

SCHOOL of MANAGEMENT

Definition of Ratings:

Buy: Undervalued by 20%

Hold: Fairly Valued

Sell: Overvalued by 20%

Time Frame: 12 Months

Industry: Generic Pharmaceuticals

Market Cap: \$817.70 MM

Shares Outstanding: 32.50 MM

Price: \$25.16 /share

52 -wk High: \$39.70 /share

52 -wk Low: \$15.60 /share

Target Price: \$26 /share

EPS: \$2.78/share

Beta: 1.20

Pharmaceutical Resources, Inc. (PRX)



Get Ready for the Roller-Coaster Ride

- Hold!

Executive Summary



- Unlike other generic companies, Pharmaceutical Resources shares have always been very volatile with a beta of 1.2, and traded at a discount historically to its industry peer average. Recent boost of its price in the past year was mainly due to higher market expectation of its major products.
- The company's exiting product portfolio consists of four major products that generate half of its revenue. However, we foresee these major products will face potential erosion after more competitors' entrance.
- There are many uncertainties facing the company's future new products launches. Especially, recent infringing on the patent drug Prilosec brings more uncertainties to its future business forecast.
- The company's management emphasizes the distribution agreement partnership strategy as a major revenue resource. However, we hold a conservative view on such a strategy since it may lead the company more to the distribution side of the business which the company does not have a very strong competitive advantage compared with other U.S. generic companies.
- According to our valuation, the stock is currently fairly traded. Our target price is \$26, with a possible range from \$22 to \$32 per share. Therefore, we are suggestion a hold strategy for this stock in the future 12 months.

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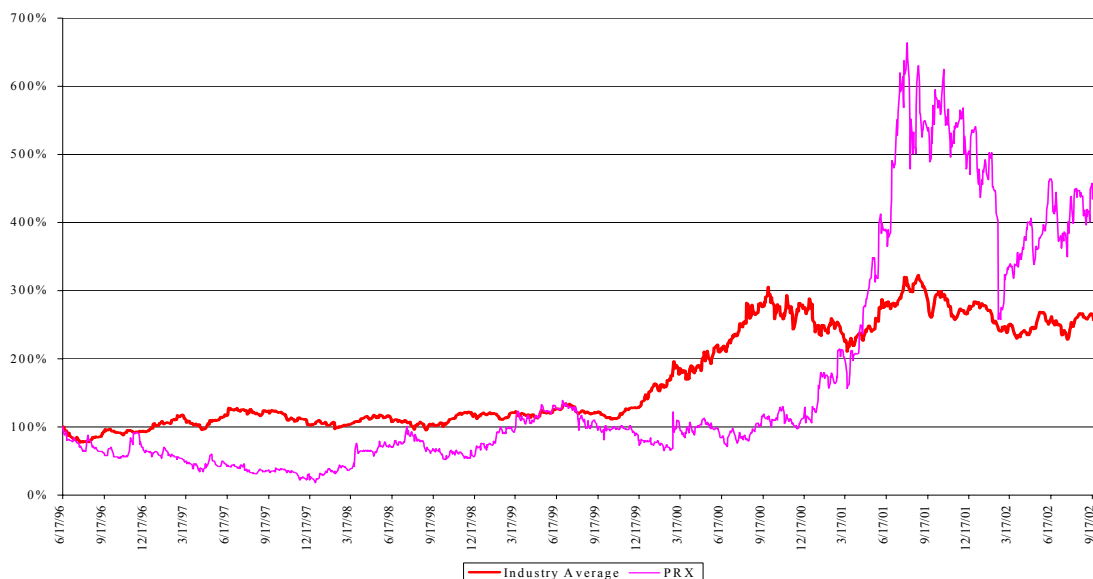
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Recent Developments

- U.S. District Judge Barbara S. Jones, in a 277-page opinion issued late Friday (October 11, 2002), ruled, Genpharm Inc. and Andrex, partners of Pharmaceutical Resources Inc., the patent infringers on the patents of AstraZeneca PLC's top-selling heartburn drug, Prilosec. This moves our assumption on the product from base case scenario to downside case scenario.
- Last fiscal year was a tremendous year for the company - revenues exploded upwards by roughly 219%. The increases in sales were primarily due to the success of three new products: Flecainide acetate, Fluoxetine, and Megestrol acetate.
- In the last year, the Company increased R&D spending from \$7.6 Million to \$11.1 Million. As an increased R&D spending generally leads to higher revenues in the future, the boost in R&D spending is a positive sign. It is also important to note that as a percentage of sales, R&D spending has actually *decreased* from 9% of sales in 2000 to 4.1% of sales in 2001.
- Last year, the Company entered a co-marketing and development agreement with a pharmaceutical/ingredient-supplier firm based in India - Dr. Reddy's Laboratories Ltd. This agreement covers 14 generic products, of which 5 are awaiting FDA approval. Under the agreement, the Company retains exclusive rights to market the products in the United States.
- In April 2002, the Company acquired FineTech, an Israeli-based manufacturer of synthetic chemical processes. This acquisition includes the physical facilities, the intellectual property and patents of FineTech. Most of FineTech's assets have been transferred to the Pharmaceutical Resources' facility in Rhode Island.



