B.13 of the Washington Business Corporation Act ("WBCA"), the full text of which is attached to this proxy statement as Exhibit C and is incorporated herein by reference. The summary does not purport to be a complete statement of, and is qualified in its entirety by reference to, Chapter 23B.13 of the WBCA and to any amendments to such section after the date of this proxy statement. Any Penwest shareholder who desires to exercise his, her or its dissenters' rights should review carefully Chapter 23B.13 of the WBCA and is urged to consult his, her or its legal advisor before electing or attempting to exercise such rights. Failure to follow any of the procedures of Chapter 23B.13 may result in termination or waiver of those rights.

A shareholder of record of Penwest stock may assert dissenters' rights as to fewer than all the shares registered in such record shareholder's name only if such record shareholder timely dissents with respect to all shares beneficially owned by any one person and notifies Penwest in writing of the name and address of each person on whose behalf the record shareholder is asserting dissenters' rights. A beneficial owner of Penwest stock who chooses to dissent must assert dissenters' rights with respect to all shares beneficially owned by such shareholder or over which such shareholder has power to direct the vote, and must submit to Penwest, with or prior to such shareholder's assertion of dissenters' rights, the record shareholder's consent to the dissent.

To dissent the shareholder must:

- deliver to Penwest, before the vote on the Asset Sale is taken, notice of the shareholder's intent to demand payment for the shareholder's shares if the Asset Sale is effected, and
- not vote the shareholder's shares in favor of the Asset Sale.

The notice described above should be delivered to Penwest at its principal executive offices, 2981 Route 22, Patterson, New York 12563, Attn: Secretary or, if delivered electronically, to the following email address Jennifer.Good@penw.com. A shareholder who does not satisfy both of the requirements described above will not be entitled to dissenters' rights.

If the Asset Sale is approved by shareholders of Penwest, Penwest shall deliver a notice not later than 10 days after the effective date of the Asset Sale to each Penwest shareholder who delivered proper notice of his, her or its intent to exercise dissenters' rights. This notice will:

- state where such shareholder must send his, her or its payment demand,
- state where and when certificates representing such shareholder's Penwest shares must be deposited,
- inform shareholders of uncertificated shares to what extent transfer of the shares will be restricted after the payment demand is received,
- contain a form for demanding payment that requires that the dissenter certify whether or not he, she or it acquired beneficial ownership before the first public announcement of the Asset Sale that occurred on November 4, 2002,
- set a date by which such payment demand must be received, and
- include another copy of Chapter 23B.13 of the WBCA.

A shareholder will not be entitled to dissenters' rights if the shareholder does not do all of the following within the time and in accordance with the notice from Penwest:

- demand payment,
- certify whether or not the shareholder acquired his, her or its shares before the first public announcement of the Asset Sale that occurred on November 4, 2002, and

- deposit the shareholder's share certificate(s).

Penwest shall pay to each Penwest dissenting shareholder who complies with the procedures described in Chapter 23B.13 of the WCBA, within 30 days after the later of the effective date of the Asset Sale and the date the payment demand is received, the amount that Penwest estimates to be the fair value of such dissenting shareholder's shares, plus accrued interest. Penwest will provide, along with such payment, among other things:

- Penwest's balance sheet, income statement and statement of changes in shareholders' equity for its last fiscal year and Penwest's latest available interim financial statements,
- an explanation of how Penwest estimated the fair value of the shares,
- an explanation of how the accrued interest was calculated,
- a statement of the dissenting shareholder's right to demand further payment if the dissenting shareholder is dissatisfied with the payment from Penwest, and
- another copy of Chapter 23B.13 of the WBCA.

Penwest may elect to withhold such payment from any dissenter who was not the beneficial owner of the shares of Penwest as to which dissenters' rights are asserted before the date of the first public announcement of the Asset Sale on November 4, 2002. If Penwest does elect to withhold payment as described in the preceding sentence, Penwest will provide such dissenting shareholder an offer of payment for his, her or its shares conditioned upon his, her or its agreement to accept the payment in full satisfaction of his, her or its demand. Penwest will provide with this offer an explanation of how it estimated the fair value of the shares, an explanation of how interest was calculated, and a statement of the dissenter's right to demand payment if it is dissatisfied with the offer from Penwest.

A dissenting shareholder may deliver a notice to the corporation informing the corporation of the dissenter's own estimate of the fair value of the dissenter's shares and amount of interest due, and demand payment of the dissenter's estimate, less any payment already received for such shares, if:

- the dissenting shareholder believes that the amount paid or offered is less than the fair value of the shares or that interest due was calculated incorrectly,
- Penwest failed to make its payment within 60 days after the date set for demanding payment, or
- Penwest does not consummate the Asset Sale and does not return the deposited certificates or release the transfer restrictions imposed on uncertificated shares within 60 days after the date set for demanding payment.

A dissenting shareholder waives the right to demand further payment as set forth in the preceding paragraph unless the dissenting shareholder delivers a notice to Penwest of the dissenter's demand within 30 days after Penwest made or offered payment for the dissenting shareholder's shares.

If Penwest does not accept the dissenting shareholder's estimate and Penwest and the dissenting shareholder do not otherwise settle on a fair value, Washington law requires that, within 60 days after Penwest receives the dissenting shareholder's demand for payment based on the dissenting shareholder's estimate, Penwest must start a proceeding in King County Superior Court, and petition the court to determine the fair value of the shares and accrued interest, naming all Penwest dissenting shareholders whose demands remain unsettled as parties to the proceeding. The court may appoint one or more persons as appraisers to receive evidence and recommend the fair value of the shares. The dissenters will be entitled to the same discovery rights as parties in other civil actions. Each dissenter made a party to the proceeding will be entitled to judgment for the amount, if any, by which the court finds the fair value of his or her own shares, plus interest, exceeds the amount paid by Penwest.

Court costs and appraisal fees would be assessed against Penwest, except that the court may assess such costs against some or all of the dissenters to the extent that the court finds the dissenters acted arbitrarily,

vexatiously or not in good faith in demanding payment. The court may also assess the fees and expenses of counsel and experts of the respective parties in amounts that the court finds equitable against:

- Penwest, if the court finds that it did not substantially comply with certain provisions of the WBCA concerning dissenters' rights, and
- either the dissenter or Penwest, if the court finds that the party against whom the fees and expenses are assessed acted arbitrarily, vexatiously or not in good faith.

If the court finds that services of counsel for any dissenter were of substantial benefit to other dissenters similarly situated, and that the fees should not be assessed against Penwest, the court may award to such counsel reasonable fees to be paid out of the amounts awarded to dissenters who benefited from the proceedings.

Note: If the Asset Sale is approved, and you do not vote in favor of it, Penwest will send you more instructions on your dissenters' rights. Failure on the part of a shareholder to make any required step in connection with exercising dissenters' rights may result in the termination or waiver of such rights.

THE ASSET SALE AGREEMENT

Penwest and the buyer entered into the Asset Sale Agreement on November 1, 2002. The full text of this agreement is attached as Exhibit A to this proxy statement and is incorporated by reference into this proxy statement. Penwest urges you to read the Asset Sale Agreement in its entirety for a more complete description of the terms and conditions of the Asset Sale and related matters.

Assets To Be Sold

Rettenmaier is purchasing substantially all of the assets of Penwest's excipient business. Penwest's excipient business involves the development, manufacture and distribution of branded pharmaceutical excipients, which are the inactive ingredients in tablets and capsules. These excipients include ProSolv, a high performance excipient based on co-processing technology which, among other things, improves the performance characteristics of tablets. Specifically, Rettenmaier is purchasing the following assets of the excipient business, either directly or through the acquisition of the outstanding stock of three subsidiaries of Penwest that do business in the U.K., Germany and Finland (the "Subsidiaries"):

- The excipient business' product portfolio, which includes 31 excipient products;
- All intellectual property related to the excipient business, including 18 issued U.S. patents and an additional 30 issued foreign patents that have been filed, all the trade names and trademarks associated with the excipient products, the drug master files for all excipient products, as well as any know-how or trade secrets associated with the excipient business;
- Customer lists and customer contracts;
- Fixed assets, inventory, accounts receivable, cash held by European subsidiaries and other tangible and intangible assets associated with the excipient business;
- Penwest's executive, administrative, research, small-scale production and warehouse facilities, comprising approximately 55,000 square feet, located in a single facility on a 15 acre site owned by Penwest in Patterson, New York;
- A 35,000 square-foot facility in Cedar Rapids, Iowa, containing manufacturing and administrative space; and
- The equipment and a building lease on a 15,000 square-foot facility in Nastola, Finland.

The assets being sold will not include: drug delivery products, related patents and other intellectual property, customer lists and customer contracts, fixed assets, inventory, accounts receivable, laboratory facilities and other assets primarily used or useful in the drug delivery business; some assets used in the Company's administrative functions or corporate overhead activities; other assets not pertaining to the excipient business; cash and bank account balances (except for those maintained by the Subsidiaries), negotiable instruments, securities and similar assets of Penwest; and all names and marks containing the words "Penwest", "TIMERx", "SyncroDose" or "Geminex", or the Penwest logo.

Purchase Price

As the purchase price for the assets, the buyer will pay $41.75 million in cash and assume certain liabilities as described below. The purchase price will be paid in three installments: $39.5 million at closing, $1.0 million on April 25, 2003 and $1.25 million on May 25, 2004. The purchase price is subject to increase or decrease depending on whether (and by how much), as of the closing date, the net working capital of the excipient business, as defined in the Asset Sale Agreement, exceeds or is less than $13.8 million. The excipient business had approximately $13.5 million of net working capital, as defined, at September 30, 2002. The amount of net working capital at closing may be materially different than the amount at September 30, 2002.

The buyer will assume the accounts payable and certain accrued expenses of the excipient business as well as the cost of severance benefits for employees of the Company whom the buyer hires, if any. The

Company will remain liable for product warranties on products sold or disposed of prior to closing. For a period of five years following the closing, the Company will generally be liable for all environmental liabilities arising from the excipient business as a result of the Company's activities prior to the closing. However, the Company will not be liable under certain conditions for such environmental liabilities that arise or potentially arise as a result of voluntary soil testing or other actions taken by the buyer.

Intercompany Obligations

At the closing of the Asset Sale, Penwest will transfer to the buyer all accounts receivable from, and all accounts payable to, the subsidiaries whose stock the buyer is purchasing. All continuing contracts between Penwest and the subsidiaries will be cancelled.

Transition Services Agreement and Lease

Penwest will enter into a transition services agreement with the buyer providing that Penwest will provide information technology, human resources and financial controller services to the buyer and the buyer will provide warehouse and financial accounting services to Penwest for up to 12 months following the closing for monthly fees of up to $9,000 and $7,000, respectively. The buyer will lease to Penwest approximately 14,000 square feet of office and research and development space at its Patterson, New York facility for up to five years following the closing (with the first two years rent-free and three one-year renewal options at a rental rate of $12 per square foot on a net lease basis).

Non-Competition and Non-Solicitation Covenants

The Company will agree not to engage, directly or indirectly, in the manufacture or sale of excipient products until five years after the Asset Sale is consummated, or to assist any other person to do so through intentional disclosure of confidential information about the excipient business. The Company will agree not to directly or indirectly solicit for employment or employ in any capacity any former employees of the Company who accept employment with the buyer under the terms of the Asset Sale Agreement until two years after the Asset Sale is consummated. The Company expects that approximately 100 of its employees will accept employment with Rettenmaier.

Conditions

The Asset Sale is conditioned on:

- the absence of any changes that affect the excipient business materially and adversely that together reduce the fair market value of the excipient business by 10% or more;
- the continued accuracy in all material respects of each party's representations and warranties;
- receipt of required consents from third parties to contracts and leases, except where such consents are not, individually or in the aggregate, material; and
- other customary closing conditions, including:
  - the absence of litigation challenging the Asset Sale;
  - delivery of appropriate deeds, bills of sale and other documents of conveyance;
  - delivery of documentation required by Rettenmaier's real estate title insurance company;
  - delivery of documentation releasing mortgages or liens on the assets;
  - delivery of opinions of legal counsel; and
  - delivery of evidence of payment in full of the AstraZeneca note.

Penwest's board of directors is authorized in its discretion to waive any of the conditions to Penwest's performance without the consent of the shareholders to the extent allowed by law. However, if, prior to the

Meeting, the board believes that its intention to waive one or more conditions is important to the shareholders' decision whether or not to approve the Asset Sale, the board will circulate an appropriate supplement to this proxy statement describing its intention to do so. At present, Penwest does not expect to waive any conditions.

Termination

Penwest and the buyer can mutually agree to terminate the Asset Sale Agreement at any time. The Asset Sale Agreement will terminate if the Asset Sale does not take place by March 1, 2003.

Penwest may terminate the transaction if:

- the buyer materially breaches, and fails to cure, any representation, warranty or covenant or fails to perform any material condition or obligation contained in the Asset Sale Agreement; or
- Penwest receives a proposal from a third party to acquire the excipient business and Penwest's board of directors determines in good faith, after consulting with outside legal counsel, that it must both consider the proposal and terminate the Asset Sale Agreement in order to comply with its fiduciary duties.

The buyer may terminate the transaction if:

- Penwest materially breaches, and fails to cure, any representation, warranty or covenant or fails to perform any material condition or obligation contained in the Asset Sale Agreement; or
- there is a material adverse change in the excipient business between the date the Asset Sale Agreement was signed and the date the transaction is consummated, and the change reduces the fair market value of the excipient business by 10% or more.

Material adverse changes do not include changes due to general economic conditions, or economic or other conditions in and affecting generally the pharmaceutical industry or the excipients products segment of that industry, unless such conditions affect Penwest disproportionately to the general economy or to the industry.

No Solicitation of Other Transactions; Termination Fees

Penwest has agreed not to solicit, initiate, encourage or participate in discussions about any proposal from a third party involving a sale of a material portion of the excipient business to anyone other than the buyer, for as long as the Asset Sale Agreement is still in effect. However, this restriction does not apply to the extent that the board concludes, by majority vote, after consultation with its outside legal counsel, that its fiduciary duties under Washington law otherwise require.

The Asset Sale Agreement provides that Penwest will be required to pay the buyer a termination fee of approximately $1.3 million which equals 3% of the purchase price, if:

- The buyer terminates the Asset Sale Agreement as a result of the failure by Penwest's board of directors to recommend that Penwest's shareholders vote in favor of the sale of the excipient business to the buyer, or as a result of Penwest's material breach of its obligations to file proxy materials and to call and hold a special meeting regarding the transactions contemplated by the Asset Sale Agreement; or
- Penwest terminates the Asset Sale Agreement as a result of Penwest's receipt of a proposal from a third party to acquire the excipient business that the board of directors determines it must consider.

The Asset Sale Agreement provides that Penwest will be required to reimburse the buyer for:

- all out-of-pocket fees and expenses incurred in connection with the purchase of the excipient business if Penwest's shareholders fail to approve the sale of the excipient business; or

- up to a maximum of $300,000 of such out-of-pocket fees and expenses, if Penwest materially breaches, and fails to cure, any representation, warranty or covenant or if there is a material adverse change in the excipient business between the date the Asset Sale Agreement was signed and the date the transaction is consummated and the change reduces the value of the excipient business by 10% or more.

The Asset Sale Agreement provides that the buyer will be required to pay a termination fee of approximately $1.3 million to Penwest if the buyer breaches its obligations to close the transactions contemplated by the Asset Sale Agreement or breaches in any material respect, and fails to cure, any material representation, warranty or covenant contained in the Asset Sale Agreement.

Employee Matters

Rettenmaier shall offer employment to substantially all persons who are employed in the excipient business. For 12 months following the completion of the Asset Sale, Rettenmaier shall provide salary, bonuses, other cash compensation and benefits to employees who join Rettenmaier that in the aggregate are substantially similar to their current cash compensation and benefits from Penwest, but only to the extent that such terms are commercially available on a fully insured basis at commercially reasonable rates. Furthermore, Rettenmaier is not required to, and will not, offer employees participation in any equity-based compensation plans. Rettenmaier shall give these employees service credit for their past services to Penwest for all purposes under Rettenmaier's welfare plans. No additional waiting periods, deductibles or exclusions or benefit limitations for pre-existing conditions shall be imposed or assessed. Rettenmaier will assume liability for severance benefits at current levels for employees whom it discharges up until 12 months after the Asset Sale is completed. Penwest will be liable for any other severance benefits. Penwest must also fund up to a maximum of $217,000 for stay bonuses under a retention bonus plan for employees who are expected to join Rettenmaier. The covenants described in this paragraph have been made between Penwest and Rettenmaier and no employee is a contractual beneficiary of such covenants or has any rights of enforcement.

Other Covenants

Until the Asset Sale is completed, Penwest must conduct its business in substantially the same manner as it has previously conducted it, in the regular and normal course of business, without material exception. The Asset Sale Agreement prohibits Penwest from taking many types of actions without Rettenmaier's consent (which must not be unreasonably withheld), including:

- incurring liabilities in excess of $250,000 in the aggregate or liabilities outside the ordinary course of business;
- selling or mortgaging assets outside the ordinary course of business;
- engaging in mergers or acquisitions;
- materially modifying contracts, except in the ordinary course of business, or materially breaching any material contract;
- modifying compensation arrangements or terms of employment contracts; or
- making loans to any person or entity except in the ordinary course of business.

Penwest must call the Meeting no later than March 1, 2003, comply with the SEC's proxy rules and Nasdaq National Market regulations, ensure that this proxy statement is accurate in all material respects, and amend or supplement this proxy statement as necessary to maintain its accuracy.

Penwest and Rettenmaier must comply with applicable laws and regulations in all material respect and use commercially reasonably efforts to satisfy all conditions to the completion of the Asset Sale. Penwest and Rettenmaier must make any necessary or advisable filings under applicable antitrust and competition laws.

In obtaining third-party consents, Penwest must use commercially reasonable efforts but is not required to provide economic incentives to obtain such consents or commence litigation to compel such arrangements.

If any such consent is not obtained, Penwest must cooperate with Rettenmaier in any commercially reasonable arrangement to provide Rettenmaier with the benefits of the underlying contract.

Representations and Warranties

Penwest has made representations and warranties to the buyer about matters that are customary in similar transactions. These include representations about:

- the due authorization of the transaction;
- the accuracy of financial statements relating to the excipient business and other information provided to the buyer;
- the absence of undisclosed liabilities;
- the absence of liens on the assets;
- Penwest's ownership of the assets;
- the condition of specific assets such as real estate, fixed assets, intangible property, inventory and accounts receivable;
- Penwest's organization, existence, good standing, corporate power, qualification to do business, capital structure and other similar corporate matters;
- the absence of required governmental or third-party approvals except as disclosed;
- the absence of breaches or violations under Penwest's corporate charter and bylaws and other agreements and documents;
- the absence of litigation;
- Penwest's compliance with applicable laws, including environmental and regulatory laws;
- the timely filing of tax returns and payment of taxes;
- the absence of specified types of changes in Penwest's business since December 31, 2001;
- the absence of undisclosed brokers and finders;
- employee matters, including labor relations, compensation and employee benefit plans;
- significant contracts, agreements and leases;
- customers and suppliers; and
- transactions with affiliates.

Indemnification; Other Rights and Remedies

Penwest has agreed to hold Rettenmaier harmless against misstatements in its representations and warranties, or breaches of covenants, to the extent that such misstatements or breaches cause damage to Rettenmaier that exceeds $250,000 in the aggregate, up to a maximum amount equal to 25% of the purchase price. To qualify for indemnification, a claim for such misstatements must generally be made by March 31, 2004. Longer time periods, lower thresholds of liability and/or higher maximum amounts apply to tax and environmental matters, purchase price adjustments, intentional breaches and violations of the United States Food and Drug Administration ("FDA") laws and regulations.

Rettenmaier will similarly indemnify Penwest for misstatements and breaches.

Penwest will also indemnify Rettenmaier without limitation against accrued but unpaid taxes and other liabilities of Penwest not assumed by Rettenmaier. For a period of five years following the closing, Penwest will generally indemnify Rettenmaier for all environmental liabilities arising from the excipient business as a result of Penwest's activities prior to the closing. However, Penwest will not be liable under certain conditions

for such environmental liabilities that arise or potentially arise as a result of voluntary soil testing and actions taken by Rettenmaier.

Rettenmaier will not have the right to be indemnified for breaches of representations and warranties of which it was aware at the closing of the Asset Sale. Neither party will be liable for any incidental, consequential, special, punitive or other similar damages except as may be awarded to a third party in litigation that is indemnified against.

In addition to the rights described above relating to termination, termination fees and indemnification, each party will have the right to sue for injunctive relief or other equitable remedies if the other party fails to fulfill its covenants and to sue for money damages for claims based on fraud or intentional breaches.

Penwest has not obtained any insurance policies covering the matters as to which it will indemnify Rettenmaier. Rettenmaier will not indemnify Penwest's directors or officers against any liabilities other than Rettenmaier's own misstatements or Rettenmaier's own breach of its covenants. Penwest's indemnification covenants to its directors and officers, as well as its directors and officers insurance policies, will remain in effect following the Asset Sale.

SELECTED FINANCIAL DATA

The following selected financial data for the five years ended December 31, 2001 are derived from the audited consolidated financial statements of Penwest Pharmaceuticals Co. The financial data for the nine-month periods ended September 30, 2002 and 2001 are derived from unaudited financial statements. The unaudited financial statements include all adjustments, consisting of normal recurring accruals, which Penwest considers necessary for a fair presentation of the Company's financial position and results of operations for these periods.

Operating results for the nine months ended September 30, 2002 are not necessarily indicative of the results that may be expected for the entire year ending December 31, 2002. The data should be read in conjunction with the consolidated financial statements and related notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2001.

	Year Ended December 31,					Nine Months Ended September 30,	
	2001	2000	1999	1998	1997	2002	2001
	(In thousands except for per share data)						
Statement of Operations Data:							
Revenues(a)	$ 40,003	$42,058	$37,307	$29,149	$26,999	$ 31,623	$30,255
Cost of product sales(a)	24,810	25,303	25,889	21,183	20,415	19,269	18,548
Gross profit	15,193	16,755	11,418	7,966	6,584	12,354	11,707
Selling, general and administrative	13,855	12,054	11,425	11,354	8,708	11,632	10,049
Research and product development	17,003	12,820	7,371	6,054	3,681	14,618	10,801
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)	(14,112)	(9,414)
Cumulative effect of change in accounting principle(d)	—	(410)	—	—	—	—	—
Net loss	$(15,981)	$(8,786)	$(7,681)	$(8,829)	$(7,316)	$(14,112)	$(9,414)
Basic and diluted loss per share before cumulative effect of change in accounting principle	$ (1.15)	$ (0.68)	$ (0.69)	$ (0.80)	$ (0.66)	$ (0.91)	$ (0.70)
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)	$ (0.91)	$ (0.70)
Weighted average shares of common stock outstanding	13,905	12,330	11,103	11,037	11,037	15,451	13,451

	December 31,					September 30,
	2001	2000	1999	1998(e)	1997	2002
	(In thousands)					
Balance Sheet Data:						
Cash and cash equivalents	$ 12,903	$ 2,204	$ 739	$ 1,476	$ 938	$ 5,986
Marketable securities	9,609	—	—	—	—	4,180
Working capital	27,059	11,129	7,713	7,648	(33,049)	15,944
Total assets	59,613	42,294	38,120	41,082	37,820	49,769
Long-term debt	—	—	6,700	—	—	—
Accumulated deficit	(60,926)	(44,945)	(36,159)	(28,478)	(19,649)	(75,038)
Shareholders' equity (deficit)	45,624	31,017	22,509	30,032	(12,297)	33,976

(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.

BUSINESS

Penwest is engaged in the development of pharmaceutical products based on innovative oral drug delivery technologies. The foundation of Penwest's technology platform is TIMERx, a controlled release delivery system that is adaptable to soluble and insoluble drugs, and is flexible for a variety of controlled release profiles. The Company has also developed two additional drug delivery technologies based on its TIMERx technology, the Geminex technology and the SyncroDose chronotherapeutic delivery technology.

The Company also develops, manufactures and distributes branded pharmaceutical excipients which are the inactive ingredients in tablets and capsules, primarily consisting of binders, disintegrants and lubricants. These excipients include ProSolv, a high functional excipient based on co-processing technology, which, among other things, improves the performance characteristics of tablets.

The Company had revenues in 2001, 2000 and 1999 of $40.0, $42.1 and $37.3 million, respectively. The excipient business contributed 86%, 79% and 95%, respectively, of these revenues and the drug delivery business contributed the balance. Total revenues of $31.6 million for the nine months ended September 30, 2002 were contributed 87% by the excipient business and the balance by the drug delivery business.

Penwest Strategy

Penwest's strategy is to develop pharmaceutical products utilizing the Company's innovative extended release oral drug delivery technologies.

- *Leverage the Company's drug delivery technologies into a portfolio of product candidates for development.* The Company believes that it has significant expertise in drug formulation and in oral drug delivery technologies. The Company's proprietary drug delivery technologies, TIMERx extended release, Geminex dual delivery and SyncroDose chronotherapeutic delivery, are applicable to a wide range of drugs with different physical and chemical properties including water soluble and insoluble drugs as well as high dose and low dose drugs. Using these technologies, the Company can formulate a drug with precise release profiles. In selecting product candidates for development, the Company focuses on opportunities in which drug delivery technologies can provide benefits to the patients and result in branded, proprietary products. The Company does not limit the products it develops by therapeutic area.

- *Expand the product development pipeline to include drugs in various stages of development.* The Company intends to aggressively add product candidates into the development pipeline and control more of the clinical development process. Historically, the Company has formulated product candidates and then relied upon a third party collaborator to complete the remainder of the clinical development program and market the drugs. The Company now intends to primarily develop products on its own or jointly in collaboration with third parties. The Company has identified several product candidates which are in the formulation stage for which the Company intends to complete the clinical trials through at least Phase II. The Company believes that by controlling development through this stage, it will be better able to control the development timelines of its portfolio of products. The Company expects to continue to seek to license at an early stage in the development process generic products or products for which the Company believes that the development process is too expensive or too risky.

- *Increase participation in the funding of drug development to capture an increased share of the economic value of the product when and if it is marketed.* Developing pharmaceutical products is expensive. If the Company develops products on its own or jointly with third parties, it will need to devote significant resources to the products. However, the Company believes by assuming a larger role in the funding of a product's development, it will receive a greater share of the returns from the product.

- *Expand the core drug delivery technologies.* The Company's expertise is in oral drug delivery technologies and drug formulation. The Company intends to continue to develop its core technologies

as well as seeking to develop, in-license or acquire new technologies which are synergistic with its product development pipeline.

- *Establish collaborations for development, manufacturing and marketing.* The Company does not anticipate establishing manufacturing or sales and marketing capabilities in the next few years. As a result, in addition to seeking to enter into collaborations to develop its products, the Company also expects to seek to enter into collaborations for the manufacturing and the selling and marketing of its products. The Company's principal collaborative agreements are with Mylan Pharmaceuticals Inc. ("Mylan"), Endo Pharmaceuticals Inc. ("Endo"), Sanofi-Synthelabo S.A. ("Sanofi") and Leiras OY ("Leiras").

Drug Delivery Technologies and Products

TIMERx® Extended Release Delivery Systems

The Company has developed its TIMERx delivery system to address the limitations of currently available oral extended release delivery systems. The Company believes that the TIMERx system has advantages over other oral drug delivery technology, as it is readily manufactured and adaptable to soluble and insoluble drugs and is flexible for a variety of controlled release profiles. Pharmaceutical products containing TIMERx have been approved and are being marketed, and the Company is developing additional products in its pipeline using TIMERx.

The patented TIMERx drug delivery system is based on a hydrophilic matrix combining primarily a heterodispersed mixture, usually polysaccharides, xanthan and locust bean gums, in the presence of dextrose. These gums are also used in our Geminex and SyncroDose drug delivery systems. The physical interaction between these components works to form a strong, binding gel in the presence of water. Drug release is controlled by the rate of water penetration from the gastrointestinal tract into the TIMERx gum matrix, which expands to form a gel and subsequently releases the active drug substance. The TIMERx system can precisely control the release of the active drug substance in a tablet by varying the proportion of the gums, together with the third component, the tablet coating and the tablet manufacturing process. Drugs using TIMERx technology are formulated by combining the active drug substance, the TIMERx drug delivery system and additional excipients and compressing such materials into a tablet.

To date, several drug formulations utilizing the TIMERx system have received regulatory approval:

- Cystrin CR, an extended release version of oxybutynin for the treatment of urge urinary incontinence, was approved in Finland in 1997 and is being marketed in Finland by Leiras;
- Slofedipine XL, an extended release version of nifedipine for the treatment of angina, was approved in the United Kingdom in 1998 and is being marketed in the United Kingdom by Sanofi. Sanofi has received market approval for this product in Italy;
- The 30 mg strength of Nifedipine XL, a generic version of Procardia XL that is used for the treatment of hypertension and angina, was approved by the FDA in December 1999. The 30 mg strength of Nifedipine XL is not being marketed in the United States by the Company's collaborator Mylan. In March 2000, Mylan signed a supply and distribution agreement with Pfizer, Inc. 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 agreed to pay Penwest a royalty on net sales of Pfizer's 30 mg strength of generic Procardia XL. The royalties are comparable to those called for in Penwest's original agreement with Mylan for Nifedipine XL, which Mylan is not marketing. Mylan has retained the marketing rights to the 30 mg strength of Nifedipine XL; and
- Cronodipin, an extended release version of nifedipine for the treatment of angina, was approved in Brazil in 2001 and is being marketed in Brazil by Merck S.A. Industries Quimicas in 2002.

The Company also has a number of TIMERx products in its development pipeline. The most advanced of these is an extended release formulation of oxymorphone incorporating TIMERx technology, oxymorphone ER, which the Company is developing with Endo. Oxymorphone ER is a narcotic analgesic that is being

developed for the treatment of moderate to severe pain which is currently given in the parenteral and suppository dosage form. Oxymorphone is marketed by Endo and had sales in the United States in 2001 of approximately $250,000. Oxymorphone ER, if successfully developed, would represent the first oral extended release version of oxymorphone and would compete in the severely competitive 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. The extended release version is being developed for twice-a-day dosing in patients suffering moderate to severe pain. Endo, which is responsible for conducting the clinical trials and seeking regulatory approval of the product, completed the pivotal Phase III clinical trial of the product in July 2002. Endo submitted the New Drug Application ("NDA") for the product to the FDA in December 2002.

The Company has also identified seven compounds, primarily in the treatment of pain, the central nervous system and cardiovascular diseases that it is currently formulating. The formulation of these compounds typically takes six to nine months and at that point a decision will be made whether to advance these into clinical development.

Geminex™ Dual Release Technology

The Company's Geminex technology was developed to provide for the independent release of different active ingredients contained in one pharmaceutical product. The release of the active ingredients can each involve two different controlled release profiles or involve controlled release and immediate release profiles. The technology is based on a bi-layer tablet that utilizes TIMERx in the controlled release layer. The Company is utilizing Geminex technology in several product development candidates that are currently in the formulation stage.

SyncroDose™ Chronotherapeutic Drug Delivery

SyncroDose has been developed to deliver drugs chronotherapeutically in the body. The technology is timed with the body's biological clock to customize the delivery of a drug with the intent of reducing the dose and improving efficacy. The Company believes that there are several disease states which can benefit from chronotherapeutic delivery including: arthritis, cardiovascular disorders, asthma, neurological disorders, etc. The SyncroDose technology utilizes the TIMERx gum matrix in the coating combined with the active and various other excipients in the core. The Company is currently developing a product for rheumatoid arthritis with Arakis Limited utilizing the SyncroDose technology. The product is in the early stages of clinical development.

Collaborative Arrangements

The Company enters into collaborative agreements with pharmaceutical companies to develop, market or manufacture products developed with its drug delivery technologies.

The Company has two primary types of collaborative agreements. In the first type, research and development are funded by Penwest and its collaborator, and Penwest receives no up-front licensing fees or milestone payments. In these arrangements, the Company will share in a pre-determined percentage of the royalties. The second type of agreement involves the straight licensing of the Company's technology to the collaborator. The Company has no obligation to fund research and development. Under these collaborative agreements, the Company receives up-front license fees and milestone payments. In addition, under all its current collaborative arrangements, the Company is entitled to receive royalties on the sale of the products covered by such collaborative arrangements and payments for the purchase of formulated TIMERx material. The Company's principal collaborative arrangements are described below.

Mylan Pharmaceuticals, Inc. In August 1994, the Company entered into product development and supply agreements with Mylan with respect to the development of generic versions of Procardia XL (nifedipine) based on the Company's TIMERx technologies. Mylan is one of the leading generic pharmaceutical companies in the United States.

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 for 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. In 2001 and 2000, Mylan accounted for approximately 12% and 19%, respectively, of the Company's total revenue, and for the nine months ended September 30, 2002 accounted for approximately 11% of the Company's total revenue.

Sanofi-Synthelabo S.A. In February 1997, the Company entered into a product development and supply agreement with Sanofi with respect to the development of a generic version of Adalat LA, a drug that utilizes the same controlled release technology as Procardia XL. This generic version would be based on the Company's TIMERx technology (the "Sanofi Product"). Sanofi is a research-based international pharmaceutical company, based in Paris, France, which has a European infrastructure from which to develop, register and market prescription pharmaceuticals.

Under the product development and supply agreement, the Company was responsible for conducting pilot bioequivalence studies of the Sanofi Product and is responsible for manufacturing and supplying TIMERx material to Sanofi. Sanofi was responsible for conducting all full scale bioequivalence and clinical studies, preparing all regulatory applications and submissions and is responsible for manufacturing and marketing the Sanofi Product in specified countries in Europe and in South Korea. The Sanofi Product was approved and Sanofi began marketing the Sanofi Product in the United Kingdom in November 1998. Sanofi also received regulatory approval in Italy in 2000 and is marketing the product.

The product development and supply agreement expires with respect to each specified country on the 10th, 13th, 16th or 19th anniversary of the date on which the Sanofi Product is approved by the relevant regulatory authority in such country for commercial sale if notice is provided by either party prior to any of such anniversary dates that the agreement will expire with respect to such country on such anniversary date. The agreement is also subject to earlier termination by either party under specified circumstances, including termination by the Company if Sanofi fails to meet minimum sales volume requirements and termination by either party upon a material breach of the agreement by the other party. If the Company does not satisfy its obligations under the agreement, the Company will be in breach of the agreement and Sanofi will be entitled to terminate the agreement.

The Company received milestone payments under the product development and supply agreement. The Company is receiving royalties upon the sale of the Sanofi Product. One-half of such payments will be paid to Mylan in accordance with a distribution agreement signed with Mylan. In addition, Sanofi has agreed that, during the term of the product development and supply agreement, it will purchase, and Sanofi is purchasing, formulated TIMERx material for use in the Sanofi Product exclusively from the Company at specified prices.

Leiras Oy. In July 1992, the Company entered into an agreement with Leiras with respect to the development and commercialization of Cystrin CR, a controlled release formulation of Cystrin based on the Company's TIMERx technology. In May 1995, the Company entered into a second agreement with Leiras clarifying certain matters with respect to the collaboration. In addition, during 2001, the Company reacquired the North American marketing rights to this product.

Under the agreements, the Company was responsible for the development and formulation of Cystrin CR and is now responsible for supplying TIMERx material to Leiras for use in the manufacture of Cystrin CR. Leiras is responsible for preparing all regulatory applications and submissions and manufacturing and marketing Cystrin CR on a worldwide basis, except for the marketing rights in North America which have been licensed back to Penwest. Leiras has the right to transfer its rights and responsibilities under the agreements and its related product rights for specified territories, subject in certain circumstances to the approval of the Company. Leiras transferred the European rights to Sanofi, which is currently not marketing the product. Leiras received marketing approval for Cystrin CR in Finland in October 1997 and began marketing the product in Finland in 1998.

The agreements terminate upon the expiration of the TIMERx patents licensed to Leiras (which will occur in 2014), subject to earlier termination by either party under specified circumstances, including upon a material breach of the agreement by a party or upon the bankruptcy of a party. If the Company does not satisfy its obligations under either of these agreements, the Company will be in breach of such agreement and Leiras will be entitled to terminate such agreement. Leiras has also agreed to pay the Company royalties on the sale of Cystrin CR and to purchase formulated TIMERx material exclusively from the Company at specified prices.

Endo Pharmaceuticals, Inc. 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, oxymorphone ER. This agreement was amended and restated in April 2002. Endo is a fully integrated specialty pharmaceutical company with a market leadership position 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 oxymorphone ER 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 oxymorphone ER, 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 oxymorphone ER in the United States. The manufacture and marketing of oxymorphone ER outside of the United States may be conducted by the Company, Endo or a third party, as determined by the Alliance Committee

The Company and Endo share the costs involved in the development and commercialization of the oxymorphone ER and have agreed that the party marketing oxymorphone ER will pay the other party royalties initially equal to 50% of the net realization (as defined in the agreement). This percentage will decrease if the aggregate U.S. net realization exceeds pre-determined thresholds. This cost-sharing is subject to each party's right to terminate its participation in the funding of development of oxymorphone ER. If this right is exercised, the other party would have the right to complete the development of oxymorphone ER and recoup the portion of development cost incurred by such party that otherwise would have been funded by the terminating party from any subsequent royalties due to the terminating party. In general, the royalty payable by the marketing party to the other party will not drop below 40%. However, the royalty will be reduced by one-third in limited circumstances, including termination of the agreement based on uncured material breaches of the agreement by the royalty receiving party and certain bankruptcy and insolvency events involving the royalty receiving party. Under the agreement, Endo will purchase formulated TIMERx material for use in oxymorphone ER exclusively from the Company at specified prices. Such prices will be reflected in the determination of net profits.

Excipient Product Lines

Overview

The Company develops, produces and distributes branded pharmaceutical excipients, which are the inactive components included in tablets and capsules. Over the past 50 years, the Company has consistently been innovative and has delivered novel products such as Emcompress, Explotab and ProSolv to the pharmaceutical industry. Each of the excipient products carries significant brand value, representing quality, service and performance. The Company sells 31 excipient products, which are used in the formulation and manufacture of tablets by pharmaceutical and nutritional companies worldwide. The excipients product line is broadly classified into three categories: binders, disintegrants and lubricants.

These products are sold to the branded prescription, generic prescription, over-the-counter and nutritional supplement markets. In 2002, bulk excipients were sold to more than 220 customers in more than forty countries worldwide, including some of the leading pharmaceutical companies in the world. Binders, working in conjunction with other products, are the primary tablet-forming component of excipients. Disintegrants

help a tablet fall apart when consumed by drawing water into the dosage form, a necessary precursor to dissolution and ultimately absorption of the drug. Lubricants help facilitate the ease of manufacture of drugs so that they emerge from a tabletting machine with the desired physical characteristics.

Pharmaceutical Excipients

ProSolv®, a high-functionality binder for tablets, is a patented combination of microcrystalline cellulose and colloidal silicon dioxide. These two ingredients work together synergistically for optimal tabletting performance. The Company has developed three products from this technology platform: ProSolv SMCC® 50, ProSolv SMCC® 90 and ProSolv HD®, as well as customized grades of ProSolv. ProSolv SMCC® can be used by manufacturers to produce harder tablets and can enable manufacturers to reduce the amount of binders used in the tablet, thereby reducing the size and cost of the tablet. Additionally, it can be used to manufacture tablets with difficult active ingredients which otherwise may not have been manufactured. ProSolv HD improves flow and compaction, and can increase throughput by increasing production speeds. Custom grades of ProSolv are designed to address specific formulation or manufacturing problems. The Company is seeking to exclusively license these custom grades to pharmaceutical and nutritional partners.