Source: Yahoo! Finance; Industry Average composites: TEVA, MYL, BRL, PRX, WPI, IVX, ANDR, SCRI.

Trading Performance



The above is the price performance comparison between Pharmaceutical Resources and the industry Average. We can see that PRX has been traded historically at a discount to the average industry. The price boosting mainly happened within 2001, because of its several new products launches. However, after a big upsurge, the market seemed to adjust back the price a little bit. Recent months, PRX has been traded at around \$25 per share, with big volatility due to news

Price to Earnings

This measure may not be meaningful for PRX because in the last 9 years, the firm has not traded at a persistent PE multiple. In fact, the Company had negative earnings for 8 of those years. Our ten-year cross sectional analysis yielded an average PE of 30.15 for the 6 companies we covered.

Price/Earnings	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Ave
IVX	45.9	22.1	28.8	26.2	Neg	Neg	53.3	30.2	47.9	25.6	35
MYL	27.4	28	16.5	23.9	32.4	23.3	32.3	19.9	23.4	15.8	24
AGN	15.4	14.6	14.2	15.5	18.2	22.6	23.9	36.7	42.8	38.9	24
FRX	25.4	23.1	21.5	20.7	Neg	33.8	46.3	41.8	47.2	41.6	33
BRL	Neg	Neg	75.1	31.2	41.3	24.9	27	17.2	22.1	38.1	35
PRX	Neg	Neg	43.9	Neg	Neg	Neg	Neg	Neg	Neg	14.6	29

30.15

Presently, the firm has a Price/Earnings of 9.05 (10/11/2002), while the major peer companies are traded at an average P/E of 20 times. Therefore, the company is traded at a large discount to its peer company.

Price to Book

In our 10-year analysis, the price to book ratio of PRX ranged from a low of 0.9 to a high of 11.0. Clearly the firm would be undervalued if it were selling for less than its book value holding other factors constant. The key here is "holding other factors constant", clearly a firm can trade below book for a variety of reasons including financial distress and pursuing value-destroying projects. The 10-year average was 3.3. This may suggest a strategy of buying the firm when the price is below or close to the book value.

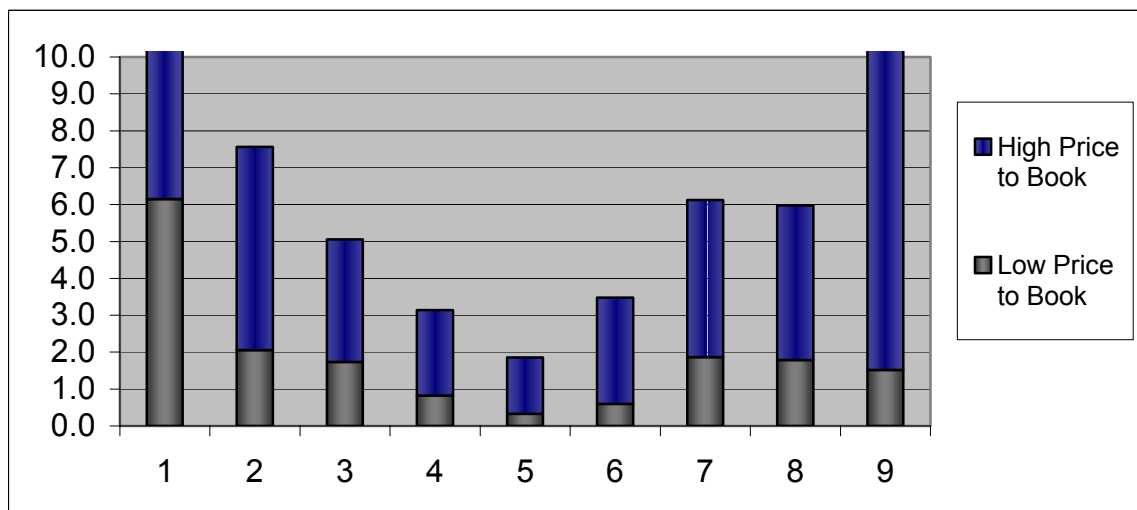
Price/Book	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Ave
IVX	11.3	7.4	7.5	6.0	4.3	1.7	1.1	1.6	3.5	2.9	4.7
MYL	6.3	6.0	3.7	4.1	3.5	3.0	3.2	2.7	2.7	2.7	3.8
AGN	3.1	3.0	2.7	2.9	3.1	2.4	4.7	9.4	11.0	10.6	5.3
FRX	3.4	2.9	3.0	2.6	2.8	2.6	4.3	4.9	7.2	7.3	4.1
BRL	3.1	2.7	2.7	2.9	3.7	6.4	4.7	3.9	6.1	5.4	4.2



PRX	Neg	11.0	3.8	2.5	1.6	0.9	1.7	3.1	3.0	5.6	3.3
4.2											

In fact, our analysis suggests that the undervalued range, using the BV method, would be at a multiple of 2.1 or less:

High Price/Book	15.8	5.5	3.3	2.3	1.5	2.9	4.3	4.2	9.8
Low Price/Book	6.2	2.1	1.7	0.8	0.3	0.6	1.9	1.8	1.5



Historically, the firm has traded below a Price/Book ratio of 2.1 in 8 out of the past 9 years. At the moment, the firm has a Price/Book of 4.54 (10/11/2002). Hence, based on historical Price to Book multiples, PRX is presently not undervalued.

Valuation

Our DCF valuation result gives us a target price of \$26 per share, within a range of \$22 to \$32 per share, by assuming base case for existing products, base case for future new products except Omeprazole (downside case) due to last Friday’s court ruling mentioned earlier in “Recent News and Development”. We also used comparable company analysis to value the company, on the condition that we assume this company will be traded at a 70% discount to its peer company. One reason is because the company’s financial performance is very volatile, much riskier than its normally peer companies, and the other reason is that a very big portion of the revenue of the company is generated through distribution agreements with other partners, making the company very dependent on its partners. Our P/E multiple and EV/EBITDA multiple valuation result gives us a range from \$28 per share and \$31 per share. Overall speaking, we suggest a “hold” position for this company’s stock based on the above valuation conclusions. (Please see valuation appendix)

The following will be devoted to analyze the company's product portfolio, its management competence and major risks.

Existing Drugs

PRX markets approximately 61 products, representing various dosage strengths for 25 drugs that are manufactured by the Company and approximately 58 additional products, representing various dosage strengths for 26 drugs that are manufactured for it by other companies. PRX holds ANDAs for the drugs it manufactures. Attachment 1 is a list of drugs manufactured and/or distributed by PRX.

Net sales of \$182,263,000 for the six months ended June 30, 2002 increased \$127,262,000, or 231%, from net sales of \$55,001,000 for the six months ended June 30, 2001. The sales increase was primarily due to new products introduced since July of the prior year, particularly fluoxetine, sold under distribution agreements with Reddy and Genpharm, and megestrol acetate oral suspension manufactured by the Company.

Sales of the Company's products are principally dependent upon, among other things, (i) pricing levels and competition, (ii) market penetration for the existing product line, (iii) the continuation of existing distribution agreements, (iv) introduction of new distributed products, (v) approval of ANDAs and introduction of new manufactured products, including potential exclusivity periods, and (vi) the level of customer service. (See the Company's 10K filing at <http://www.edgar-online.com/brand/yahoo/search/?sym=PRX>)

Contribution of old drugs to the revenue growth is quite limited. **The major driver for revenue growth is from new drugs.** In fiscal year 2001, the Company's top four selling products accounted for approximately 70% of net sales compared to 45% and 47%, respectively, of net sales in fiscal years 2000 and 1999. Three of the products in the most recent year, fluoxetine, megestrol oral suspension and ranitidine, were not part of the top four in any of the preceding periods and accounted for approximately 45%, 16% and 4%, respectively of the Company's total 2001 net sales.

As the Company said in its SEC filing, to introduce new products not only through its internal research and development program, but also through **joint venture, distribution and other agreements** with pharmaceutical companies located throughout the world.

The current distribution agreement and strategic alliances of PRX:

1. Genpharm Distribution Agreement

Under which, the Company has the exclusive distribution rights within the United States and certain other United States territories to approximately 40 generic pharmaceutical products of Genpharm, a Canadian subsidiary of Merck KGaA. To date, 18 of such products have obtained FDA approval and are currently being marketed by Par.

2. The Genpharm Additional Product Agreement, dated November 27, 2000, pursuant to which Genpharm granted the Company exclusive distribution rights within the United States and certain other United States territories with respect to five generic pharmaceutical products not included in the Company's other distribution agreements with Genpharm. To date, two of such products have obtained FDA approval and are currently being marketed by Par.

3. The Reddy Development and Supply Agreement are in addition to five products currently being marketed by the Company under prior agreements with Dr. Reddy's



Laboratories Ltd. (“Reddy”), a producer of bulk active ingredients for the pharmaceutical industry and a developer and manufacturer of finished dosage forms located in India.

4. BASF and the Company have agreed to continue to operate under terms similar to those of the **BASF Supply Agreement**. Under the BASF Supply Agreement, Par agreed to purchase minimum quantities of certain products manufactured by BASF, and to phase out Par's manufacturing of those products until December 31, 2005

Distribution Agreements play a very important role in Par's business. Net sales of distributed products, which consist of products manufactured under contract and licensed products, were approximately 58% and 56%, respectively, of the Company's net sales in the six-month periods ended June 30, 2002 and 2001.

Besides establishing distribution agreements, Par also got new drugs through acquisitions.

The Company purchased a portion of ISP's fine chemical business, FineTech, which is based in Haifa, Israel, from ISP in April 2002. FineTech had revenues of approximately \$6,000,000 in 2001. However; this purchase is not expected to have a material effect on the Company's earnings in fiscal year 2002.