EMCOCEL®, or microcrystalline cellulose, the Company's largest selling product, is a tabletting binder used in pharmaceutical formulations worldwide. EMCOCEL is utilized in a number of products including ethical and over-the-counter brands.

EMCOMPRESS®, or dicalcium phosphate, is a binder marketed by the Company under an exclusive worldwide distribution agreement with the manufacturer Rhodia. The distribution agreement is subject to automatic extension on an annual basis unless either party gives the other party 12 months notice of its desire to terminate the agreement. EMCOMPRESS is frequently used in vitamin formulations as it serves as an additional source of dietary calcium.

EMDEX® and *CANDEX*®, or dextrates, are binders that are used as directly compressible excipients in both chewable and non-chewable tablets. They are odorless with a sweet taste caused by its sugar composition. EMDEX and CANDEX are used in, among other things, chewable antacid tablets and vitamins.

EXPLOTAB®, or sodium starch glycolate, is the principal disintegrant marketed by the Company. EXPLOTAB is distributed by the Company under an exclusive worldwide distribution agreement with the manufacturer, Roquette America, Inc. The distribution agreement is automatically renewable on an annual basis unless either party gives the other party 12 months notice of its desire to terminate the agreement. EXPLOTAB is used in a number of products and is an essential component of the Tylenol family of products.

PRUV®, or sodium stearyl fumarate, is the principal lubricant marketed by the Company. PRUV is used in several prescription pharmaceuticals. PRUV is being marketed under rights granted by AstraZeneca. On October 25, 2002, the Company entered into an agreement to purchase those rights. The Company expects that this purchase will close concurrently with the Asset Sale.

Other Aspects of Penwest's Business

Research and Development

The Company conducts research and development activities with respect to additional applications of TIMERx technology, advances in the TIMERx technology, additional drug delivery technologies and additional novel excipients such as ProSolv. The Company's research and development expenses in 2001, 2000, and 1999 were $17.0 million, $12.8 million, and $7.4 million, respectively, and its research and development expenses in the first nine months of 2002 were $14.6 million. The drug delivery business accounted for approximately 95%, 94%, 88% and 97%, respectively. These expenses do not include amounts incurred by the Company's collaborators in connection with the development of products under the collaboration agreements such as expenses for full-scale bioequivalence studies or clinical trials performed by the collaborators.

Manufacturing

Drug Delivery Business. The Company currently has a laboratory contiguous to its executive offices in Patterson, New York. This facility is one of the assets being sold to Rettenmaier as part of the Asset Sale. However, the Company will be entitled to rent the laboratory space it currently occupies for up to five years. The Company has outsourced the commercial manufacture of TIMERx materials to a third-party pharmaceutical company, Draxis Pharmaceuticals, Inc., under a manufacturing agreement that expires in September 2004.

The Company believes that there are a limited number of manufacturers that operate under cGMP regulations capable of manufacturing the Company's products. There can be no assurance that Draxis or any other third parties upon which the Company relies for supply of its TIMERx material 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 and results of operations.

The Company's drug delivery systems are based on a hydrophilic matrix combining primarily a heterodispersed mixture, usually polysaccharides, xanthan and locust bean gums, in the presence of dextrose. The Company purchases these gums from a sole source supplier. Although the Company has qualified alternate suppliers with respect to these gums and to date the Company has not experienced difficulty acquiring 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, which could have a material adverse effect on the Company's business, financial condition and results of operations.

Excipient Product Lines. The Company currently operates two cGMP-approved manufacturing facilities for its microcrystalline cellulose products, including EMCOCEL and ProSolv. These facilities are located in Cedar Rapids, Iowa and Nastola, Finland and cover approximately 35,000 square feet and 15,000 square feet, respectively. The Company's microcrystalline cellulose products are primarily made from a specialty grade of wood pulp. The Company obtains wood pulp primarily from two suppliers; however, wood pulp is widely available from a number of suppliers.

The Company has several key excipient products that are manufactured exclusively by a third-party supplier for Penwest:

Product	Contract Manufacturer
Emcompress®	Rhodia, SA
Emdex® and Candex®	Penford Products Co.
Explotab®	Roquette, Inc.
Pruv®	AstraZeneca AB

All manufacturing operations of the Company are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of certain materials and waste products.

Marketing and Distribution

Drug Delivery Product Lines. Pursuant to the Company's collaborative agreements, the Company's collaborators have, or are expected to have, responsibility for the marketing and distribution of any extended release pharmaceuticals developed based on the Company's drug delivery technologies. Because the Company does not currently market any such pharmaceuticals without a collaborator, the Company has not developed any sales force with respect to such products. As a result, the Company is substantially dependent on the efforts of its collaborators to market the products. In selecting a collaborator for a drug candidate, some of the factors the Company considers include the collaborator's market presence in the therapeutic area targeted by the drug candidate and the collaborator's sales force and distribution network.

Excipient Product Lines. The Company has an in-house sales force of eleven employees who market the Company's excipient products in the United States and in Europe. This sales force focuses primarily on pharmaceutical and nutritional companies. The Company also markets excipients worldwide through the use of distributors located in over 40 countries. The Company typically sells its excipients to its largest customers under multi-year supply agreements.

Patents and Proprietary Rights

The Company believes that patent and trade secret protection, particularly of its drug delivery technology, is important to its business and that its success will depend in part on its ability to maintain existing patent protection, obtain additional patents, maintain trade secret protection and operate without infringing the proprietary rights of others.

Drug Delivery Business. The Company has been issued 27 U.S. and 139 foreign patents, relating to the Company's controlled release drug delivery technology. The U.S. patents issued to the Company principally cover the Company's TIMERx technology, including the combination of the xanthan and locust bean gums, the oral solid dosage form of TIMERx and the method of preparation, as well as the application (and combination) of TIMERx technology to various active drug substances, including both methods of treatment and methods of preparation. All these patents will expire between 2008 and 2018.

Excipient Product Lines. The Company has been issued 18 U.S. patents and 30 foreign patents covering its ProSolv technology. These patents will expire between 2010 and 2019.

Protection of Proprietary Information. The issuance of a patent is not conclusive as to its validity or as to the enforceable scope of the claims of the patent. There is no assurance that the Company's patents or any future patents will prevent other companies from developing non-infringing similar or functionally equivalent products or from successfully challenging the validity of the Company's patents. Furthermore, there is no assurance that: (1) any of the Company's future processes or products will be patentable; (2) any pending or additional patents will be issued in any or all appropriate jurisdictions; (3) the Company's processes or products will not infringe upon the patents of third parties; or (4) the Company will have the resources to defend against charges of infringement by or protect its own patent rights against third parties. The inability of the Company to protect its patent rights or infringement by the Company of the patent or proprietary rights of others could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company also relies on trade secrets and proprietary knowledge, which it generally seeks to protect by confidentiality and non-disclosure agreements with employees, consultants, licensees and pharmaceutical companies. There can be no assurance, however, that these agreements have or in all cases will be obtained, that these agreements will not be breached, that the Company will have adequate remedies for any breach or that the Company's trade secrets will not otherwise become known by competitors.

There has been substantial litigation in the pharmaceutical industry with respect to the manufacture, use and sale of new products that are the subject of conflicting patent rights. Some of the controlled release products that the Company is developing with its collaborators are generic versions of brand name controlled release products that are covered by one or more patents. Under the Waxman-Hatch Act, when an applicant files an ANDA with the FDA for a generic version of a brand name product covered by an unexpired patent listed with the FDA, the applicant must certify to the FDA that such patent will not be infringed by the applicant's product or that such patent is invalid or unenforceable. Notice of such certification must be given to the patent owner and the sponsor of the NDA for the brand name product. If a patent infringement lawsuit is filed within 45 days of the receipt of such notice, the FDA will conduct a substantive review of the ANDA, but will not grant final marketing approval of the generic product until a final judgment on the patent suit is rendered in favor of the applicant or until 30 months (or such longer or shorter period as a court may determine) have elapsed from the date of the certification, whichever is sooner. Should a patent owner commence a lawsuit with respect to alleged patent infringement by the Company or its collaborators, the uncertainties inherent in patent litigation make the outcome of such litigation difficult to predict. The Company's collaborators are responsible for all legal costs under Waxman-Hatch lawsuits. The Company

evaluates the probability of patent infringement litigation with respect to its collaborators' ANDA submissions on a case by case basis. The delay in obtaining FDA approval to market the Company's product candidates as a result of litigation, whether or not the Company is successful, could have a material adverse effect on the Company's business, financial condition and results of operations.

Trademarks. TIMERx, Emcocel, Multicel-N, Celpac, ProSolv, Explotab, Emdex, Emdex Plus, Emcompress, Compactrol, Emcosoy, Lubritab and Candex are registered trademarks of the Company. Geminex and SyncroDose are also trademarks of the Company. Other tradenames and trademarks appearing in this proxy statement are the property of their respective owners.

Government Regulation

FDA Regulation of Pharmaceutical Products. All pharmaceutical manufacturers are subject to extensive regulation by the federal government, principally the FDA, and, to a lesser extent, by state and local governments. The Federal Food, Drug and Cosmetic Act (the "FDCA") and other federal statutes and regulations govern or influence the development, testing, manufacture, safety, labeling, storage, record keeping, approval, advertising, promotion, sale and distribution of prescription products. Pharmaceutical manufacturers are also subject to certain record keeping and reporting requirements, establishment registration, product listing and FDA inspections.

Drugs can be approved by the FDA based on three types of marketing applications: an NDA, an ANDA or a license application under the Public Health Service Act. A full NDA must include complete reports of preclinical, clinical and other studies to prove adequately that the product is safe and effective for its intended use. The FDCA also provides for NDA submissions that may rely in whole or in part on publicly available clinical and other data on safety and efficacy under section 505(b)(2) of the FDCA. These types of NDAs may be appropriate for certain drugs containing previously approved active ingredients but differing with regard to other characteristics such as indications for use, dosage form or method of delivery.

As an initial step in the FDA regulatory approval process for an NDA, preclinical studies are typically conducted in animal models to assess the drug's efficacy and to identify potential safety problems. The results of these studies must be submitted to the FDA as part of an Investigational New Drug Application, which must be reviewed by the FDA before proposed clinical testing can begin. Typically, clinical testing involves a three-phase process. Phase I trials are conducted with a small number of subjects and are designed to provide information about both product safety and the expected dose of the drug. Phase II trials are designed to provide additional information on dosing and preliminary evidence of product efficacy. Phase III trials are large scale studies designed to provide statistical evidence of efficacy and safety in humans. The results of the preclinical testing and clinical trials of a pharmaceutical product are then submitted to the FDA in the form of an NDA for approval to commence commercial sales. Preparing such applications involves considerable data collection, verification, analysis and expense. In responding to an NDA, the FDA may grant marketing approval, request additional information or deny the application if it determines that the application does not satisfy its regulatory approval criteria.

This regulatory process can require many years and the expenditure of substantial resources. Data obtained from preclinical testing and clinical trials are subject to varying interpretations, which can delay, limit or prevent FDA approval. In addition, changes in FDA approval policies or requirements may occur or new regulations may be promulgated which may result in delay or failure to receive FDA approval.

ANDAs may be submitted for generic versions of brand name drugs ("Listed Drugs") where the generic drug is the "same" as the Listed Drug with respect to active ingredient(s) and route of administration, dosage form, strength, and conditions of use recommended in the labeling. ANDAs may also be submitted for generic drugs that differ with regard to certain changes from a Listed Drug if the FDA has approved a petition from a prospective applicant permitting the submission of an ANDA for the changed product.

Rather than safety and efficacy studies, the FDA requires data demonstrating that the ANDA drug formulation is bioequivalent to the Listed Drug. The FDA also requires labeling, chemistry and manufacturing information. FDA regulations define bioequivalence as the absence of a significant difference in the rate and

the extent to which the active ingredient becomes available at the site of drug action when administered at the same molar dose under similar conditions in an appropriately designed study. If the approved generic drug is both bioequivalent and pharmaceutically equivalent to the Listed Drug, the agency will assign a code to the product in an FDA publication entitled "Approved Drug Products With Therapeutic Equivalence Evaluation." These codes will indicate whether the FDA considers the product to be therapeutically equivalent to the Listed Drug. The codes will be considered by third parties in determining whether the generic drug is therapeutically equivalent and fully substitutable for the Listed Drug and are relied upon by Medicaid and Medicare formularies for reimbursement.

Although the FDA has approved the ANDA filed by the Company's collaborator Mylan for the 30 mg dosage strength of a generic version of Procardia XL, there can be no assurance that applications filed by the Company's collaborators with respect to other products will be suitable or available for such products, or that such products will receive FDA approval on a timely basis.

Certain ANDA procedures for generic versions of controlled release products are the subject of petitions filed by brand name drug manufacturers, which seek changes from the FDA in the approval process for generic drugs. These requested changes include, among other things, tighter standards for certain bioequivalence studies and disallowance of the use by a generic drug manufacturer in its ANDA of proprietary data submitted by the original manufacturer as part of an original new drug application. The Company is unable to predict at this time whether the FDA will make any changes to its ANDA procedures as a result of such petitions or any future petitions filed by brand name drug manufacturers or the effect that such changes may have on the Company. Any changes in FDA regulations which make ANDA approvals more difficult could have a material adverse effect on the Company's business, financial condition and results of operations.

Some products containing the Company's TIMERx formulation, such as controlled release formulations of approved immediate release drugs, will require the filing of an NDA. The FDA will not accept ANDAs when the delivery system or duration of drug availability differs significantly from the Listed Drug. However, the Company may be able to rely on existing publicly available safety and efficacy data to support section 505(b)(2) NDAs for controlled release products when such data exists for an approved immediate release version of the same chemical entity. However, there can be no assurance that the FDA will accept such section 505(b)(2) NDAs, or that the Company will be able to obtain publicly available data that is useful. The section 505(b)(2) NDA process is a highly uncertain avenue to approval because the FDA's policies on section 505(b)(2) NDAs have not yet been fully developed. There can be no assurance that an application submitted under section 505(b)(2) will be approved, or will be approved in a timely manner.

Sponsors of ANDAs and section 505(b)(2) NDAs, with the exception of applications for certain antibiotic drugs, must include, as part of their applications, certifications with respect to certain patents on Listed Drugs that may result in significant delays in obtaining FDA approvals. Sponsors who believe that patents that are listed in an FDA publication entitled "Approved Drug Products With Therapeutic Equivalence Evaluations" are invalid, unenforceable, or not infringed, must notify the patent owner. If the patent owner initiates an infringement lawsuit against the sponsor within 45 days of the notice, the FDA's final approval of the ANDA or section 505(b)(2) NDA may be delayed for a period of thirty months or longer. This delay may also apply to other ANDAs or 505(b)(2) NDAs for the same Listed Drug. Moreover, the approval of an ANDA involved in such a patent lawsuit may under certain circumstances require a further delay in the final approval of other ANDAs for the same Listed Drug for an additional 180 days. In addition, recent court decisions have raised the possibility that, under some circumstances, ANDAs other than the first ANDA for a Listed Drug may be delayed indefinitely and thereby effectively denied approval if the drug that is the subject of the first ANDA is not brought to market.

Under the Waxman-Hatch Act, an applicant who files the first ANDA with a certification of patent invalidity or non-infringement with respect to a product may be entitled to receive, if such ANDA is approved by the FDA, 180-day marketing exclusivity (a 180-day delay in approval of other ANDAs for the same drug) from the FDA. However, there can be no assurance that the FDA will not approve an ANDA filed by another applicant with respect to a different dosage strength prior to or during such 180-day marketing exclusivity period.

ANDAs and section 505(b)(2) NDAs are also subject to so-called market exclusivity provisions that delay the submission or final approval of the applications. The submission of ANDAs and section 505(b)(2) NDAs may be delayed for five years after approval of the Listed Drug if the Listed Drug contains a new active molecular entity. The final approval of ANDAs and section 505(b)(2) NDAs may also be delayed for three years where the Listed Drug or a modification of the Listed Drug was approved based on new clinical investigations. The three-year marketing exclusivity period would potentially be applicable to Listed Drugs with novel drug delivery systems.

Sponsors of drug applications affected by patents may also be adversely affected by patent term extensions provided under the FDCA to compensate for patent protection lost due to time taken in conducting FDA required clinical studies or during FDA review of data submissions. Patent term extensions may not exceed five additional years nor may the total period of patent protection following FDA marketing approval be extended beyond 14 years. In addition, by virtue of the Uruguay Round Agreements Act of 1994 that ratified the General Agreement on Tariffs and Trade, certain brand name drug patent terms have been extended to 20 years from the date of filing of the pertinent patent applications (which can be longer than the former 17-year patent term starting from the date of patent issuance). Patent term extensions may delay the ability of the Company and its collaborators to use the Company's proprietary technology in the future, market new controlled release products, file section 505(b)(2) NDAs referencing approved products, or file ANDAs based on Listed Drugs when those approved products or Listed Drugs have acquired patent term extensions.

Manufacturers of marketed drugs must conform to the FDA's cGMP standard or risk sanctions such as the suspension of manufacturing or the seizure of drug products and the refusal to approve additional marketing applications. The FDA conducts periodic inspections to implement these rules. There can be no assurance that a manufacturer's facility will be found to be in compliance with cGMP or other regulatory requirements. Failure to comply could result in significant delays in the development, testing and approval of products manufactured at such facility, as well as increased costs.

Noncompliance with applicable requirements can also result in total or partial injunctions against production and/or distribution, refusal of the government to enter into supply contracts or to approve NDAs, ANDAs or biologics applications, criminal prosecution and product recalls. The FDA also has the authority to revoke for cause drug or biological approvals previously granted.

FDA Regulation of Excipients. Products sold for use as excipients in finished drug products are subject to regulation by the FDA with regard to labeling, product integrity and manufacturing. The FDA will not approve a drug for marketing without adequate assurances that the excipients are safe for use in the product. The FDA presumes certain excipients that are present in approved drug products currently marketed for human use to be safe. These excipients are listed by the FDA in a document known as the Inactive Ingredient Guide, or "IIG." While the FDA does not ordinarily require applicants for NDAs or ANDAs to submit data demonstrating the safety of excipients listed in the IIG, it may require evidence of safety in certain circumstances, such as when evidence is required to demonstrate that such excipients interact safely with other components of a drug product. For excipients not listed in the IIG, the FDA will generally require data, which may include clinical data, demonstrating the safety of the excipient for use in the product at issue. In the case of generic drug products approved based on bioequivalence to a reference drug, the FDA may in some cases (e.g., products for parenteral, ophthalmic, otic or topical use) require excipients that are identical to the excipients in the reference drug. There can be no assurance that the FDA will not require new clinical safety data to approve an application for a product with a Penwest excipient or that the FDA will approve such an application even if such clinical data are submitted.

Foreign Regulatory Approval. Whether or not FDA approval has been obtained, approval of a pharmaceutical product by comparable governmental regulatory authorities in foreign countries must be obtained prior to the commencement of clinical trials and subsequent marketing of such product in such countries. The approval procedure varies from country to country, and the time required may be longer or shorter than that required for FDA approval.

Under European Union ("EU") law, either of two approval procedures may apply to the Company's products: a centralized procedure, administered by the EMEA (the European Medicines Evaluation Agency); or a decentralized procedure, which requires approval by the medicines agency in each EU Member State where the Company's products will be marketed. The centralized procedure is mandatory for certain biotechnology products and available at the applicant's option for certain other products. Although the decentralized procedure requires approval by the medicines agency in each EU Member State where the products will be marketed, there is a mutual recognition procedure under which the holder of marketing approval from one EU Member State may submit an application to one or more other EU Member States, including a certification to the effect that the application is identical to the application which was originally approved or setting forth the differences between the two applications. Within 90 days of such application, each EU Member State will be required to determine whether to recognize the prior approval.

Whichever procedure is used, the safety, efficacy and quality of the Company's products must be demonstrated according to demanding criteria under EU law and extensive nonclinical tests and clinical trials are likely to be required. In addition to premarket approval requirements, national laws in EU Member States will govern clinical trials of the Company's products, adherence to good manufacturing practice, advertising and promotion and other matters. In certain EU Member States, pricing or reimbursement approval may be a legal or practical precondition to marketing.

A procedure for abridged applications for generic products also exists in the EU. The general effect of the abridged application procedure is to give scope for the emergence of generic competition once patent protection has expired and the original product has been on the market for at least six or ten years. Independent of any patent protection, under the abridged procedure, new products benefit in principle from a basic six or ten year period of protection (commencing with the date of first authorization in the EU) from abridged applications for a marketing authorization. The period of protection in respect of products derived from certain biotechnological processes or other high-technology medicinal products viewed by the competent authorities as representing a significant innovation is ten years. Further, each EU Member State has discretion to extend the basic six-year period of protection to a ten-year period to all products marketed in its territory. Certain EU Member States have exercised such discretion. The protection does not prevent another company from making a full application supported by all necessary pharmacological, toxicological and clinical data within the period of protection. Abridged applications can be made principally for medicinal products which are essentially similar to medicinal products which have been authorized for either six or ten years. Under the abridged application procedure, the applicant is not required to provide the results of pharmacological and toxicological tests or the results of clinical trials. For such abridged applications, all data concerning manufacturing quality and bioavailability are required. The applicant submitting the abridged application generally must provide evidence or information that the drug product subject to this application is essentially similar to that of the referenced product in that it has the same qualitative and quantitative composition with respect to the active ingredient and the same dosage form, and is similar in bioavailability as the referenced drug.

The Company's European excipients manufacturing operations are subject to a variety of laws and regulations, including environmental and good manufacturing practices regulations.

Other Regulations. The Company is governed by federal, state and local laws of general applicability, such as laws regulating working conditions and environmental protection. Certain drugs that the Company is developing are subject to regulations under the Controlled Substances Act and related statutes.

Competition

The pharmaceutical industry is highly competitive and is affected by new technologies, governmental regulations, health care legislation, availability of financing, litigation and other factors. Many of the Company's competitors have longer operating histories and greater financial, marketing, legal and other resources than the Company and certain of its collaborators. The Company expects that it will be subject to competition from numerous other entities that currently operate or intend to operate in the pharmaceutical industry, including companies that engage in the development of controlled release technologies.

Drug Delivery Business. The Company's drug delivery business faces competition from numerous public and private companies and their controlled release technologies, including Johnson & Johnson's Oros technology, multiparticulate systems marketed by Elan Corporation plc ("Elan") and Biovail, traditional matrix systems marketed by SkyePharma, plc and other extended release technologies marketed or under development by Andrx Corporation, among others.

Most of the Company's products under development are extended release versions of existing immediate release drugs. These drugs will face competition from products with the same indication as the product developed by Penwest. For instance, the Company expects that oxymorphone ER will face competition from Purdue Pharma's OxyContin®.

A number of the products that the Company has developed and still will selectively develop are generic versions of branded controlled release pharmaceuticals. Typically, selling prices of immediate release drugs have declined and profit margins have narrowed after generic equivalents of such drugs are first introduced and the number of competitive products has increased. Similarly, the success of generic versions of controlled release products based on the Company's TIMERx technology will depend, in large part, on the intensity of competition from currently marketed drugs and technologies that compete with the branded pharmaceutical, as well as the timing of product approvals. However, the Company believes that generic versions of controlled release pharmaceuticals based on TIMERx technology are less likely to suffer the same degree of price erosion as other generic pharmaceuticals because of formulation, and the fact that analytical and manufacturing complexity of the generic versions may be difficult for other companies to replicate, which could limit competition. Competition may also arise from therapeutic products that are functionally equivalent but produced by other methods.

Excipient Product Lines. In its excipient business, the Company competes with a number of large manufacturers and other distributors of excipient products, many of which have substantially greater financial, marketing and other resources than the Company. The Company's principal competitors in this market are FMC Corporation, which markets its own line of microcrystalline cellulose products, and Rettenmaier, which also competes with the Company's microcrystalline cellulose and sodium starch glycolate products.

Employees

As of September 30, 2002, the Company employed 156 persons, of whom 95 were involved in research and development, administration and sales and marketing activities in Patterson, New York; 22 were involved in manufacturing operations at the Company's facility in Nastola, Finland; 29 were involved in manufacturing operations at the Company's facility in Cedar Rapids, Iowa; and 10 were involved in sales activities in the Company's European sales offices. Upon the completion of the Asset Sale, approximately 100 employees of the excipient business, including sales, marketing, administrative and research and development personnel, will no longer be employed by the Company. The total annualized cash compensation cost of these employees at current rates is approximately $5.5 million. After completion of the Asset Sale, the Company expects to have approximately 65 employees.

None of the Company's employees are covered by collective bargaining agreements other than the Company's employees in Finland who are covered by a national collective bargaining agreement. The Company considers its employee relations to be good.

Properties

The Company's executive, administrative, research, small-scale production and warehouse facilities, comprising approximately 55,000 square feet, currently are located in a single facility on a 15 acre site owned by the Company in Patterson, New York.

The Company owns a facility in Cedar Rapids, Iowa where it manufactures and packages pharmaceutical excipients. The facility is a 35,000 square foot building containing manufacturing and administrative space. The Company also manufactures pharmaceutical excipients in a 15,000 square foot facility leased by the

Company in Nastola, Finland, which lease renews annually with a two-year notification of termination period for either party.

The Company believes that all its present facilities are well maintained and in good operating condition. The Company is currently exploring options to add additional laboratory space.

The Asset Sale will transfer the Cedar Rapids, Nastola and Patterson facilities to the buyer. However, the Company will retain the right to occupy approximately 14,000 square feet of office and research and development space in the Patterson building for up to five years following the Asset Sale, initially on a rent-free basis for two years and then pursuant to three successive one-year options at a rental rate of $12 per square foot. The Company intends to lease approximately 11,000 square feet of office space in, Danbury, Connecticut if the Asset Sale is consummated. The lease agreement for the Connecticut space has not yet been negotiated.

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 described below under "— Risk Factors".

Overview

Penwest is engaged in the development of pharmaceutical products based on innovative extended release oral drug delivery technologies. The Company also develops, manufactures, and distributes 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 its ProSolv® line of products, high functionality excipients based on co-processing technology, which, among other things, improve the performance characteristics of tablets. If the Asset Sale is completed, the Company will no longer sell any excipient products and will use the proceeds of the Asset Sale to expand its drug delivery business.

The Company has incurred net losses and has had negative cash flows since 1994. As of September 30, 2002, the Company's accumulated deficit was approximately $75.0 million. Whether or not the Asset Sale is completed, the Company expects operating losses and negative cash flows from operations to continue until substantial sales of products commercialized utilizing TIMERx technology occur. A substantial portion of the Company's revenues to date have been generated from sales of the Company's pharmaceutical excipient product line. During 2001 and the nine months ended September 30, 2002, the Company derived 86% and 87%, respectively, of its revenues from the sales of its excipient products and sales of its excipient products generated substantial positive cash flows from operations although the Company as a whole had negative cash flows from operations. The Company's future profitability will depend on several factors, including:

- the successful commercialization of TIMERx controlled release products, including in particular oxymorphone ER, a narcotic analgesic for the treatment of moderate to severe pain, which is being developed with Endo for which Endo has submitted an NDA to the FDA;
- royalties from Mylan's sales of Pfizer, Inc.'s 30 mg generic version of Procardia XL; and
- the level of the Company's investment in research and development activities;

and, if the Asset Sale is not completed:

- sales growth of the Company's pharmaceutical excipient products; and
- royalties received on third parties' sales of products containing ProSolv.

If the Asset Sale is completed, the Company's future profitability will also depend on its ability to use the net proceeds of the Asset Sale to expand its drug development and delivery business.

The Company's strategy includes a significant commitment to spending on research and development targeted at identifying and developing extended release products which can be formulated using the Company's TIMERx and other 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 the area of new technology, however, is discretionary and is subject to the Company identifying appropriate opportunities, as well as the availability of funds from the Company's operations, cash resources, collaborative research and development arrangements, external financing, and if the Asset Sale takes place, the net proceeds of the Asset Sale. There can be no assurance when or if the Company will achieve profitability or if it will be able to sustain profitability on a quarterly basis, if at all.

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 at 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 excipient products are sold internationally and its results of operations 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. As part of the Asset Sale, the Company is selling the stock of its foreign subsidiaries. The Company expects that after the Asset Sale its results of operations will be less likely to be affected by currency fluctuations.

The Company's results of operations may fluctuate from quarter to quarter depending on the volume and timing of orders of formulated bulk TIMERx, royalties on Mylan's sales of Pfizer's 30 mg generic version of Procardia XL, variations in payments under the Company's collaborative agreements, including payments upon the achievement of specified milestones, and, if the Asset Sale is not completed, the volume and timing of orders of the Company's pharmaceutical excipient products and royalties received on third parties' sales of products containing ProSolv. 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 and currency exchange rate fluctuations.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. 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. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2001, and the reported amounts of revenues and expenses during the reporting periods. Areas where significant judgments are made include, but are not limited to, revenue recognition, allowance for doubtful accounts, inventory, deferred taxes-valuation allowance and impairment of intangible assets. Actual results could differ materially from these estimates.

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 adopted Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets."

Results of Operations

Nine Months Ended September 30, 2002 and 2001

Total revenues increased 4.5% for the nine months ended September 30, 2002 to $31.6 million from $30.3 million for the nine months ended September 30, 2001. Product sales increased by 5.2% to $27.5 million for the nine months ended September 30, 2002 compared to $26.2 million for the nine months ended September 30, 2001. The increase in product sales was due to increased sales of excipient products, primarily in Europe and partially due to the Company beginning to sell direct in certain countries, and was partially offset by lower revenues on sales of formulated bulk TIMERx primarily due to the timing of customer orders. Royalties and licensing revenues were comparable for the first nine months of 2002 and 2001 at $4.1 million. During the third quarter of 2002, the Company was notified by a major customer of excipient products that a contract for purchasing microcrystalline cellulose will not be renewed beginning January 1, 2003. Sales approximated $1.6 million to this customer of the excipient business for the nine months ended September 30, 2002.

Gross profit increased to $12.4 million, or 39.1% of total revenues, for the first nine months of 2002 from $11.7 million, or 38.7% of total revenues, for the first nine months of 2001. The increase in the gross profit percentage was primarily due to changes in the product mix of excipient products sold in 2002, primarily increased ProSolv sales, as compared to 2001. The Company expects that the Asset Sale will result in a substantial decrease in gross profit in future periods, at least initially.

Selling, general and administrative expenses increased by 15.8% for the first nine months of 2002, to $11.6 million as compared with $10.0 million for the first nine months of 2001. The increase was primarily due to marketing costs incurred by Endo on the joint development of oxymorphone ER, increased compensation

expense primarily due to hiring additional drug delivery personnel, increased costs for the Company's annual report and increased business insurance costs.

Research and product development expenses increased by 35.3% for the first nine months of 2002 to $14.6 million from $10.8 million for the first nine months of 2001. This increase was primarily due to the Company's share of the increased costs of clinical trials for oxymorphone ER being developed with Endo and the Company's increased investment in the development of new products utilizing TIMERx technology and in research involving new drug delivery technologies.

The effective tax rates for the first nine months of 2002 and 2001 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.

As of September 30, 2002, the Company had several 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 most advanced of these product candidates is oxymorphone ER, which the Company is developing with Endo. Endo, which is responsible for conducting the clinical trials and seeking regulatory approval of the product, completed the pivotal Phase III clinical trial of the product in July 2002 and submitted the NDA for the product to the FDA in December 2002. The Company anticipates spending an additional $2.5 million on the development and pre-marketing costs of the oxymorphone program during the fourth quarter of 2002, and then anticipates that the Company's research and development expenses with respect to this product will decrease in 2003.

There can be no assurance that any of the Company's products will be successfully developed, will receive regulatory approval, or will be successfully commercialized.

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 a $717,000 or 2.2% increase in 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.

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.

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.

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 $2.1 million or 6.1% decrease in excipient 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 year 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 cash flows from the sale of excipients, sales 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. The Company expects to continue to rely on these sources of funding unless the Asset Sale is completed, in which case the Company will have net cash proceeds available after the closing of approximately $33.9 million, but will no longer derive cash flow from the sale of excipients (which the Company estimates will be approximately $6.0 million in 2002). Of the $33.9 million of net cash proceeds available after the closing, Rettenmaier will pay the Company $1.0 million in April 2003 and $1.25 million in May 2004.

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 September 30, 2002, the Company had cash, cash equivalents, and short-term investments of $10.2 million. The Company has no committed sources of capital other than a revolving line of credit ("Revolver") with a financial institution. 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 ending January 2004, 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 0.5% per annum on unused portions of the Line of Credit and also 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 interest rate on the Revolver at September 30, 2002 was 5.75%. 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 collection of certain trade receivables are used to immediately reduce the balance of the Revolver. 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 September 30, 2002, there were approximately $2.6 million of outstanding borrowings under the Revolver. If the Asset Sale is completed, the Company will use a portion of the net proceeds to pay all outstanding borrowings under the Line of Credit and then will terminate the Revolver.

On October 25, 2002, Penwest entered into an agreement with AstraZeneca AB for the purchase of assets relating to Pruv®, one of the excipient products that Penwest distributes, for a purchase price of $3.0 million, including cash of $750,000 and a promissory note of $2.25 million. Under the terms of the note, $1.0 million is due on April 25, 2003 and $1.25 million is due on May 25, 2004. The note does not bear interest. In accordance with the terms of the Pruv agreement, the Company will be required to pay the promissory note in full upon the closing of the Asset Sale.

As of September 30, 2002, the Company did not have any material commitments for capital expenditures. As of September 30, 2002, the Company's trade receivables were $7.2 million, an increase of $1.0 million from the $6.2 million of trade receivables at December 31, 2001. In connection with its strategic alliance agreement with Endo, the Company expects to expend an additional $2.5 million during the fourth quarter of 2002 on the development and pre-marketing costs of oxymorphone ER and then anticipates the Company's research and development expenses with respect to this product will decrease in 2003.

The Company's major outstanding contractual cash obligations relate to its Revolver and its operating leases, primarily of equipment. Below is a table summarizing the Company's contractual obligations and commercial commitments, including non-cancellable operating leases having initial lease terms of more than one year, as of September 30, 2002 (in thousands):

	Total	Less than One Year	1-3 Years	4-5 Years	After 5 Years
Loans Payable	$3,782	$3,782	$ —	$ —	$ —
Operating Leases	2,128	729	1,325	74	—
Total Contractual Obligations	$5,910	$4,511	$1,325	$ 74	$ —

The Company had negative cash flow from operations for the nine months ended September 30, 2002 of $13.5 million, primarily due to the net loss in the period. The Company had negative cash flow from operations for the nine months ended September 30, 2001 of $6.5 million, primarily due to the net loss in the period, partially offset by net reductions of accounts receivable. The Company had negative cash flow from operations in the years ended December 31, 2001, 2000 and 1999 of $11.1 million, $7.3 million and $4.1 million, respectively, primarily due to net losses for each period. Funds expended in 2002 for the acquisition of fixed assets were primarily related to additions at the Company's manufacturing facilities in Iowa and Finland, laboratory equipment for drug development activities, and information technology associated with the Company strengthening its technology infrastructure to prepare for increasing drug development activities. 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 as described above. Funds expended for intangible assets included costs to secure patents on technology developed by the Company and to secure trademarks.

If the Asset Sale is completed, the Company's cash flow will differ greatly from its current cash flow because it will no longer derive revenues from sales of its excipient products nor will it incur expenses in connection with its excipient business. However, the Company cannot predict the amount of Penwest's future cash flow.

The Company intends to utilize available cash and short-term investments, cash from operations, and if the Asset Sale is not completed, funds available under the Revolver to fund future operations. If the Asset Sale is completed, the Company will also use the net proceeds of the Asset Sale to fund future operations. The Company's requirements for capital in its business are substantial and will depend on many factors, including:

- whether or not the Asset Sale is completed;
- the structure of any future collaborative or development agreements;
- the progress of the Company's collaborative and independent development projects and funding obligations with respect to the projects;
- revenues from sales of the Company's excipient products if the Asset Sale is not completed;
- the costs to the Company of clinical studies for its products;
- the costs and timing of adding drug development capabilities;
- royalties received from Mylan;
- royalties from sales of TIMERx products;
- the timing and amount of payments received under existing and possible future collaborative agreements; and
- the prosecution, defense and enforcement of potential patent claims and other intellectual property rights.

Liquidity. If the Asset Sale is not completed, the Company anticipates that its existing capital resources, including funds available under the Revolver, and anticipated internally generated funds from the sale of excipient products and formulated bulk TIMERx, royalties from Mylan and other payments from collaborators will enable the Company to fund its currently planned operations through mid 2003. If the Asset Sale is completed, the Company anticipates that the net proceeds received by the Company from the Asset Sale, its existing capital resources and anticipated internally generated funds from the sale of formulated bulk TIMERx, royalties from Mylan and other payments from collaborators, will enable the Company to fund its currently planned operations, including its planned increase in drug development and commercialization efforts, for at least the next two years.

In either case, the Company may need to raise additional funds to maintain its operations beyond these dates. 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, it at all. If adequate funds are not available, Penwest may be required to (1) significantly curtail its product commercialization efforts, including terminating existing collaborative agreements; (2) obtain funds through arrangement 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; (3) significantly scale back or terminate operations and/or (4) seek relief under the applicable bankruptcy laws.

At September 30, 2002, the Company had federal net operating loss ("NOL") carryforwards of approximately $56.4 million for income tax purposes, of which approximately $6.2 million, $8.4 million, $9.1 million, $17.8 million and $14.9 million expire in 2018, 2019, 2020, 2021 and 2022, respectively. In addition, the Company had research and development tax credit carryforwards of approximately $1.4 million of which $298,000, $306,000 and $777,000 expire in 2019, 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 September 30, 2002, a valuation allowance of approximately $20.3 million has been recognized to offset net deferred tax assets, primarily attributable to the NOL carryforward. Utilization of the operating losses may be subject to a limitation due to the ownership change provisions of the Internal Revenue Code. If the Asset Sale is completed, the Company expects that approximately $10.0 million of NOL carryforwards will be used to offset the Company's taxable capital gains and ordinary income from the Asset Sale.

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 consist of corporate debt and approximated $4.2 million at September 30, 2002. These securities have contractual maturity dates of up to eleven months. Due to the relatively short-term maturities of these securities, management believes there is no significant market risk. At September 30, 2002, market values approximated carrying values. At September 30, 2002, the Company had approximately $10.2 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 $102,000.

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 September 30, 2002) on the greater of $3.0 million or on the average outstanding balance. At September 30, 2002, there was $2.6 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 began applying the new rules on accounting for goodwill and other intangible assets 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.

In July 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated With Exit or Disposal Activities." SFAS No. 146 addresses accounting and reporting for costs associated with exit or disposal activities and nullifies Emerging Issues Task Force, or EITF, Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)." SFAS No. 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred. Under EITF Issue No. 94-3, a liability for an exit cost was recognized at the date an entity committed to an exit plan. The provisions of SFAS No. 146 are effective for exit or disposal activities that are initiated after December 31, 2002, with early adoption encouraged.

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.

Risk Factors

If the asset sale takes place, we will no longer derive revenues or cash flow from our excipient business and our future value will depend entirely on our drug delivery business

During 2001 and the nine months ended September 30, 2002, the excipient business generated 86% and 87%, respectively, of our total revenues and generated substantial positive cash flows from operations although the Company overall had negative cash flows from operations. All such revenues and cash flows would cease upon closing the asset sale. Following the asset sale, our future prospects, and our value as an ongoing financial enterprise, will depend exclusively on the performance of our drug development and delivery business, which is subject to the risks described below.