On March 5, 2002 the Company acquired the U.S. rights to five products from BMS. Based on the Company's market research, these products are expected to generate annual net sales of approximately \$10,000,000 in fiscal year 2002 and beyond.

Major contributors to revenue in 2002---Recently launched generic drugs

Flecainide acetate

The FDA awarded generic marketing exclusivity for flecainide acetate to Par through October 2002. Par's launch of **flecainide acetate** is under license from 3M. Under terms of the agreement, Par will pay 3M a licensing fee based on a percentage of Par's flecainide sales. The parties have also agreed to dismiss all outstanding claims in settling patent litigation between them and counter claims between the parties, thereby allowing Par to ship flecainide without risk of any future litigation from 3M.

Fluoxetine

The Company's exclusivity period for fluoxetine ended in late-January 2002. On August 2, 2001, the Company received 180-day marketing exclusivity for fluoxetine 40 mg capsules, the generic version of Eli Lilly and Company's Prozac, pursuant to the Reddy Development and Supply Agreement. PRI now sells more fluoxetine than any other generic manufacturer, by successfully persuaded physicians to prescribe capsule pills instead of the original tablet pills. PRX achieved this from direct sampling marketing method besides traditional promotion methods. However, the broad array of available dosage forms of generic fluoxetine makes PRX facing intensive competition.

Megestrol acetate

Megace is Bristol Myers Squibb's (#) branded product used for the treatment of weight loss associated with AIDS. PRX filed a Paragraph IV application for which it received tentative approval in October 2000. The Company's exclusivity period for megestrol acetate oral suspension ended in mid-January 2002. PRX got the approval of its own patent in March 2000, by innovating around the existing Bristol formulation patent through its own novel formulation.



Currently Roxanne is the only competitor on the generic Megestrol market, and we expect competition to be light.

Buspirone

Buspirone is a branded drug of Bristol Myers. With generic buspirone, PRX used the same tactic that worked so well for fluoxetine, trying to persuade physicians to switch to an unusual dosage

New Products

A significant portion of PRX's future growth is dependent on the launch of new products in PRX's pipeline. We will examine PRX's known product pipeline in this section and attempt to quantify the impact that these new products have on PRX's share price.

Omeprazole

Omeprazole is the generic version of Prilosec, an antiulcerant (treatment for stomach ulcers) that had \$4,611 million branded sales in 2001. PRX, through its partnership with Genpharm (Merck KGaA), is entitled to 30% of Genpharm's profits for Omeprazole.

Genpharm's attempt to be the first to file under paragraph IV ANDA (abbreviated new drug application) and hence, enjoy 180 days of exclusivity was not without hiccup. Although Genpharm was the first to file the ANDA to FDA, and the application was deemed not acceptable by FDA. Andrx's ANDA was subsequently accepted by FDA and was awarded the first to file status.

However, as Genpharm was likely to litigate whether FDA's initial decision to reject Genpharm's application was proper, Andrx reached an agreement with Genpharm where Andrx markets whichever product is awarded first-filer status. In return, Genpharm receives 15% of Andrx's operating profits from omeprazole sales up until the point there are three generic products in the market and 10% of Andrx's profits thereafter for the next four years.

Hence, assuming that either Genpharm or Andrx (the most likely scenario) obtained approval and was awarded the 180 days of exclusivity, PRX will receive 4.5% of Andrx's profits and 3% for the next four years according to Genpharm's agreement with Andrx. In addition, PRX will still receive 30% of Genpharm's profits for Omeprazole when PRX launches Genpharm's Omeprazole after the exclusivity period. This scenario is likely to bring \$3.14 to PRX's share price.

At the worst, we will see both Genpharm and Andrx (very unlikely) not getting approval for the ANDA, in which case, PRX will receive profits after the exclusivity period, bringing \$2.01 to PRX's share price. However, with the recent court ruling last Friday, it is now more likely that PRX will be facing the worst scenario. Genpharm and Andrx are likely to appeal and the base case scenario, at best, will happen but at a later launch date.

A best case scenario will see PRX getting a piece of the action during the exclusivity period and obtaining more market share (through Genpharm) after the exclusivity period. This optimistic scenario will positively impact PRX's share price by \$9.17.

Latanoprost

Latanoprost is the generic version of Xalatan, a treatment for glaucoma that had \$430 million branded sales in 2001. PRX had a marketing agreement with Breath Ltd of the Arrow Group and the product was most likely the first to file. As the market for Xalatan is rather small and if



Breath manages to achieve first filer status and the 180 days exclusivity, it is likely that Breath can capture a major share of the generic market.

In our base case scenario, we assumed that PRX (through Breadth) would be able to get first filer status, adding \$3.36 to the share price. A potential upside is that PRX may capture more market share because of lack of competition, adding \$5.19 to the share price. The downside is that the exclusivity period is not awarded to Breadth, resulting in PRX's share price to increase only by \$1.01.

Catapres TTS

PRX has an agreement with Elan to market the generic version of Catapres TTS, a patch treatment for hypertension. However, it is not certain whether Elan was the first to file. The current market size for the product is \$162 million (branded sales). Nonetheless, as few generic manufacturers have the capability to produce transdermal patch, there will be at most 2 to 3 generic competitors for this market¹.

Our base case scenario depicts no exclusivity with only 2 generic players in the market, affecting PRX's share price by \$1.62. A potential upside will see Elan being awarded exclusivity for the first 180 days, increasing share price by \$1.82. Worst scenario calls for share price increasing by \$1.21.

Flecainide

Flecainide is the generic version of Tambocor, a treatment for heart rhythm disturbances that had \$112 million branded sales in 2001. Alphapharma, PRX's marketing partner, is the first to file.

The impact of Flecainide to PRX's share price is minimal given the small market size. Assuming that Alphapharma is awarded 180 days of exclusivity, the impact to PRX's share price is \$0.17.

Paroxetine

Paroxetine is the generic version of Paxil, a treatment for depression that had \$2,154 million branded sales in 2001. Paxil is the tablet form while Pentech (PRX is licensing Pentech's application) is applying for the capsule form. Pentech is believed to be the first filer and PRX is likely to duplicate the success it has with Fluoxetine, inducing pharmacies and physicians to switch from the tablet form to the capsule form.

Depending on the adoption rate of the capsule form, Paroxetine is expected to add \$0.79 to PRX's share price, with a potential upside of \$1.01 and downside of \$0.42.

Other Products

The growth of PRX is very dependent on the new products that it is able to launch. Hence, a big obstacle in valuing the company is that there is no way of knowing what other products the company will be launching from 2004 onwards as this is dependent on the company's partnership with the various companies and the capability of its R&D. We assumed in a base case, there is going to be 10% of the revenue from launching new products for each year after 2004, with a potential upside of 15% and a downside of 8%.

¹ CIBC World Markets



Management Expertise

The core management team has been in place for over a decade, consequently the company performance over the last ten years can be used to glean management effectiveness. The most important recent changes that may affect management performance in the future are the changes of the composition of the board of directors. These changes were as a result of Merck KGaA's sale of their holdings in the company. The four seats held by Merck KGaA were vacated. In October and November of 2001 the board elected new directors to fill almost all of those seats.

Last year was a tremendous year for the company with revenues increasing by 219%, a significant improvement over the prior nine years. The recent improvements in financial performance may be due to shifts in strategy. In addition to their internal R&D program, the company now plans to introduce products through distribution agreements with other firms. Specifically, the firm intends to partner with international firms, who may benefit from PRX's domestic expertise in distribution. Furthermore, the company intends to pursue arrangement with raw material suppliers to ensure constant supply at reasonable prices.

While this strategy is well founded, it is hard to determine how much it will pay off over the long term. The blockbuster products that led to their recent success may be hard to duplicate on a one, two or even three-year basis. In reviewing the company performance, earnings have been negative five of the last nine years. Therefore, we are cautiously optimistic about the value added benefit of management.

Risks and Concerns

Pharmaceutical Resources like other generic firms are subject to a changing and increasingly unpredictable competitive environment as consolidation in the distribution channel leads to downward pricing pressure and lower margins. Furthermore, the level and fierceness of competition is highly erratic and unpredictable, which can lead to large swings in profitability.

Narrow Product Range PRX presently obtains a significant portion of its revenues and thus earnings from a few products. With a narrow product range, the impact of a change in the competitive dynamics for those products can have a substantial impact on the firm's financial performance.

Customer Risk A large portion of the company's sales is derived from a few customers. Last year three customers accounted for 35% of the Company's sales volume. The loss or reduction of orders of one or more of these customers could have a material adverse affect on the financial health of the company.

Weak Past Performance With the exception of 2001, the past decade has been less than memorable for PRX. In 1993, revenues were at about \$74.5 Million and steadily declined to \$60.4 Million by 1998. This may suggest at least a minimum level of caution, as the performance record, while good of late, has not been stellar.

Legal Environment The Company's ability to increase sales, thus earnings, is largely based on the approval of new generic products by the FDA. The approval process can be complicated by legal actions. Patent related suits are not uncommon and may make the approval process more difficult and lead to longer approval times in some cases. Branded drug companies, on occasion, try to extend the life of their drugs by applying for new patents just as their drugs are coming off patents which when challenged can sometimes end up in the legal system.



Valuation Risks. Historically PRX has had somewhat unstable cash flow streams and revenue growth has not followed a consistent deterministic pattern. This may present a problem in forecasting future cash flows, which will affect the DCF valuation.

Market Risks.

- Institutional sponsorship in this industry is typically high. For small cap stocks, this level of sponsorship can make the shares more volatile. For instance, if a mutual fund with \$5 Billion in assets takes a “small position”, say 50 basis points, that amounts to a \$25 Million position. For this firm with daily volume at about \$7.35 Million worth of shares, it can have a significant impact on the short-term fluctuations of the stock.