We have not been profitable and expect to continue to incur substantial losses

We have incurred net losses since 1994, including net losses of approximately $14.1 million for the first nine months of 2002 and of $16.0 million, $8.8 million, and $7.7 million, during 2001, 2000, and 1999, respectively. As of September 30, 2002, our accumulated deficit was approximately $75.0 million. We expect net losses to continue until substantial sales of products commercialized utilizing TIMERx technology occur.

If we are unable to successfully develop and commercialize these products, or generate substantial sales from these products, we may never achieve profitability, whether or not the Asset Sale takes place.

A substantial portion of our revenues has been generated from the sales of our pharmaceutical excipients. If the asset sale is completed, we will no longer generate any revenues from the sales of our excipient products and our business will depend exclusively on our drug delivery business. Based on the financial information included elsewhere in this proxy statement, our net losses would have been approximately $17.5 million for the first nine months of 2002 and approximately $19.0 million, $13.8 million and $12.9 million during 2001, 2000 and 1999, respectively, if we exclude the financial results from our excipient business from the calculation of net losses.

Our future profitability will depend on several factors, including:

- the successful commercialization of TIMERx controlled release products, including in particular oxymorphone ER, a narcotic analgesic for the treatment of moderate to severe pain, being developed with Endo;
- royalties from Mylan's sales of Pfizer's 30 mg generic version of Procardia XL; and
- the level of investment in research and development activities.

If we do not complete the asset sale and we retain our excipient business, our future profitability will also depend on:

- royalties received on third parties' sales of products containing ProSolv; and
- sales growth of our pharmaceutical excipient products.

If the asset sale is completed, our future profitability will also depend on our ability to use the net proceeds of the asset sale to expand our drug development and delivery business. Our strategy includes a significant commitment to spending on research and development targeted at identifying and developing extended release products which can be formulated using our TIMERx and other drug delivery technologies. We also expect to expend significant resources on the development of new drug delivery technologies, both internally and through in-licenses or acquisition. Our spending in the area of new technology, however, is discretionary and is subject to the availability of appropriate opportunities and funding.

We are dependent on collaborators to conduct full-scale bioequivalence studies and clinical trials, obtain regulatory approvals for, and manufacture, market, and sell our TIMERx controlled release products

Many of our TIMERx controlled release products have been or are being developed and commercialized in collaboration with pharmaceutical companies. Under these collaborations, depending on the structure of the collaboration, we are dependent on our collaborators to fund some portion of development, to conduct full-scale bioequivalence studies and clinical trials, obtain regulatory approvals for, and manufacture, market and sell products utilizing our TIMERx controlled release technology. For instance, we are dependent on Endo to obtain the regulatory approvals required to market oxymorphone ER and will be dependent on Endo to manufacture and market oxymorphone ER in the United States. We are also dependent on Sanofi and Leiras to manufacture and market Slofedipine XL and Cystrin CR, respectively. In addition, we are dependent on Mylan with respect to the marketing and sale of the 30 mg strength of Pfizer's generic version of Procardia XL.

Our collaborators may not devote the resources necessary or may otherwise be unable to complete development and commercialization of these potential products. Our existing collaborations are subject to termination on short notice under certain circumstances including, for example, if the collaborator determines that the product in development is not likely to be successfully developed or not likely to receive regulatory approval, if we breach the agreement or upon a bankruptcy event.

If we cannot maintain our existing collaborations or establish new collaborations, we would be required to terminate the development and commercialization of products or undertake product development and commercialization activities at our own expense. Moreover, we have limited experience in conducting

full-scale bioequivalence studies and clinical trials, preparing and submitting regulatory applications and manufacturing, marketing and selling the pharmaceutical products. We may not be successful in performing these activities.

Our existing collaborations and any future collaborations with third parties may not be scientifically or commercially successful. Factors that may affect the success of our collaborations include the following:

- our collaborators may be pursuing alternative technologies or developing alternative products, either on their own or in collaboration with others, that may be competitive with the product as to which they are collaborating with us, which could affect our collaborator's commitment to the collaboration with us;
- reductions in marketing or sales efforts or a discontinuation of marketing or sales of our products by our collaborators would reduce our revenues, which will be based on a percentage of net sales by the collaborator;
- our collaborators may terminate their collaborations with us, which could make it difficult for us to attract new collaborators or adversely affect our perception in the business and financial communities; and
- our collaborators may pursue higher priority programs or change the focus of their development programs, which could affect the collaborator's commitment to us.

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

The pharmaceutical industry is highly competitive and is affected by new technologies, governmental regulations, health care legislation, availability of financing, litigation and other factors. Many of our competitors have longer operating histories and greater financial, marketing, legal and other resources than we do and than certain of our collaborators do.

Our TIMERx business faces competition from numerous public and private companies and their controlled release technologies, including Johnson & Johnson's oral osmotic pump (OROS®) technology, multiparticulate systems marketed by Elan and Biovail, traditional matrix systems marketed by SkyePharma, plc and other controlled release technologies marketed or under development by Andrx Corporation, among others.

Our TIMERx products in development will face competition from products with the same indication as the TIMERx products being developed by Penwest. For instance, we expect extended release oxymorphone ER will face competition from Purdue Pharma's OxyContin®.

In addition to developing controlled release versions of immediate release products, we concentrated a significant portion of our initial development efforts on generic versions of branded controlled release products. The success of generic versions of branded controlled release products based on our TIMERx technology will depend, in large part, on the intensity of competition from the branded controlled release product, other generic versions of the branded controlled release product and other drugs and technologies that compete with the branded controlled release product, as well as the timing of product approval.

The generic drug industry is characterized by frequent litigation between generic drug companies and branded drug companies. Those companies with significant financial resources will be better able to bring and defend any such litigation.

In our excipient business, we compete with a number of large manufacturers and other distributors of excipient products, many of which have substantially greater financial, marketing and other resources than the Company. Our principal competitor in this market is FMC Corporation, which markets its own line of microcrystalline cellulose products, and J. Rettenmaier & Sohne GmbH KG, a subsidiary of the buyer of our excipient business, which manufactures and markets microcrystalline cellulose and sodium starch glycolate products.

We require additional funding, which may be difficult to obtain

We have no committed sources of capital except for the Revolver. If the asset sale is completed, there will be approximately $33.9 million of net cash proceeds available after closing.

If the asset sale is completed, we anticipate that the net proceeds received by us from the asset sale, our existing capital resources and anticipated internally generated funds from the sale of formulated bulk TIMERx, royalties from Mylan and other payments from collaborators, will enable us to fund our currently planned operations, including the planned increase in our drug development and commercialization efforts, for at least the next two years. If the asset sale is not completed, we anticipate that our existing capital resources, including funds available under the Revolver, and anticipated internally generated funds from the sale of our excipient products and formulated bulk TIMERx, royalties from Mylan and other payments from collaborators will enable us to fund our currently planned operations through mid 2003.

We have had negative cash flows and net losses since 1994. See "We have not been profitable and expect to incur substantial losses" for a discussion of our risk of continued losses. Whether or not the asset sale is completed, we expect negative cash flows from operations to continue until substantial sales of products commercialized utilizing TIMERx technology occur, particularly because we expect our operating expenses to continue to increase in the future, including our research and development expenses, as our product development efforts accelerate. The proceeds from the asset sale will provide us with significant funding, but we will lose the positive cash flows generated by our excipient business.

Our requirements for additional capital are substantial and will depend on many factors, including:

- the completion of the asset sale;
- the structure of any future collaborative or development agreements;
- the progress of our collaborative and independent development projects and funding obligations with respect to the projects;
- if the asset sale is not completed, revenues from our excipient products;
- the costs to us of clinical studies for our products;
- the costs and timing of adding drug development capabilities;
- royalties received from Mylan;
- royalties from sales of TIMERx products;
- the timing and amount of payments received under existing and possible future collaborative agreements; and
- the prosecution, defense and enforcement of potential patent claims and other intellectual property rights.

If we determine to seek additional funding, we may do so through collaborative arrangements and public or private financings. Additional financing may not be available to us on acceptable terms, if at all.

If we raise additional funds by issuing equity securities, further dilution to our then existing stockholders will result. In addition, the terms of the financing may adversely affect the holdings or the rights of such stockholders.

If we are unable to obtain funding on a timely basis, we may be required to (1) significantly curtail our product commercialization efforts, including terminating or reducing our participation in existing collaborative agreements; (2) obtain funds through arrangements with collaborators or others on adverse terms to us that may require us to relinquish rights to certain of our technologies, product candidates, or products which we would otherwise pursue on our own or that would significantly dilute our shareholders; (3) significantly scale back or terminate operations; and/or (4) seek relief under applicable bankruptcy laws.

If our clinical trials are not successful or take longer to complete than we expect, we may not be able to develop and commercialize certain of our products

In order to obtain regulatory approvals for the commercial sale of our potential products, including controlled release versions of immediate release drugs and new chemical entities, we or our collaborators will be required to complete clinical trials in humans to demonstrate the safety and efficacy of the products. We or our collaborators may not be able to obtain authority from the FDA or other regulatory agencies to commence or complete these clinical trials.

The results from preclinical testing of a product that is under development may not be predictive of results that will be obtained in human clinical trials. In addition, the results of early human clinical trials may not be predictive of results that will be obtained in larger scale advanced stage clinical trials. Furthermore, we, our collaborators or the FDA may suspend clinical trials at any time if the subjects or patients participating in such trials are being exposed to unacceptable health risks, or for other reasons.

The rate of completion of clinical trials is dependent in part upon the rate of enrollment of patients. Patient accrual is a function of many factors including the size of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the study and the existence of competitive clinical trials. Delays in planned patient enrollment may result in increased costs and program delays.

We and our collaborators may not be able to successfully complete any clinical trial of a potential product within any specified time period. In some cases, we may not be able to complete the trial at all. Moreover, clinical trials may not show any potential product to be safe or efficacious. Thus, the FDA and other regulatory authorities may not approve any of our potential products for any indication.

Our business, financial condition, or results of operations could be materially adversely affected if:

- we or our collaborators are unable to complete a clinical trial of one of our potential products;
- the results of any clinical trial are unfavorable; or
- the time or cost of completing the trial exceeds our expectations.

We may not obtain regulatory approval; the approval process can be time-consuming and expensive

We are not able to market any of our products in the United States, Europe or in any other jurisdiction without marketing approval from the United States Food and Drug Administration, or FDA, the European Agency for the Evaluation of Medicinal Products, or an equivalent foreign regulatory agency. The regulatory process to obtain market approval for a new drug takes many years and requires the expenditure of substantial resources. We have had only limited experience in preparing applications and obtaining regulatory approvals.

To date, several drug formulations utilizing the TIMERx system have received regulatory approval:

- Cystrin CR was approved in Finland in 1997;
- Slofedipine XL was approved in the United Kingdom in 1998 and in Italy in 2001;
- The 30 mg strength of Nifedipine XL was approved by the FDA in December 1999; and
- Cronodipin was approved in Brazil in 2001.

We also have a number of TIMERx products in our development pipeline. The most advanced of these is oxymorphone ER, which we are developing with Endo. In December 2002, Endo submitted an NDA to the FDA for oxymorphone ER.

We may encounter delays or rejections during any stage of the regulatory approval process based upon the failure of clinical data to demonstrate compliance with, or upon the failure of the product to meet, the FDA's requirements for safety, efficacy and quality; and those requirements may become more stringent due to changes in regulatory agency policy or the adoption of new regulations. After submission of a marketing application, in the form of an NDA or an Abbreviated New Drug Application, or ANDA, the FDA may deny the application, may require additional testing or data and/or may require post marketing testing and

surveillance to monitor the safety or efficacy of a product. While the U.S. Food, Drug and Cosmetic Act, or FDCA, provides for a 180-day review period, the FDA commonly takes one to two years to grant final approval to a marketing application (NDA or ANDA).

Further, the terms of approval of any marketing application, including the labeling content, may be more restrictive than we desire and could affect the marketability of products incorporating our controlled release technology.

Some of the controlled release products that we are developing with our collaborators are generic versions of branded controlled release products, which require the filing of ANDAs. Certain ANDA procedures for generic versions of controlled release products are the subject of petitions filed by brand name drug manufacturers, which seek changes from the FDA in the approval process for generic drugs. These requested changes include, among other things, tighter standards for certain bioequivalence studies and disallowance of the use by a generic drug manufacturer in its ANDA of proprietary data submitted by the original manufacturer as part of an original new drug application. Any changes in FDA regulations that make ANDA approvals more difficult may have a material adverse effect on our business, financial condition and results of operations.

Other products containing our TIMERx controlled release technology require the filing of an NDA. A full NDA must include complete reports of preclinical, clinical and other studies to prove adequately that the product is safe and effective, which involves, among other things, full clinical testing, and as a result requires the expenditure of substantial resources. In certain cases involving controlled release versions of FDA-approved immediate release drugs, we may be able to rely on existing publicly available safety and efficacy data to support an NDA for controlled release products under Section 505(b)(2) of the FDCA when such data exists for an approved immediate release version of the same chemical entity. However, we can provide no assurance that the FDA will accept such section 505(b)(2) NDA, or that we will be able to obtain publicly available data that is useful. The section 505(b)(2) NDA process is a highly uncertain avenue to approval because the FDA's policies on section 505(b)(2) NDAs have not yet been fully developed. There can be no assurance that the FDA will approve an application submitted under section 505(b)(2) in a timely manner or at all.

The FDA also has the authority to revoke or suspend approvals of previously approved products for cause, to debar companies and individuals from participating in the drug-approval process, to request recalls of allegedly volatile products, to seize allegedly volatile products, to obtain injunctions to close manufacturing plants allegedly not operating in conformity with current Good Manufacturing Practices and to stop shipments of allegedly volatile products. The FDA may seek to impose pre-clearance requirements on products currently being marketed without FDA approval, and there can be no assurance that the Company or its third-party manufacturers or collaborators will be able to obtain approval for such products within the time period specified by the FDA.

Even if we obtain marketing approval, our products will be subject to ongoing regulatory review

If regulatory approval of a product is granted, such approval may be subject to limitations on the indicated uses for which the product may be marketed or contain requirements for costly post-marketing follow-up studies. As to products for which marketing approval is obtained, the manufacturer of the product and the manufacturing facilities will be subject to continual review and periodic inspections by the FDA and other regulatory authorities. The subsequent discovery of previously unknown problems with the product, manufacturer or facility may result in restrictions on the product or manufacturer, including withdrawal of the product from the market.

If we fail to comply with applicable regulatory requirements, we may be subject to fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Our controlled release products that are generic versions of branded controlled release products that are covered by one or more patents may be subject to litigation

We expect that our collaborators will file ANDAs for our controlled release products that are generic versions of branded controlled release products that are covered by one or more patents. It is likely that the owners of the patents covering the brand name product or the sponsors of the NDA with respect to the branded product will sue or undertake regulatory initiatives to preserve marketing exclusivity, as Pfizer did with respect to our generic version of Procardia XL that we developed with Mylan. Any significant delay in obtaining FDA approval to market our product candidates as a result of litigation, as well as the expense of such litigation, whether or not we or our collaborators are successful, could have a material adverse effect on our business, financial condition and results of operations.

The market may not be receptive to products incorporating our drug delivery technologies

The commercial success of products incorporating our extended release technology that are approved for marketing by the FDA and other regulatory authorities will depend upon their acceptance by the medical community and third party payors as clinically useful, cost-effective and safe. No product based on our TIMERx or other extended release technology is marketed in the United States, so there can be no assurance as to market acceptance.

Other factors that we believe could materially affect market acceptance of these products include:

- the timing of the receipt of marketing approvals and the countries in which such approvals are obtained;
- the safety and efficacy of the product as compared to competitive products; and
- the cost-effectiveness of the product and the ability to receive third party reimbursement.

Our success depends on our protecting our patents and patented rights

Our success depends in significant part on our ability to develop patentable products, to obtain patent protection for our products, both in the United States and in other countries, and to enforce these patents. The patent positions of pharmaceutical firms, including us, are generally uncertain and involve complex legal and factual questions. As a result, patents may not issue from any patent applications that we own or license. If patents do issue, the claims allowed may not be sufficiently broad to protect our technology. In addition, issued patents that we own or license may be challenged, invalidated or circumvented. Our patents also may not afford us protection against competitors with similar technology.

Our success also depends on our not infringing patents issued to competitors or others. We are aware of patents and patent applications belonging to competitors and others that may require us to alter our products or processes, pay licensing fees or cease certain activities.

We may not be able to obtain a license to any technology owned by a third party that we require to manufacture or market one or more products. Even if we can obtain a license, the financial and other terms may be disadvantageous.

Our success also depends on our maintaining the confidentiality of our trade secrets and patented know-how. We seek to protect such information by entering into confidentiality agreements with employees, consultants, licensees and pharmaceutical companies. These agreements may be breached by such parties. We may not be able to obtain an adequate, or perhaps, any remedy to such a breach. In addition, our trade secrets may otherwise become known or be independently developed by our competitors.

We may become involved in patent litigation or other intellectual property proceedings relating to our products or processes which could result in liability for damage or stop our development and commercialization efforts

The pharmaceutical industry has been characterized by significant litigation and interference and other proceedings regarding patents, patent applications and other intellectual property rights. The types of situations in which we may become parties to such litigation or proceedings include:

- We or our collaborators may initiate litigation or other proceedings against third parties to enforce our patent rights.
- We or our collaborators may initiate litigation or other proceedings against third parties to seek to invalidate the patents held by such third parties or to obtain a judgment that our products or processes do not infringe such third parties' patents.
- If our competitors file patent applications that claim technology also claimed by us, we or our collaborators may participate in interference or opposition proceedings to determine the priority of invention.
- If third parties initiate litigation claiming that our processes or products infringe their patent or other intellectual property rights, we and our collaborators will need to defend against such proceedings.

An adverse outcome in any litigation or other proceeding could subject us to significant liabilities to third parties and require us to cease using the technology that is at issue or to license the technology from third parties. We may not be able to obtain any required licenses on commercially acceptable terms or at all.

The cost of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Although the legal costs of defending litigation relating to a patent infringement claim are generally the contractual responsibility of our collaborators (unless such claim relates to TIMERx in which case such costs are our responsibility), we could nonetheless incur significant unreimbursed costs in participating and assisting in the litigation. Some of our competitors may be able to sustain the cost of such litigation and proceedings more effectively than we can because of their substantially greater resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to complete in the marketplace. Patent litigation and other proceedings may also absorb significant management time.

We have only limited manufacturing capabilities and will be dependent on third party manufacturers

We lack commercial scale facilities to manufacture our TIMERx material in accordance with current GMP requirements prescribed by the FDA. We currently rely on Draxis Pharma, Inc. for the bulk manufacture of our TIMERx material for delivery to our collaborators under a contract that expires in September 2004. The agreement shall be automatically renewed for successive one-year periods, unless either party gives notice of its intent not to renew the contract, at least six months prior to the end of the then-current term.

There are a limited number of manufacturers that operate under GMP regulations capable of manufacturing our TIMERx material. We have not yet qualified a second source of supply. In the event that our current manufacturer is unable to manufacture the TIMERx material in the required quantities, on a timely basis or at all, we may be unable to obtain alternative contract manufacturing, or obtain such manufacturing on commercially reasonable terms.

If our third party manufacturer fails to perform its obligations, we may be adversely affected in a number of ways, including:

- our collaborators may not be able to meet commercial demands for our products on a timely basis;
- our collaborators may not be able to initiate or continue clinical trials of products that are under development; and
- our collaborators may be delayed in submitting applications for regulatory approvals of our products.

We have limited experience in manufacturing TIMERx material on a commercial scale and no facilities or equipment to do so. If we determine to develop our own manufacturing capabilities, we will need to recruit qualified personnel and build or lease the requisite facilities and equipment. We may not be able to successfully develop our own manufacturing capabilities. Moreover, it may be very costly and time consuming for us to develop such capabilities.

The manufacture of any of our products (both TIMERx material and excipients) is subject to regulation by the FDA and comparable agencies in foreign countries. Any delay in complying or failure to comply with such manufacturing requirements could materially adversely affect the marketing of our products and our business, financial condition and results of operations.

We are dependent upon a limited number of suppliers for the gums used in our TIMERx material and upon a limited number of suppliers for the wood pulp used in the manufacture of our excipients

Our TIMERx drug delivery system is a hydrophilic matrix combining primarily two polysaccharides, xanthan and locust bean gums, in the presence of dextrose. These gums are also used in our Geminex and SyncroDose drug delivery systems. We purchase these gums from a sole source supplier. Emcocel and ProSolv, our two largest selling excipients, are manufactured from a specialty grade of wood pulp. We have qualified alternate suppliers with respect to such materials, but we can provide no assurance that interruptions in supplies will not occur in the future or that we will not have to obtain substitute suppliers. Any interruption in these supplies could have a material adverse effect on our ability to manufacture bulk TIMERx for delivery to our collaborators or to manufacture these excipients.

If our collaborators fail to obtain an adequate level of reimbursement by third party payors for our controlled release products, they may not be able to successfully commercialize controlled release products in certain markets

The availability of reimbursement by governmental and other third party payors affects the market for any pharmaceutical product. These third party payors continually attempt to contain or reduce the costs of health care by challenging the prices charged for medical products and services. In certain foreign countries, particularly the countries of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control.

The generic versions of controlled release products being developed by us and our collaborators may be assigned an AB rating if the FDA considers the product to be therapeutically equivalent to the branded controlled release drug. Failure to obtain an AB rating from the FDA would indicate that for certain purposes the drug would not be deemed to be therapeutically equivalent, would not be fully substitutable for the branded controlled release drug and would not be relied upon by Medicaid and Medicare formularies for reimbursement.

In both the U.S. and certain foreign jurisdictions, there have been a number of legislative and regulatory proposals to change the health care system. Further proposals are likely. The potential for adoption of these proposals may affect our ability to raise capital, obtain additional collaborative partners and market our products.

If we or our collaborators obtain marketing approvals for our products, we expect to experience pricing pressure due to the trend toward managed health care, the increasing influence of health maintenance organizations and additional legislative proposals. We may not be able to sell our products profitably if reimbursement is unavailable or limited in scope or amount.

We will be exposed to product liability claims and may not be able to obtain adequate product liability insurance

Our business exposes us to potential product liability risks which are inherent in the testing, manufacturing, marketing and sale of pharmaceutical products. Product liability claims might be made by consumers,

health care providers, pharmaceutical companies, or others that sell our products. These claims may be made even with respect to those products that are manufactured in licensed and regulated facilities or that otherwise possess regulatory approval for commercial sale.

We are currently covered by primary product liability insurance in the amount of $1 million per occurrence and $2.0 million annually in the aggregate on a claims-made basis and by umbrella liability insurance in excess of $25.0 million which can also be used for product liability insurance. This coverage may not be adequate to cover any product liability claims. Product liability coverage is expensive. In the future, we may not be able to maintain or obtain such product liability insurance at a reasonable cost or in sufficient amounts to protect us against losses due to liability claims. Any claims that are not covered by product liability insurance could have a material adverse effect on our business, financial condition and results of operations.

The market price of our common stock may be volatile

The market price of our common stock, like the market prices for securities of pharmaceutical, biopharmaceutical and biotechnology companies, have historically been highly volatile. The market from time to time experiences significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Factors such as fluctuations in our operating results, future sales of our common stock, announcements of technological innovations or new therapeutic products by us or our competitors, announcements regarding collaborative agreements, clinical trial results, government regulation, developments in patent or other proprietary rights, public concern as to the safety of drugs developed by us or others, changes in reimbursement policies, comments made by securities analysts and general market conditions may have a significant effect on the market price of the common stock.

Certain provisions of our Shareholder Rights Plan, Certificate of Incorporation and Bylaws and of Washington law make a takeover of Penwest more difficult

We have adopted a shareholder rights plan, often referred to as a poison pill. The rights issued under the plan will cause substantial dilution to a person or group that attempts to acquire us on terms that are not approved by our board of directors, unless the board first determines to redeem the rights. Various provisions of our Certificate of Incorporation, our Bylaws and Washington law may also have the effect of deterring hostile takeovers or delaying or preventing changes in control or management of our company, including transactions in which our stockholders might otherwise receive a premium for their shares over then current market prices. In addition, these provisions may limit the ability of stockholders to approve transactions that they may deem to be in their best interest.

UNAUDITED PRO FORMA FINANCIAL INFORMATION

The following unaudited pro forma consolidated financial statements have been prepared from the historical financial statements of Penwest to give effect to the sale of substantially all of the assets of Penwest's excipient business to Rettenmaier (the "Asset Sale"). The unaudited pro forma consolidated balance sheet reflects adjustments as if the Asset Sale had occurred on September 30, 2002. The unaudited pro forma consolidated statements of operations for the nine months ended September 30, 2002 and for the years ended December 31, 2001, 2000, and 1999 reflect adjustments as if the Asset Sale had occurred on January 1, 2002, 2001, 2000, and 1999, respectively. Penwest has also entered into an agreement with AstraZeneca AB for the purchase of assets related to Pruv®, one of the excipient products that Penwest distributes. These assets are to be resold to Rettenmaier in the Asset Sale and, accordingly, the unaudited pro forma consolidated financial statements reflect adjustments for Penwest's purchase of such assets from AstraZeneca concurrently with the Asset Sale.

The unaudited pro forma consolidated financial statements do not purport to present the financial position or results of operations of Penwest had the transactions and events assumed therein occurred on the dates specified, nor are they necessarily indicative of the results of operations that may be achieved in the future.

The unaudited pro forma consolidated financial statements should be read in conjunction with the historical financial statements of Penwest, including the related notes, and "Management's Discussion and Analysis of Financial Condition and Results of Operations" from its Annual Report on Form 10-K for the year ended December 31, 2001 and from its Quarterly Report on Form 10-Q for the quarter ended September 30, 2002. In addition, the unaudited pro forma consolidated financial statements should be read in conjunction with the historical financial statements of Penwest Pharmaceuticals Co. Excipient Business, which are included within this proxy statement.

See accompanying notes to unaudited pro forma consolidated financial statements.

PENWEST PHARMACEUTICALS CO.

UNAUDITED PRO FORMA CONSOLIDATED BALANCE SHEET
As of September 30, 2002

	Historical	Pro Forma Adjustments	Pro Forma
		(In thousands)	
ASSETS			
Current assets:			
Cash and cash equivalents	$ 5,986	$ 39,500 (a) (2,396) (b) (750) (c) (e) (2,643) (g) (2,250) (h)	$37,447
Marketable securities	4,180	—	4,180
Trade accounts receivable, net of allowance for doubtful accounts	7,187	(5,526) (b)	1,661
Note receivable	—	1,000 (d)	1,000
Inventories, net	8,052	(7,636) (b)	416
Prepaid expenses and other current assets	2,983	(298) (b)	2,685
Total current assets	28,388	19,001	47,389
Note receivable, less current portion	—	1,250 (d)	1,250
Fixed assets, net	14,422	(12,582) (b)	1,840
Prepaid rent	—	350 (f)	350
Patents, net	4,151	(1,109) (b)	3,042
Other assets	2,808	3,000 (e)	
	—	(3,003) (b)	2,805
Total assets	$49,769	$ 6,907	$56,676
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities:			
Accounts payable	$ 2,885	$ (1,872) (b)	$ 1,013
Accrued expenses	5,469	(467) (b)	5,002
Taxes payable	308	(62) (b)	246
Transaction cost liabilities	—	2,020 (f)	2,020
Estimated taxes on Asset Sale gain	—	300 (j)	300
Note payable	—	2,250 (e) (2,250) (h)	
Loans payable	3,782	(2,643) (g)	1,139
Total current liabilities	12,444	(2,724)	9,720
Deferred income taxes	199	(81) (b)	118
Deferred revenue	306	(154) (b)	152
Deferred compensation	2,844	—	2,844
Total liabilities	15,793	(2,959)	12,834
Total shareholders' equity	33,976	9,866 (k)	43,842
Total liabilities and shareholders' equity	$49,769	$ 6,907	$56,676

See accompanying notes to unaudited pro forma consolidated financial statements.

PENWEST PHARMACEUTICALS CO.

UNAUDITED PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS
For the Nine Months Ended September 30, 2002

	Historical	Pro Forma Adjustments	Pro Forma
	(In thousands, except per share data)		
Revenues			
Product sales	$ 27,549	$(27,198) (l)	$ 351
Royalties and licensing fees	4,074	(361) (l)	3,713
Total revenues	31,623	(27,559)	4,064
Cost of product sales	19,269	(19,149) (l)	120
Gross profit	12,354	(8,410)	3,944
Operating expenses			
Selling, general, and administrative	11,632	(4,144) (l)	7,488
Research and product development	14,618	(459) (l)	14,159
Total operating expenses	26,250	(4,603)	21,647
Loss from operations	(13,896)	(3,807)	(17,703)
Investment income	314	—	314
Interest expense	181	(181) (i)	—
Loss before income taxes	(13,763)	(3,626)	(17,389)
Income tax expense (benefit)	349	(281) (m)	68
Net loss	$(14,112)	$ (3,345)	$(17,457)
Basic and diluted net loss per share	$ (0.91)	$ (0.22)	$ (1.13)
Weighted average shares of common stock outstanding	15,451	15,451	15,451

See accompanying notes to unaudited pro forma consolidated financial statements.

PENWEST PHARMACEUTICALS CO.

UNAUDITED PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS
For the Year Ended December 31, 2001

	Historical	Pro Forma Adjustments	Pro Forma
	(In thousands, except per share data)		
Revenues			
Product sales	$ 34,778	$(33,964) (l)	$ 814
Royalties and licensing fees	5,225	(243) (l)	4,982
Total revenues	40,003	(34,207)	5,796
Cost of product sales	24,810	(24,567) (l)	243
Gross profit	15,193	(9,640)	5,553
Operating expenses			
Selling, general, and administrative	13,855	(5,054) (l)	8,801
Research and product development	17,003	(813) (l)	16,190
Total operating expenses	30,858	(5,867)	24,991
Loss from operations	(15,665)	(3,773)	(19,438)
Investment income	477	—	477
Interest expense	290	(290) (i)	—
Loss before income taxes	(15,478)	(3,483)	(18,961)
Income tax expense (benefit)	503	(431) (m)	72
Net loss	$(15,981)	$ (3,052)	$(19,033)
Basic and diluted net loss per share	$ (1.15)	$ (0.22)	$ (1.37)
Weighted average shares of common stock outstanding	13,905	13,905	13,905

See accompanying notes to unaudited pro forma consolidated financial statements.

PENWEST PHARMACEUTICALS CO.

UNAUDITED PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS
For the Year Ended December 31, 2000

	Historical	Pro Forma Adjustments	Pro Forma
	(In thousands, except per share data)		
Revenues			
Product sales	$37,148	$(33,247) (l)	$ 3,901
Royalties and licensing fees	4,910	(31) (l)	4,879
Total revenues	42,058	(33,278)	8,780
Cost of product sales	25,303	(22,625) (l)	2,678
Gross profit	16,755	(10,653)	6,102
Operating expenses			
Selling, general, and administrative	12,054	(4,374) (l)	7,680
Research and product development	12,820	(717) (l)	12,103
Total operating expenses	24,874	(5,091)	19,783
Loss from operations	(8,119)	(5,562)	(13,681)
Investment income	217	—	217
Interest expense	172	(172) (i)	—
Loss before income taxes and cumulative effect of change in accounting principle	(8,074)	(5,390)	(13,464)
Income tax expense (benefit)	302	(243) (m)	59
Loss before cumulative effect of change in accounting principle	(8,376)	(5,147)	(13,523)
Cumulative effect of change in accounting principle	(410)	100	(310)
Net loss	$(8,786)	$ (5,047)	$(13,833)
Basic and diluted amounts per share:			
Loss before cumulative effect of change in accounting principle	$ (0.68)	$ (0.42)	$ (1.10)
Cumulative effect of change in accounting principle	(0.03)	0.01	(0.02)
Net loss	$ (0.71)	$ (0.41)	$ (1.12)
Weighted average shares of common stock outstanding	12,330	12,330	12,330

See accompanying notes to unaudited pro forma consolidated financial statements.

PENWEST PHARMACEUTICALS CO.

UNAUDITED PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS
For the Year Ended December 31, 1999

	Historical	Pro Forma Adjustments	Pro Forma
	(In thousands, except per share data)		
Revenues			
Product sales	$36,768	$(35,388) (l)	$ 1,380
Royalties and licensing fees	539	—	539
Total revenues	37,307	(35,388)	1,919
Cost of product sales	25,889	(25,219) (l)	670
Gross profit	11,418	(10,169)	1,249
Operating expenses			
Selling, general, and administrative	11,425	(3,810) (l)	7,615
Research and product development	7,371	(897) (l)	6,474
Total operating expenses	18,796	(4,707)	14,089
Loss from operations	(7,378)	(5,462)	(12,840)
Investment income	—	—	—
Interest expense	371	(371) (i)	—
Loss before income taxes	(7,749)	(5,091)	(12,840)
Income tax expense (benefit)	(68)	138 (m)	70
Net loss	$(7,681)	$ (5,229)	$(12,910)
Basic and diluted net loss per share	$ (0.69)	$ (0.47)	$ (1.16)
Weighted average shares of common stock outstanding	11,103	11,103	11,103

See accompanying notes to unaudited pro forma consolidated financial statements.

PENWEST PHARMACEUTICALS CO.

NOTES TO UNAUDITED PRO FORMA CONSOLIDATED FINANCIAL STATEMENTS

1. Basis of Presentation

The accompanying unaudited pro forma consolidated financial statements are presented to reflect the sale of substantially all of the assets of Penwest's excipient business to Rettenmaier (the "Asset Sale"). Penwest has also entered into an agreement with AstraZeneca for the purchase of assets relating to one of the excipient products that the Company distributes (the "AstraZeneca Acquisition"). These assets are to be resold to Rettenmaier in the Asset Sale and, accordingly, the unaudited pro forma consolidated financial statements reflect adjustments for the AstraZeneca Acquisition concurrently presented with those of the Asset Sale.

The accompanying unaudited pro forma consolidated balance sheet presents the historical financial information of Penwest as of September 30, 2002 as adjusted for the AstraZeneca Acquisition and the Asset Sale as if the transactions had occurred on September 30, 2002. The accompanying unaudited pro forma consolidated statements of operations for the nine months ended September 30, 2002 and years ended December 31, 2001, 2000, and 1999 subtract the historical operations of the business to be sold from the historical operations of Penwest and add pro forma adjustments, as if the Asset Sale and the AstraZeneca Acquisition had occurred on January 1, 2002, 2001, 2000, and 1999 respectively.

2. Pro Forma Adjustments

The unaudited pro forma consolidated financial statements reflect the following pro forma adjustments:

(a) Cash proceeds from the Asset Sale of $39,500,000.

(b) The assets sold and liabilities assumed by Rettenmaier in the Asset Sale, including $2,396,000 of cash from Penwest's wholly-owned subsidiaries engaged in the excipient business.

(c) Cash payment for the AstraZeneca Acquisition of $750,000.

(d) Note receivable due from Rettenmaier totaling $2,250,000 related to the Asset Sale; the note receivable is due in two installments: $1,000,000 on April 25, 2003 and $1,250,000 on May 25, 2004.

(e) The assets purchased as part of the AstraZeneca Acquisition consist of $3,000,000 of intellectual property and the purchase price is $750,000 in cash and a note payable of $2,250,000. The note is due in full upon the closing of the Asset Sale.

(f) Accrual for additional estimated costs incurred in the Asset Sale, and capitalized deferred costs of approximately $350,000 for the recognition of the fair value of a rent abatement provided to Penwest by Rettenmaier included as part of the Asset Sale. Estimated transaction costs include investment banking, legal, accounting, stay bonuses and other transaction-related costs. Additional transaction costs of approximately $480,000 were accrued prior to September 30, 2002 and are included in historical prepaid expenses and other current assets as of September 30, 2002. This does not include any severance payments (other than the stay bonuses referred to above) for the approximately 100 excipient business-related manufacturing, sales and administrative employees who are expected to leave Penwest's employment in connection with the Asset Sale because substantially all such employees will be offered employment by Rettenmaier; if they decline such employment they will not qualify for severance pay and if they accept such employment Penwest will have no further obligation to them for severance pay.

(g) Part of the Asset Sale cash proceeds to be used to retire Penwest's outstanding revolving line of credit of $2,643,000 at September 30, 2002.

(h) Part of the Asset Sale cash proceeds to be used to pay off the note payable to AstraZeneca in connection with the AstraZeneca Acquisition.

(i) The reduction in interest expense for the nine months ended September 30, 2002 and the years ended December 31, 2001, 2000, and 1999 for the retroactive effect of the use of sale proceeds to retire outstanding revolving lines of credit.

(j) Estimated tax liability on the gain on the Asset Sale, calculated at the federal alternative minimum tax rate of 20%.

(k) Estimated after-tax gain on the Asset Sale equals $9,866,000 less the non-cash effect of the acceleration of stock options of employees who will be hired by Rettenmaier of $2,000 and less transaction costs previously paid of $480,000 or a total of $9,384,000.

(l) Excipient business revenues and expenses, excluding corporate allocations and charges, which are assumed to remain.

(m) The tax effect for all pre-tax pro forma adjustments has been calculated to reflect the pro forma tax provision at anticipated effective tax rates.

3. Schedule of Uses of Excipient Transaction Proceeds

	(In thousands)
Gross proceeds	$41,750
Retire revolving credit line balance at September 30, 2002	(2,643)
Pay-off AstraZeneca note payable	(2,250)
Transaction costs to be paid*	(2,020)
Estimated taxes	(300)
Cash available for use in the Drug Delivery business, including working capital	$34,537

* Does not include approximately $480,000 of costs that were accrued prior to September 30, 2002.

4. Schedule of Computed After-Tax Gain on the Sale of the Excipient Business

	(In thousands)
Net effect noted in Pro Forma Balance Sheet equity section	$9,866
Less: Non-cash charge for accelerated stock options	(2)
Less: Prepaid transaction costs	(480)
Net after-tax gain as of September 30, 2002	$9,384

MARKET PRICE OF COMMON STOCK

Penwest's common stock 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 2003, 2002 and 2001 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 2003	High	Low
Quarter Ended March 31 (through January 3)	$11.20	$10.45
Period 2002	**High**	**Low**
Quarter Ended March 31	$19.68	$17.20
Quarter Ended June 30	$20.99	$17.00
Quarter Ended September 30	$17.25	$ 7.89
Quarter Ended December 31	$10.98	$ 7.01
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

On November 1, 2002, the last full business day prior to the first public announcement of the Asset Sale, the closing price of Penwest common stock was $9.05 per share.

On January [ ], 2003 there were [ ] shareholders of record.

The Company has never paid cash dividends on its common stock. The Company is prohibited from paying dividends on its common stock under its existing credit facility with the CIT Group/Business Credit, Inc. (which the Company intends to terminate concurrently with the closing of the Asset Sale). 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, whether or not the Asset Sale is completed.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information, as of November 14, 2002, regarding the beneficial ownership of the Company's common stock (1) by any person known to the Company to be the beneficial owner of more than five percent of the Company's common stock, (2) by each director, (3) by each of the Company's executive officers who received in excess of $100,000 in compensation in 2001 and (4) by the directors and executive officers as a group.