Company	Institutional % of float
PRX	70% ¹

- Insider Buying/Selling

	Last 6 months	% of insider holdings
IVX	2 BUYS	0.20%
MYL	1 SELL	1.50%
AGN	4 SELLS	2.80%
FRX	4 SELLS	NA
BRL	22 SELLS	0.30%
PRX	9 SELLS	66.60% ²

Other insiders that sold recently include the Chairman, CEO, Officers, Directors and beneficiaries. We are concerned with the recent insider sales to whether it is indicative of an inherent problem in the company unknown to the public.

¹ Source: Yahoo Finance

² Source: Yahoo Finance



Import Disclaimer

Please read this document before reading this report.

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Appendix
Pharmaceutical Resource, Inc.

Appendix I: Drugs manufactured and/or distributed by PRX

<u>Name</u>	<u>Competitive Brand-Name Drug</u>
<i>Central Nervous System:</i>	
Biperiden Hydrochloride	Akineton
Benztropine Mesylate	Cogentin
Buspirone	BuSpar
Clonazepam	Klonopin
Doxepin Hydrochloride	Sinequan, Adapir
Fluoxetine	Prozac
Fluphenazine Hydrochloride	Prolixin
Imipramine Hydrochloride	Tofranil
Triazolam	Halcion
<i>Cardiovascular:</i>	
Acebutolol	Sectral
Amiodarone Hydrochloride	Cordarone
Captopril	Capoten
Doxazosin Mesylate	Cardura
Enalapril	Vasotec
Guanfacine	Tenex
Hydralazine Hydrochloride	Apresoline
Hydra-Zide	Apresazide
Indapamide	Lozol
Isosorbide Dinitrate	Isordil
Minoxidil	Loniten
Nicardipine Hydrochloride	Cardene
Sotalol	Betapace
<i>Analgesic/Anti-Inflammatory:</i>	
Aspirin (zero order release)	Zorprin
Carisoprodol and Aspirin	Soma Compound
Dexamethasone	Decadron
Etodolac	Lodine
Ibuprofen	Advil, Nuprin, M
Naproxen Sodium	Aleve
Orphengesic/Orphengesic Forte	Norgesic/Norgesi
Oxaprozin	Daypro
<i>Anti-Bacterial:</i>	
Doxycycline Monohydrate	Monodox
Silver Sulfadiazine (SSD)	Silvadene
<i>Anti-Diabetic:</i>	
Metformin Hydrochloride	Glucophage
<i>Anti-Diarrheal:</i>	
Diphenoxylate Hydrochloride and Atropine Sulfate	Lomotil
<i>Antiemetic:</i>	
Meclizine Hydrochloride	Antivert
Prochlorperazine Maleate	Compazine
<i>Anti-Gout:</i>	
Allopurinol	Zyloprim
<i>Anti-Histaminic:</i>	



Cyproheptadine Hydrochloride	Periactin
<i>Anti-Neoplastic:</i>	
Hydroxyurea	Hydrea
Megestrol Acetate	Megace
Megestrol Acetate Oral Suspension	Megace Oral Suspension
<i>Anti-Parkinson:</i>	
Selegiline	Eldepryl
<i>Anti-Thrombotic:</i>	
Ticlopidine Hydrochloride	Ticlid
<i>Anti-Ulcerative:</i>	
Ranitidine	Zantac
Famotidine	Pepcid
<i>Anti-Viral:</i>	
Acyclovir	Zovirax
<i>Anti-Hyperthyroid:</i>	
Methimazole	Tapazole
<i>Broncodilator:</i>	
Metaproterenol Sulfate	Alupent
<i>Cholesterol Lowering:</i>	
Lovastatin	Mevacor
<i>Gentro-Urinary (diuretic):</i>	
Amiloride Hydrochloride	Midamor
<i>Ovulation Stimulant:</i>	
Clomiphene	Clomid



Appendix II:

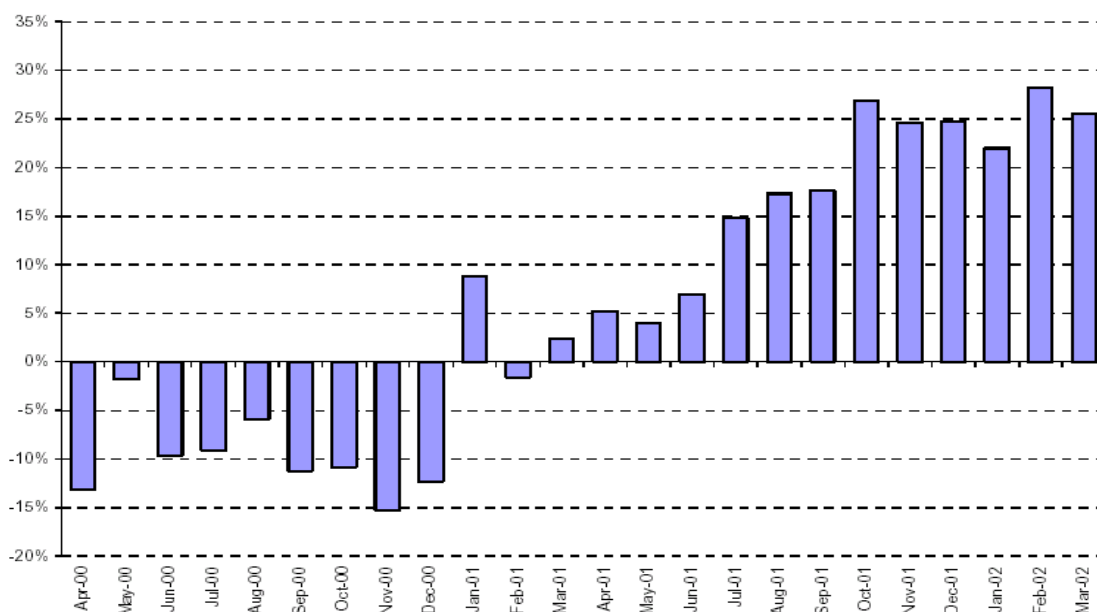
PHARMACEUTICAL RESOURCES PARTNERSHIPS OVERVIEW