Name (and Address for Beneficial Owners over 5%)	Amount of Beneficial Ownership of Common Stock(1)	Percent of Class(2)
John P. Curran Curran Partners, L.P. 237 Park Avenue New York, NY 10017	1,634,453(3)	10.55%
Tod R. Hamachek 2981 Route 22 Patterson, NY 12563-2335	950,875(4)	5.95%
Other Directors:		
Paul E. Freiman	52,845(5)	*
Jere E. Goyan	44,264(6)	*
Rolf H. Henel	32,333(7)	*
Robert J. Hennessey	44,424(8)	*
John N. Staniforth	47,043(9)	*
Anne M. VanLent	47,765(10)	*
Other Named Executive Officers:		
Anand R. Baichwal	177,269(11)	1.13%
Stephen J. Berté, Jr.	85,529(12)	*
Jennifer L. Good	185,777(13)	1.18%
All directors and executive officers as a group (10 persons)	1,668,124(14)	10.02%

* Represents less than 1%.

(1) The number of shares beneficially owned by each person or entity known by the Company to own beneficially more than 5% of the outstanding voting stock, and each director and executive officer of the Company is determined under rules promulgated by the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares as to which an individual or group has sole or shared voting power or investment power and also any shares which an individual or group has the right to acquire within 60 days after November 14, 2002 through the exercise of any stock option, warrant or other right. The inclusion herein of such shares, however, does not constitute an admission that the named shareholder is a direct or indirect beneficial owner of such shares. Unless otherwise indicated, each person or group named in the table has sole voting and investment power (or shares such power with his or her spouse) with respect to all shares or common stock listed as owned by such person or entity.

(2) Percentage ownership calculations are based on 15,495,045 shares of common stock outstanding as of November 14, 2002. Any shares that may be acquired by a person or entity upon the exercise of stock options or warrants within 60 days of November 14, 2002 are deemed to be outstanding for the purpose of calculating the percentage of the outstanding common stock owned by such person or entity. These shares, however, are not considered outstanding when computing the percentage ownership of any other person or entity.

(3) Consists of 1,306,508 shares of common stock for which John P. Curran has sole voting power and 327,945 shares of common stock held by Curran Partners, L.P., a private equity investment fund, of which Mr. Curran is the general partner and with which Mr. Curran has dispositive power but does not have voting power.

(4) Includes 484,875 shares subject to outstanding stock options held by Mr. Hamachek, which are exercisable within the 60-day period following November 14, 2002.

(5) Includes 41,267 shares subject to outstanding stock options held by Mr. Freiman, which are exercisable within the 60-day period following November 14, 2002.

(6) Includes 36,764 shares subject to outstanding stock options held by Dr. Goyan, which are exercisable within the 60-day period following November 14, 2002.

(7) Includes 23,333 shares subject to outstanding stock options held by Mr. Henel, which are exercisable within the 60-day period following November 14, 2002.

(8) Includes 36,924 shares subject to outstanding stock options held by Mr. Hennessey, which are exercisable within the 60-day period following November 14, 2002.

(9) Includes 39,543 shares subject to outstanding stock options held by Dr. Staniforth, which are exercisable within the 60-day period following November 14, 2002.

(10) Includes 40,265 shares subject to outstanding stock options held by Ms. VanLent, which are exercisable within the 60-day period following November 14, 2002.

(11) Consists of 177,269 shares subject to outstanding stock options held by Dr. Baichwal, which are exercisable within the 60-day period following November 14, 2002.

(12) Consists of 85,529 shares subject to outstanding stock options held by Mr. Berté, which are exercisable within the 60-day period following November 14, 2002.

(13) Includes 185,602 shares subject to outstanding stock options held by Ms. Good, which are exercisable within the 60-day period following November 14, 2002.

(14) Includes an aggregate of 1,151,371 shares subject to outstanding stock options which are exercisable within the 60-day period following November 14, 2002.

THE MEETING

This proxy statement is furnished in connection with the solicitation of proxies by the Board of Directors of Penwest to be voted at the special meeting of shareholders (the "Meeting") to be held at 10:00 a.m. on February [ ], 2003, at , and at any adjournment or postponement thereof.

The notice of the Meeting, this proxy statement and enclosed proxy are being mailed to shareholders on or about January [ ], 2003.

Voting Securities and Votes Required

On January [ ], 2003, the record date for determination of shareholders entitled to notice of and to vote at the Meeting, there were outstanding and entitled to vote a total of [ ] shares of common stock of the Company, $.001 par value per share. Holders of common stock on the record date are each entitled to one vote per share of common stock that they own.

The holders of a majority of the shares of common stock issued and outstanding and entitled to vote at the meeting shall constitute a quorum for the transaction of business at the Meeting. Shares of common stock present in person or represented by proxy (including shares which abstain or do not vote with respect to any matter presented for shareholder approval) will be counted for purposes of determining whether a quorum is present at the Meeting.

The Asset Sale must be approved by the affirmative vote in favor of shareholders who hold in the aggregate a majority of the shares of common stock issued and outstanding and entitled to be voted at the Meeting. Officers and directors of Penwest and their affiliates who beneficially own a total of approximately 1,668,124 shares, constituting approximately 10.0% of the Company's issued and outstanding common stock, have indicated that they intend to vote in favor of the Asset Sale.

Shares which abstain from voting as to a particular matter, and shares held in "street name" by brokers or nominees who indicate on their proxies that they do not have discretionary authority to vote such shares as to a particular matter, will not be counted as votes in favor of such matter. Accordingly, abstentions and "broker non-votes" will have the same effect on the voting on the Asset Sale as a vote against it.

Shareholders may vote by any one of the following means:

- By mail;
- By telephone (toll free);
- Over the internet; or
- In person, at the Meeting.

To vote by mail, please sign, date and complete the enclosed proxy and return it in the enclosed self-addressed envelope. No postage is necessary if the proxy is mailed in the United States. Instructions for voting by using a toll-free telephone number or over the Internet can be found on your proxy. If you hold your shares through a bank, broker or other nominee, it will give you separate instructions for voting your shares.

All proxies will be voted in accordance with the instructions of the shareholder. If no choice is specified, the proxies will be voted in favor of the matters set forth in the accompanying notice. No proxies will be voted in favor of adjourning the Meeting to a later date for the purpose of soliciting additional proxies. Any proxy may be revoked by a shareholder at any time before its exercise by delivery of a written revocation or a subsequently dated proxy to the Secretary of the Company or by voting in person at the meeting. Attendance at the meeting will not itself be deemed to revoke a proxy unless the shareholder gives affirmative notice at the meeting that the shareholder intends to revoke the proxy and vote in person.

Solicitation of Proxies

The proxy card accompanying this proxy statement is solicited by the board of directors. Proxies may be solicited by officers, directors and other employees of the Company, none of whom will receive any additional compensation for their services. The Company reserves the right to retain other outside agencies for the purpose of soliciting proxies. Solicitations of proxies may be made personally, or by mail, telephone, telegraph, facsimile or messenger. The Company will pay persons holding shares of common stock in their names or in the names of nominees, but not owning such shares beneficially, such as brokerage houses, banks and other fiduciaries, for the expense of forwarding soliciting materials to their principals. All costs of soliciting proxies will be paid by the Company.

Shareholder Proposals for 2003 Annual Meeting

Under Rule 14a-8(e)(2) of the Securities and Exchange Commission, shareholder proposals intended for inclusion in next year's proxy statement must be directed to the Corporate Secretary at Penwest Pharmaceuticals Co., 2981 Route 22, Patterson, New York 12563-2335, and must be received by January 9, 2003. If the Company does not receive shareholder proposals by this date, it retains the discretion to vote proxies it receives.

If a shareholder of the Company wishes to present a proposal before the 2003 Annual Meeting but has not complied with the requirements for inclusion of such proposal in the Company's proxy materials pursuant to Rule 14a-8 under the Exchange Act, such shareholder must give written notice of such proposal to the Secretary of the Company at the principal offices of the Company not less than 60 days nor more than 90 days prior to the 2003 Annual Meeting. Notwithstanding the foregoing, if the Company provides less than 70 days notice or prior public disclosure of the date of the meeting to the shareholders, notice by the shareholders must be received by the Secretary no later than the close of business on the tenth day following the date on which the notice of the meeting was mailed or such public disclosure was made, whichever occurs first. If a shareholder who wished to present a proposal fails to notify the Company by this date, the proxies that management solicits for that meeting will have discretionary authority to vote on the shareholder's proposal if it is properly brought before that meeting. If a shareholder makes timely notification, the proxies may still exercise discretionary authority under circumstances consistent with the Securities and Exchange Commission's proxy rules.

Householding of Annual Meeting Materials

Some banks, brokers and other nominee record holders may be participating in the practice of "householding" proxy statements. This means that only one copy of our proxy statement may have been sent to multiple shareholders in your household. We will promptly deliver a separate copy of the document to you if you call or write us at the following address or phone number: Penwest Pharmaceuticals Co., 2981 Route 22, Patterson, New York 12563-2335, Attention: Secretary, (845) 878-8381. If you would like to receive separate copies of proxy materials in the future, or if you are receiving multiple copies and would like to receive only one copy for your household, you should contact your bank, broker or other nominee record holder, or you may contact us at the above address and phone number.

Other Matters

The Company is not aware of any other business to be acted upon at the meeting. If other business requiring a vote of the shareholders should come before the meeting, the holders of the proxies will vote in accordance with their best judgment.

WHERE YOU CAN FIND MORE INFORMATION

The Company files reports, proxy statements and other information with the SEC as required by the Exchange Act.

You can find, copy and inspect information filed by the Company with the SEC at the public reference facilities maintained by the SEC at Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549. You can obtain copies of information filed by the Company with the SEC at prescribed rates by writing to the SEC's Public Reference Section, 450 Fifth Street, N.W., Washington, D.C. 20549. You can call the SEC at 1-800-SEC-0330 for further information about the public reference room. You can review the Company's electronically filed reports, proxy and information statements on the SEC's world wide web site at http://www.sec.gov. The Company's common stock trades on the Nasdaq National Market under the symbol "PPCO". Therefore, you can inspect reports, proxy statements and other information concerning the Company at the offices of the National Association of Securities Dealers, Inc., Market Listing Section, 1735 K Street, N.W., Washington, D.C. 20006. The Company maintains a world wide web site at http://www.penw.com. The Company's web site is not a part of this proxy statement.

PENWEST PHARMACEUTICAL CO. EXCIPIENT BUSINESS

INDEX TO HISTORICAL FINANCIAL STATEMENTS OF THE COMBINED EXCIPIENT BUSINESS (UNAUDITED)

These historical financial statements should be read in conjunction with the historical financial statements of Penwest, including the related notes, set forth in its Annual Report of Form 10-K for the year ended December 31, 2001 and its Quarterly Report on Form 10-Q for the nine months ended September 30, 2002.

HISTORICAL FINANCIAL STATEMENTS OF THE COMBINED EXCIPIENT BUSINESS

PENWEST PHARMACEUTICALS CO. EXCIPIENT BUSINESS

COMBINED STATEMENTS OF NET ASSETS

	September 30, 2002	December 31, 2001	December 31, 2000
		(In thousands) (Unaudited)	
ASSETS			
Current assets:			
Cash and cash equivalents	$ 2,396	$ 1,372	$ 913
Trade accounts receivable, net of allowance for doubtful accounts of $166, $170, $183	5,526	5,034	5,095
Inventories, net	7,636	7,665	7,730
Prepaid expenses and other current assets	298	307	329
Total current assets	15,856	14,378	14,067
Fixed assets, net	12,582	14,146	16,330
Intangible assets, net	1,109	961	807
Other assets	3	3	3
Total assets	$29,550	$29,488	$31,207
LIABILITIES			
Current liabilities:			
Accounts payable	$ 1,872	$ 1,710	$ 2,725
Accrued expenses	1,000	1,016	866
Taxes payable	2,213	1,988	1,982
Total current liabilities	5,085	4,714	5,573
Deferred income taxes	2,213	2,257	2,314
Deferred revenue	154	170	190
Total liabilities	7,452	7,141	8,077
Net assets	22,098	22,347	23,130
Total liabilities and net assets	$29,550	$29,488	$31,207

See accompanying notes.

PENWEST PHARMACEUTICALS CO. EXCIPIENT BUSINESS

COMBINED STATEMENTS OF OPERATIONS

	For the Nine Months Ended September 30,		For the Years Ended December 31,		
	2002	2001	2001	2000	1999
			(In thousands) (Unaudited)		
Revenues					
Product sales	$27,198	$25,543	$33,964	$33,247	$35,388
Royalties and licensing fees	361	200	243	31	—
Total revenues	27,559	25,743	34,207	33,278	35,388
Cost of product sales	19,149	18,343	24,567	22,625	25,219
Gross profit	8,410	7,400	9,640	10,653	10,169
Operating expenses					
Selling, general, and administrative	5,940	5,377	7,527	6,583	5,615
Research and product development	459	594	813	717	897
Total operating expenses	6,399	5,971	8,340	7,300	6,512
Income before income taxes and cumulative effect of change in accounting principle	2,011	1,429	1,300	3,353	3,657
Income tax expense	674	447	356	1,116	1,186
Income before cumulative effect of change in accounting principle	1,337	982	944	2,237	2,471
Cumulative effect of change in accounting principle	—	—	—	(100)	—
Net income	$ 1,337	$ 982	$ 944	$ 2,137	$ 2,471

See accompanying notes.

PENWEST PHARMACEUTICALS CO. EXCIPIENT BUSINESS

COMBINED STATEMENTS OF CASH FLOWS

	For the Nine Months Ended September 30,		For the Years Ended December 31,		
	2002	2001	2001	2000	1999
			(In thousands) (Unaudited)		
Operating activities:					
Net income	$ 1,337	$ 982	$ 944	$ 2,137	$ 2,471
Adjustments to reconcile net income to net cash provided by operating activities:					
Depreciation and amortization	1,620	1,562	2,128	2,156	2,290
Deferred income taxes	(44)	(46)	(57)	(102)	(139)
Deferred revenue	(16)	(15)	(20)	190	—
Changes in operating assets and liabilities:					
Trade accounts receivable	(492)	(635)	62	(174)	(983)
Inventories	29	(376)	65	(3,166)	978
Accounts payable, accrued expenses, and other	380	(937)	(837)	706	1,464
Net cash provided by operating activities	2,814	535	2,285	1,747	6,081
Investing activities:					
Acquisitions of fixed assets, net	(444)	(300)	(405)	(1,262)	(652)
Intangible asset costs	(202)	(144)	(266)	(106)	(183)
Other	260	40	607	(296)	113
Net cash (used in) investing activities	(386)	(404)	(64)	(1,664)	(722)
Financing activities:					
Transfers (to) from Penwest, net	(1,586)	213	(1,727)	339	(5,973)
Net cash provided by (used in) financing activities	(1,586)	213	(1,727)	339	(5,973)
Effect of exchange rate changes on cash and cash equivalents	182	(15)	(35)	(44)	(113)
Net increase in cash and cash equivalents	1,024	329	459	378	(727)
Cash and cash equivalents at beginning of period	1,372	913	913	535	1,262
Cash and cash equivalents at end of period	$ 2,396	$1,242	$ 1,372	$ 913	$ 535

See accompanying notes.

PENWEST PHARMACEUTICALS CO. EXCIPIENT BUSINESS

COMBINED STATEMENTS OF NET ASSETS

	Net Assets	Cumulative Translation Adjustments	Comprehensive Income (Loss)	Total Net Assets
		(In thousands) (Unaudited)		
Balances, December 31, 1999	$21,715	$(1,061)		$20,654
Transfers from Penwest	604	—		604
Foreign currency translation adjustment	—	(265)	$ (265)	(265)
Net income	2,137	—	2,137	2,137
Comprehensive income			1,872	
Balances, December 31, 2000	24,456	(1,326)		23,130
Transfers to Penwest	(1,482)	—		(1,482)
Foreign currency translation adjustment	—	(245)	(245)	(245)
Net income	944	—	944	944
Comprehensive income			699	
Balances, December 31, 2001	23,918	(1,571)		22,347
Transfers to Penwest	(2,202)	—		(2,202)
Foreign currency translation adjustment	—	616	616	616
Net income	1,337	—	1,337	1,337
Comprehensive income			1,953	
Balances, September 30, 2002	$23,053	$ (955)		$22,098

See accompanying notes.

PENWEST PHARMACEUTICALS CO. EXCIPIENT BUSINESS

NOTES TO COMBINED FINANCIAL STATEMENTS (Unaudited)

1. Business

Penwest Pharmaceuticals Co. Excipient Business ("Excipient Business") develops, manufactures and distributes of branded pharmaceutical excipients which are the inactive ingredients in tablets and capsules. Based on its fundamental expertise in tabletting ingredients, the Excipient Business has developed its proprietary ProSolv®, a high functional excipient based on co-processing technology, which, among other things, improves the performance characteristics of tablets. The Excipient Business has manufacturing facilities in Iowa and Finland and has customers primarily throughout North America and Europe.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying combined financial statements include the accounts of Penwest Pharmaceuticals Co. Excipient Business, which includes wholly owned foreign subsidiaries of Penwest Pharmaceuticals Co. Material intercompany and inter-division balances and transactions have been eliminated in combination. Historically, management did not prepare stand-alone financial statements for the Excipient Business, nor was the Excipient Business considered to be a separate segment. In preparation of these combined financial statements, management used allocations in estimating certain balance sheet and statement of operations accounts that were not specifically identifiable to the Excipient Business. The allocation methodologies primarily included full-time equivalents, salary, and headcount statistics, as well as estimates based on analyses of time spent by individual employees between the Excipient Business and Penwest Pharmaceuticals Co.'s drug delivery business. Management believes that the allocation methodologies that it used are reasonable given the nature of the individual accounts that the methodologies were applied to. Had the Excipient Business not been a part of the consolidated operations of Penwest Pharmaceuticals Co., actual expenses incurred may have been different from the allocation methods used. Selling, general, and administrative expenses allocated to the Excipient Business were based on a stand-alone, unaffiliated basis and include expense allocations of approximately $2,746,000, $2,537,000, $3,400,000, $2,938,000, and $2,675,000 for the nine months ended September 30, 2002 and 2001, and the years ended December 31, 2001, 2000, and 1999, respectively. Such expenses include allocation of corporate expenses consisting primarily of costs associated with general and administrative personnel, insurance, professional fees, directors' fees, and information technology.

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.

Interim Financial Statements

The interim financial statements for the nine months ended September 30, 2002 and 2001 are also unaudited and have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, the unaudited interim financial statements of the Excipient Business contain all adjustments, consisting of normal recurring adjustments, considered necessary for fair presentation. The results of operations for the interim periods are not necessarily indicative of the results for the entire year.

Cash and Cash Equivalents

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

Credit Risk and Fair Value of Financial Instruments

Management of the Excipient Business 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 Excipient Business maintains an allowance for doubtful accounts which management believes is sufficient to cover potential credit losses. One customer of the Excipient Business accounted for approximately 10% of total revenues for the year ended December 31, 2000. No customers of the Excipient Business accounted for 10% or more of total revenues in the nine months ended September 30, 2002 or 2001 or the years ended December 31, 2001 or 1999.

The carrying value of financial instruments, which includes cash, trade receivables, 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

Management of the Excipient Business 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 Excipient Business' foreign operations are translated into U.S. dollars at period-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. Net assets includes the cumulative translation adjustments, which is a component of other comprehensive income included within the Excipient Business' financial statements. Realized gains and losses from foreign currency transactions are reflected in the combined statements of operations. Foreign currency transaction gains and losses were not significant in any period in the nine months ended September 30, 2002 or 2001 or the three years ended December 31, 2001.

Comprehensive Income

Comprehensive income is comprised of net income and other comprehensive income (loss). Other comprehensive income (loss) includes certain changes in net assets that are excluded from net income and include foreign currency translation adjustments. Comprehensive income for the nine months ended September 30, 2002 and 2001 and the years ended December 31, 2001, 2000, and 1999 has been reflected in the Combined Statements of Net Assets.

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. 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. While the Excipient Business was included in the consolidated tax returns of Penwest, the income tax provision for the Excipient Business was computed assuming the Excipient Business as a stand-alone, unaffiliated entity filing a separate return.

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 estimated or contractual licensing and supply term when there exists an obligation to supply inventory for manufacture. Other non-refundable contractual fees received in connection with a collaborator's regulatory filing or 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 in connection with products sold are included in "cost of product sales" on the Combined 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.

3. Change in Accounting Principle

Prior to the fourth quarter of 2000, the Excipient Business recognized revenue for upfront non-refundable fees when received and when all contractual obligations relating to the fees had been fulfilled. In addition, it previously recognized revenue relating to other contractual fees as achieved, in accordance with the terms of the collaboration agreements. Effective January 1, 2000, there was a change in the method of accounting for upfront non-refundable fees and other non-refundable contractual fees. Revenue received from non-refundable upfront licensing fees are recognized ratably over the estimated or contractual licensing and supply term when there exists an obligation to supply inventory for manufacture. Other contractual fees received in connection with a collaborator's regulatory filing or launch of a product are also recognized ratably over the estimated or contractual licensing and supply term. Management of the Excipient Business 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, SAB No. 101 was adopted 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 decrease net income by $100,000.

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 new rules on accounting for goodwill and other intangible assets were applied beginning in the first quarter of 2002. The adoption of the new standards did not have a material effect on the results of operations, financial position, or cash flows of the Excipient Business.

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. FAS No. 144 was adopted in the first quarter of 2002 and did not have a material effect on the results of operations, financial position, or cash flows of the Excipient Business.

In July 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated With Exit or Disposal Activities". SFAS No. 146 addresses accounting and reporting for costs associated with exit or disposal activities and nullifies Emerging Issues Task Force, or EITF, Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring). SFAS No. 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred. Under EITF Issue No. 94-3, a liability for an exit cost was recognized at the date an entity committed to an exit plan. The provisions of SFAS No. 146 are effective for exit or disposal activities that are initiated after December 31, 2002, with early adoption encouraged.

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 Excipient Business.

5. Inventories

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

Inventories are summarized as follows:

	September 30, 2002	December 31, 2001	December 31, 2000
		(In thousands)	
Raw materials	$1,312	$1,486	$2,503
Finished products	6,324	6,179	5,227
Total inventories	$7,636	$7,665	$7,730

Inventories are periodically reviewed and quality tested to identify obsolete, slow moving or otherwise unsaleable amounts. Inventories at September 30, 2002 and December 31, 2001 and 2000, are net of allowances of $215,000, $249,000 and $26,000, respectively.

The majority of the Excipient Business' inventories are manufactured from a specialty grade of wood pulp, which is purchased from a sole source supplier. Although there are qualified alternate suppliers with respect to this material, there can be no assurance that interruptions in supply will not occur in the future or that a substitute supplier will be obtained. Any of these events could have a material adverse effect on its ability to manufacture excipients, which could have a material adverse effect on its business, financial condition, cash flows and results of operations.

6. Fixed Assets

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

	September 30, 2002	December 31, 2001	December 31, 2000
		(In thousands)	
Buildings, equipment, and software	$31,324	$31,135	$30,904
Land	696	696	696
Construction in progress	174	363	431
	32,194	32,194	32,031
Less: Accumulated depreciation	19,612	18,048	15,701
	$12,582	$14,146	$16,330

Depreciation expense was approximately $1,566,000, $1,503,000, $2,017,000, $2,006,000, and $2,004,000 for the nine months ended September 30, 2002 and 2001, and the years ended December 31, 2001 2000, and 1999, respectively.

7. Intangible Assets

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

	September 30, 2002	December 31, 2001	December 31, 2000
		(In thousands)	
Patents, net of accumulated amortization of $257, $203, and $164	$1,109	$961	$735
Goodwill, net of accumulated amortization of $540, $540, and $468	—	—	72
	$1,109	$961	$807

Patents include costs to secure patents on technology developed and secure trademarks. Patents are amortized on a straight-line basis over their useful lives of 17 to 20 years. Amortization expense of approximately $54,000, $29,000, $39,000, $33,000, and $28,000 was recorded in the nine months ended September 30, 2002 and 2001, and 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 would be recorded to the extent the asset's carrying value is in excess of related discounted cash flows.

Goodwill was amortized on a straight-line basis over ten years. Amortization expense approximated $0, $29,000, $72,000, $58,000, and $58,000 for the nine months ended September 30, 2002 and 2001, and the years ended December 31, 2001, 2000, and 1999, respectively.

8. Intercompany Financing

The Company has not historically allocated interest between the drug delivery business and the Excipient Business. Accordingly, there was no interest expense allocated to the Excipient Business for the nine months ended September 30, 2002 and 2001 or the years ended December 31, 2001, 2000, and 1999, respectively. Penwest Pharmaceuticals Co.'s drug delivery business has a history of net operating losses and negative cash flows from operations. Therefore, the drug delivery business has been funded, in part, by the positive operating cash flows of the Excipient Business.

9. Commitments

Leases

The Excipient Business' 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 Excipient Business' 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 approximately $647,000, $448,000, $662,000, $282,000, and $147,300 for the nine months ended September 30, 2002 and 2001, and 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:

	Operating Leases
	(In thousands)
2002	$ 712
2003	681
2004	623
2005	307
2006	302
Thereafter	51
Total minimum lease payments	$2,676

10. Income Taxes

The provision (benefit) for federal, state and foreign income taxes computed as if the Excipient Business were filing separate tax returns consists of the following:

	Nine Months Ended September 30,		Year Ended December 31,		
	2002	2001	2001	2000	1999
			(In thousands)		
Federal:					
Current	$334	$151	$(70)	$ 827	$ 928
Deferred	(34)	(25)	(34)	(75)	(46)
Foreign:					
Current	359	306	473	290	283
Deferred	(22)	—	—	(18)	(87)
State:					
Current	41	18	10	101	114
Deferred	(4)	(3)	(23)	(9)	(6)
	$674	$447	$356	$1,116	$1,186

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

	Nine Months Ended September 30,		Year Ended December 31,		
	2002	2001	2001	2000	1999
Statutory tax rate	34%	34%	34%	34%	34%
Foreign taxes	(2)	(4)	(7)	(2)	(4)
State, net of FEA benefit	1	1	—	2	2
Other	1	—	—	—	—
	34%	31%	27%	34%	32%

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

	September 30, 2002	December 31,	
		2001	2000
		(In thousands)	
Receivable allowance	$ (64)	$ (62)	$ (67)
Inventory reserves and basis differences	(138)	(135)	(45)
Accrued expenses	21	(20)	(40)
Other	(88)	(48)	(73)
Total deferred tax assets	(269)	(265)	(225)
Depreciation and amortization	2,477	2,435	2,452
Other	5	87	87
Total deferred tax liabilities	2,482	2,522	2,539
Net deferred tax liability	$2,213	$2,257	$2,314

The Excipient Business' income tax payments, primarily comprised of foreign income taxes, approximated $520,000, $259,000, $331,000, $355,000, and $243,000, for the nine months ended September 30, 2002 and 2001, and the years ended December 31, 2001 and 2000, and 1999, respectively.

The Excipient Business' policy is to permanently reinvest foreign earnings. Accumulated foreign earnings, for which no deferred taxes have been provided, amounted to $5,715,000, $4,583,000, $5,043,000, $3,794,000, and $3,372,000 as of September 30, 2002 and 2001, and 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 income before income taxes is foreign income of $1,121,000, $1,068,000, $1,651,000, $977,000, and $971,000, for the nine months ended September 30, 2002 and 2001, and the years ended December 31, 2001, 2000, and 1999, respectively.

11. Retirement Plans and Other Employee Benefits

Savings Plan

Excipient Business 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 Excipient Business' expense under the Plan was approximately $123,000, $78,000, $116,000, $125,000, and $114,000 for the nine months ended September 30, 2002 and 2001, and the years ended December 31, 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 the nine months ended September 30, 2002 and 2001, or the years ended December 31, 2001, 2000, and 1999.

Health Care and Life Insurance Benefits

The Excipient Business' employees participate in Penwest Pharmaceutical Co.'s health care and life insurance benefit plans which are available to most active employees. Costs incurred for these benefits were approximately $344,000, $346,000, $408,000, $319,000, and $276,000, in the nine months ended September 30, 2002 and 2001, and the years ended December 31, 2001, 2000, and 1999, respectively.

12. 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 could cause the Excipient Business to pay substantial damages, alter its products or processes, obtain licenses and/or cease certain activities. Even if the outcome is favorable, litigation costs could be substantial. Although the legal costs of defending litigation relating to a patent infringement claim are generally the contractual responsibility of collaborators, the Excipient Business could nonetheless incur significant unreimbursed costs in participating and assisting in the litigation.

13. Geographic Data

The Excipient Business' geographic area data for the nine months ended September 30, 2002 and 2001, and each of the three fiscal years ended December 31, 2001, 2000, and 1999 were as follows:

	North America	Finland	Other	Eliminations	Total
			(In thousands)		
SEPTEMBER 30, 2002					
Total Revenues	$27,112	$5,244	$3,279	$(8,076)	$27,559
Long-lived Assets	$13,036	$ 618	$ 40		$13,694
SEPTEMBER 30, 2001					
Total Revenues	$25,581	$ 586	$ 293	$ (717)	$25,743
Long-lived Assets	$15,442	$ 534	$ 21		$15,997
DECEMBER 31, 2001					
Total Revenues	$32,616	$6,912	$3,650	$(8,971)	$34,207
Long-lived Assets	$14,527	$ 557	$ 26		$15,110
DECEMBER 31, 2000					
Total Revenues	$32,142	$5,708	$2,948	$(7,520)	$33,278
Long-lived Assets	$16,516	$ 604	$ 20		$17,140
DECEMBER 31, 1999					
Total Revenues	$33,371	$5,490	$4,038	$(7,511)	$35,388
Long-lived Assets	$16,777	$ 649	$ 33		$17,459

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 Excipient Business.

14. Subsequent Events

On October 25, 2002, Penwest entered into an agreement with AstraZeneca AB for the purchase of assets relating to Pruv®, one of the excipient products that the Excipient Business distributes, for a purchase price of $3.0 million, including cash of $750,000 and a promissory note of $2.25 million. In accordance with the terms of the Pruv agreement, the Company will be required to pay the promissory note in full upon the closing of the sale of the Excipient Business (the "Asset Sale") to Josef Rettenmaier Holding GmbH & Co. KG ("Rettenmaier") (see below).

On November 1, 2002, Penwest entered into an agreement with Rettenmaier to sell substantially all of the assets that comprise its Excipient Business for $41.75 million in cash ($39.5 million to be received at closing, $1.0 million on April 25, 2003 and $1.25 million on May 25, 2004), subject to adjustment based on the net working capital of the Excipient Business on the closing date, and the assumption of specified liabilities. The closing of the Asset Sale is expected to occur in the first quarter of 2003.

PURCHASE AGREEMENT

By and Between

Penwest Pharmaceuticals Co.

and

Josef Rettenmaier Holding GmbH & Co. KG

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PURCHASE AGREEMENT

Agreement made as of November 1, 2002, between Penwest Pharmaceuticals Co., a Washington corporation with its principal office at 2981 Route 22, Patterson, New York 12563-9970 (the "Company"), and Josef Rettenmaier Holding GmbH & Co. KG, a German limited partnership with its principal office at Holzmuehle 1, Rosenberg, Germany (the "Buyer").

Preliminary Statement

The Company and its subsidiaries Penwest Pharmaceuticals Ltd., Penwest Pharmaceuticals GmbH and Penwest Pharmaceuticals Oy (collectively, the "Subsidiaries") are referred to in this Agreement as the "Sellers."

The Buyer desires to purchase, and the Company desires to sell, substantially all of the assets and business of the Sellers pertaining to the development, testing, manufacture, distribution and sale of excipient products, such products being used, inter alia, in the manufacture of tablets by pharmaceutical and nutritional companies (such assets and business being referred to as the "Business"), as distinct from controlled release drug delivery technologies and systems and other products and services (the "Excluded Lines of Business") and from the Company's administrative functions and corporate overhead, for the purchase price set forth below and the assumption of certain of the Sellers' liabilities as set forth below, subject to the terms and conditions of this Agreement.

In order to effect this transaction, the Company will sell to the Buyer the Assets described below. The Assets consist of certain assets described below, owned directly by the Company and located primarily in the United States (the "U.S. Assets") and all of the outstanding capital stock of the Subsidiaries (the "Subsidiary Shares").

NOW, THEREFORE, in consideration of the mutual premises hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. *Sale and Delivery of the Assets*

1.1 *Sale and Delivery of the U.S. Assets.*

(a) Subject to and upon the terms and conditions of this Agreement, at the closing of the transactions contemplated by this Agreement (the "Closing"), the Company shall sell, transfer, convey, assign and deliver to the Buyer, and the Buyer shall purchase from the Company, all of the Company's right, title and interest in and to all of the U.S. Assets, consisting of (x) the properties, assets and other claims, rights and interests owned by the Company that pertain to the Business and are described in Subsections (i) through (x) below (except for those assets that are listed on *Schedule 1.1(a)* under the caption "Certain Excluded Assets"), (y) those properties, assets and other claims, rights and interests that are listed on *Schedule 1.1(a)* under the caption "Certain Included Operating Assets" which pertain both to the Business and the Excluded Lines of Business but which the parties have agreed shall constitute Assets and (z) those properties, assets and other claims that are listed on *Schedule 1.1(a)* under the caption "Certain Included Administrative Assets" which are used in the Company's administrative functions and corporate overhead primarily for the support of the Business rather than primarily for the support of the Excluded Lines of Business or for general company-wide purposes, and which the parties have agreed shall constitute Assets:

(i) the real property and interests therein, options or similar rights to purchase real property and buildings, structures, facilities, fixtures and other improvements thereon owned by the Company that are listed on *Schedule 1.1(a)(i)* attached hereto (collectively, the "U.S. Real Property");

(ii) the machinery and equipment, fixtures, furniture, leasehold improvements, construction in progress, motor vehicles and spare parts, owned by the Company on the Closing Date (as defined in

Section 1.6) that are listed on *Schedule 1.1(a)(ii)* attached hereto (collectively, the "U.S. Fixed Assets");

(iii) the inventories, finished goods, work in process, raw materials, office supplies, maintenance parts and supplies, packaging materials and similar items pertaining to the Business owned by the Company as they exist on the Closing Date;

(iv) the rights (collectively, the "U.S. Contract Rights") of the Company under those contracts, agreements, leases, licenses and other instruments to which the Company is a party and which pertain to the Business, including without limitation those that are listed on *Schedule 2.15(a)(i)* attached hereto (collectively, the "U.S. Contracts");

(v) the prepaid expenses, security deposits, other deposits and other similar assets of the Company pertaining to the Business as they exist on the Closing Date;

(vi) copies (in hard copy and, if readily available to the Company, electronic media) of the Company's drug master files, books, records and accounts, correspondence, manuals, customer lists, employment records (other than medical or other confidential records of employees who do not consent to the transfer of such records to the Buyer), studies, reports or summaries relating to or pertaining to the Business;

(vii) the Company's right, title and interest in and to intangible property rights pertaining to the Business identified on *Schedule 1.1(a)(vii)* attached hereto, including inventions, discoveries, trade secrets, processes, formulas, United States and foreign patents, patent applications, trade names, trademarks, trademark registrations, applications for trademark registrations, copyrights, copyright registrations, owned or, where not owned, used by the Company and licenses and other agreements to which the Company is a party (as licensor or licensee) or by which the Company is bound relating to any of the foregoing kinds of property or rights to any "know-how" or disclosure or use of ideas (collectively, the "U.S. Intangible Property");

(viii) the accounts, accounts receivable, notes and notes receivable pertaining to the Business as they exist on the Closing Date which are payable to the Company, including any security held by the Company for the payment thereof and including any accounts receivable or other rights to receive payment from any of the Subsidiaries (collectively, the "U. S. Accounts Receivable");

(ix) to the extent transfer is permitted under applicable law or regulation, Permits (as defined in Section 2.16) that are necessary for the lawful ownership or operation of the Business or the Assets; and

(x) the goodwill of the Business (as distinct from the goodwill of the Excluded Lines of Business or the goodwill or going concern value of the Company as a business organization), including the exclusive right to represent oneself as the successor to the Business.

As a general principle, in case of doubt it will be presumed that physical assets belonging to the Company located at its facility at Cedar Rapids, Iowa and other assets, whether or not physical, which are not listed under the caption "Certain Excluded Assets" and which pertain primarily to the Business, are included in the U.S. Assets.

(b) The assets to be transferred to the Buyer from the Company under this Agreement shall *not* include:

(i) unless specifically listed on *Schedule 1.1(a)* under the caption "Certain Included Operating Assets" or "Certain Included Assets", assets (including without limitation assets of the types described in *Section 1.1(a)* above), primarily used or useful in the Excluded Lines of Business, used in the Company's administrative functions or corporate overhead activities (unless used solely to support the Business) or otherwise not pertaining to the Business;

(ii) any cash, bank account balances, negotiable instruments, securities (other than the Subsidiary Shares) or similar assets;

(iii) any casualty, liability or other policies of insurance and rights thereunder or any rights under self insurance programs maintained or established with respect to the Business;

(iv) any refunds of any Tax (as defined in Section 2.22(a)(ii)), including, without limitation, any claims for refunds filed prior to the Closing Date;

(v) any right or franchise of the Company to be a corporation or any documents pertaining thereto;

(vi) any indemnity or contribution rights granted to or owed by third parties with respect to liabilities or obligations that do not constitute Assumed Liabilities (as hereinafter defined), or any rights or assets arising from and directly related to the defense, release, compromise, discharge or satisfaction of such liabilities and obligations;

(vii) any causes of action, judgments, claims or demands of whatever nature against third parties arising out of or relating to events prior to the Closing Date;

(viii) any guarantees given by the Company or its affiliates for the benefit of the Business;

(ix) any rights of the Company under this Agreement;

(x) any names or marks containing the words "Penwest", "TIMERx" , "Synchrodose", or "Geminex" (collectively, the "Excluded Marks") or the Penwest logo, except as set forth in Section 10.3; or

(xi) any assets which pertain to the Business but are nevertheless listed on *Schedule 1.1(a)* attached hereto under the caption "Certain Excluded Assets" (collectively, the "Excluded Assets").

(c) At any time and from time to time after the Closing, at the Buyer's request and without further consideration, the Company shall promptly cooperate in executing and delivering such instruments of sale, transfer, conveyance, name change, assignment and confirmation prepared by the Buyer, and taking such other action, as the Buyer may with commercial reasonableness request to more effectively transfer, convey and assign to the Buyer, and to confirm the Buyer's title to, all of the U.S. Assets, to put the Buyer in actual possession and operating control thereof, to assist the Buyer in exercising all rights with respect thereto and to carry out the purpose and intent of this Agreement.

1.2 *Sale and Delivery of the Subsidiary Shares.* Subject to the terms and conditions of this Agreement, at the Closing, the Company shall sell, convey, assign, transfer and deliver to the Buyer all of the Subsidiary Shares free and clear of all Encumbrances (as defined in Section 2.4), and the Buyer shall purchase, acquire and accept the Subsidiary Shares from the Company. The Subsidiary Shares, together with the U.S. Assets, constitute the assets being sold to the Buyer (collectively, the "Assets").

1.3 *Purchase Price.* The "Purchase Price" for the Assets shall be Forty-One Million Seven Hundred Fifty Thousand Dollars ($41,750,000), payable as follows: Thirty-Nine Million Five Hundred Thousand Dollars ($39,500,000) payable in cash and Two Million Two Hundred Fifty Thousand Dollars ($2,250,000) payable in the form of a promissory note in the form attached as Exhibit A hereto (the "Promissory Note"). At the Closing, the Buyer shall pay the cash portion of the Purchase Price by wire transfer of immediately available funds to an account designated by the Company and shall deliver the Promissory Note. The Purchase Price shall be subject to subsequent adjustment as provided in Section 1.7

1.4 *Assumption of Liabilities; Etc.*

(a) At the Closing, the Buyer shall execute and deliver an Instrument of Assumption of Liabilities (the "Buyer's Instrument of Assumption") substantially in the form attached hereto as *Exhibit B,* pursuant to which it shall assume and agree to perform, pay and discharge the following (collectively, the "Assumed Liabilities"):

(i) all liabilities and obligations of the Company in respect of the Business of the same kind and nature as those set forth in the Sellers' Financial Information (as defined in Section 2.5) including, without limitation, all accounts payable, accrued expenses, accrued Taxes (as defined in

Section 2.22(a)(i)) (other than Taxes imposed upon or measured by net income), customer charge backs, discounts, commissions, credits and rebates, customer deposits, amounts owing to any of the Subsidiaries, and other liabilities which shall not have been discharged prior to the Closing Date and which are included in the Closing Date Balance Sheet (as defined in Section 1.7);

(ii) all obligations of the Company arising from and after the Closing Date under the U.S. Contracts referred to in Section 1.1(a)(iv);

(iii) all obligations to Continuing Employees (as defined in Section 5.8) solely to the extent expressly assumed under Section 5.8; and

(iv) all other liabilities, obligations and commitments of the Company pertaining to the Business that are listed on *Schedule 1.4(a)* attached hereto.

(b) Subject to Sections 1.4(c) and 1.4(d), the Buyer shall not at the Closing assume or agree to perform, pay or discharge, and the Company shall remain unconditionally liable for, all obligations, liabilities and commitments, fixed or contingent, of the Company other than the Assumed Liabilities. In particular and without limitation, the Buyer shall not assume any liability with respect to Taxes imposed upon or measured by net income, Product Liability, Employment Plans or Employees (each as hereinafter defined), except as otherwise set forth herein.

(c) Notwithstanding any other provisions of this Agreement, the following obligations, liabilities and commitments of the Company shall be allocated as follows:

(i) 100% to the Company: all Losses (as defined in Section 9.1) in respect of product liability claims for personal injuries or property damage or other Losses (including without limitation, Losses related to exposure or alleged exposure to any materials contained in such products) ("Product Liabilities") with respect to products shipped or otherwise disposed of by the Company prior to the Closing Date;

(ii) 100% to the Buyer: all Losses in respect of Product Liabilities with respect to products sold or otherwise disposed of on or after the Closing Date; and

(iii) as provided in Section 5.8: all obligations and liabilities to Employees (as defined in Section 2.17(a)).

(d) All material agreements and commitments, whether written, oral or otherwise, which are solely between the Company, on the one hand, and any of the Subsidiaries (excluding agreements solely between and among the Subsidiaries (if any)), on the other hand, are set forth on *Schedule 1.4(d)* and, except as otherwise expressly provided in such Schedule or elsewhere in this Agreement, all such agreements, etc., whether or not material, shall be terminated and of no further effect, simultaneously with the Closing without any further action or liability on the part of the parties thereto.

1.5 *Allocation of Purchase Price and Assumed Liabilities.* The aggregate amount of the Purchase Price and the Assumed Liabilities shall be allocated among the various categories of U.S. Assets, the Subsidiary Shares and the covenant not to compete set forth in Section 10.1 as set forth on *Schedule 1.5* attached hereto (the "Allocation Schedule"), subject to subsequent adjustment to the extent required by the calculation of Net Working Capital pursuant to Section 1.7. The Buyer shall prepare the allocation and submit it to the Company, which shall not withhold its approval unreasonably. The allocation set forth in such Allocation Schedule, shall comply with the rules of Section 1060 of the Internal Revenue Code of 1986, as amended (the "Code") and the Treasury Regulations promulgated thereunder. The Buyer and the Company agree to be bound by the allocation set forth in the Allocation Schedule for all purposes of Tax reporting, including the filing of IRS Form 8594 in accordance with the Allocation Schedule. Neither the Buyer nor the Company shall file a Tax Return or take any position with any Taxing Authority that is inconsistent with the Allocation Schedule.

1.6 *The Closing.* The Closing shall take place at the offices of Alston & Bird LLP, 90 Park Avenue, New York, New York 10016, and shall occur on the first business day following the later to occur of (i) the

satisfaction and/or waiver of the conditions to close set forth in Sections 7 and 8 of this Agreement, and (ii) the date on which the shareholders of the Company approve the Agreement or on such other date as is mutually agreeable to the Buyer and the Company (the "Closing Date"). The transfer of the Assets by the Company to the Buyer shall be deemed to occur at 9:00 a.m., New York time, on the Closing Date. The parties agree to use commercially reasonable efforts to set the Closing Date on a day within five (5) days of the end of a month. If the Closing Date falls within said five (5) day period, the parties agree to use the month end balance sheet of the Business as the Closing Date Balance Sheet as provided in Section 1.7.

1.7 *Post Closing Adjustment.* The parties hereto acknowledge that the Purchase Price assumes that the Assets include net working capital ("Assumed Net Working Capital") of Thirteen Million Eight Hundred Thousand Dollars ($13,800,000). Within 20 days after the calendar month end following the Closing Date, the Company shall prepare and deliver to the Buyer a balance sheet of the Business (reflecting the Assets and the Assumed Liabilities) as of the Closing Date (the "Closing Date Balance Sheet") and a calculation of Net Working Capital, as defined under United States generally accepted accounting principles ("GAAP") (the "Calculation"). The Buyer shall provide access to the books and records of the Business and the services of the accounting personnel of the Business under the direction of the Company in order to facilitate the preparation of the Closing Date Balance Sheet and the Calculation. Except as disclosed on *Schedule 2.5(a)* or *Schedule 2.5(b),* the Closing Date Balance Sheet shall be prepared in accordance with GAAP, consistent with the methods used by the Company to prepare its financial statements that have been filed with the Securities and Exchange Commission (the "SEC") and with its "Balance Sheet – Excipients Business" as of March 31, 2002 previously provided to the Buyer. The Buyer and its representatives shall have 20 days to inspect the Closing Date Balance Sheet and the Calculation. If the Buyer disagrees with any items contained in the Closing Date Balance Sheet or the Calculation, then the Buyer and the Company shall have 30 days after the delivery of a notice of objection by the Buyer to come to an agreement as to what the Calculation should have been. If they are unable to agree within such 30-day period, an accounting firm of recognized national standing shall be appointed to resolve the dispute (including, if necessary, auditing the Closing Date Balance Sheet) within 60 days and whose decision shall be final and binding. Promptly upon the determination of the Net Working Capital, if it is more or less than the Assumed Net Working Capital, the Purchase Price shall be increased (dollar-for-dollar) by the amount of any excess amount or reduced (dollar for dollar) by any shortfall amount, as the case may be. Any excess or shortfall determined by such accounting firm shall be paid within two working days of said determination, the excess, if any, to be paid to the Company and the shortfall, if any, to be paid to the Buyer. The parties shall share the fees of the accounting firm in proportion to the ratio that the Net Working Capital as determined by the accounting firm bears to the calculations of the Buyer and the Company, respectively.

2. *Representations and Warranties of the Company*

Except as set forth in one or more Schedules attached hereto, the Company represents and warrants to the Buyer that all of the statements contained in this Section 2 are true as of the date of this Agreement (or, if made as of a specified date, as of such date). For purposes of the representations and warranties of the Company contained herein, disclosure in any of the Schedules attached hereto of any facts or circumstances shall constitute disclosure for purposes of any other Schedule (and therefore the corresponding representation and warranty) if it would be evident on the face of the Schedule to a reader familiar with the Business that such disclosure is applicable. The inclusion of any information in any Schedule attached hereto or other document delivered by the Company pursuant to this Agreement shall not be deemed to be an admission or evidence of the materiality of such item, nor shall it establish a standard of materiality for any purpose whatsoever.

2.1 *Organization.* The Company is a corporation, duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization, and has all requisite power and authority (corporate and other) to own its properties, to carry on its business as now being conducted, to execute and deliver this Agreement and the agreements contemplated herein, and to consummate the transactions contemplated hereby. *Schedule 2.1* attached hereto lists all corporate, partnership, joint venture and other entities in which any Seller holds, directly or indirectly, a 5% or greater interest. Each of the Subsidiaries is a corporation or other entity duly organized, validly existing and in good standing under the laws of the jurisdiction of its

incorporation or organization and has all requisite power and authority to own its properties and to carry on its business as now being conducted. Each of the Company and each Subsidiary is duly qualified to do business and in good standing in all jurisdictions in which its ownership of property or the character of its business requires such qualification, except where the failure to be so qualified would not have a material adverse effect on the Business. Copies of the charter, bylaws and other governing instruments of the Company and each of the Subsidiaries, each as amended to date, have been previously delivered to the Buyer, are complete and correct, and no amendments have been made thereto or have been authorized since the date thereof.

2.2 *Capitalization of the Subsidiaries and Title to the Shares.* *Schedule 2.2* attached hereto specifies each Subsidiary's jurisdiction of organization and sets forth the number of shares of capital stock authorized and the number of shares outstanding for each Subsidiary. The Company owns (beneficially or of record) all issued and outstanding shares of stock of each Subsidiary. The Company has the right to deliver and sell, or to cause to be delivered and sold, the Subsidiary Shares pursuant to this Agreement. The certificates representing the Subsidiary Shares are free and clear of all Encumbrances (as defined in Section 2.4). All the Subsidiary Shares are duly authorized, validly issued, fully paid and non-assessable. Except as set forth on *Schedule 2.2* attached hereto, as of the date hereof (x) there are no shares of capital stock of the Subsidiaries authorized, issued or outstanding, and (y) there are no existing options, warrants, calls, pre-emptive rights, subscriptions or other rights, agreements, arrangements or commitments of any character relating to the issued or unissued capital stock of the Subsidiaries obligating the Subsidiaries to issue, transfer or sell or cause to be issued, transferred or sold, any of its shares of capital stock.

2.3 *Authorization.* Except for stockholder approval as contemplated by Section 5.4, the execution and delivery of this Agreement by the Company, and the agreements provided for herein to which the Company is a party, and the consummation by the Company of all transactions contemplated hereby, have been duly authorized by all requisite corporate action. Upon receipt of stockholder approval, this Agreement and all such other agreements and obligations entered into and undertaken in connection with the transactions contemplated hereby and thereby to which the Company is a party will constitute the valid and legally binding obligations of the Company, enforceable against the Company in accordance with their respective terms. The execution, delivery and performance by the Company of this Agreement and the agreements provided for herein, and the consummation by the Company of the transactions contemplated hereby and thereby, will not, with or without the giving of notice or the passage of time or both: (a) violate the provisions of any law, rule or regulation applicable to the Company or any other Seller; (b) violate the provisions of the charter, bylaws or other governing instruments of the Company or any other Seller; (c) violate any judgment, decree, order or award of any court, governmental body or arbitrator that names any of the Sellers or is binding on any of the Assets; or (d) conflict with or result in the breach or termination of any term or provision of, or constitute a default under, or cause any acceleration under, or cause the creation of any lien, charge or encumbrance upon the properties or assets of the Company or any other Seller pursuant to, any indenture, mortgage, deed of trust or other instrument or agreement to which the Company or any other Seller is a party or by which the Company or any other Seller or any of their respective properties is or may be bound, except such violations, breaches or defaults which (A) would not, individually or in the aggregate, have a material adverse affect on the Business or on the Company's ability to consummate the transactions contemplated herein or (B) would become applicable as a result of the business or activities in which the Buyer is or proposed to be engaged other than the Business or as a result of any acts or omissions by, or the status of any facts pertaining to, the Buyer or (C) would arise only if any of the consents and approvals listed on *Schedule 2.3* attached hereto is not obtained. *Schedule 2.3* attached hereto lists the consents and approvals of third parties that are required in connection with the consummation of the transactions contemplated by this Agreement and identifies, under the heading "Individually Material Consents," those consents and approvals which, if not obtained or if not dealt with in the manner contemplated by the final sentence of Section 5.7, would individually or in the aggregate, have a material adverse effect on the Business or on the Company's ability to consummate the transactions contemplated herein.

2.4 *Ownership of the Assets.* Schedule 2.4(i) attached hereto lists all claims, liabilities, liens, pledges, charges and encumbrances affecting the Assets and the assets of the Subsidiaries (collectively, the "Encumbrances") having in each instance a value in excess of $50,000. The Company is, and at the Closing

will be, the true and lawful owner of the U.S. Assets, and will have the right to sell and transfer to the Buyer marketable title to the U.S. Assets, free and clear of all Encumbrances of any kind, except for (a) liens for Taxes not yet due and payable or being contested in good faith, (b) Encumbrances that will be released on the Closing Date, (c) such imperfections of title, easements, or other non-financial encumbrances, if any, as are not, individually or in the aggregate, substantial in character, amount or extent and do not materially interfere with the present use of the property subject thereto or affected thereby, or otherwise materially impair operation of the Business or (d) Encumbrances set forth on *Schedule 2.4(ii)* attached hereto (collectively, the "Permitted Encumbrances"). The delivery to the Buyer of the instruments of transfer of ownership contemplated by this Agreement will vest marketable title to the U.S. Assets in the Buyer, free and clear of all Encumbrances of any kind or nature whatsoever, except for the Permitted Encumbrances.

Schedule 2.4(iii) attached hereto sets forth a description of all the real property owned or leased by any Seller and used in the Business. The Sellers have delivered to the Buyer copies of the most recent title reports and surveys in their possession, if any, related to real property owned by them. Except as set forth in *Schedule 2.4(iii)* attached hereto, with respect to each parcel of U.S. Real Property and the real property and interests therein, options or similar rights to purchase real property and buildings, structures, facilities, fixtures and other improvements thereon that are owned by the Subsidiaries (the "Non-U.S. Real Property" and, together with the U.S. Real Property, the "Real Property"):

(i) the identified owner has, or will at Closing have, marketable title to each such parcel, free and clear of Encumbrances, other than Permitted Encumbrances;

(ii) there are no (A) pending or, to the Company's knowledge, threatened condemnation proceedings relating to any such parcel, or (B) pending or, to the Company's knowledge, threatened litigation or administrative actions relating to any such parcel;

(iii) there are no leases, subleases, licenses or agreements, written or oral, granting to any party or parties the right of use or occupancy of any material portion of such parcel;

(iv) there are no outstanding options or rights of first refusal to purchase any such parcel, or any portion thereof or interest therein;

(v) to the Company's knowledge, all facilities located on such parcel are supplied with utilities adequate for the operation of such facilities; and

(vi) accurate copies of all deeds, surveys, and title insurance policies, if any, in the Sellers' possession have been delivered to Buyer to enable Buyer to obtain, at its expense, such title insurance and updated surveys as Buyer may wish to obtain.

2.5 *Financial Information.*

(a) *Schedule 2.5(a)* sets forth financial information with respect to the revenue, costs and expenses and earnings before interest and taxes of the Business for the years ended December 31, 1999, 2000 and 2001 and with respect to assets and liabilities at December 31, 2000 and 2001, and for the 6 months ended June 30, 2002 (collectively, "Financial Information"). The Financial Information presents fairly the financial condition and results of operations of the Business as at the respective dates of and for the periods referred to in such Financial Information, all in accordance with GAAP and the methods used by the Company to prepare its financial statements that have been filed with the SEC, except as noted in *Schedule 2.5(a)*. The Financial Information reflects the consistent application of such accounting principles throughout the periods involved. The Financial Information has been prepared from and is in accordance with the accounting records of Seller, which are true and complete in all material respects, have been maintained in accordance with normal business practices, and accurately and fairly reflect all properties, assets, liabilities, transactions and appropriate accruals of the Business in accordance with GAAP. Except as noted on *Schedule 2.5(a),* all costs and expenses of any nature whatsoever associated with the ownership and operation of the Business and the Assets have been, in all material respects, fully and properly reflected in the Financial Information, and the Financial Information includes all expenses incurred by or on behalf of the Business that are necessary to operate the Business on a stand-alone basis

without benefit of any synergies or cost savings attributable to the Buyer's existing operations ("Stand-Alone Basis"). Except as noted on *Schedule 2.5(a),* the expenses allocated to the Business approximate in all material respects the amounts necessary to operate the Business on a Stand-Alone Basis.

(b) *Schedule 2.5(b)* sets forth financial information with respect to the revenues and gross profits of the Business for the seven months ended July 31, 2002 and the eight months ended August 31, 2002 (collectively, "Recent Financial Information"). The Recent Financial Information presents fairly the revenues and gross profits of the Business for the periods referred to in such Recent Financial Information, in accordance with GAAP, except as noted in *Schedule 2.5(b)*. The Recent Financial Information reflects the consistent application of such accounting principles with the Financial Information. The Recent Financial Information has been prepared from and is in accordance with the accounting records of Seller, which are true and complete in all material respects, have been maintained in accordance with normal business practices, and accurately and fairly reflect all transactions and appropriate accruals of the Business in accordance with GAAP, except as noted in *Schedule 2.5(b)*.

2.6 *AstraZeneca Payments.* The Company has entered into the agreement with AstraZeneca plc attached hereto as *Schedule 2.6*, has made the first payment required thereunder (in the amount of $750,000) and shall pay on or before the Closing Date the remaining payments (in the total amount of $2,250,000) required to be paid thereunder.

2.7 *Accounts Receivable.* Except as set forth on *Schedule 2.7* attached hereto, all accounts receivable of the Business, to the extent uncollected on the date hereof, represent valid obligations owing by the account debtors thereof. Except as set forth on *Schedule 2.7,* there are no refunds, rights of setoff, discounts or other adjustments payable in respect of any of the accounts receivable of the Business.

2.8 *Absence of Undisclosed Liabilities.* Except as and to the extent (a) reflected and reserved against in the Financial Information or not required to be reflected therein in accordance with GAAP, (b) set forth on *Schedule 2.8* attached hereto, (c) incurred in the ordinary course of business after the date of the Financial Information or (d) allocated between the Company and the Buyer pursuant to Section 1.4(c), to the Company's knowledge no Seller (individually) has, nor do the Sellers (in the aggregate) have, any material liability or obligation, secured or unsecured, whether accrued, absolute, contingent, unasserted or otherwise, affecting the Assets. No Seller sells Inventory (as defined in Section 2.11) pursuant to an agreement or arrangement which obligates the Seller to accept such Inventory for return (except for failure to conform to the applicable warranties).

2.9 *Litigation.* Except as set forth on *Schedule 2.9* attached hereto, no Seller is a party to, or to the Company's knowledge threatened with the assertion of, and none of the Assets is subject to, any material litigation, suit, action, investigation, proceeding or controversy before any court, administrative agency or other governmental authority materially relating to or affecting the Assets or the Business. To the Company's knowledge, no Seller is in violation of or in default with respect to any judgment, order, writ, injunction, decree or rule of any court, administrative agency or governmental authority or any regulation of any administrative agency or governmental authority which names any Seller materially relating to or affecting the Assets or the Business.

2.10 *Insurance.* A list of all of all material fire, theft, casualty, general liability, workers compensation, business interruption, environmental impairment, product liability, automobile and other insurance policies currently insuring the Assets or the Business have been previously been delivered to the Buyer. Buyer acknowledges and agrees that effective with the Closing all insurance policies covering the Business and the Assets owned by the Company and the Subsidiaries shall terminate and no further liability shall arise to the insurers under any of such policies which are claims-made policies.

2.11 *Inventory.* *Schedule 2.11* attached hereto lists the inventories, finished goods, work in process, raw materials, packaging materials and similar items pertaining to the Business owned by any Seller (the "Inventory") by category, as of a date not more than 30 days prior to the date hereof, which Schedule has been prepared on a Seller-by-Seller basis, including a general description, quantity and cost of such Inventory. All Inventory is properly labeled, is located at the Company's places of business or is in transit,

was acquired in the ordinary course of business, is not the subject of any consignment arrangement, and at time of Closing appeared to Sellers to be of good and merchantable quality, useable or saleable in the ordinary course of business, without markdown, and appeared to Sellers to be not obsolete.

2.12 *Fixed Assets.* *Schedule 2.12* attached hereto lists (a) all Fixed Assets (as defined below) having an acquisition cost of $25,000 or more and (b) all categories of Fixed Assets (on a Seller-by-Seller basis) as of the date hereof, including a description and the book value of each such category. "Fixed Assets" shall mean the U.S. Fixed Assets, and the equipment, furniture, leasehold improvements and construction in progress owned by the Subsidiaries on the Closing Date (the "Non-U.S. Fixed Assets"). The Fixed Assets are being sold on an "as is, where is" basis except that, unless otherwise indicated on *Schedule 2.12,* all material structures and all pieces of machinery and equipment having an acquisition cost of $100,000 or more included in the Fixed Assets are operational and usable for the purposes for which they are currently used and together are adequate for the conduct of the Business, as currently conducted.

2.13 *Leases.* *Schedule 2.13* attached hereto sets forth a list as of the date hereof of all leases relating to the Business to which any Seller is a party (the "Leases"), other than leases with annual lease payments of less than $15,000, identifying separately each Lease. Except as set forth on *Schedule 2.13,* the Company does not lease any real property other than space in public warehouses in connection with the conduct of the Business. Copies of the Leases, and all material amendments and supplemental agreements thereto, have previously been delivered by the Company to the Buyer. To the Company's knowledge, and assuming due authorization and execution of such Leases by parties other than the Sellers, the Leases are in full force and effect, are binding and enforceable against each of the parties thereto in accordance with their respective terms and have not been modified or amended since the date of delivery to the Buyer. No party to any Lease has sent written notice to the other claiming that such party is in default thereunder, which was not cured during any applicable cure period. To the Company's knowledge, there has not occurred any event which would constitute a material breach of or material default in the performance of any material covenant, agreement or condition contained in any Lease, nor has there occurred any event which with the passage of time or the giving of notice or both would constitute such a material breach or material default. Except as set forth on *Schedule 2.13,* no Lease has been assigned and no space leased under any Lease has been subleased.

2.14 *Change in Financial Condition and Assets.* Except as set forth on *Schedule 2.14* attached hereto, since December 31, 2001) there has been no transaction or occurrence relating to the Business in which any of the Sellers has:

(a) suffered any material adverse change in the Business, Liabilities, Assets or earnings;

(b) written down or written up the value of any material Inventory, or determined as collectible any accounts receivable or portion thereof previously considered to be uncollectible;

(c) canceled any material debts or waived any material claims or rights;

(d) disposed of or permitted to lapse any right to the use of any material item of Intellectual Property or disposed of or, to the Company's knowledge, disclosed to any Person not authorized to have such information any material item of Intellectual Property not previously a matter of public knowledge or existing in the public domain;

(e) sold, transferred or otherwise disposed of any of the material Assets or material assets which would constitute Assets if still owned by any of the Sellers (including Inventory) except in the ordinary course of business consistent with past practice;

(f) suffered any casualty loss or damage in excess of $50,000 in the aggregate (whether or not insured against);

(g) disposed of any material financial or other records pertaining to the Business other than records older than 3 years old;

(h) paid any claims other than in the ordinary course of business and not exceeding $50,000 in the aggregate;

(i) breached any agreement or taken any action or failed to take any action which, with notice and the passage of time, would constitute a breach of any material agreement or a breach of any representation or covenant of Sellers contained in this Agreement;

(j) since June 30, 2002, taken any other action which is not either in the ordinary course of business and consistent with past practice or provided for in this Agreement;

(k) entered into any collective bargaining or labor agreement (oral or written) or experienced any organized slowdown, work interruption, strike, or work stoppage; or

(l) agreed, so as to legally bind any of Sellers, whether in writing or otherwise, to take any of the actions set forth in this Section 2.14 and not otherwise permitted by this Agreement.

2.15 *Contracts.*

(a) *Schedule 2.15(a)(i)* attached hereto lists and describes all U.S. Contracts and *Schedule 2.15(a)(ii)* attached hereto lists and describes all those contracts, agreements, licenses and other instruments to which the Subsidiaries are party (the "Non-U.S. Contracts" and, together with the U.S. Contracts, the "Contracts"), except (in each case and to the extent entered into in the ordinary course of business) Contracts for (i) orders or agreements for the purchase of raw materials or supplies used in the manufacture of the products of the Business, or supplies or services to be used in the ordinary course of business, in each case with a remaining balance of $50,000 or less and a remaining term of six months or less; (ii) orders or agreements from customers for the purchase of products of the Business, in each case with a remaining balance of $50,000 or less and a remaining term of six months or less; (iii) agreements for the maintenance of the facilities of the Business or any part thereof or any equipment of the Business, in each case with a remaining balance of $50,000 or less and a remaining term of six months or less; (iv) standard form employment or confidentiality agreements (provided they do not contain non-solicitation or non-competition provisions or provisions granting special severance benefits or a fixed term of employment); (v) non-hazardous waste disposal agreements which are terminable on two months' notice or less; (vi) confidentiality agreements with customers of the Business relating to confidential information disclosed by the parties thereto, which shall not include agreements containing non-solicitation or non-compete provisions; and (vii) license and maintenance agreements for standard, off-the-shelf computer software.

(b) Except as set forth on *Schedule 2.15(b)* attached hereto:

(i) each Contract is a valid and binding agreement of the applicable Seller, enforceable against such Seller in accordance with its terms, and the Company does not have any knowledge that any Contract is not a valid and binding agreement of the other parties thereto;

(ii) to the Company's knowledge, each Seller has fulfilled all material obligations required pursuant to the Contracts to have been performed by such Seller on its part prior to the date hereof;

(iii) to the Company's knowledge, no Seller is in material breach of or default under any Contract, and no event has occurred which with the passage of time or giving of notice or both would constitute such a material default, result in a loss of rights or result in the creation of any lien, charge or encumbrance, thereunder or pursuant thereto;

(iv) to the Company's knowledge, there is no existing material breach or material default by any other party to any Contract, and no event has occurred which with the passage of time or giving of notice or both would constitute a material default by such other party, result in a loss of rights or result in the creation of any material lien, charge or encumbrance thereunder or pursuant thereto; and

(v) no Seller is materially restricted by any Contract from carrying on the Business anywhere in the world.

(c) Except as set forth on *Schedule 2.3* attached hereto or *Schedule 2.15(c)* attached hereto, the continuation, validity and effectiveness of each Contract will not be materially and adversely affected by

the transfer thereof to Buyer under this Agreement, and all such Contracts are assignable to Buyer without the consent of any other party.

(d) Copies of all Contracts referred to in *Schedule 2.15(a)(i)* attached hereto and *Schedule 2.15(a)(ii)* attached hereto have previously been delivered or made available by the Company to the Buyer.

2.16 *Compliance with Agreements and Laws.* Except as set forth on *Schedule 2.16*, to the Company's knowledge, each Seller has all requisite licenses, permits and certificates (excluding environmental, health and safety permits) from federal, state, foreign and local authorities necessary to conduct the Business and own and operate the Assets, other than those the failure to obtain which could not have a material adverse effect on any Seller or its properties (collectively, the "Permits"), and all Permits are in full force and effect and not scheduled to expire for at least 3 months from the date hereof. *Schedule 2.16(i)* attached hereto lists all such Permits, copies of which have previously been delivered by the Company to the Buyer. Except as set forth on *Schedule 2.16(ii)* attached hereto, to the Company's knowledge, the Business of each Seller does not violate in any material respect any federal, state, local or foreign laws, regulations or orders the enforcement of which would have a material and adverse effect on the operation of the Business by the Buyer. The foregoing representations and warranties shall not extend to any matters as to which liability has been allocated between the Company and the Buyer pursuant to Section 1.4(c). To the knowledge of the Company, except as set forth on *Schedule 2.16(i),* all the Permits can be assigned to Buyer without consent of or notice to the issuing authority.

2.17 *Employee Relations.*

(a) To the Company's knowledge, as it relates to employees of any Seller who work primarily in or for the Business ("Employees"), each Seller is in material compliance with all federal, state, foreign and municipal laws and regulations (and their foreign equivalents) respecting employment and employment practices, terms and conditions of employment, immigration, wages and hours, and statutory benefit requirements, including, but not limited to, social security and its foreign equivalents; no Seller is engaged in any unfair labor practice, and there are no arrears in the payment of wages or social security taxes (or their foreign equivalents).

(b) To the Company's knowledge, with respect to the Business, except as set forth on *Schedule 2.17(b)* attached hereto, within the last five years:

(i) none of the Employees is or has been represented by any labor union;

(ii) there is not and has not been any unfair labor practice complaint threatened or pending against any Seller before the National Labor Relations Board or any state, foreign or local agency;

(iii) there is not and has not been any pending or threatened labor strike or other material labor trouble affecting any Seller (including, without limitation, any organizational drive);

(iv) there is not and has not been any labor grievance pending against any Seller;

(v) there is not and has not been any pending or threatened representation question respecting the Employees; and

(vi) there is not and have not been any pending or threatened arbitration proceedings arising out of or under any collective bargaining agreement to which any Seller is a party, or any basis for which a claim may be made under any collective bargaining agreement to which any Seller is a party.

(c) *Schedule 2.17(c)* attached hereto lists (i) the material employee benefits generally provided by each Seller to its Employees and all written contracts or agreements and a description of all oral contracts and agreements between each Seller and its Employees, independent contractors and consultants, (ii) each Seller's current payroll, including the job descriptions and salary or wage or commission rates of each of its Employees, showing separately for each such person the amounts paid or payable as salary, commission and bonus payments for the year ending December 31, 2001, as well as the

current salary, commission rate and target bonus of each such person and (iii) each independent contractor or consultant providing services to a Seller in connection with the Business and a description of the services and the terms of payment for each such independent contractor or consultant. *Schedule 2.17(c)* also sets forth the vacation policy applicable to each Seller as well as a complete and accurate list of the following information for each Employee of the Sellers: name, job title, employer, department, vacation accrued and years of service. Except as disclosed on *Schedule 2.17(c),* the employment of each Employee and the engagement of each independent contractor or consultant of the Sellers is terminable at will without any penalty, liability, severance or statutory termination obligation incurred by any Seller. Except as disclosed on *Schedule 2.17(c),* no Seller will owe any amounts to any of its Employees, consultants, or independent contractors as of the Closing Date relating to the Business, including amounts incurred for any wages, bonuses, fees, commissions, vacation pay, sick leave, contract notice periods, change of control payments, severance or statutory termination obligations.

(d) No Seller (with respect to the Business) has experienced a "plant closing" or "mass layoff" within the meaning of the Worker Adjustment Retraining and Notification Act (the "WARN Act") or any comparable employment action under any state or foreign law similar to WARN, and Sellers shall provide Buyer, upon request, with such information as Buyer shall reasonably deem necessary to determine Buyer's potential WARN liability or obligations. Except as disclosed on *Schedule 2.17(d),* none of the Sellers' Employees has suffered an "employment loss" (as defined in the WARN Act) within six months prior to the Closing Date.

(e) To the Company's knowledge, the Sellers are in material compliance with all federal and foreign immigration laws and regulations. The Company, upon the request of Buyer, will make available to Buyer prior to the Closing Date Employees' (as defined in Section 5.8) Form I-9 and all associated records.

2.18 *Suppliers.* Schedule 2.18 attached hereto lists the names and addresses of each of the (a) top ten suppliers of the Sellers by purchase volume of goods primarily for the Business and (b) suppliers of distributed products, for the fiscal year ended December 31, 2001 and for the eight month period ending August 31, 2002, together with the aggregate amount of such purchases during such periods divided by supplier and product. Except as set forth in *Schedule 2.18,* none of such suppliers has given notice to any Seller that it intends to discontinue or reduce its relationship with the Sellers or official notice that it will only do future business at higher prices and, to the Company's knowledge, none of such suppliers intends to discontinue its relationship with the Sellers, although none (except for those listed on *Schedule 2.3* attached hereto under the heading "Individually Material Consents") has been asked about its intentions to do business with the Buyer, and there are no suppliers of raw materials to the Business for which there are not adequate alternative suppliers of such raw materials on commercially reasonable terms.

2.19 *Customers. Schedule 2.19(a)* attached hereto lists the names and addresses of each customer of the Sellers which accounted for more than $10,000 of sales by the Sellers primarily for the Business for the fiscal year ended December 31, 2001 and for the 8 month period ending August 31, 2002 (but not the actual amount of such sales). The financial information the Company has provided to Buyer's adviser, Eisner LLP, in connection with its financial analysis of customers with respect to the ten largest customers by purchase volume is complete and correct. Except as set forth on *Schedule 2.19(b),* none of such ten largest customers has given notice to any Seller that it intends to discontinue its relationship with the Sellers or official notice that it will only do future business at lower prices and, to the Company's knowledge, none of the customers intends to discontinue or reduce its relationship with the Sellers, although none (except for those listed on *Schedule 2.3* attached hereto under the heading "Individually Material Consents") has been asked about its intentions to do business with the Buyer. Except as set forth on *Schedule 2.19(c)* attached hereto, the Sellers have not received prepayments or deposits of more than $10,000 from any customer or more than $100,000 in the aggregate for products to be shipped, or services to be performed, at a later date.

2.20 *Intangible Property.*

(a) *Schedule 2.20(a)* attached hereto lists and, where appropriate, describes, all categories and material items of U.S. Intangible Property and the Subsidiaries' right, title and interest in and to

intangible property rights, including but not limited to inventions, discoveries, trade secrets, processes, formulas, United States and foreign patents, patent applications, trade names, trademarks, trademark registrations, applications for trademark registrations, copyrights, copyright registrations, owned or, where not owned, used by the Subsidiaries and licenses and other agreements to which the Subsidiaries are party (as licensor or licensee) or by which the Subsidiaries are bound relating to any of the foregoing kinds of property or rights to any "know-how" or disclosure or use of ideas (collectively, the "Non-U.S. Intangible Property" and, together with the U.S. Intangible Property, the "Intangible Property"). Copies of all material licenses and other agreements relating to the Intangible Property have been previously delivered by the Company to the Buyer.

(b) To the Company's knowledge, except as otherwise disclosed in *Schedule 2.20(b)* attached hereto, without material exception, (i) the Sellers are the owners or licensees of all Intangible Property (as disclosed on such Schedule); (ii) the Intangible Property owned by the Sellers is sufficient to conduct the Business in all material respects as currently conducted and, when transferred to the Buyer pursuant to this Agreement, will be sufficient to permit the Buyer to conduct the Business in all material respects as currently conducted by the Sellers; (iii) the Sellers have received no notice of, and there is no basis for, a claim against any of them that any of their operations, activities, products or publications related to the Business infringes any patent, trademark, trade name, copyright or other property right of a third party, or that any of them is illegally using the trade secrets, formulae or any property rights of others; and (iv) no Seller has any disputes with or claims against any third party for infringement by such third party of any trade name or other Intangible Property of any Seller.

(c) To the Company's knowledge, no use by any of the Sellers of any Intangible Property licensed to it materially violates the terms of any Contract pursuant to which it is licensed. No litigation is pending, or to the Company's knowledge, threatened, which alleges that any Intangible Property owned or licensed by a Seller or which a Seller otherwise has the right to use is invalid or unenforceable by a Seller, nor is any Seller aware of any such litigation that is unasserted, but the assertion of which is foreseeable. Except as set forth on *Schedule 2.20(c),* no Seller manufactures products in connection with the Business which are the subject of patents, patent applications, copyrights, copyright applications, trademarks, trademark applications, trade styles, service marks, or trade secrets owned by but not licensed from third parties. Except as shown on *Schedule 2.20(c),* no royalties or fees are payable by a Seller to anyone for use of the Intangible Property. All Contracts pursuant to which a Seller has any license or right to use any Intangible Property are in full force and effect and there are no existing material defaults, and the execution of this Agreement will not cause any Seller to be in violation or default under any such Contract. No Seller has received any notice that the manufacture, use, or sale by such Seller of its products in connection with the Business, or any component or part thereof, nor any manufacturing operation or machinery employed by Seller in connection therewith, violates or infringes upon any claims of any United States or foreign patent or patent application owned or held by any third party, nor is Seller aware of any unasserted Litigation the assertion of which is foreseeable. All Intangible Property and Contracts related thereto are fully assignable to the Buyer without the consent of any third party except as shown on *Schedule 2.20(c)*. Each Seller has taken all reasonable steps to maintain the confidentiality of the Intangible Property and knows of no Intangible Property which has been misappropriated since December 31, 1999.

2.21 *Employee Benefit Plans.*

(a) Except as listed on *Schedule 2.21(a)* attached hereto, none of the Sellers now has or contributes to or participates in or has any liability under any employee benefit plan subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), which covers Employees, including without limitation any multiemployer pension plan as defined in Section 4001(a)(3) of ERISA.

(b) *Schedule 2.21(b)(i)* attached hereto sets forth a true and complete list of all pension, profit sharing, retirement, deferred compensation, insurance, health and welfare, flexible spending account, cafeteria plan, disability, stock option, stock purchase, stock appreciation, phantom stock or other equity-based, incentive, bonus, vacation pay, severance pay, termination indemnity, retention, change of control

and other similar formal or informal, oral or written, plans, programs, payroll practices and agreements, relating to any Employees, former employees, retirees, dependents, spouses, directors, independent contractors, or other beneficiaries related to the Business by any Seller or by any other member of any controlled group of corporations, group of trades or businesses under common control, or affiliated service group (as defined for purposes of Section 414(b), (c), (m) and (o), respectively, of the Code (an "ERISA Affiliate"), whether or not covered under ERISA (the "Employee Plans") and, except as set forth on *Schedule 2.21(b)(ii)* attached hereto, no Seller or ERISA Affiliate has any obligations, contingent or otherwise, past or present, under applicable federal or foreign law or the terms of any Employee Plan which could be imposed upon Buyer. Seller has provided to Buyer true, complete and correct copies of (i) each Employee Plan (or, in the case of any unwritten Employee Plan, a description of its material terms), (ii) the most recent annual report on Form 5500 filed with the Internal Revenue Service with respect to each Employee Plan (if any such report was required), (iii) the most recent summary plan description for each Employee Plan for which such a summary plan description is required, (iv) the most recent financial statements for each Employee Plan for which such statements are required, and (v) any trust agreement or other funding or financial documents for any Employee Plan.

(c) With the exception of the Penwest Pharmaceuticals Co. Savings Plan (the "Company's 401(k) Plan") and except as disclosed on *Schedule 2.21(c)* attached hereto, no Seller maintains, sponsors or contributes to currently or, within the past five years has maintained, sponsored or contributed to, a defined benefit pension plan, defined contribution plan, termination indemnity plan or any other employee pension benefit plan (whether funded or unfunded) covering any Employees.

(d) The Company's 401(k) Plan is qualified under Code sections 401(a) and 401(k) and its attendant trust is exempt from taxation under Code section 501(a). A copy of the most recent determination letter issued by the IRS (and any pending application for a determination letter) in connection with the 401(k) Plan has been provided to Buyer.

(e) Each Employee Plan has been administered in accordance with its terms in all material respects and in material compliance with all applicable laws and regulations (including, where applicable, ERISA and the Code).

(f) Except as set forth on *Schedule 2.21(f)* attached hereto, all contributions and payments accrued under each Employee Plan, determined in accordance with prior funding and accrual practices, as adjusted to include proportional accruals for the period ending as of the Closing Date, have been discharged and paid on or prior to the Closing Date or otherwise properly provided for in the consolidated financial statements or financial records of the Sellers to the extent required by GAAP.