Partner	Date	Products in Agreement	Estimated Economics
Dr. Reddy's	1996	Five products	
Genpharm (Merck KGaA)	March 1998	40 products, including flecainide, metformin.	Merck KGaA pays R&D costs in return for cut of gross profits
Genpharm	November 2000	5 generic products including 10mg and 20mg tablets of generic Prozac	Over 50% of gross profits
Andrx (#)	January 2001	Andrx sales of generic Prilosec	4.5% royalty stream on operating profits from Andrx, stemming from 30% cut from Genpharm
Dr. Reddy's	April 2001	Fourteen drugs, including 40mg generic Prozac, Generic 20mg Zyprexa	20% of GP during exclusivity, 50% after.
Elan	October 2001	License of generic Clonidine TT	Not disclosed
Pentech	November 2001	Capsule versions of Paxil	Profit Split
Breath Ltd. of the Arrow Group	November 2001	Generic Xalatan	Profit Split
Elan	December 2001	Agreement to identify 2 controlled release products per year over next five years. Elan will perform R&D, while PRI will market and distribute. PRI will reimburse Elan for costs and pay a royalty on sales.	Not disclosed
Bristol Myers Squibb (#)	March 2002	As part of a settlement over antitrust issues related to Megace, PRI gained Capoten, Capozide, Questran, Questran Light, and Sumycin	PRI paid \$3 million and now has full U.S. rights to the products
Merck KGaA	April 2002	11 generic products, including generic versions of Claritin and Remeron. Merck will develop and submit all ANDAs while PRI will market and distribute them.	PRI receives just over 50% of profits.
Nortec/Glatt	May 2002	PRI will develop and submit a Paragraph IV ANDA for an extended-release version of a branded product with sales of \$300 million.	

Source: Company reports

Appendix III Base Products Revenue Growth Rate (%)

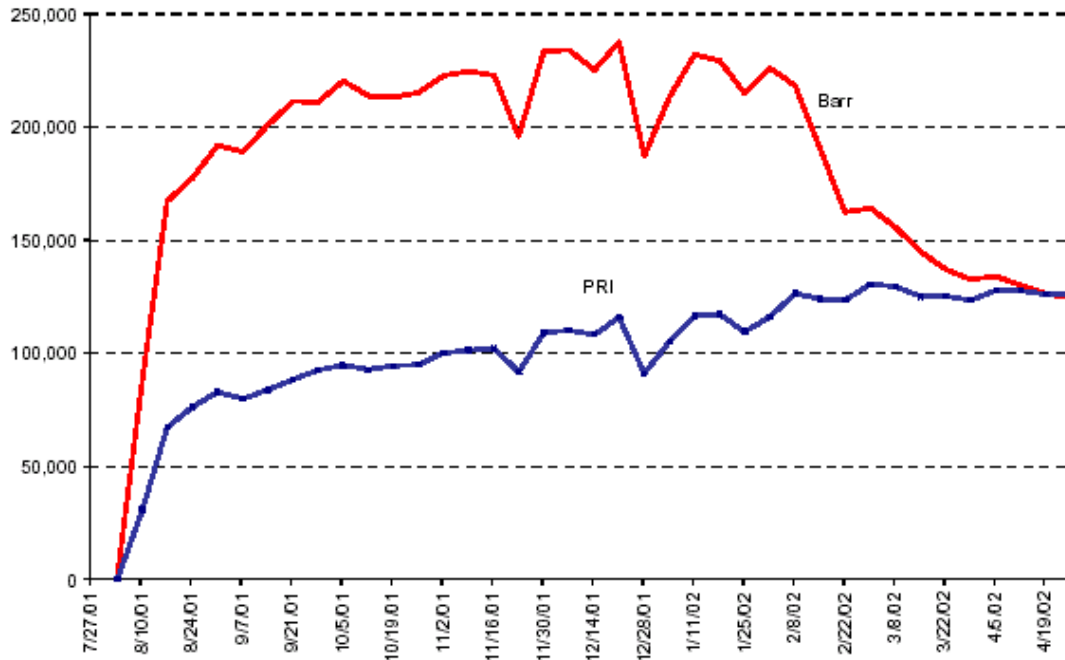
BASE BUSINESS GROWTH



Source: IMS Health and U.S. Bancorp Piper Jaffray estimates

Appendix IV.