(g) No liability under Title IV of ERISA has been or is expected to be incurred by the Company or its ERISA Affiliates and no event has occurred that could reasonably result in material liability under Title IV of ERISA being incurred by the Company or its ERISA Affiliates with respect to any ongoing, frozen, or terminated plan of the Company or of any ERISA Affiliate and no other liability under Title IV of ERISA can be imposed on the Buyer as a result of the transactions contemplated by this Agreement. There has been no "reportable event," within the meaning of ERISA Section 4043 for which the 30-day reporting requirement has not been waived by any ongoing, frozen, or terminated single employer plan of the Company or of an ERISA Affiliate.

(h) Except as set forth on *Schedule 2.21(h)* attached hereto, no Seller has any liability for retiree health and life benefits under any of the Employee Plans and there are no restrictions on the rights of such Seller to amend or terminate any such retiree health or benefit plan without incurring any liability thereunder except to the extent required under Part 6 of Subtitle B of Title I of ERISA or Code Section 4980B or other similar law. No material Tax under Code Sections 4980B or 5000 has been incurred with respect to any Employee Plan and no circumstance exists which could reasonably be expected to give rise to such Taxes.

(i) Except as set forth on *Schedule 2.21(i)* attached hereto, neither the execution and delivery of this Agreement nor the consummation of the transactions contemplated hereby will (i) result in any

payment (including severance, termination indemnity, unemployment compensation, golden parachute, or otherwise) becoming due to any director, any Employee or any independent contractor of any Seller from any Seller under any Employee Plan or otherwise, (ii) increase any benefits otherwise payable under any Employee Plan or otherwise, or (iii) result in any acceleration of the time of payment or vesting of any such benefit.

(j) The actuarial present values of all accrued deferred compensation entitlements (including entitlements under any executive compensation, supplemental retirement, or employment agreement) of current and former Employees and current and former independent contractors related to the Business of any Seller and their respective beneficiaries, other than entitlements accrued pursuant to funded retirement plans, have been fully reflected on the Seller's Financial Information to the extent required by and in accordance with GAAP.

(k) All individuals who render services in connection with the Business to any Seller and who are authorized to participate in an Employee Plan pursuant to the terms of such Employee Plan are in fact eligible to and authorized to participate in such Employee Plan. All individuals participating in (or eligible to participate in) any Employee Plan are common-law employees (and not independent contractors) of a Seller.

(l) Neither the Sellers nor any of its ERISA Affiliates has had an "obligation to contribute" (as defined in ERISA Section 4212) to a "multiemployer plan" (as defined in ERISA Sections 4001(a)(3) and 3(37)(A)).

(m) Without limiting the foregoing provisions of this Section 2.21, except as disclosed in *Schedule 2.21(m)* attached hereto, with respect to each Employee Plan maintained outside the United States which is mandated by a government other than that of the United States or subject to foreign law (collectively, the "Foreign Benefit Plans"), (i) the terms of each Foreign Benefit Plan and the manner in which it is and has been administered in operation are in compliance with all applicable laws of the jurisdiction in which such Foreign Benefit Plan is maintained, (ii) each Foreign Benefit Plan which is required to be registered with or submitted to a foreign regulatory authority for tax qualification or other approval has been so registered or submitted to and each such plan has received such approval, and the Company is not aware of any circumstances likely to result in revocation of any such registration or approval, (iii) all contributions to each Foreign Benefit Plan required to be made through the Closing Date or required to be made with respect to a period prior to the Closing Date have been or shall be made by a Seller or, if applicable, shall be accrued in accordance with applicable international accounting practices, and (iv) for any Foreign Benefit Plan which, under the laws of the applicable foreign jurisdiction, is required to be funded, the fair market value of such Foreign Benefit Plan's assets equals or exceeds the present value of all benefits (whether vested or not) accrued to date by all present and former participants in such Foreign Benefit Plan or such Foreign Benefit Plan is fully insured, in each case based upon generally accepted local accounting and actuarial practice and procedure.

2.22 *U.S. Tax Matters.*

(a) As used in this Agreement the following terms shall have the following meanings:

(i) "Tax Returns" means all reports and returns required to be filed on or before the Closing Date, whether filed on separate, consolidated, or combined basis; and

(ii) "Taxes" means all federal, state, or local gross or net income, gross or net receipts, windfall profits, severance, property, ad valorem, real estate, capital property (tangible or intangible), productions, sales use, value added, stamp, duty, business transfer, wealth, license, excise, franchise, employment, withholding or similar taxes imposed on the income, properties or operations of the Business, together with any interest, additions or penalties.

(b) The Sellers have filed all material Tax Returns required to be filed by them with respect to the Business. All such Tax Returns with respect to the Business were correct and complete in all material respects. All Taxes owed by the Sellers have been paid. No claim has been made by an authority in a

jurisdiction where any of the Sellers conducts the Business and does not file Tax Returns that it is, or may be, subject to taxation by that jurisdiction based on the conduct of the Business.

(c) Each of the Sellers has withheld and paid all Taxes required to have been withheld and paid in connection with amounts paid or owing to any employee, independent contractor, creditor, stockholder, or third party with respect to the Business.

(d) There is no dispute or claim concerning any Tax liability of any of the Sellers claimed or raised by any authority in writing, nor to the knowledge of the Company is there any potential dispute or claim concerning any Tax liability of the Sellers. None of the Sellers has waived any statute of limitations in respect of Taxes or agreed to any extension of time with respect to a Tax assessment or deficiency.

2.23 *Environmental Matters.* For the purpose of this Agreement, the following terms shall, unless the context clearly requires otherwise, have the respective meanings set forth below.

"Environmental Liabilities" means any notice, claim, demand, action, suit, inquiry, proceeding, or investigation under Environmental Law by any third-party and/or by any federal, state or regulatory entity, incident to (i) the ownership, operation or use of any site or facility by any of the Sellers or any predecessor thereof on or prior to the Closing Date for the storage, treatment, generation, transportation, processing, handling, production or disposal, of any Hazardous Material (hereinafter defined), or as a landfill or other waste disposal site or the Release of any Hazardous Material to the environment prior to the Closing Date at such sites; (ii) human exposure to any Hazardous Material, noises, vibrations or nuisances of whatever kind to the extent the same arise from the condition of the ownership, operation, use, sale, transfer or conveyance thereof by any of the Sellers or any predecessor thereof on or prior to the Closing Date; (iii) a violation of any applicable Environmental Law or non-compliance with any environmental permit relating to the ownership, operation or use of any site or facility by the Sellers or any predecessor thereof on or prior to the Closing Date; or (iv) any requests for information, notices of claim, demand letters or other notification received by the Buyer after the Closing Date from any federal, state or local regulatory entity in connection with any investigation or clean-up of hazardous or polluting substances or Release sent directly or indirectly by the Sellers or any predecessor thereof on or prior to the Closing Date to any site listed or formally proposed for listing on the National Priority List ("NPL") promulgated pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA") or the Comprehensive Environmental Response, Compensation and Liability Information System ("CERCLIS") or to any site listed on any state list of hazardous substances sites requiring investigation or clean-up.

"Environmental Laws" means any and all federal, state, local and foreign laws, rules or regulations, and any orders or decrees in effect as of the Closing relating to the regulation or protection of the natural environment or to emissions, discharges, releases or threatened releases of pollutants, contaminants, chemicals or toxic or hazardous substances or wastes into the indoor or outdoor environment, including, without limitation, ambient air, soil, surface water, ground water, wetlands, land or subsurface strata, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of pollutants, contaminants, chemicals or toxic or hazardous substances or wastes.

"Environmental Representations" means the representations and warranties set forth in this Section 2.23.

"Hazardous Materials" means, collectively, (a) any petroleum or petroleum products, flammable explosives, radioactive materials, asbestos in any form that is or could reasonably become friable, urea formaldehyde foam insulation, and transformers or other equipment that contain dielectric fluid containing polychlorinated biphenyls (PCBs), and (b) any chemicals or other materials or substances which are now or hereafter become defined as or included in the definition of "hazardous substances", "hazardous wastes", "hazardous materials", "toxic substances", "toxic pollutants", "contaminants" or "pollutants" under any Environmental Law.

"Release" means any release, spill, emission, leaking, pumping, injection, deposit, disposal, discharge, dispersal, leaching or migration into the ambient environment, including, without limitation, the movement of Hazardous Materials through ambient air, soil, surface water, ground water, wetlands, land or subsurface strata.

"Remedial Activities" means environmental assessment or remediation activities required by Environmental Laws.

"Seller Site" means any site or facility previously owned, operated or leased by any of the Sellers or any predecessor thereof.

Except as set forth in *Schedule 2.23* attached hereto:

(a) the Sellers have all environmental, health and safety permits, licenses and other authorizations (collectively, "Permits") required under applicable Environmental Laws in connection with the operation of the Business and Assets as currently operated other than those which the failure to obtain could not reasonably be expected to have a material adverse effect on the Business. Each of the Permits is in full force and effect. The Business of each Seller is in material compliance with the applicable terms and conditions of the Permits and in material compliance with all other Environmental Laws;

(b) no pending notice, notification, demand, request for information, citation, summons or order has been issued, no lawsuit has been filed, no penalty assessments or demands been assessed and no investigation is pending or, to the knowledge of the Company, threatened against any Seller by any governmental entity, with respect to compliance with or any alleged violation of any Environmental Law in connection with the operation of the Business or Assets;

(c) the Sellers do not own, operate or lease a treatment, storage or disposal facility requiring a permit under the Resource Conservation and Recovery Act of 1976, as amended, or under any comparable state, local or foreign statute;

(d) to the Company's knowledge, no polychlorinated biphenyls ("PCBs") are present at any site now owned, operated or leased by any of the Sellers or have been present at a Seller Site;

(e) to the Company's knowledge, no friable asbestos or friable asbestos-containing material is present at any Seller Site;

(f) to the Company's knowledge, there are no underground storage tanks or surface impoundments for Hazardous Materials, active or abandoned, at any Seller Site;

(g) no Hazardous Materials are being Released at, on or under any Seller Site or have been Released at, on or under any Seller Site (except as may be allowed by permit) and, to the Company's knowledge, none of the Seller Sites are adversely affected by any Release or disposal of Hazardous Materials originating or emanating from any other property;

(h) to the Company's knowledge, none of the Sellers has transported or arranged for the transportation of any Hazardous Material to any location that is the subject of Federal, state, local or foreign enforcement actions or other investigations that may lead to Environmental Liabilities against any of Sellers or the Buyer;

(i) to the Company's knowledge, all toxic or hazardous wastes currently or previously generated by the Sellers or any of them or any predecessor thereof in connection with the Business and delivered to a transporter or carrier have been handled and delivered to duly authorized and licensed carriers authorized to handle and transport such wastes by the governmental agency with jurisdiction thereof;

(j) no oral or written notification of a Release of a Hazardous Material has been filed by or on behalf of the Sellers and, to the Seller's knowledge, no Seller Site is listed or proposed for listing on the NPL, CERCLIS or any similar state or foreign list of sites requiring investigation or clean-up;

(k) no liens have arisen under or pursuant to any Environmental Laws on any Seller Site, and, to the Seller's knowledge, no government action has been taken or is in process that could subject any such Seller Site to such liens;

(l) no "jurisdictional wetlands" as defined for purposes of Section 404 of the Clean Water Act are located within any portion of the property owned, leased or operated by any of the Sellers;

(m) none of the Seller Sites is subject to, and the Company has no knowledge of, any imminent restriction on the ownership, occupancy, use or transferability thereof (i) arising under any Environmental Law or (ii) in connection with any Release, threatened Release, or disposal of a Hazardous Material;

(n) all activities conducted by a Seller pertaining to methane extraction have been successfully completed and no sampling and/or monitoring of any methane extraction system is required at Company's Cedar Rapids, Iowa facility;

(o) without material exception, the Sellers have provided to the Buyer copies of all Phase 1 environmental reports conducted in relation to any Seller Site.

(p) as to any Seller Site not located in the United States, the representations and warranties set forth in this Section 2.23 shall apply with respect to equivalent laws and regulations in effect in those jurisdictions.

The Company's representations and warranties as to environmental matters are only those contained in this Section 2.23. Other representations and warranties, including, without limitation, those contained in Sections 2.9 and 2.16, do not apply to environmental matters.

2.24 *Special Transactions.*

(a) None of the Sellers has made any gift or contribution to or on behalf of or at the direction of any employee of any supplier, customer, union or governmental agency related to the Business.

(b) Except as specifically disclosed, none of Sellers' sales in connection with the Business are sales to affiliates or related parties. None of the Sellers' business relationships in connection with the Business are dependent on relationships with family members, whether such family membership is based on consanguinity or marriage.

2.25 *Certain Affiliated Transactions.* Except as set forth in *Schedule 2.25(i)* attached hereto, no portion of the Business is conducted by any shareholder, director, officer or employee of any of the Sellers (in contrast to being conducted by the Sellers) and all of the assets necessary for or used by the Sellers in the conduct of the Business as presently conducted are owned by the Sellers or leased from entities in which no shareholder, director, officer or employee (or any family member thereof or trust therefor) directly or indirectly participates other than as a shareholder in a publicly held company in which he or she owns less than five percent (5%) (collectively, "Permitted Entities"). *Schedule 2.25(ii)* lists all contracts relating to the Business between any Seller, on the one hand, and any of its officers, directors or employees or any entity other than a Permitted Entity.

2.26 *Disclosure.* To the Company's knowledge, no representation or warranty by any of the Sellers in this Agreement or in any Exhibit hereto, or in any list, statement, document or information set forth in or attached to any Schedule delivered or to be delivered pursuant to this Agreement, contains or will contain any untrue statement of a material fact or omits or will omit any material fact necessary in order to make the statements contained therein not misleading. No statement with respect to the Assets and the Business in any document filed by any Seller pursuant to the Securities Act of 1933, as amended (the "Securities Act") or the Securities Exchange Act of 1934, as amended (the "Exchange Act") contained, at the time it was made, any untrue statement of a material fact or omitted to state a material fact required to be stated in such document or necessary in order to make the statements in such document, in light of the circumstances under which they were made, not misleading (except as subsequently corrected or superseded by subsequently filed disclosures). None of the information supplied or to be supplied by any Seller for inclusion in the Proxy Statement (as defined in Section 5.4) to be mailed to the Company's shareholders (the "Company Shareholders") in connection with the Special Meeting (as defined in Section 5.4), and any other documents to be filed by the Company thereof with the SEC or any other regulatory or governmental authority in connection with the transactions contemplated hereby, will, at the respective time such documents are filed, and with respect to the Proxy Statement, when first mailed to the Company Shareholders, be false or misleading with respect to any material fact, or omit to state any material fact necessary to make the

statements therein, in light of the circumstances under which they were made, not misleading, or, in the case of the Proxy Statement or any amendment thereof or supplement thereto, at the time of the Special Meeting, be false or misleading with respect to any material fact, or omit to state any material fact necessary to correct any statement in any earlier communication with respect to the solicitation of any proxy for the Special Meeting.

3. *Representations of the Buyer*

The Buyer represents and warrants to the Company that all of the statements contained in this Section 3 are true as of the date of this Agreement.

3.1 *Organization and Authority.* The Buyer is a limited partnership duly organized, validly existing and in good standing under the laws of Germany and has requisite power and authority (corporate and other) to own its properties and to carry on its business as now being conducted. The Buyer has full power to execute and deliver this Agreement, the Promissory Note and the Buyer's Instrument of Assumption and to consummate the transactions contemplated hereby and thereby. Certified copies of the charter documents of the Buyer, as amended to date, have been previously delivered to the Company, are complete and correct, and no amendments have been made thereto or have been authorized since the date thereof.

3.2 *Authorization.* The execution and delivery of this Agreement by the Buyer, and the agreements provided for herein to which the Buyer is a party (including, without limitation, the Promissory Note) and the consummation by the Buyer of all transactions contemplated hereby, have been duly authorized by all requisite corporate action. This Agreement and all such other agreements and written obligations entered into and undertaken in connection with the transactions contemplated hereby and thereby constitute the valid and legally binding obligations of the Buyer enforceable against the Buyer in accordance with their respective terms. The execution, delivery and performance of this Agreement and the agreements provided for herein, and the consummation by the Buyer of the transactions contemplated hereby and thereby, will not, with or without the giving of notice or the passage of time or both, (a) violate the provisions of any law, rule or regulation applicable to the Buyer; (b) violate the provisions of the Buyer's charter documents; (c) violate any judgment, decree, order or award of any court, governmental body or arbitrator; or (d) conflict with or result in the breach or termination of any term or provision of, or constitute a default under, or cause any acceleration under, or cause the creation of any lien, charge or encumbrance upon the properties or assets of the Buyer pursuant to, any indenture, mortgage, deed of trust or other agreement or instrument to which it or its properties is a party or by which the Buyer is or may be bound. No consents and approvals of third parties are required in connection with the consummation by the Buyer of the transactions contemplated by this Agreement.

3.3 *Regulatory Approvals.* All consents, approvals, authorizations and other requirements prescribed by any law, rule or regulation which must be obtained or satisfied by the Buyer and which are necessary for the consummation of the transactions contemplated by this Agreement have been obtained and satisfied, except for those to be obtained in accordance with Section 5.6.

3.4 *Financial Capacity.* The Buyer has the financial capacity to consummate the transactions contemplated by this Agreement, including the payment of the Purchase Price and any adjustments thereto pursuant to Section 1.7. The Buyer's obligations pursuant to this Agreement are not conditioned upon its obtaining any financing. The Buyer currently contemplates borrowing up to $31.5 million for this purpose, but its failure to make such borrowings will not excuse it from its obligations under this Agreement, including its obligation to purchase the Assets.

3.5 *Disclosure.* To the Buyer's knowledge, no representation or warranty by the Buyer in this Agreement or in any Exhibit hereto, or in any list, statement, document or information set forth in or attached to any Schedule delivered or to be delivered pursuant hereto, or any statement in any document filed by the Buyer pursuant to the Exchange Act, contains or will contain any untrue statement of a material fact or omits or will omit any material fact necessary in order to make the statements contained therein not misleading. The Buyer shall use commercially reasonable efforts to ensure that none of the information supplied or to be supplied by Buyer for inclusion in the Proxy Statement to be mailed to the Company

Shareholders in connection with the Special Meeting, and any other documents to be filed by the Company with the SEC or any other regulatory or governmental authority in connection with the transactions contemplated hereby, will, at the respective time such documents are filed, and with respect to the Proxy Statement, when first mailed to the Company Shareholders, contain any untrue statement of a material fact, or omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, or, in the case of the Proxy Statement or any amendment thereof or supplement thereto, at the time of the Special Meeting, contain any untrue statement of a material fact, or omit to state any material fact necessary to correct any statement in any earlier communication with respect to the solicitation of any proxy for the Special Meeting. Notwithstanding the foregoing, the Buyer shall not be required to provide any information which has been consistently treated by it as proprietary and confidential, except to the extent required by applicable Proxy Rules (as defined in Section 5.4(c)) or requested by the staff of the SEC.

3.6 *Reliance.* In entering into this Agreement, Buyer acknowledges that it has relied solely upon the representations and warranties of the Company specifically referred to in Section 2 of this Agreement. Buyer acknowledges that it did not rely on the document entitled "The Excipients Business of Penwest Pharmaceuticals Co." heretofore provided to Buyer by Banc of America Securities LLC relating to the Sellers and the Business or the financial estimates and projections contained therein. The Buyer has conducted, to the extent it deemed appropriate and sufficient, its own independent investigation, review and analysis of the business, operations, assets, liabilities, results of operations, financial condition, technology and prospects of the Sellers. Buyer acknowledges that it and its representatives have been provided sufficient access to the personnel, properties, premises and records of the Sellers for such purpose. No such investigation, review or analysis, whether prior to or after the date hereof, shall detract from the validity or enforceability of Seller's representations and warranties set forth herein except if and to the extent that Buyer has actual knowledge that a representation or warranty made by the Company is false or incomplete on the date hereof.

4. *Access to Information; Public Announcements*

4.1 *Access to Management, Properties and Records.*

(a) Subject to applicable law, from the date of this Agreement until the Closing Date, the Company shall afford the officers, attorneys, accountants and other authorized representatives of the Buyer access upon reasonable notice, during normal business hours, in cooperation with the Company's personnel, and without disruption of the Company's business operations to all relevant management personnel, offices, properties, books and records of the Sellers, so that the Buyer may have an opportunity to make such investigation as it shall reasonably desire to make of the Business and the Buyer shall be permitted to make abstracts from, or copies of, all such books and records at its expense. The Company shall furnish to the Buyer such financial and operating data and other information as to the Assets and the Business of the Sellers as the Buyer shall reasonably request.

(b) If reasonably so requested by the Buyer, the Company shall authorize the release to the Buyer of copies of all files pertaining to the Assets or the Business held by any federal, state, county or local authorities, agencies or instrumentalities.

4.2 *Confidentiality.* The provisions of the Confidentiality Agreement, dated May 16, 2002 (the "Confidentiality Agreement"), between the Company and the Buyer, as amended or supplemented, shall remain binding and in full force and effect, as stated therein.

4.3 *Public Announcements.* The parties agree that, prior to the Closing Date, except as otherwise required by law, any and all public announcements or other public communications concerning this Agreement and the purchase of the Assets by either party shall be subject to the prior written approval of the other party.

5. *Pre-Closing Covenants of the Parties*

From and after the date hereof and until the Closing Date:

5.1 *Conduct of Business.* The Company covenants that each Seller shall carry on the Business substantially in the same manner as heretofore, in the regular and normal course of business, without material exception. The Sellers shall be entitled to make or not make previously planned leasehold improvements and other capital expenditures in their sole discretion. With respect to the Business, the Sellers shall, without material exception:

(a) maintain the Assets in their present order and condition in accordance with good business practices, reasonable wear and use excepted, and deliver the Assets to Purchaser on the Closing Date in such condition;

(b) take all steps reasonably necessary to maintain Sellers' rights in and to the Intangible Property and other intangible assets of Sellers related to the Business;

(c) pay all accounts payable in accordance with past practice and collect all accounts receivable in accordance with past practice, but not less than in accordance with prudent business practices;

(d) comply with all laws;

(e) use commercially reasonable efforts to preserve the goodwill and patronage of the customers, Employees and suppliers of the Business and others having a business relationship with Sellers; and

(f) not authorize, or commit to agree to take, any of the foregoing actions.

Until the Closing Date, the Company shall provide to the Buyer (i) within 10 business days after the end of each month, unaudited revenue information for such month and (ii) within 21 business days after the end of each month, unaudited year-to-date financial information with respect to the revenues and gross profits of the Business, plus direct costs of those cost centers whose operating expenses are allocable solely to the Business, together with a letter identifying any unusual developments in any allocable cost center.

5.2 *Absence of Material Changes.* Without the prior written consent of the Buyer, which consent shall not be unreasonably withheld, the Company covenants that, with respect to the Business, no Seller shall:

(a) voluntarily incur any obligation or liability (absolute or contingent), except in the ordinary course of business or liability in excess of $250,000 in the aggregate, whether or not in the ordinary course of business;

(b) mortgage, pledge, or subject to any lien, charge or any other Encumbrance any of the Assets, except in the ordinary course of business;

(c) sell, assign, or transfer any of the Assets, except in the ordinary course of business;

(d) except as set forth on *Schedule 5.2(d)*, cancel or adjust any debts or claims, except in the ordinary course of business;

(e) acquire, or merge or consolidate with or into, any corporation or other entity;

(f) make any change either individually or in the aggregate in the compensation (including bonus or rate of commission) payable or to become payable to any of its Employees, independent contractors or consultants (other than periodic increases in the ordinary course of business and pursuant to any benefit plan existing on the date hereof);

(g) except as permitted under Section 5.2(f), enter into any new employment, consulting or compensation agreements with employees, independent contractors or consultants, or modify any such existing agreements (other than in connection with hiring of new non-management employees in the ordinary course of business);

(h) materially modify, amend, alter or terminate any of its executory Contracts of a material value or which are material in amount, except in the ordinary course of business;

(i) take or knowingly permit any act or omission constituting a material breach or default under any material contract, indenture or agreement by which it or its properties are bound;

(j) change any of its accounting principles or practices, except as required by GAAP (in which event the Company shall notify Buyer promptly of such change);

(k) adopt any new Employee Plan or materially alter the terms, status or funding condition of any Employee Plan;

(l) make any loans to any person or entity, except in the ordinary course of business; or

(m) authorize, commit or agree to do any of the foregoing in the future.

5.3 *Taxes.* The Company covenants that each Seller will, on a timely basis (including legally permitted extension periods), file all Tax Returns for and pay any and all Taxes (other than Taxes to the extent such taxes constitute Assumed Liabilities) which shall become due at any time on account of the operation of the Business of such Seller or the ownership of the Assets on or prior to the Closing Date.

5.4 *Special Meeting and Proxy Statement.*

(a) As promptly as reasonably practicable, but in no event later than fifteen (15) business days after the execution of this Agreement, the Company shall, with the assistance and cooperation of the Buyer, prepare and file with the SEC under the Exchange Act, preliminary proxy materials (and shall thereafter, as promptly as is reasonably practicable, so file any definitive proxy materials) for the purpose of soliciting proxies from the Company Shareholders to vote in favor of approval of the transactions contemplated by this Agreement at a special meeting of Company Shareholders to be called and held for such purpose (the "Special Meeting"). Such proxy materials, together with any accompanying letter to shareholders, notice of meeting and form of proxy, shall be referred to herein as the "Proxy Statement". The Company shall provide to the Buyer (and its counsel) with a reasonable opportunity to review and comment on the Proxy Statement prior to filing such with the SEC, and shall provide the Buyer with a copy of all such filings made with the SEC. The Company shall notify the Buyer promptly upon the receipt of any comments from the SEC or its staff in connection with the filing of, or amendments or supplements to, the Proxy Statement. The Company, with the assistance and cooperation of the Buyer, shall promptly respond to any SEC comments on the Proxy Statement and shall otherwise use its commercially reasonable efforts to resolve as promptly as practicable all SEC comments to the satisfaction of the SEC.

(b) On the first business day following the resolution to the satisfaction of the SEC of all SEC comments on the Proxy Statement (or the expiration of the ten-day period under Rule 14a-6(a) under the Exchange Act, if no SEC comments are received by such date), the Company shall authorize its agents to print and distribute the Proxy Statement to the Company Shareholders and, pursuant thereto, shall call the Special Meeting in accordance with the Washington Business Corporation Act and other applicable Washington laws (the "Washington Law") and solicit proxies from Company Shareholders to vote in favor of the approval of the transactions contemplated by this Agreement at the Special Meeting. The Company shall schedule the Special Meeting on a date that is no later than thirty (30) calendar days after the date the Proxy Statement is first mailed to the Company Shareholders and shall hold the Special Meeting on such date unless delayed by the need to circulated amended or supplemental proxy materials or other matters.

(c) The Company shall comply with all applicable provisions of and rules under the Exchange Act and all applicable provisions of Washington Law, its articles of incorporation and bylaws and any applicable regulations of the Nasdaq National Market (collectively, the "Proxy Rules") in the preparation, filing and distribution of the Proxy Statement, the solicitation of proxies thereunder, and the calling and holding of the Special Meeting. Without limiting the foregoing, the Company shall use commercially reasonable efforts to ensure that the Proxy Statement does not, as of the date on which it is distributed to Company Shareholders, and as of the date of the Special Meeting, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements

made, in light of the circumstances under which they were made, not misleading (provided that the Company shall not be responsible for the accuracy or completeness of any information furnished by the Buyer in writing for inclusion in the Proxy Statement).

(d) The Company, acting through its Board of Directors, shall include in the Proxy Statement the recommendation of its Board of Directors that the Company Shareholders vote in favor of the approval of the transactions contemplated by this Agreement, and shall not withdraw, qualify or modify, or propose publicly to withdraw, qualify or modify, in a manner adverse to Buyer, such recommendation and shall otherwise use its commercially reasonable efforts to obtain the requisite stockholder approval, except in the event that the Board of Directors by a majority vote, after consultation with its outside legal counsel, determines in good faith that its fiduciary duties under applicable law prohibit or restrict the Company from fulfilling any of the foregoing obligations.

(e) The Company covenants that no Seller shall, directly or indirectly, through any officer, director, agent or otherwise, (i) solicit, initiate or encourage submission of proposals or offers from any person relating to any acquisition or purchase, directly or indirectly, of all or a material portion of the Assets (an "Acquisition Proposal"), or (ii) participate in any discussions or negotiations regarding, or furnish to any other person, any non-public information with respect to, or otherwise cooperate in any way with, or assist or participate in, facilitate or encourage, any effort or attempt by any other person to make an Acquisition Proposal, except in the event that the Board of Directors, by a majority vote after consultation with outside legal counsel, determines in good faith that its fiduciary duties under applicable law prohibit or restrict the Company from fulfilling any of the foregoing obligations. As promptly as practicable after the receipt of an Acquisition Proposal from any person, the Company shall provide Buyer with oral and written notice of the material terms and conditions of such Acquisition Proposal and the identity of the person making such Acquisition Proposal. The Company shall provide Buyer with forty-eight (48) hours prior notice of any meeting of its Board of Directors at which its Board of Directors is reasonably expected to discuss the application of its fiduciary duties and to consider any Acquisition Proposal.

5.5 *Compliance with Laws.* The Company covenants that each Seller will comply in all material respects with all laws and regulations which are applicable to it in connection with the conduct of the Business or its ownership of the Assets and will perform and comply in all material respects with all contracts, commitments and obligations by which it is bound.

5.6 *Hart-Scott-Rodino Act and Foreign Antitrust Laws.* Each of the Buyer and the Company shall promptly file any Notification and Report Forms and related material that it may be required to file with the Federal Trade Commission and the Antitrust Division of the United States Department of Justice under the Hart-Scott-Rodino Act, shall use its commercially reasonable efforts to obtain an early termination of the applicable waiting period, and shall make any further filings or information submissions pursuant thereto that may be necessary, proper or advisable. The Buyer and the Company shall take all actions that may be necessary, proper or advisable under any applicable antitrust and competition laws of the European Union or any country other than the United States (the "Foreign Antitrust Laws"). Each of the Buyers and the Company shall comply with any orders issued by the Federal Trade Commission, Department of Justice, any state attorney general or any foreign antitrust administrator and accept such conditions, restrictions, limitations, divestiture requirements or other provisions as may be necessary to resolve any objections that may be asserted by any such governmental entity under any antitrust law.

5.7 *Assignment of Contracts.* The assignment of any U.S. Contract, Permit or other asset to be assigned to Buyer pursuant to the provisions hereof shall not constitute a contract to assign the same to the extent that an attempted assignment would constitute a breach thereof or (except in the case of the AstraZeneca agreement referred to in Section 2.6) give rise to any right of acceleration or termination. The Company covenants that the Sellers shall use their commercially reasonable efforts to procure consents to any such assignment, provided, however, that the Sellers' refusal to provide economic incentives to induce consent to such assignment or their failure to commence litigation to compel consent to such assignment shall not be deemed to be a failure by the Sellers to use commercially reasonable efforts to secure such consent. If

any such consent is not obtained, the Company covenants that the Sellers shall cooperate with the Buyer in any commercially reasonable arrangement designed to provide the Buyer the benefit of any such Contract, Permit or other asset, including enforcement of any and all rights of any Seller against the other party thereto arising out of breach or cancellation thereof by such party or otherwise.

5.8 *Employee Matters.*

(a) Buyer shall, as of the Closing Date, offer employment or, in the case of Employees of the Subsidiaries, continuing employment, to substantially all Employees whose names are set forth on *Schedule 5.8(a)(i)* attached hereto (the "Target Employees"). Target Employees of the Company who accept employment with Buyer pursuant to this *Section 5.8(a),* by countersigning Buyer's offer letter no later than the date specified therein, together with the Target Employees of the Subsidiaries as of the Closing Date, are referred to collectively as "Continuing Employees." Employees whose names are not set forth on *Schedule 5.8(a)(i)* or who do not accept employment with Buyer pursuant to this Section 5.8(a), by countersigning Buyer's offer letter by the date specified therein, together with the Employees of the Subsidiaries whose names are not set forth on *Schedule 5.8(a)(i)* are referred to collectively as "Retained Employees." On or prior to the Closing, the Company shall cause the Subsidiaries to terminate the employment of all Retained Employees employed by the Subsidiaries. The Company shall use its commercially reasonable efforts (and cause the Subsidiaries to use their commercially reasonable efforts) to retain the Target Employees (including by establishment of the "Retention Bonuses" as defined in paragraph (i) of this Section 5.8) until the Closing Date and to have the Target Employees accept Buyer's offer of employment or remain employed by the Subsidiary, as the case may be. If any Continuing Employee is discharged by Buyer on or after the Closing Date, then Buyer shall be solely liable for any and all severance costs for such Continuing Employee under any severance benefit plan maintained by the Buyer or assumed by the Buyer pursuant to this Agreement (including the U. S. Severance Pay Plan for Management Employees and the U. S. Severance Pay Plan for Non-Management Employees) and with respect to the Subsidiaries, any severance or termination payments, compensation or damages under any severance plan currently maintained by the Subsidiaries or arising under foreign law. Notwithstanding the foregoing, Buyer shall not be liable for and the Company shall retain or assume liability for and indemnify and hold harmless the Buyer and the Subsidiaries for the payment of severance compensation or similar termination indemnity payments or benefits arising under any severance benefits plan maintained by the Company (including the U. S. Severance Pay Plan for Management Employees and the U. S. Severance Pay Plan for Non-Management Employees) and with respect to the Subsidiaries any severance or termination payments, compensation or damages under any severance plan maintained by the Subsidiaries or arising under foreign law (i) to the extent such compensation is not deductible solely by reason of Code Section 280G or (ii) to Retained Employees or Employees who are terminated or are notified of their termination of employment by the Company or a Subsidiary on or prior to the Closing Date, whether effective prior to on or following the Closing Date. Buyer shall be responsible for and assume all liability for all notices or payments due to any Continuing Employees, and all notices, payments, fines or assessments due to any Governmental Entity, pursuant to any applicable foreign, federal, state or local law, common law, statute, rule or regulation with respect to the employment, discharge or layoff of the Continuing Employees following the Closing Date, including without limitation, the WARN Act, Section 4980B of the Code, Title X of the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), and any rules or regulations that have been issued in connection with the foregoing. The Company acknowledges and assumes all liabilities, if any, under COBRA or any comparable foreign law with respect to all of its employees as of the Closing Date (including Continuing Employees and their "qualified beneficiaries" whose "qualifying event" (as such terms are defined in Code Section 4980B) occurs on or prior to the Closing Date), including any notice required by COBRA or comparable foreign law to Continuing Employees with respect to cessation of coverage under any group health plan of the Sellers as the result of the transactions contemplated by this Agreement. The Company shall be responsible and assume all liability for any obligations or other violations of the WARN Act or any comparable foreign law, associated with the sale of the Business or any other event occurring on or prior to the Closing Date. The foregoing three sentences to the contrary, notwithstanding, if the Buyer fails to fulfill its obligation set forth in this

paragraph to offer employment to substantially all of the Target Employees and, as a result of such failure, a violation of the WARN Act or comparable foreign law occurs, Buyer shall be responsible and assume all liability for such obligations and other violations.

(b) On and for a period of not less than one year following the Closing Date, Buyer shall provide, or shall cause to be provided, salary, bonus and other cash compensation and benefits for Continuing Employees that in the aggregate are substantially similar to or better than the compensation and benefits provided to such Continuing Employees under the welfare plans made available to the employees of the respective Sellers on the day prior to the Closing Date, but only to the extent commercially available on a fully insured basis at commercially reasonable rates (it being agreed that the rates paid by the Sellers on the day prior to the Closing Date shall be deemed to be commercially reasonable rates) (such substituted benefits being referred to as "Buyer's Welfare Plans"), which benefits are described in *Schedule 5.8(b)* attached hereto. Continuing Employees shall receive service credit for their service with the Sellers and their respective predecessors for all purposes under Buyer's Welfare Plans (but only to the extent such service was taken into account under the comparable benefit plan made available to the employees of the respective Sellers on the day prior to the Closing Date). No additional waiting periods, deductibles, exclusions or benefit limitations for pre-existing conditions shall be imposed or assessed against such Continuing Employees (or their dependents) under Buyer's Welfare Plans (other than as would have been applicable to such Continuing Employees or their dependents under the benefit plans made available to the Employees of the respective Sellers on the day prior to the Closing Date) but only to the extent such terms are commercially available on a fully insured basis at commercially reasonable rates. Buyer's Welfare Plans shall recognize any expenses paid by such Continuing Employees (or their dependents) which were applied to meet deductibles and maximum out-of-pocket limits under the benefit plans for the calendar year of the Closing as if such expenses had been paid under Buyer's Welfare Plans for purposes of applying the deductible and maximum out-of-pocket limits of Buyer's Welfare Plans for such calendar year but only to the extent such terms are commercially available on a fully issued basis at commercially reasonable rates. Seller acknowledges that for purposes of this paragraph (b) of Section 5.8, stock options, stock purchase plans and similar equity-based compensation plans, programs and arrangements maintained by Seller or any of the Subsidiaries for the benefit of the Employees shall be disregarded and Buyer shall not be required under the terms of this Agreement to provide any such plan, program or arrangement to the Continuing Employees following the Closing. Prior to the Closing Date, the Company shall take any and all action necessary to provide that any unexercised stock options held by Continuing Employees shall become fully vested on the Closing Date and shall be exercisable by the Continuing Employees until at least one (1) year following the Closing Date or until the date the stock option would otherwise expire, if sooner.

(c) (i) Continuing Employees who participate in the Company's 401(k) Plan or any other qualified retirement plans (the "Qualified Plans") shall terminate as participants and the Company shall amend its Qualified Plans to provide that Continuing Employees become fully vested in their accrued benefits under such plans. Buyer shall permit any such Continuing Employees to directly roll over any eligible rollover distributions paid in cash from such plans to a defined contribution plan of Buyer, subject to Buyer's reasonable satisfaction that such rollover will not adversely affect the qualified status of Buyer's plan and the tax-exempt status of the corresponding trust under Sections 401(a) and 501(a), respectively.

(ii) Buyer shall provide, or cause to be provided, matching contributions for Continuing Employees under Buyer's 401(k) Plan at a rate that is substantially equivalent to or greater than the matching contributions rate provided such employees under the Company's 401(k) Plan, and provide, or cause to be provided, other retirement benefits for Continuing Employees that in the aggregate are substantially similar to or better than the retirement benefits provided such employees under any other Qualified Plans, on the day prior to the Closing Date ("Buyer's Retirement Plans"). Buyer's Retirement Plans shall provide service credit to such Continuing Employees for eligibility and vesting purposes for their service with the respective Sellers and their predecessors, but only to the extent such service was taken into account for such purposes under the Qualified

Plans. Notwithstanding the foregoing, Buyer retains the right to modify, amend or terminate any of Buyer's Retirement Plans at any time.

(iii) Buyer acknowledges that any participants in the Qualified Plans who have loans outstanding thereunder will be required to repay such loans before eligible rollover distributions can be made to such participants unless the Buyer's Retirement Plan accepts a transfer of the underlying promissory note. On the Closing Date, the Company shall cause to be provided to Buyer a list of any such loans outstanding on the Closing Date. None of Buyer's Retirement Plan shall be required to hold stock of any Seller or any predecessor company or former parent company of the Company.

(d) The Company shall take all actions that are necessary or appropriate to ensure that Buyer shall have no obligation or liability under the WARN Act or any comparable foreign law or otherwise with respect to any employees or former employees of the Sellers whose employment is terminated by any Seller on or prior to the Closing Date or with respect to any Retained Employee who is terminated prior to, on or after the Closing Date, including, without limitation, providing to such employees any notifications required by the WARN Act in a timely manner. Buyer shall take all such actions to ensure that the Company has no such liability with respect to Continuing Employees who are terminated by Buyer after the Closing Date, including, without limitation, providing to such employees any notifications required by the WARN Act in a timely manner. The Company shall indemnify and hold harmless Buyer from and against any liability incurred by Buyer arising out of the termination of employment of any of the Sellers' employees on or prior to the Closing Date and Buyer shall indemnify and hold harmless the Company from and against any liability incurred by the Company arising out of the termination of employment of a Continuing Employee by Buyer after the Closing Date.

(e) Subject to applicable law, all information and records regarding employment and personnel matters of Continuing Employees shall be transferred to Buyer on the Closing Date.

(f) Effective as of the Closing, Buyer shall provide Continuing Employees with coverage for all workers' compensation benefits, and from and after the Closing be responsible for all workers' compensation claims filed by Continuing Employees in connection with events following the Closing.

(g) From and after the Closing, Buyer shall be responsible for, and shall indemnify and hold harmless the Company and its officers, directors and employees from and against any and all claims, losses, damages, costs and expenses (including attorneys' fees and expenses) and other liabilities and obligations relating to or arising out of (i) all salaries, wages, commissions, employee incentive or other compensation, severance, holiday, vacation, health, dental or retirement benefits accrued after the Closing Date and (ii) the liabilities assumed by Buyer under this Section 5.8 or any failure by Buyer to comply with the provisions of this Section 5.8. If, after the Closing Date, the Company pays any claim made by a Continuing Employee for medical or dental benefits or for workers' compensation accrued or incurred following the Closing, Buyer thereby acknowledges and agrees that it shall reimburse the Company within ten (10) Business Days of delivery of notice of such payment.

(h) The Company shall be responsible for and shall indemnify and hold harmless the Buyer and its officers, directors and employees from and against any claims, losses, damages, costs, and expenses (including reasonable attorneys' fees and expenses) and other liabilities and obligations relating to or arising out of (a) the payment of all earned but unpaid salaries, bonus (including the payment, no later than 30 days after the Closing Date, of year 2002 bonuses (prorated by multiplying the annualized amount of such bonuses by a fraction, the numerator of which is the number of days elapsed in 2002 and 2003 prior to the Closing Date and the denominator of which is 365) in accordance with its past practices and without any difference based on the fact that the recipients are no longer employees of the Company), vacation pay, sick pay, holiday pay, severance pay and other like obligations and payments to the Employees (including Continuing Employees) for all events occurring and periods ending on or prior to the Closing Date, (b) the payment of any amounts due to Employees (including Continuing Employees) pursuant to the Employee Plans as a result of the employment of the Employees (including Continuing Employees) on or prior to the Closing Date, (c) all incurred but unreported or unpaid medical and workers' compensation claims occurring on or prior to the Closing Date and for the cost

associated with confinement in any medical care, nursing, rehabilitation or similar facility which commences prior to the Closing Date, (d) liabilities associated with any leaves taken prior to the Closing Date in connection with the Family and Medical Leave Act of 1993 or any policy, program or plan effective on the Closing Date and (e) liabilities assumed or retained by Sellers under this Section 5.8 or any failure by the Company or the Subsidiaries to comply with the provisions of this Section 5.8. In determining bonuses and other similar payments due to Continuing Employees for any period ended on or prior to the Closing Date, the Company shall, if payment thereof will occur after the Closing Date, waive any requirement that such employees be employees of the Company on the date such bonuses or other similar payments are paid. If, after the Closing Date, the Buyer pays any claim made by a Continuing Employee for medical or dental benefits or workers' compensation incurred or accrued on or prior to the Closing Date, the Company hereby acknowledges and agrees that it shall reimburse the Buyer within ten (10) Business Days of delivery of notice of such payment. The Company shall, and hereby does, release all Continuing Employees from any employment and/or confidentiality agreement previously entered into between the Company and such Continuing Employees to the extent (but only to the extent) necessary for Buyer to operate the Business in the same manner as operated by the Sellers prior to the Closing Date.

(i) Within five (5) days after the date of this Agreement, the Company shall, and shall cause the Subsidiaries to (i) establish retention bonus arrangements (the "Retention Bonuses") in the forms attached hereto as *Exhibit C* for the benefit of Target Employees whose names are set forth on *Schedule 5.8(i)* attached hereto (the "Retention Bonus Employees") and (ii) announce to the Retention Bonus Employees the terms and conditions of such Retention Bonuses. The Retention Bonuses shall provide that, if the Retention Bonus Employee accepts an offer of employment from the Buyer or one of its affiliates and remains employed by the Buyer or an affiliate six (6) months after the Closing Date or his or her employment is terminated without cause by the Buyer or any of its affiliates during such six (6) month period, then such Employee shall be entitled to receive a retention bonus at the Company's sole expense in an amount set forth on *Schedule 5.8(i),* which bonus shall be paid within ten (10) business days after the six (6) month anniversary of the Closing Date. The Company shall retain or assume sole responsibility for paying the Retention Bonuses to Retention Bonus Employees. The Buyer shall administer and make any and all payments of Retention Bonuses to Retention Bonus Employees provided, however, that the Company shall retain the economic obligation (including payroll tax liabilities) with respect to payment of the Retention Bonuses and the Company shall reimburse Buyer for the cost of such Retention Bonuses (including payroll tax liabilities) made by Buyer within ten (10) days after receipt of an invoice evidencing payment by Buyer of such Retention Bonuses. The Buyer shall take any action reasonably requested by the Company necessary to permit the Company to realize any tax benefits associated with the Company's reimbursement to the Buyer for payment of the Retention Bonuses.

(j) No Continuing Employee or other current or former employee of any of the Sellers, any affiliate of any of the Sellers (or his/her spouse or beneficiary), or any other person not a party to this Agreement, shall be entitled to assert any claim hereunder. This Agreement shall be binding upon and inure to the benefit only of the parties hereto and their respective successors and permitted assigns in accordance with Section 15 hereof. Notwithstanding any other provision of this Agreement, except with respect to such successors or permitted assigns this Agreement is not intended and shall not be construed for the benefit of any third party or any person not a signatory hereto. In no event shall this Agreement constitute a third party beneficiary contract.

(k) Following the Closing, the Company shall permit Continuing Employees who participate in the Company's dependent care spending account to continue to receive reimbursements for covered expenses from their account balance, if any, following the Closing Date through the end of the plan year in which the Closing Date occurs. No additional contributions shall be required for such coverage form the Continuing Employees.

5.9 *Notification of Changes.* Between the date hereof and the Closing Date, the Company shall promptly notify the Buyer in writing of (i) any material adverse change, (ii) the institution of or, if known by

the Company, the threat of institution of, litigation against any Seller related to this Agreement, the Business or the Assets, (iii) the occurrence or existence of any event or circumstance that might reasonably be expected to result in the institution or assertion of litigation related to this Agreement, the Business or the Assets against any of the Sellers, (iv) the terms of new material contracts or material amendments to material contracts (except for aspects of such matters the disclosure of which the Company believes, after consultation with its counsel, and consultation by its counsel with counsel for the Buyer, is impermissible or inadvisable under applicable laws), and (v) any information that, if known on the date hereof, would have been required to be disclosed on a Schedule to this Agreement in order for the representations and warranties set forth in Section 2.26 to be true as of the date hereof.

6. *Satisfaction of Conditions.*

The Company and the Buyer covenant and agree to use their commercially reasonable efforts to obtain the satisfaction of the conditions specified in this Agreement.

7. *Conditions to Obligations of the Buyer*

The obligations of the Buyer under this Agreement to consummate the Closing are subject to the fulfillment, at the Closing, of the following conditions precedent, each of which may be waived in writing in the sole discretion of the Buyer:

7.1 *Continued Truth of Representations and Warranties of the Company; Compliance with Covenants and Obligations.* The representations and warranties of the Company in this Agreement shall be true in all material respects on and as of the Closing Date as though such representations and warranties were made on and as of such date, except for any changes permitted by the terms hereof or consented to in writing by the Buyer. The Company shall have performed and complied in all material respects with all terms, conditions, covenants, obligations, agreements and restrictions required by this Agreement to be performed or complied with by it prior to or at the Closing Date.

7.2 *Corporate Proceedings.* All corporate and other proceedings required to be taken on the part of the Company to authorize or carry out this Agreement and to convey, assign, transfer and deliver the Assets shall have been taken, including, without limitation, that the Company Shareholders shall have approved the transactions contemplated by this Agreement in accordance with the terms of Section 5.4 hereunder.

7.3 *Approvals.* The Company shall have obtained (a) all of the consents listed in *Schedule 2.3* attached hereto under the heading "Individually Material Consents" and (b) all other consents, authorizations, permits or approvals from all other third parties (including without limitation governmental agencies, departments, bureaus, commissions and similar bodies), of which the failure to obtain would cause a materially adverse effect upon the Business if not so obtained (either individually or in the aggregate). All applicable waiting periods (and any extensions thereof) under the Hart-Scott-Rodino Act and any applicable Foreign Antitrust Laws shall have expired or otherwise been terminated.

7.4 *Adverse Proceedings.* No action or proceeding by or before any court or other governmental body shall have been instituted by any governmental body or person whatsoever which shall seek to restrain, prohibit or invalidate the transactions contemplated by this Agreement or which might affect the right of the Buyer to own or use the Assets or conduct the Business after the Closing or claiming damages in connection with the transaction contemplated hereby.

7.5 *Closing Deliveries.* The Buyer shall have received at or prior to the Closing each of the following documents:

(a) a bill of sale substantially in the form attached hereto as *Exhibit D*, executed on behalf of the Company;

(b) such deeds, other instruments of conveyance, assignment and transfer, and related documents (including, an Iowa real estate transfer statement), executed and acknowledged in form and substance in conformity with local customs in the location of each of the U.S. Assets and otherwise reasonably

satisfactory to the Buyer, as shall be appropriate to convey, transfer and assign to, and to vest in, the Buyer title to the U.S. Assets as provided in this Agreement, and comply with local law;

(c) such affidavits as Buyer's title company shall reasonably require in order to omit from its title insurance policy all exceptions for judgments, bankruptcies or other returns against persons or entities whose names are the same as or similar to the Company's name and any other Encumbrances other than Permitted Encumbrances;

(d) checks to the order of the appropriate taxing authority in payment of all applicable real property transfer taxes and copies of any required tax returns therefor executed by the Company, which checks shall be certified or official bank checks if required by the taxing authority;

(e) a certification that the Company is not a non-resident alien for purposes of Section 1445 of the Internal Revenue Code, signed under penalty of perjury;

(f) any and all other documents customarily delivered at real estate closings where the U.S. Real Property is located, and reasonably necessary to record the deeds and obtain title insurance without payment of special premium therefor;

(g) copies of such contracts, files and other data and documents pertaining to the Assets or the Business, that are not located at the facilities to be transferred to the Buyer under this Agreement, as the Buyer may reasonably request;

(h) such certificates of the Company's officers and such other documents evidencing satisfaction of the conditions specified in Section 7 as the Buyer shall reasonably request;

(i) the Transition Services Agreement and Patterson Lease (all as defined in Section 10.5) executed by the Company and accepted by the Buyer;

(j) a notarized document of transfer and assignment with respect to the ownership interests of Penwest Pharmaceuticals GmbH, a stock transfer form with respect to the stock of Penwest Pharmaceuticals Ltd. and stock certificates of the other Subsidiary, duly endorsed for transfer to the Buyer or accompanied by such stock powers or other documents as shall be necessary to transfer ownership thereof to the Buyer;

(k) a certificate of the Secretary of State or other appropriate official of the state or country of organization of each Seller as to the legal existence and good standing of each Seller in such jurisdiction, and a certificate of the Secretary of State or other appropriate official of each jurisdiction in which each Seller is qualified to transact business, as to the good standing and foreign qualification of each Seller in each such jurisdiction or, as to Penwest Pharmaceuticals GmbH, a certified copy of the trade register excerpt for such company;

(l) certificates of the Secretary or other appropriate officer of the Company attesting to the incumbency of the Company's officers, respectively, the authenticity of the resolutions authorizing the transactions contemplated by the Agreement, and the authenticity and continuing validity of the charter documents delivered pursuant to Section 2.1;

(m) resignations of officers and directors of the Subsidiaries;

(n) UCC-3 release and termination statements and mortgage satisfaction certificates executed by each Seller's secured creditors which will, when filed with appropriate authorities, release all Encumbrances against the Assets except for Permitted Encumbrances;

(o) the opinions of the law firm of Hale and Dorr LLP and Perkins Coie LLP in the respective forms attached hereto as *Exhibits E* and *F*;

(p) evidence reasonably satisfactory to the Buyer's counsel of transfer of those material permits whose transfer is permissible and which constitute Assets;

(q) evidence of payment of all amounts owing to AstraZeneca plc referred to in Section 2.6;

(r) a sales tax clearance certificate issued by appropriate officials of the State of New York; and

(s) such other documents, instruments or certificates of the type customary for transactions similar to the transactions contemplated by this Agreement as the Buyer may reasonably request.

8. *Conditions to Obligations of the Company*

The obligations of the Company under this Agreement to consummate the Closing are subject to the fulfillment, at the Closing Date, of the following conditions precedent, each of which may be waived in writing at the sole discretion of the Company:

8.1 *Continued Truth of Representations and Warranties of the Buyer; Compliance with Covenants and Obligations.* The representations and warranties of the Buyer in this Agreement shall be true in all material respects on and as of the Closing Date as though such representations and warranties were made on and as of such date, except for any changes consented to in writing by the Company. The Buyer shall have performed and complied in all material respects with all terms, conditions, obligations, agreements and restrictions required by this Agreement to be performed or complied with by it prior to or at the Closing Date.

8.2 *Corporate Proceedings.* All corporate and other proceedings required to be taken on the part of the Buyer to authorize or carry out this Agreement shall have been taken.

8.3 *Governmental Approvals.* Without material exception, all governmental agencies, departments, bureaus, commissions and similar bodies, the consent, authorization or approval of which is necessary under any applicable law, rule, order or regulation for the consummation by the Buyer of the transactions contemplated by this Agreement and whose names are set forth in *Schedule 2.3*attached hereto under the heading "Individually Material Consents" or the failure to receive which, although not so listed, would cause a materially adverse effect upon the Business if not received (either individually or in the aggregate) shall have consented to, authorized, permitted or approved such transactions. All applicable waiting periods (and any extensions thereof) under the Hart-Scott-Rodino Act and all Foreign Antitrust Laws shall have expired or otherwise been terminated.

8.4 *Adverse Proceedings.* No action or proceeding by or before any court or other governmental body shall have been instituted or threatened by any governmental body or person whatsoever which shall seek to restrain, prohibit or invalidate the transactions contemplated by this Agreement or which might affect the right of the Company to transfer the Assets.

8.5 *Closing Deliveries.* The Company shall have received at or prior to the Closing each of the following documents:

(a) such certificates of the Buyer's officers and such other documents evidencing satisfaction of the conditions specified in this Section 8 as the Company shall reasonably request;

(b) a certificate of the Secretary of State of the state of Delaware as to the legal existence and good standing (including tax) of the Buyer in Delaware;

(c) a certificate of the Secretary of the Buyer attesting to the incumbency of the Buyer's officers, the authenticity of the resolutions authorizing the transactions contemplated by this Agreement, and the authenticity and continuing validity of the charter documents delivered pursuant to Section 3.1;

(d) the Buyer's Instrument of Assumption and the Transition Services Agreement and Patterson Lease executed by the Buyer;

(e) opinions of the law firms of Alston & Bird LLP and Poellath & Partner in the respective forms attached hereto as *Exhibit G* and *H*;

(f) payment of the Purchase Price as provided in Section 1.3, by wire transfer and by delivery of the manually executed original of the Promissory Note; and

(g) such other documents, instruments or certificates of the type customary for transactions similar to the transactions contemplated by this Agreement as the Company may reasonably request.

9. *Indemnification*

9.1 *By the Buyer and the Company.* The Buyer on the one hand and the Company on the other hand each hereby agree to indemnify and hold harmless the other, any of their respective affiliates and any of such affiliate's respective directors, employees and agents against all claims, damages, losses, liabilities, costs and expenses (including, without limitation, settlement costs and any reasonable legal expenses, accounting expenses or other expenses for investigating or defending any actions or threatened actions) ("Losses") reasonably incurred by the Buyer or the Company in connection with each and all of the following:

(a) any breach by the indemnifying party of any representation or warranty made by it in this Agreement; and

(b) any breach of any covenant, agreement or obligation of the indemnifying party contained in this Agreement or any other agreement, instrument or document contemplated by this Agreement.

9.2 *By the Company.* The Company further agrees to indemnify and hold harmless the Buyer, its affiliates and such affiliate's directors, employees and agents, from any and all Losses reasonably incurred by the Buyer, in connection with each and all of the following:

(a) the failure of the Buyer to obtain the protections afforded by compliance with the notification and other requirements of the bulk sales laws in force in the jurisdictions in which such laws may be applicable to either the Company or the transactions contemplated by this Agreement;

(b) except for the Assumed Liabilities and for liabilities and obligations allocated to the Buyer in Section 1.4(c) or elsewhere in this Agreement, any claims, damages, or liabilities arising out of the operation of the Business, to the extent such claims accrue or arise out of facts or circumstances occurring on or before the Closing Date or, if such claims arise out of liabilities of the Company not constituting Assumed Liabilities and not allocated to the Buyer in Section 1.4(d) or elsewhere in this Agreement, occurring on, before or after the Closing Date;

(c) subject to the provisions of Section 9.9, any Environmental Liabilities;

(d) any Taxes of the Company and the Subsidiaries imposed upon or measured by net income with respect to any Tax year or portion thereof ending on or before the Closing Date (or for any Tax year beginning before and ending after the Closing Date to the extent allocable to the portion of such period beginning before and ending on the Closing Date), except to the extent they are already taken into account in determining the Net Working Capital;

(e) the unpaid Taxes of any person (other than any of the Company and the Subsidiaries) under Reg. §1.1502-6 (or any similar provision of state, local, or foreign law), as a transferee or successor, by contract, or otherwise; and

(f) any liabilities and obligations allocated to the Company in Section 1.4(c) or elsewhere in this Agreement (including liabilities and obligations of Subsidiaries that are allocated to the Company).

9.3 *By the Buyer.* The Buyer further agrees to indemnify and hold harmless the Company, its affiliates and such affiliate's directors, employees and agents, from any and all Losses reasonably incurred by the Company, in connection with or arising out of (a) the operation of the Business, to the extent such claims accrue or arise out of facts or circumstances occurring after the Closing Date, (b) any Assumed Liabilities and (c) any liabilities and obligations allocated to the Buyer in Section 1.4(c) or elsewhere in this Agreement (including liabilities and obligations of Subsidiaries that are allocated to the Buyer).

9.4 *Claims for Indemnification.* Whenever any claim shall arise for indemnification hereunder the party seeking indemnification (the "Indemnified Party"), shall promptly notify the party from whom indemnification is sought (the "Indemnifying Party") of the claim and, when known, the facts constituting the basis for such claim. In the event of any such claim for indemnification hereunder resulting from or in connection with any claim or legal proceedings by a third party, the notice to the Indemnifying Party shall specify, if known, the amount or an estimate of the amount of the liability arising therefrom. Failure to give timely notice of any claim shall not release the Indemnifying Party from any further liability to the

Indemnified Party with respect to such claim except to the extent such failure materially prejudices the ability of the Indemnifying Party to defend against such claim.

The Indemnified Party shall not settle or compromise any claim by a third party for which it is entitled to indemnification hereunder without the prior written consent of the Indemnifying Party, unless suit shall have been instituted against it and the Indemnifying Party shall not have taken control of such suit after notification thereof as provided in Section 9.5 of this Agreement.

9.5 *Defense by Indemnifying Party.* In connection with any claim giving rise to indemnity hereunder resulting from or arising out of any claim or legal proceeding by a person who is not a party to this Agreement, the Indemnifying Party at its sole cost and expense may, upon written notice to the Indemnified Party, assume the defense of any such claim or legal proceeding if it acknowledges to the Indemnified Party in writing its obligations to indemnify the Indemnified Party with respect to all elements of such claim. The Indemnified Party shall be entitled to participate in (but not control) the defense of any such action, with its counsel and at its own expense. If the Indemnifying Party does not assume the defense of any such claim or litigation resulting therefrom within 30 days after the date it is notified that such claim has been made, (a) the Indemnified Party may defend against such claim or litigation, in such manner as it may reasonably deem appropriate, including, but not limited to, settling such claim or litigation, after giving notice of the same to the Indemnifying Party, on such terms as the Indemnified Party may deem appropriate, and (b) the Indemnifying Party shall be entitled to participate in (but not control) the defense of such action, with its counsel and at its own expense.

9.6 *Additional Procedures for Environmental Indemnification.*

In addition to the procedures for defense by the Indemnifying Party specified in Section 9.5, the following additional procedures shall apply to claims for indemnification under Section 9.1 regarding the Environmental Representations and Section 9.2 regarding Environmental Liabilities (collectively "Environmental Claims"):

(a) The Company shall not be responsible for any legal or other expenses of Buyer or its affiliates incurred in connection with the defense of an Environmental Claim incurred:

(i) prior to the Buyer's providing notice to the Company and for 30 days thereafter (except for reasonable and necessary costs of investigation prior to timely notice); or

(ii) after the Company's assumption of control of the defense; or

(iii) during the period following the Company's taking control of the defense of such claim, except to the extent such action is legally required.

(b) If the Company has assumed the defense of an Environmental Claim that involves Remedial Activities on a Seller Site then owned by the Buyer or one of its affiliates (collectively, the "Facility"):

(i) the Company shall provide the Buyer reasonable notice and opportunity to comment (at its own cost and expense) upon the Company's plans for addressing such Environmental Claim;

(ii) the Buyer shall provide the Company reasonable access to the Facility relating to such Environmental Claim (including, without limitation, the right to enter, investigate, drill wells on, take samples on, excavate, monitor, test, cap and implement remedial or removal actions, on or at the Facility in compliance with applicable Environmental Law);

(iii) the Company shall use reasonable efforts to avoid disruption to the business or operations of the Buyer or its affiliates or damage to persons or property, and shall take reasonable steps to mitigate and remedy any such disruption and damage;

(iv) neither the Buyer nor its affiliates shall unreasonably interfere with or impede any of the Company's remedial, investigatory or removal actions;

(v) the Buyer or its affiliate may have a representative present to observe all remediation activities conducted at the Facility;

(vi) the Company shall be solely responsible for any necessary offsite disposal or manifesting of materials, samples taken or waste generated in connection with the remediation, and, upon Buyer's request, the Company shall furnish reasonable evidence that such disposal is in compliance with all applicable Environmental Laws;

(vii) subject to Section 9.9 of this Agreement, all activities undertaken in connection with the Remedial Activities shall fully comply with all applicable Environmental Laws and other applicable laws including those relating to worker safety and to proper disposal of any disturbed or discarded materials;

(viii) the Company will restore promptly any physical damage on the Facility caused by the Remedial Activities to the condition existing prior to such damage;

(ix) each of the Company and its contractors shall have in force at all times a comprehensive general liability insurance policy, automobile insurance policy and an errors and omissions policy providing reasonable coverage and deductibles and worker's compensation insurance in the statutory amounts, and the Company and Buyer shall be made certificate holders as additional insured parties under said policies where legally permissible during the performance of the Remedial Activities; and

(x) subject to the Company's right to control the defense, if the Company and the Buyer cannot resolve any disagreement as to the Company's plans for performing such Remedial Activities, the Company and the Buyer shall resolve such disputes in accordance with Sections 19 and 20 of this Agreement.

(c) If the Company has assumed the defense of the Environmental Claim (whether or not it involves Remedial Activities at a Facility):

(i) the Company thereafter shall determine, control and undertake the actions to resolve such claim to the extent required under applicable Environmental Law;

(ii) the Company shall keep the Buyer reasonably informed about the defense, and, at Buyer's sole cost and expense (as to out-of-pocket costs and expenses), shall provide the Buyer with reasonable access to all data and reports generated in connection with such activities;

(iii) the Buyer shall provide the Company reasonable access to such employees and advisors of Buyer or its affiliates as may have knowledge of the relevant Facility or facts relating to such an Environmental Claim and all relevant documents and records regarding any matter in respect of which a claim is asserted; and

(iv) the Buyer shall, and shall cause its affiliates to, cooperate with the Company (as the Company may reasonably direct) in connection with the prosecution, defense, settlement or performance of the Company's obligations as set forth in Section 9.1, 9.2 or 9.6.

9.7 *Payment of Indemnification Obligation.* All indemnification by the Buyer or the Company hereunder shall be effected by payment of cash or delivery of a cashier's or certified check in the amount of the indemnification liability.

9.8 *Limitations on Indemnification.* No amount of indemnification shall be payable by an Indemnifying Party in the case of a claim by any Indemnified Party under Section 9, unless, until and then only to the extent that actual damages and losses suffered or incurred by the Indemnified Party exceed $250,000 and then only to the extent such damages and losses exceed such amount. In no event shall the aggregate indemnity amount payable by any Indemnifying Party under this Section 9 exceed 25% of the Purchase Price, as adjusted pursuant to Section 1.7. The foregoing limitations on indemnification shall not apply to (a) intentional breaches of representations or covenants contained in this Agreement; (b) liabilities not assumed by or allocated to the Buyer under this Agreement; (c) the adjustment to the Purchase Price by reason of the calculation of the Net Working Capital; (d) losses arising out of or related to Taxes payable by any of the Sellers or with respect to any representation or warranty set forth in Section 2.22; or

(e) indemnification claims under Section 9.2(c); and the $250,000 limitation shall not apply to Losses arising out of (i) the transactions contemplated by this Agreement violating applicable laws or regulations of the federal Food and Drug Administration ("FDA") or comparable state agencies or (ii) Penwest's failure to make any required filings with the FDA or comparable state agencies with respect to such transactions. Notwithstanding anything to the contrary contained herein, no party shall be liable for any incidental, consequential, special, punitive or other similar damages, except that an Indemnifying Party shall be liable for such damages of those types as are awarded to a third party pursuant to a claim brought by such third party against an Indemnified Party.

9.9 *Additional Limitations on Environmental Indemnification.*

(a) Notwithstanding any other provision of this Agreement to the contrary, the Company shall have no obligation to provide indemnification or have any other liability under Sections 9.1 or 9.2 for:

(i) Environmental Claims asserted on or after the fifth anniversary of the Closing Date;

(ii) Environmental Claims related to a Facility unless (1) the Facility has been operated since the Closing Date solely for commercial or industrial purposes (including related office, warehouse, sale, and service activities), (2) the Facility has not been sold or transferred during such five-year indemnification period, and (3) such Environmental Claim does not involve conditions and/or Hazardous Materials created, caused or materially aggravated by the Buyer or any tenant of the Buyer (other than the Company) following the Closing Date;

(iii) Environmental Claims arising directly or indirectly out of any drilling, soil or groundwater sampling, or excavation at any Facility ("Post-Closing Investigation") carried out after the Closing Date to the extent such acts were consented to or allowed, initiated, performed, sought or caused by Buyer or its affiliates, or a successor owner or operator of such Facility, *except* where, and solely to the extent that the Sellers are provided 30 days prior notice of the intent to investigate and the Post-Closing Investigation results directly from any of the following:

(1) a determination (whether by judgment, order, award or other legal directive) in a judicial, administrative or binding arbitral proceeding commenced by a third party that Buyer has an obligation to investigate, remediate or pay damages on account of an Environmental Claim;

(2) environmental investigations performed upon the demand of a bona fide prospective purchaser of the Facility; or

(3) activities necessary for the construction, reconstruction, refurbishment, renovation, expansion, or enlargement of any building or structure.

(b) The Buyer agrees to place such legal and institutional controls on any Facility as the Company may determine are reasonably necessary for the efficient discharge of its indemnification obligations with regard to Environmental Claims, including, without limitation, activity and use limitations, deed restrictions, deed notices or government orders ("Institutional Controls"), provided that such Institutional Controls are not inconsistent with and would not unreasonably interfere with the continued commercial or industrial use of such Facility.

(c) Pursuant to Sections 9.1 and 9.2, the Company shall be responsible to conduct, or to pay Losses on account of, any investigation or remediation of Hazardous Substances at any Facility only to the extent such investigation or remediation is necessary to render the Facility safe and useful for its use for industrial and commercial purposes, which rendering may be premised on industrial or commercial risk-based cleanup standards and/or placement of Institutional Controls.

(d) If Buyer is nevertheless controlling the defense of an Environmental Claim, in performing any Remedial Activities response action for which indemnification may be sought pursuant to 9.1 or 9.2, Buyer shall select the remedy which most cost effectively achieves the required level of cleanup with respect to which the Company owes (or is asserted to owe) an indemnity pursuant to Section 9.1 or 9.2.

(e) Buyer's rights to indemnification for Environmental Liabilities are solely as explicitly set forth in this Agreement, but nothing in this Agreement shall preclude the Buyer or its officers, directors or agents from seeking contribution or other recovery or relief, whether in law or equity, related directly or indirectly to the Business, or operation of the Business and arising at any time under Environmental Laws. The Parties each reserve all rights and defenses in respect of any such claims.

9.10 *Survival of Representations; Claims for Indemnification.* All representations and warranties made by the parties herein or in any instrument or document furnished in connection herewith shall survive the Closing and any investigation at any time made by or on behalf of the parties hereto. All such representations and warranties shall expire (i) on March 31, 2004 or (ii) twelve (12) months after the Closing Date, whichever is later, except for (a) claims, if any, asserted in writing prior to such expiration date, which shall survive until finally resolved and satisfied in full, (b) representations and warranties contained in Section 2.22 hereof, which shall first expire three (3) months after the expiration of the statute of limitations with respect to claims for non-payment or underpayment of taxes, (c) the Environmental Representations, which shall first expire five (5) years after the Closing Date, and (d) representations and warranties with respect to title to the Assets, which shall not expire. All claims and actions for indemnity pursuant to this Section 9 for breach of any representation or warranty shall be asserted or maintained in writing by a party hereto on or prior to the expiration of the applicable period.

10. *Post-Closing Agreements*

10.1 *Non-Competition Agreement, Non-Solicitation.*

(a) Without the prior approval of the Buyer, for a period of five (5) years after the Closing Date, the Company shall not engage directly or indirectly in the manufacture or sale of excipient products (whether or not in bulk) in the United States, the continent of Europe or elsewhere or assist any other person to be so engaged by intentional disclosure of confidential information related to the Business; provided, that the sale of excipients as part of the development, formulation and sale of complete, controlled release, drug delivery systems shall not be deemed to violate this Section 10.1. The parties hereto specifically acknowledge and agree that the foregoing covenant and agreement is made and given by the Sellers in connection with the sale of the Business and the good will associated therewith and in order to protect and preserve to the Buyer the benefit of its bargain in the purchase of such Business and good will.

(b) Without the prior approval of the Buyer, for a period of two (2) years after the Closing Date, the Company shall not directly or indirectly solicit for employment or employ in any capacity, including as a consultant or agent, any Continuing Employee.

(c) The parties hereto agree that the duration and geographic scope of the provisions set forth in this Section 10.1 are reasonable. If any court determines that the duration or the geographic scope, or both, are unreasonable and that such provision is to that extent unenforceable, the parties hereto agree that these provisions shall remain in full force and effect for the greatest time period and in the greatest area that would not render it unenforceable. The parties intend that these provisions shall be deemed to be a series of separate covenants, one for each and every county of each and every state of the United States of America and each and every political subdivision of each and every foreign country and each and every political subdivision of each. The Company agrees that damages are an inadequate remedy for any breach of this provision and that the Buyer shall, whether or not it is pursuing any potential remedies at law, be entitled to equitable relief in the form of preliminary and permanent injunctions without bond or other security upon any actual or threatened breach of these provisions.

10.2 *Sharing of Data.*

(a) Subject to applicable law, the Company shall have the right for a period of five years following the Closing Date (and for such longer period as may be reasonably necessary to enable the Company to deal with applicable governmental agencies and regulators) to have reasonable access to such books, records and accounts, including financial and tax information, correspondence, production records, and other similar information as are transferred to the Buyer pursuant to the terms of this Agreement for the

purposes of concluding its involvement in the Business prior to the Closing Date and for complying with its obligations under applicable securities, tax, environmental, employment or other laws and regulations. Subject to applicable law, the Buyer shall have the right for a period of five years following the Closing Date (and for such longer period as may be reasonably necessary to enable the Buyer to deal with applicable governmental agencies and regulators) to have reasonable access to those books, records and accounts, including financial and tax information, correspondence, employment records and other records which are retained by the Company pursuant to the terms of this Agreement to the extent that any of the foregoing relates to the Business transferred to the Buyer hereunder or is otherwise needed by the Buyer in order to comply with its obligations under applicable securities, tax, environmental, employment or other laws and regulations.

(b) The Company and the Buyer agree that from and after the Closing Date they shall cooperate fully with each other to facilitate the transfer of the Assets from the Sellers to the Buyer and the operation thereof by the Buyer.

10.3 *Use of Name.* The Buyer agrees not to use any of the Excluded Marks or the Penwest name, corporate name, logo or any variation or derivation thereof prior to or after the Closing Date in connection with any business related to, competitive with, or an outgrowth of, the Business conducted on the date hereof; provided, however, that the Buyer (i) may continue to use any brochures, packaging or marketing materials included in the Assets containing any Penwest name, mark or logo (but not any of the Excluded Marks) (provided that such brochures or materials are prominently marked on their cover pages, within 30 days after the Closing Date, to indicate that the Buyer, and not the Company, is conducting the Business and owns the Subsidiaries) for up to nine months following the Closing Date and may during such nine-month period reprint and use additional copies of any of the foregoing of which there is less than a nine month supply included in the Assets, and (ii) may for up to nine months after the Closing identify itself in any advertising, brochures, marketing materials or otherwise as the successor to the Penwest excipients business.

10.4 *Cooperation in Litigation.* Each party hereto will fully cooperate with the others in the defense or prosecution of any litigation or proceeding already instituted or which may be instituted hereafter against or by such party relating to or arising out of the conduct of the Business prior to or after the Closing Date (other than litigation or proceedings arising out the transactions contemplated by this Agreement). The party requesting such cooperation shall pay the reasonable out-of-pocket expenses (including legal fees and disbursements), as incurred, of the party providing such cooperation and of its officers, directors, managers, members, employees and agents reasonably incurred in connection with providing such cooperation, but shall not be responsible to reimburse the party providing such cooperation for such party's time spent in such cooperation or the salaries or costs of fringe benefits or similar expenses paid by the party providing such cooperation to its officers, directors, managers, members, employees and agents while assisting in the defense or prosecution of any such litigation or proceeding.

10.5 *Transitional Services and Patterson Lease.* The Company shall (i) utilize office and research and development space and equipment in Patterson, New York, pursuant to a lease in the form attached hereto as *Exhibit I* (the "Patterson Lease") which provides for two years of occupancy rent-free and options for three years thereafter at a rental of $12 per square foot and (ii) utilize its current financial systems information technology services pursuant to a services agreement in the form attached hereto as *Exhibit J* (the "Transition Services Agreement). Likewise the Buyer shall utilize the Seller's benefits administrative services pursuant to the Transition Services Agreement. The parties agree to provide, or cause to be provided, these aforementioned services for up to a twelve-month period after the Closing.

10.6 *Confidentiality Agreements.* If requested by Buyer, the Company agrees to enforce confidentiality agreements it has with employees, consultants and other third parties to protect the Intangible Property sold to the Buyer. Such enforcement shall be at Buyer's cost, using attorneys selected by Buyer and reasonably acceptable to the Company. The Buyer shall furthermore reimburse the Company any reasonable out of pocket expenses it may incur in this respect.

10.7 *Tax Matters.* The following provisions shall govern the allocation of responsibility as between the Buyer and the Company for certain Tax matters following the Closing Date:

(a) *Tax Periods Beginning Before and Ending After the Closing Date.* Buyer shall prepare or cause to be prepared and file or cause to be filed any Tax Returns of the Subsidiaries for tax periods which begin before the Closing Date and end after the Closing Date. Sellers shall pay to Buyer within fifteen (15) days after the date on which Taxes shown on such Tax Returns are paid with respect to such periods an amount equal to the portion of such Taxes which relates to the portion of such taxable period ending on the Closing Date. For purposes of this Section, in the case of any Taxes that are imposed on a periodic basis and are payable for a taxable period that includes (but does not end on) the Closing Date, the portion of such Tax which relates to the portion of such taxable period ending on the Closing Date shall (x) in the case of any Taxes other than Taxes based upon or related to income or receipts, be deemed to be amounts of such Tax for the entire taxable period multiplied by a fraction the numerator of which is the number of days in the taxable period ending on the Closing Date and the denominator of which is the number of days in the entire taxable period, and (y) in the case of any Tax based upon or related to income or receipts be deemed equal to the amount which would be payable if the relevant taxable period ended on the Closing Date. Any credits relating to a taxable period that begins before and ends after the Closing Date shall be taken into account as though the relevant taxable period ended on the Closing Date. All determinations necessary to give effect to the foregoing allocations shall be made in a manner consistent with prior practice of the Company and the Subsidiaries.

(b) *Cooperation About Tax Matters.*

(i) Buyer, the Company and the Subsidiaries shall cooperate fully, as and to the extent reasonably requested by any other party, in connection with the filing of Tax Returns pursuant to this Section and any audit, litigation or other proceeding with respect to Taxes. Such cooperation shall include the retention and (upon such other party's request) the provision of records and information which are reasonably relevant to any such audit, litigation or other proceeding and making employees available on a mutually convenient basis to provide additional information and explanation of any material provided hereunder. The Company and the Buyer agree to retain all books and records with respect to Tax matters pertinent to the Company and the Subsidiaries relating to any taxable period beginning before the Closing Date until the expiration of the statute of limitations (and, to the extent notified by Buyer to the Company or the Company to the Buyer, any extensions thereof) of the respective taxable periods, and to abide by all record retention agreements entered into with any taxing authority, and to give the other party reasonable written notice prior to transferring, destroying or discarding any such books and records and, if the other party so requests, the Company and the Subsidiaries, as the case may be, shall allow the other party to take possession of such books and records.

(ii) Buyer and the Company further agree, upon request, to use their commercially reasonable efforts to obtain any certificate or other document from any governmental authority or any other person as may be necessary to mitigate, reduce or eliminate any Tax that could be imposed (including, but not limited to, with respect to the transactions contemplated hereby).

(c) *Tax Sharing Agreement.* All tax sharing agreements or similar agreements with respect to or involving the Company and the Subsidiaries shall be terminated as of the Closing Date and, after the Closing Date, the Company and the Subsidiaries shall not be bound thereby or have any liability thereunder.

11. *Termination of Agreement*

11.1 *Termination by Lapse of Time.* This Agreement shall terminate at 5:00 p.m., New York time, on the day which is 90 days from the date hereof, if the Closing contemplated hereby has not been consummated, unless (a) such date is extended by the written consent of the Buyer and the Company or (b) the Company receives written comments from the SEC with respect to the Company's proxy materials, in

which event said termination date shall be extended by an additional 30 days if the Company so requests within 5 days of its receipt of such comments.

11.2 *Termination by Agreement of the Parties.* This Agreement may be terminated by the mutual written agreement of the parties hereto.

11.3 *Termination by Reason of Breach.* This Agreement may be terminated:

(a) by the Company, if at any time prior to the Closing there shall occur a material breach of any of the representations, warranties or covenants of the Buyer or the failure by the Buyer to perform any material condition or obligation hereunder, which material breach or failure to perform cannot be or has not been cured within 30 days after the giving of written notice by one party to the other party specifying such breach or failure to perform; and

(b) by the Buyer, if at any time prior to the Closing there shall occur (i) a material breach of any of the representations, warranties or covenants of the Company or the failure of the Company to perform any material condition or obligation hereunder, which material breach or failure to perform cannot be or has not been cured within 30 days after the giving of written notice by one party to the other party specifying such breach or failure to perform, or (ii) a material adverse change; provided, however, if such material breach and/or material adverse change shall have occurred between the date of this Agreement and the Closing which would permit the Buyer to terminate this Agreement and nevertheless Buyer does not terminate this Agreement and continues with the transactions contemplated hereby, Buyer shall thereby have irrevocably and completely waived its rights to claim reimbursement of any Losses which Buyer could reasonably have foreseen as a result of such material breach and/or material adverse change.

11.4 *Termination by the Company's Board of Directors.* This Agreement may be terminated by the Company if the Company receives an Acquisition Proposal and the Board of Directors determines, in its good faith judgment, after consultation with legal counsel, that it must consider such Acquisition Proposal in order to comply with its fiduciary duties, as provided for in Section 5.4(e), and also that it must terminate this Agreement in order to comply with such duties.

11.5 *Effects of Termination.* If this Agreement is terminated pursuant to this Section 11, all further obligations of the parties under this Agreement will terminate, except for the obligations set forth in Sections 4.2, 4.3, 11.5, 11.6, 13, 14, 16, 17, 18, 19, 20, 21 and 22 and except for any obligations of either party to the other arising out of its willful breach of its covenants contained herein.

11.6 *Expenses*

(a) Except as otherwise expressly provided herein, the Buyer (on the one hand) and the Company (on the other hand) shall each pay its own expenses in connection with this Agreement and the transactions contemplated hereby.

(b) Notwithstanding the foregoing, if:

(i) the Buyer terminates this Agreement as a result of the failure of the condition set forth in Section 7.2, due to the lack of stockholder approval for this Agreement, then the Company shall pay to the Buyer an amount equal to Buyer's reasonable, documented out-of-pocket costs and expenses (including attorneys' fees) actually incurred by Buyer in connection with this Agreement and the transactions contemplated hereby (the "Costs and Expenses"). The Costs and Expenses shall be paid within two business days from the date of termination of this Agreement; and if

(ii) the Buyer terminates this Agreement pursuant to Section 11.3(b) (other than as described in clause (iii) below), then the Company shall pay to the Buyer an amount equal to the Buyer's Costs and Expenses, up to a maximum amount of $300,000; and if

(iii) (x) the Buyer shall terminate this Agreement pursuant to Section 11.3(b) as a result of the failure by the Board of Directors to recommend that the Company Shareholders vote in favor of

the approval of the transactions contemplated by this Agreement or as a result of a material breach by the Company of its obligations under Section 5.4; or

(y) the Company shall terminate this Agreement pursuant to Section 11.4 as a result of its receipt of an Acquisition Proposal which the Board of Directors determines, in its good faith judgment, after consultation with outside legal counsel, that it must consider in order to comply with its fiduciary duties, as provided for in Section 5.4(e);

then the Company shall pay to Buyer an amount equal to three percent (3%) of the Purchase Price (the "Termination Fee").

(c) If the Termination Fee shall be payable pursuant to subsection (b)(iii)(x) of this Section 11.6, the Termination Fee shall be paid two business days from the date of termination of this Agreement. If the Termination Fee shall be payable pursuant to subsection (b)(iii)(y) of this Section 11.6, the Termination Fee shall be paid concurrently with the delivery of the notice of termination of this Agreement to the Buyer. All such payments shall be in same-day funds.

(d) Also notwithstanding the foregoing, if the Buyer breaches its obligation to close the transactions contemplated by this Agreement or breaches any material representation, warranty or covenant in any material respect and fails to cure the same within the time allotted, then the Buyer shall pay to the Company an amount equal to three percent (3%) of the Purchase Price (the "Company's Termination Fee"). The Company's Termination Fee shall be paid within two business days from the date of termination of this Agreement in same day funds.

(e) The parties acknowledge that the agreements contained in paragraphs (a) through (d) of this Section 11.6 are an integral part of the transactions contemplated by this Agreement, and that without these agreements, they would not enter into this Agreement; accordingly, if the other Party fails to pay promptly any fee payable by it pursuant to this Section 11.6, then it shall pay to the other Party its costs and expenses (including attorneys' fees) in connection with collecting such fee, together with interest on the amount of the fee at the prime rate of Bank of America, N.A. (in effect on the date such payment was required to be made) from the date such payment was due under this Agreement until the date of payment.

(f) Nothing contained in this Section 11.6 shall constitute or shall be deemed to constitute liquidated damages for the breach by the Company or the Buyer of the terms of this Agreement. The remedies set forth in this Section 11.6 shall be the sole and exclusive remedies of the parties and their respective affiliates, directors, employees and agents for any and all claims, rights to seek contribution and other recovery or relief arising in the situations described in this Section 11.6, except for (i) such equitable remedies as may be granted by a court of competent jurisdiction and (ii) remedies for claims based on fraud or intentional breaches.

(g) Notwithstanding any other provision of this Section 11.6, no amount shall be payable to a Party if it is itself in breach of this Agreement and any period for cure has passed so that the other Party is under no obligation to close the transaction contemplated hereby.

12. *Transfer and Sales Tax*

Notwithstanding any provisions of law imposing the burden of such taxes on the Company or the Buyer, as the case may be, the party customarily paying pursuant to local practice shall be responsible for and shall pay (a) all sales, use, VAT and transfer taxes, stamp duties and notary fees, and (b) all real estate conveyance fees or governmental charges, if any, upon the sale or transfer of any of the Assets hereunder. The parties acknowledge that different local practice shall apply to Patterson, New York and Cedar Rapids, Iowa. If the party herein shall fail to pay such amounts on a timely basis, the other party may pay such amounts to the appropriate governmental authority or authorities, and the other party shall promptly reimburse the paying party for any amounts so paid.

13. *Brokers*

13.1 *For the Company.* The Company represents and warrants that it has not engaged any broker or finder or incurred any liability for brokerage fees, commissions or finder's fees in connection with the transactions contemplated by this Agreement, except for Banc of America Securities LLC, whose fees and expenses will be paid by the Company in accordance with the Company's agreement with such firm. The Company agrees to indemnify and hold harmless the Buyer against any claims or liabilities asserted against it by any person acting or claiming to act as a broker or finder on behalf of the Company.

13.2 *For the Buyer.* The Buyer represents and warrants that it has not engaged any broker or finder or incurred any liability for brokerage fees, commissions or finder's fees in connection with the transactions contemplated by this Agreement, except for Altium Capital AG and CFC Capital LLC, whose fees and expenses will be paid by the Buyer in accordance with the Buyer's agreement with such firm. The Buyer agrees to indemnify and hold harmless the Company against any claims or liabilities asserted against it by any person acting or claiming to act as a broker or finder on behalf of the Buyer.

14. *Notices.*

All notices, requests, demands, claims, and other communications hereunder shall be in writing. Any notice, request, demand, claim or other communication hereunder shall be deemed duly delivered four business days after it is sent by registered or certified mail, return receipt requested, postage prepaid, or one business day after it is sent either for next business day delivery via a reputable nationwide overnight courier service or via telecopier with written confirmation of transmission, in each case to the intended recipient as set forth below:

If to the Company:

Penwest Pharmaceuticals Co.
2981 Route 22
Patterson, NY 12563-9970
Attn: Chief Financial Officer

Copy to:

Hale and Dorr LLP
60 State Street
Boston, MA 02109
Attn: Stuart M. Falber, Esq.
Edward Young, Esq.

If to the Buyer:

Josef Rettenmaier Holding GmbH & Co. KG
Holzmuehle 1
Rosenberg, Germany

Copy to:

Alston & Bird LLP
90 Park Avenue
New York, New York 10016
Attn: Rudolph S. Houck, Esq.

Any party may give any notice, request, demand, claim or other communication hereunder using any other means (including personal delivery, expedited courier, messenger service, telecopy, telex, ordinary mail or electronic mail), but no such notice, request, demand, claim or other communication shall be deemed to have been duly given unless and until it actually is received by the party for whom it is intended. Any party may change the address to which notices, requests, demands, claims, and other communications hereunder are to be delivered by giving the other parties notice in the manner herein set forth.

15. *Successors and Assigns*

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, except that the Buyer and the Company may not assign their respective obligations hereunder without the prior written consent of the Company in the case of an assignment by the Buyer or the Buyer in the case of an assignment by the Company; provided, however, that the Buyer may assign this Agreement, and its rights hereunder, to a subsidiary or affiliate, without thereby terminating or limiting its obligations or liabilities to the Company hereunder. In particular, without limiting the foregoing, the Buyer hereby represents to Sellers and Sellers acknowledge that the Buyer intends to assign and/or delegate to one or more of its affiliates and cause that affiliate or those affiliates to assume, some or all of the rights and liabilities with respect to the Subsidiary Shares and/or Assets and Assumed Liabilities and Sellers hereby

consent thereto (provided, that no such delegation of obligations shall relieve the Buyer of continued liability thereafter for such obligations). Any assignment in contravention of this provision shall be void.

16. *Entire Agreement; Amendments; Attachments*

This Agreement, all Schedules and Exhibits attached hereto, the Confidentiality Agreement and all agreements and instruments to be delivered by the parties pursuant hereto represent the entire understanding and agreement between the parties hereto with respect to the subject matter hereof and supersede all prior oral and written and all contemporaneous oral negotiations, commitments and understandings between such parties. The Buyer and the Company may amend or modify this Agreement, in such manner as may be agreed upon, by a written instrument executed by the Buyer and the Company. This Agreement, including said Schedules and Exhibits, have gone through several revisions; the parties agree that the deletion of any language from an earlier draft shall not necessarily be interpreted to indicate the negation of the deleted language.

17. *Legal Fees*

If legal proceedings are commenced by the Buyer against any of the Sellers, or by any of the Sellers against the Buyer, in connection with this Agreement or the transactions contemplated hereby, the party or parties which do not prevail in such proceedings shall pay the reasonable attorneys' fees and other costs and expenses, including investigation costs, incurred by the prevailing party or parties in such proceedings.

18. *Governing Law; Consent to Jurisdiction*

18.1 *Governing Law.* This Agreement shall be governed by and construed in accordance with the laws of the State of New York (without reference to the conflicts of law provisions thereof).

18.2 *Consent to Jurisdiction.* For purposes of equitable remedies and enforcement of awards obtained pursuant to Section 20, each of the parties hereto (i) consents to submit itself to the personal jurisdiction of the state and federal courts located in the State of New York in the event any dispute that the parties fail to resolve arises out of this Agreement or any of the transactions contemplated by this Agreement, (ii) agrees that it shall not attempt to deny or defeat such personal jurisdiction by motion or other request for leave from any such court and (iii) agrees that it shall not bring any action relating to this Agreement or any of the transactions contemplated by this Agreement in any court other than courts set forth above. In any such proceeding, the parties agree to accept service of process by mail at the addresses herein provided for notice.

19. *Mediation.* Neither party shall commence an arbitration proceeding unless such party shall first give a written notice (a "Dispute Notice") to the other party setting forth the nature of the dispute. The parties shall attempt in good faith to resolve the dispute by mediation under the Commercial Mediation Rules of the American Arbitration Association in effect on the date of this Agreement. If the parties cannot agree on the selection of a mediator within twenty (20) days after delivery of the Dispute Notice, the mediator will be selected by the President of the New York Bar Association. If the dispute has not been resolved by mediation as provided above within sixty (60) days after the delivery of the Dispute Notice, then the dispute shall be determined by arbitration in accordance with the provisions of Section 20 hereof.

20. *Arbitration.*

20.1 *Normal Arbitration.* Any controversy, claim or dispute of whatever nature arising between the parties, including but not limited to those arising out of or relating to this Agreement or the construction, interpretation, performance, breach, termination, enforceability or validity of this Agreement or the arbitration provisions contained in this Agreement, whether such claim existed prior to or arises on or after the date of this Agreement, including the determination of the scope of this agreement to arbitrate, which is not settled through mediation as provided in Section 19 above shall be determined by arbitration in New York City by a panel of three arbitrators in accordance with the Commercial Arbitration Rules of the American Arbitration Association and its Supplementary Procedures for Large, Complex Disputes, except that (a) every person named on all lists of potential arbitrators shall be a neutral and impartial lawyer with excellent academic and professional credentials (i) who has practiced law for at least 15 years, specializing in either general commercial litigation or general corporate and commercial matters, and (ii) who has had experience, and is

generally available to serve, as an arbitrator, and (b) each party shall be entitled to strike on a peremptory basis, for any reason or no reason, any or all of the names of potential arbitrators on any list submitted to the parties by the AAA as well as any person selected by the AAA to serve as an arbitrator by administrative appointment. If the parties cannot agree on the selection of the arbitrator(s) from one or more lists submitted by the AAA within 30 days after the AAA transmits to the parties its first list of potential arbitrators, the President of the New York Bar Association shall nominate three persons who, in his or her opinion, meet the criteria set forth herein, which nominees may not include persons named on any list submitted by the AAA. Each party shall be entitled to strike one of such three nominees on a peremptory basis within 10 days after its receipt of such list of nominees, indicating its order of preference with respect to the remaining nominees. If two such nominees have been stricken by the parties, the unstricken nominee shall be the arbitrator. Otherwise, the selection of the arbitrator shall be made by the AAA from the remaining nominees in accordance with the parties' mutual order of preference, or by random selection in the absence of a mutual order of preference. The arbitrator(s) shall base their award on applicable law and judicial precedent, shall include in such award the findings of fact and conclusions of law upon which the award is based and shall not grant any remedy or relief a court could not grant under applicable law, provided, however, the arbitrators(s) may include all or a portion of the expenses (including reasonable legal fees) of the prevailing party in the award. Judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.

20.2 *Material Adverse Change.* If the controversy, claim or dispute pertains primarily to whether there has been a "material adverse change" or "the existence or occurrence of a circumstance or event that is material and adverse" as described in Section 5.9 hereof, then (i) either party may proceed with arbitration pursuant to Section 20.1 without having complied with Section 19, (ii) the arbitration shall be conducted by a panel of one arbitrator, (iii) the time for selection of the arbitrator shall be reduced from 30 days to 5 days and for peremptory strikes shall be reduced from 10 days to 3 days, and (iv) the parties shall use their commercially reasonable efforts to achieve a resolution of the controversy, claim or dispute as quickly as possible.

21. *Interpretation.*

(a) As used in this Agreement, the phrase "to the knowledge of the Company" or any phrase of similar import shall refer to the actual knowledge of the following executive officers of the Sellers: Tod Hamachek, Jennifer Good, Steve Berte, Neal Parks and Bob Sherwood.

(b) For purposes of Section 9.8 (but not for the purposes of other portions of Article IX), in determining the amount of damages or losses caused by the breach of any representation or warranty of Sellers, any qualification or limitation of such representation or warranty by reference to the materiality of matters stated therein or as to matters having or not having a material adverse effect, or by reference to the Sellers' knowledge (except for the knowledge qualifications contained in Sections 2.4(ii), 2.20(c) and 2.26 and the initial knowledge qualification contained in Section 2.9) shall be disregarded, in determining the amount of damages or losses caused by any inaccuracy, untruth, incompleteness or breach thereof for purposes of Section 9.8.

(c) As used in this Agreement, an effect shall not be considered to be material and adverse, if it is due to (a) general economic conditions, or economic or other conditions in and affecting generally the pharmaceutical industry or the excipient products segment of that industry (except if and to the extent such conditions affect the Sellers disproportionately) or (b) actions taken by the Buyer.

(d) As used in Section 11.3(b)(ii), the terms "material," "material adverse change" and "material and adverse" include both changes in and matters affecting the Business and external changes in and matters which affect the Business (other than those referred to in Section 21(c)) and they shall be deemed material, so that the Buyer shall be entitled to terminate this Agreement pursuant to Section 11.3(b)(ii), only if they would reduce the fair market value of the Business by ten percent (10%) or more, where "fair market value" has the meaning set forth in Revenue Ruling 59-60. As used in Section 11.6(b)(iii)(x), the term "material breach" shall mean a breach which results in shareholder approval of the transactions contemplated by this Agreement not being obtained within the time period

contemplated by this Agreement. In determining the materiality of various matters, the parties intend that materiality be assessed in the context of what a reasonable businessperson would consider to be material.

(e) As used in this Agreement, the term "including" shall mean "including, without limitation."

(f) If an event or action causes damages to or reduces the value of the Business, it will be presumed to be "in connection with" or "related to" the Business for purposes of representations and warranties which are expressly "in connection with" or "relating to" the Business.

22. *Miscellaneous.*

22.1 *Section Headings.* The section headings are for the convenience of the parties and in no way alter, modify, amend, limit, or restrict the contractual obligations of the parties.

22.2 *Severability.* The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement.

22.3 *Counterparts.* This Agreement and any amendment hereto may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which shall be one and the same document.

IN WITNESS WHEREOF, this Agreement has been duly executed by the parties hereto as of and on the date first above written.

(Corporate Seal)

PENWEST PHARMACEUTICALS CO.

ATTEST:

By: /s/ Tod R. Hamachek

Title: Chief Executive Officer

/s/ Jennifer L. Good

Chief Financial Officer

BUYER:

(Seal)

JOSEF RETTENMAIER HOLDING GMBH & CO. KG

By: /s/ Josef Rettenmaier

Title: Duly Authorized

By: /s/ Heinz Petersen

Title: Duly Authorized

Exhibit B

November 1, 2002

Board of Directors
Penwest Pharmaceuticals Co.
2981 Route 22
Patterson, NY 12563

Members of the Board of Directors:

You have requested that we update our oral opinion, rendered to the Board of Directors of Penwest Pharmaceuticals Co. (the "Company") on October 25, 2002, as to the fairness, from a financial point of view, to the Company of the consideration proposed to be paid by Josef Rettenmaier Holding GmbH & Co. KG (the "Purchaser"), in connection with the sale by the Company to the Purchaser (the "Sale") of substantially all of the assets and business of the Company pertaining to the development, testing, manufacture, distribution and sale of excipient products, such products being used, inter alia, in the manufacture of tablets by pharmaceutical and nutritional companies (such assets and business being referred to as the "Business"). Pursuant to the terms of the Purchase Agreement, dated as of November 1, 2002, between the Company and the Purchaser (the "Agreement"), the Company will receive $39.5 million in cash and a promissory note of the Purchaser in the principal amount of $2.25 million, subject to the assumption of certain liabilities by the Purchaser and the post-closing working capital adjustment described in the Agreement. The terms and conditions of the Sale are more fully set forth in the Agreement.

For purposes of the opinion set forth herein, we have:

(i) reviewed certain publicly available financial statements and other business and financial information of the Company;

(ii) reviewed certain internal financial statements and other financial and operating data concerning the Business prepared by the management of the Company;

(iii) analyzed certain financial forecasts related to the Business prepared by the management of the Company;

(iv) discussed the past and current operations, financial condition and prospects of the Business with senior executives of the Company and the Business;

(v) compared the financial performance of the Business with that of certain publicly traded companies we deemed relevant;

(vi) compared certain financial terms of the Sale to financial terms, to the extent publicly available, of certain acquisition transactions we deemed relevant;

(vii) participated in discussions and negotiations among representatives of the Company and the Purchaser and their financial and legal advisors;

(viii) reviewed the Agreement and certain related documents; and

(ix) performed such other analyses and considered such other factors as we have deemed appropriate.

We have assumed and relied upon, without independent verification, the accuracy and completeness of the financial and other information reviewed by us for the purposes of this opinion. With respect to the financial forecasts, we have assumed that they have been reasonably prepared on bases reflecting the best currently available estimates and good faith judgments of the future financial performance of the Business. With respect to the financial forecasts, for purposes of our analysis, we have adjusted the financial forecasts to reflect certain events that occurred subsequent to the preparation of such financial forecasts. We have discussed the adjusted financial forecasts with management of the Company, and we have, with your consent, relied upon the adjusted financial forecasts in arriving at our opinion. We have not made any independent valuation or appraisal of the assets or liabilities of the Business, nor have we been furnished with any such appraisals. We have assumed that the Sale will be consummated as provided in the Agreement, with full satisfaction of all covenants and conditions and without any waivers thereof.

We have acted as sole financial advisor to the Company in connection with the Sale and will receive a fee for our services, including a fee that is contingent upon the consummation of the Sale. In the past, Banc of America Securities LLC or its affiliates have provided financial advisory and financing services for the Company, and have received fees for the rendering of these services. In the ordinary course of our businesses, we and our affiliates may actively trade the debt and equity securities of the Company, for our own account or for the accounts of customers, and, accordingly, we or our affiliates may at any time hold long or short positions in such securities.

It is understood that this letter is for the benefit and use of the Board of Directors of the Company in connection with and for the purposes of its evaluation of the Sale. This opinion may not be disclosed, referred to, or communicated (in whole or in part) to any third party for any purpose whatsoever except with our prior written consent in each instance. However, this opinion may be included in its entirety in any filing made by the Company in respect of the Sale with the Securities and Exchange Commission, so long as this opinion is reproduced in such filing in full and any description of or reference to us or summary of this opinion or related analyses in such filing is in a form acceptable to us and our counsel. Our opinion is necessarily based on economic, market and other conditions as in effect on, and the information made available to us as of, the date hereof. It should be understood that subsequent developments may affect this opinion and we do not have any obligation to update, revise, or reaffirm this opinion. We were not requested to opine as to, and this opinion does not address, the relative merits of the Sale as compared with any alternative transaction or strategy that may be available to the Company or the basic business decision to proceed with or effect the Sale. In addition, we express no opinion or recommendation as to how the shareholders of the Company should vote at the shareholders' meeting held in connection with the Agreement.

Based upon and subject to the foregoing, including the various assumptions and limitations set forth herein, we are of the opinion on the date hereof that the consideration to be received by the Company in the proposed Sale is fair, from a financial point of view, to the Company.

Very truly yours,

BANC OF AMERICA SECURITIES LLC

Exhibit C

CHAPTER 23B.13 RCW

DISSENTERS' RIGHTS

Sections

RCW 23B.13.010 Definitions. As used in this chapter:

(1) "Corporation" means the issuer of the shares held by a dissenter before the corporate action, or the surviving or acquiring corporation by merger or share exchange of that issuer.

(2) "Dissenter" means a shareholder who is entitled to dissent from corporate action under RCW 23B.13.020 and who exercises that right when and in the manner required by RCW 23B.13.200 through 23B.13.280.

(3) "Fair value," with respect to a dissenter's shares, means the value of the shares immediately before the effective date of the corporate action to which the dissenter objects, excluding any appreciation or depreciation in anticipation of the corporate action unless exclusion would be inequitable.

(4) "Interest" means interest from the effective date of the corporate action until the date of payment, at the average rate currently paid by the corporation on its principal bank loans or, if none, at a rate that is fair and equitable under all the circumstances.

(5) "Record shareholder" means the person in whose name shares are registered in the records of a corporation or the beneficial owner of shares to the extent of the rights granted by a nominee certificate on file with a corporation.

(6) "Beneficial shareholder" means the person who is a beneficial owner of shares held in a voting trust or by a nominee as the record shareholder.

(7) "Shareholder" means the record shareholder or the beneficial shareholder.

[1989 c 165 § 140.]

RCW 23B.13.020 Right to dissent.

(1) A shareholder is entitled to dissent from, and obtain payment of the fair value of the shareholder's shares in the event of, any of the following corporate actions:

(a) Consummation of a plan of merger to which the corporation is a party (i) if shareholder approval is required for the merger by RCW 23B.11.030, 23B.11.080, or the articles of incorporation and the shareholder is entitled to vote on the merger, or (ii) if the corporation is a subsidiary that is merged with its parent under RCW 23B.11.040;

(b) Consummation of a plan of share exchange to which the corporation is a party as the corporation whose shares will be acquired, if the shareholder is entitled to vote on the plan;

(c) Consummation of a sale or exchange of all, or substantially all, of the property of the corporation other than in the usual and regular course of business, if the shareholder is entitled to vote on the sale or exchange, including a sale in dissolution, but not including a sale pursuant to court order or a sale for cash pursuant to a plan by which all or substantially all of the net proceeds of the sale will be distributed to the shareholders within one year after the date of sale;

(d) An amendment of the articles of incorporation that materially reduces the number of shares owned by the shareholder to a fraction of a share if the fractional share so created is to be acquired for cash under RCW 23B.06.040; or

(e) Any corporate action taken pursuant to a shareholder vote to the extent the articles of incorporation, bylaws, or a resolution of the board of directors provides that voting or nonvoting shareholders are entitled to dissent and obtain payment for their shares.

(2) A shareholder entitled to dissent and obtain payment for the shareholder's shares under this chapter may not challenge the corporate action creating the shareholder's entitlement unless the action fails to comply with the procedural requirements imposed by this title, RCW 25.10.900 through 25.10.955, the articles of incorporation, or the bylaws, or is fraudulent with respect to the shareholder or the corporation.

(3) The right of a dissenting shareholder to obtain payment of the fair value of the shareholder's shares shall terminate upon the occurrence of any one of the following events:

(a) The proposed corporate action is abandoned or rescinded;

(b) A court having jurisdiction permanently enjoins or sets aside the corporate action; or

(c) The shareholder's demand for payment is withdrawn with the written consent of the corporation.

[1991 c 269 § 37; 1989 c 165 § 141.]

RCW 23B.13.030 Dissent by nominees and beneficial owners.

(1) A record shareholder may assert dissenters' rights as to fewer than all the shares registered in the shareholder's name only if the shareholder dissents with respect to all shares beneficially owned by any one person and delivers to the corporation a notice of the name and address of each person on whose behalf the shareholder asserts dissenters' rights. The rights of a partial dissenter under this subsection are determined as if the shares as to which the dissenter dissents and the dissenter's other shares were registered in the names of different shareholders.

(2) A beneficial shareholder may assert dissenters' rights as to shares held on the beneficial shareholder's behalf only if:

(a) The beneficial shareholder submits to the corporation the record shareholder's consent to the dissent not later than the time the beneficial shareholder asserts dissenters' rights, which consent shall be set forth either (i) in a record or (ii) if the corporation has designated an address, location, or system to which the consent may be electronically transmitted and the consent is electronically transmitted to the designated address, location, or system, in an electronically transmitted record; and

(b) The beneficial shareholder does so with respect to all shares of which such shareholder is the beneficial shareholder or over which such shareholder has power to direct the vote.

[2002 c 297 § 35; 1989 c 165 § 142.]

RCW 23B.13.200 Notice of dissenters' rights.

(1) If proposed corporate action creating dissenters' rights under RCW 23B.13.020 is submitted to a vote at a shareholders' meeting, the meeting notice must state that shareholders are or may be entitled to assert dissenters' rights under this chapter and be accompanied by a copy of this chapter.

(2) If corporate action creating dissenters' rights under RCW 23B.13.020 is taken without a vote of shareholders, the corporation, within ten days after the effective date of such corporate action, shall deliver a notice to all shareholders entitled to assert dissenters' rights that the action was taken and send them the notice described in RCW 23B.13.220.

[2002 c 297 § 36; 1989 c 165 § 143.]

RCW 23B.13.210 Notice of intent to demand payment.

(1) If proposed corporate action creating dissenters' rights under RCW 23B.13.020 is submitted to a vote at a shareholders' meeting, a shareholder who wishes to assert dissenters' rights must (a) deliver to the corporation before the vote is taken notice of the shareholder's intent to demand payment for the shareholder's shares if the proposed action is effected, and (b) not vote such shares in favor of the proposed action.

(2) A shareholder who does not satisfy the requirements of subsection (1) of this section is not entitled to payment for the shareholder's shares under this chapter.

[2002 c 297 § 37; 1989 c 165 § 144.]

RCW 23B.13.220 Dissenters' rights — Notice.

(1) If proposed corporate action creating dissenters' rights under RCW 23B.13.020 is authorized at a shareholders' meeting, the corporation shall deliver a notice to all shareholders who satisfied the requirements of RCW 23B.13.210.

(2) The notice must be sent within ten days after the effective date of the corporate action, and must:

(a) State where the payment demand must be sent and where and when certificates for certificated shares must be deposited;

(b) Inform holders of uncertificated shares to what extent transfer of the shares will be restricted after the payment demand is received;

(c) Supply a form for demanding payment that includes the date of the first announcement to news media or to shareholders of the terms of the proposed corporate action and requires that the person asserting dissenters' rights certify whether or not the person acquired beneficial ownership of the shares before that date;

(d) Set a date by which the corporation must receive the payment demand, which date may not be fewer than thirty nor more than sixty days after the date the notice in subsection (1) of this section is delivered; and

(e) Be accompanied by a copy of this chapter.

[2002 c 297 § 38; 1989 c 165 § 145.]

RCW 23B.13.230 Duty to demand payment.

(1) A shareholder sent a notice described in RCW 23B.13.220 must demand payment, certify whether the shareholder acquired beneficial ownership of the shares before the date required to be set forth in the notice pursuant to RCW 23B.13.220(2)(c), and deposit the shareholder's certificates, all in accordance with the terms of the notice.

(2) The shareholder who demands payment and deposits the shareholder's share certificates under subsection (1) of this section retains all other rights of a shareholder until the proposed corporate action is effected.

(3) A shareholder who does not demand payment or deposit the shareholder's share certificates where required, each by the date set in the notice, is not entitled to payment for the shareholder's shares under this chapter.

[2002 c 297 § 39; 1989 c 165 § 146.]

RCW 23B.13.240 Share restrictions.

(1) The corporation may restrict the transfer of uncertificated shares from the date the demand for their payment is received until the proposed corporate action is effected or the restriction is released under RCW 23B.13.260.

(2) The person for whom dissenters' rights are asserted as to uncertificated shares retains all other rights of a shareholder until the effective date of the proposed corporate action.

[1989 c 165 § 147.]

RCW 23B.13.250 Payment.

(1) Except as provided in RCW 23B.13.270, within thirty days of the later of the effective date of the proposed corporate action, or the date the payment demand is received, the corporation shall pay each dissenter who complied with RCW 23B.13.230 the amount the corporation estimates to be the fair value of the shareholder's shares, plus accrued interest.

(2) The payment must be accompanied by:

(a) The corporation's balance sheet as of the end of a fiscal year ending not more than sixteen months before the date of payment, an income statement for that year, a statement of changes in shareholders' equity for that year, and the latest available interim financial statements, if any;

(b) An explanation of how the corporation estimated the fair value of the shares;

(c) An explanation of how the interest was calculated;

(d) A statement of the dissenter's right to demand payment under RCW 23B.13.280, and

(e) A copy of this chapter.

[1989 c 165 § 148.]

RCW 23B.13.260 Failure to take action.

(1) If the corporation does not effect the proposed action within sixty days after the date set for demanding payment and depositing share certificates, the corporation shall return the deposited certificates and release any transfer restrictions imposed on uncertificated shares.

(2) If after returning deposited certificates and releasing transfer restrictions, the corporation wishes to undertake the proposed action, it must send a new dissenters' notice under RCW 23B.13.220 and repeat the payment demand procedure.

[1989 c 165 § 149.]

RCW 23B.13.270 After-acquired shares.

(1) A corporation may elect to withhold payment required by RCW 23B.13.250 from a dissenter unless the dissenter was the beneficial owner of the shares before the date set forth in the dissenters' notice as the date of the first announcement to news media or to shareholders of the terms of the proposed corporate action.

(2) To the extent the corporation elects to withhold payment under subsection (1) of this section, after taking the proposed corporate action, it shall estimate the fair value of the shares, plus accrued interest, and shall pay this amount to each dissenter who agrees to accept it in full satisfaction of the dissenter's demand. The corporation shall send with its offer an explanation of how it estimated the fair value of the shares, an explanation of how the interest was calculated, and a statement of the dissenter's right to demand payment under RCW 23B.13.280.

[1989 c 165 § 150.]

RCW 23B.13.280 Procedure if shareholder dissatisfied with payment or offer.

(1) A dissenter may deliver a notice to the corporation informing the corporation of the dissenter's own estimate of the fair value of the dissenter's shares and amount of interest due, and demand payment of the dissenter's estimate, less any payment under RCW 23B.13.250, or reject the corporation's offer under RCW 23B.13.270 and demand payment of the dissenter's estimate of the fair value of the dissenter's shares and interest due, if:

(a) The dissenter believes that the amount paid under RCW 23B.13.250 or offered under RCW 23B.13.270 is less than the fair value of the dissenter's shares or that the interest due is incorrectly calculated;

(b) The corporation fails to make payment under RCW 23B.13.250 within sixty days after the date set for demanding payment; or

(c) The corporation does not effect the proposed action and does not return the deposited certificates or release the transfer restrictions imposed on uncertificated shares within sixty days after the date set for demanding payment.

(2) A dissenter waives the right to demand payment under this section unless the dissenter notifies the corporation of the dissenter's demand under subsection (1) of this section within thirty days after the corporation made or offered payment for the dissenter's shares.

[2002 c 297 § 40; 1989 c 165 § 151.]

RCW 23B.13.300 Court action.

(1) If a demand for payment under RCW 23B.13.280 remains unsettled, the corporation shall commence a proceeding within sixty days after receiving the payment demand and petition the court to determine the fair value of the shares and accrued interest. If the corporation does not commence the proceeding within the sixty-day period, it shall pay each dissenter whose demand remains unsettled the amount demanded.

(2) The corporation shall commence the proceeding in the superior court of the county where a corporation's principal office, or, if none in this state, its registered office, is located. If the corporation is a foreign corporation without a registered office in this state, it shall commence the proceeding in the county in this state where the registered office of the domestic corporation merged with or whose shares were acquired by the foreign corporation was located.

(3) The corporation shall make all dissenters, whether or not residents of this state, whose demands remain unsettled, parties to the proceeding as in an action against their shares and all parties must be served with a copy of the petition. Nonresidents may be served by registered or certified mail or by publication as provided by law.

(4) The corporation may join as a party to the proceeding any shareholder who claims to be a dissenter but who has not, in the opinion of the corporation, complied with the provisions of this chapter. If the court determines that such shareholder has not complied with the provisions of this chapter, the shareholder shall be dismissed as a party.

(5) The jurisdiction of the court in which the proceeding is commenced under subsection (2) of this section is plenary and exclusive. The court may appoint one or more persons as appraisers to receive evidence and recommend decision on the question of fair value. The appraisers have the powers described in the order appointing them, or in any amendment to it. The dissenters are entitled to the same discovery rights as parties in other civil proceedings.

(6) Each dissenter made a party to the proceeding is entitled to judgment (a) for the amount, if any, by which the court finds the fair value of the dissenter's shares, plus interest, exceeds the amount paid by the corporation, or (b) for the fair value, plus accrued interest, of the dissenter's after-acquired shares for which the corporation elected to withhold payment under RCW 23B.13.270.

[1989 c 165 § 152.]

RCW 23B.13.310 Court costs and counsel fees.

(1) The court in a proceeding commenced under RCW 23B.13.300 shall determine all costs of the proceeding, including the reasonable compensation and expenses of appraisers appointed by the court. The court shall assess the costs against the corporation, except that the court may assess the costs against all or some of the dissenters, in amounts the court finds equitable, to the extent the court finds the dissenters acted arbitrarily, vexatiously, or not in good faith in demanding payment under RCW 23B.13.280.

(2) The court may also assess the fees and expenses of counsel and experts for the respective parties, in amounts the court finds equitable:

(a) Against the corporation and in favor of any or all dissenters if the court finds the corporation did not substantially comply with the requirements of RCW 23B.13.200 through 23B.13.280; or

(b) Against either the corporation or a dissenter, in favor of any other party, if the court finds that the party against whom the fees and expenses are assessed acted arbitrarily, vexatiously, or not in good faith with respect to the rights provided by chapter 23B.13 RCW.

(3) If the court finds that the services of counsel for any dissenter were of substantial benefit to other dissenters similarly situated, and that the fees for those services should not be assessed against the corporation, the court may award to these counsel reasonable fees to be paid out of the amounts awarded the dissenters who were benefited.

[1989 c 165 § 153.]

PROXY

For the Special Meeting of the Shareholders of
Penwest Pharmaceuticals Co.

THIS PROXY IS SOLICITED ON BEHALF OF THE
BOARD OF DIRECTORS OF THE COMPANY

The undersigned, revoking all prior proxies, hereby appoint(s) Tod R. Hamachek and Jennifer L. Good, and each of them, as proxies of the undersigned (with full power of substitution in them and each of them) to attend and represent the undersigned at the Special Meeting of Shareholders of Penwest Pharmaceuticals Co. (the "Company") to be held at the [ ], [ ], [ ], on [ ], January [ ], 2003, at 10:00 a.m., and any adjourned sessions thereof, and there to act and vote as indicated, upon the matter referred to on the reverse side and described in the proxy statement relating to the meeting, all shares of common stock of the Company which the undersigned would be entitled to vote or act upon, with all powers the undersigned would possess, if personally present at the meeting and at any adjourned sessions thereof. The following matter is being proposed by the Board of Directors of the Company. All capitalized terms used in this proxy and not defined herein shall have the meaning ascribed them in the proxy statement relating to the meeting.

IN THEIR DISCRETION, THE PROXIES ARE AUTHORIZED TO VOTE UPON OTHER MATTERS AS PROPERLY MAY COME BEFORE THE MEETING, OR ANY ADJOURNMENT THEREOF.

(Continued and to be signed on the reverse side]

▲ **FOLD AND DETACH HERE** ▲

1. Approval of the sale of substantially all of the assets used in the Company's excipient business to Josef Rettenmaier Holding GmbH & Co. KG for $41.75 million in cash, subject to adjustment.

I plan to attend the meeting ☐

FOR ☐ AGAINST ☐

Date _____, ____

_____

Signature

_____

Signature

Attendance of the undersigned at the meeting or at any adjourned session thereof will not be deemed to revoke this proxy unless the undersigned shall affirmatively indicate thereof the intention of the undersigned to vote said shares in person. If the undersigned hold(s) any of the shares of the Company in a fiduciary, custodial or joint capacity or capacities, this proxy is signed by the undersigned in every such capacity as well as individually.

IMPORTANT — PLEASE SIGN AND RETURN THIS PROXY PROMPTLY. When shares are held by joint tenants, both should sign. When signing as attorney, executor, administrator, trustee or guardian, please give full title as such. If a corporation, please sign in full corporate name by President or other authorized officer. If a partnership, please sign in partnership name by an authorized person.

▲ FOLD AND DETACH HERE ▲

Vote by Internet or Telephone or Mail
24 Hours a Day, 7 Days a Week

Internet and telephone voting is available through 4PM Eastern Time the business day prior to annual meeting day.

Your telephone or Internet vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed and returned your proxy card.

Internet		**Telephone**		**Mail**
http://www.proxyvoting.com/ppco		**1-800-840-1208**		
Use the Internet to vote your proxy. Have your proxy card in hand when you access the web site. You will be prompted to enter your control number, located in the box below, to create and submit an electronic ballot.	**OR**	Use any touch-tone telephone to vote your proxy. Have your proxy card in hand when you call. You will be prompted to enter your control number, located in the box below, and then follow the directions given.	**OR**	Mark, sign and date your proxy card and return it in the enclosed postage-paid envelope.

If you vote your proxy by Internet or by telephone, you do NOT need to mail back your proxy card.

You can view the Proxy Statement on the Internet at: http://www.penw.com