FLUOXETINE PRESCRIPTION VOLUME



Source: IMS Health

Appendix V: Revenue & COGS projection assumptions:**Existing Products**

Based on observations on the history, after a generic drug exceeds its 180 days exclusivity, its price and revenue will drop substantially, from 30% to 70%. While it's quite hard to tell the price erosion speed of any specific new drug, we are more certain about the average revenue decrease speed. Therefore, to project future revenue of PRX, we made projections with two scenarios: **base case** and **upside case**.

Assumptions for base case revenue projection: sales decline by 50% after exclusivity in year 2-3: in year 4 and after, sales growth rate is 0%;

Assumptions for aggressive revenue projection: in year 2-3, sales growth rate is -10%; in year 4 and after: sales growth rate is 3%.

Assumptions for COGS projection: gross margin after the exclusivity: 50% in year 1, then decreases by 5% each year until 35% for ever; for products older than 4 years, the gross margin is 35%.

New Products

The revenue projection of PRX's new products is mainly based on observations made by Salomon Smith Barney (SSB)¹ of the generic industry. It is observed that in general, prices of drugs with expired patents usually rapidly decline to 30% of the branded drug price. In addition, generic manufacturers tend to capture 70% of the total market by the end of the first year of their entrance into the market and 90% of the market by the end of the second year.

By using the 2001 sales for the existing proprietary drugs, we first extrapolated the size of the total generic market after the launch of the generic versions based on SSB's observations. From there, depending on the expected market dynamics for the particular product, we assume the market share that is attributed to PRX which is totally dependent on the expected number of players in the market and whether PRX is able to acquire exclusivity for the product.

Manufacturing costs vary from product to product and are based on US Bancorp's assumptions.

The new products mentioned in this report are those that are known publicly and generally expected to launch in 2003 and 2004. However, it is very likely that the company will continue to launch new products during and after 2004. For that, we assume that after 2004, the company will continue to experience the same revenue growth from new products as in the prior year.

¹ Generically Speaking II March 2002



Appendix VI:**Pharmaceutical Resources, Inc. - Assumptions****General Information**

Project Name	PRX
Fiscal Year	31-Dec
Update Time	14-Oct
Years of Cash Flow	5

Terminal Value

Perpetual Growth Rate (%)

Perpetual Growth Rate (%)	2.00	3.00	4.00
P/E	17	20	23
P/Revenue	2.6	2.9	3.2
P/Cash Flow	9	10	11
EV/EBITDA	12	13	14

WACC**10.25%****11.3%****12.25%**

Risk Free Rate	4.65%
Risk Premium	6%
Beta	1.2
Cost of Equity	11.25%

Existing Product Scenarios**Base Case**

Upside Case Base Case

New Products Scenarios

Upside Case Base Case Downside Case Not Launch

Omeprazole	Downside Case
Catepres TT	Base Case
Latanoprost	Base Case
Paroxetine	Base Case
Flecainide	Base Case
Other New Products	Base Case

New Products

- price of generic drops to 30% of branded price

- Generic substitution

1 year 70%
2 years 90%

		2003	2004	2005	2006	2007
Manufacturing cost %of sales						
	Omeprazole	0.26	0.37	0.5	0.5	0.5
	Catepres TTS	0.45	0.5	0.55	0.55	0.55
	Latanoprost		0.2	0.4	0.5	0.55
	Paroxetine		0.45	0.9	0.9	0.9
	Flecainide	0.45	0.65	0.65	0.65	0.65

Other New Products

Upside Case	15%
Base Case	10%
Downside Case	8%

First year of Second Yea Third Year
Manufacturing Cos 60% 65% 70%

Source: Company's 10-K and our estimates.



Appendix VII:**Pharmaceutical Resources, Inc. - Financials**

	Historical			Projections					
	1999	2000	2001	2002	2003	2004	2005	2006	2007
Income Statement									
Revenue	80.32	85.00	274.10	355.52	315.72	392.34	398.38	440.97	471.32
<i>Growth Rate %</i>		106%	322%	30%	-11%	24%	2%	11%	7%
Base Products									
Self-Manufactured		79.00	71.00	90.00	90.00	90.00	90.00	90.00	90.00
<i>Growth Rate %</i>			-10.1%	26.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Genpham		5.00	21.00	43.00	43.00	43.00	43.00	43.00	43.00
<i>Growth Rate %</i>			320.0%	104.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Reddy		1.00	10.00	23.00	23.00	23.00	23.00	23.00	23.00
<i>Growth Rate %</i>			900.0%	130.0%	0.0%	0.0%	0.0%	0.0%	0.0%
total Base	0.00	85.00	105.10	157.32	156.00	156.00	156.00	156.00	156.00
<i>Growth Rate %</i>			23.6%	49.7%	-0.8%	0.0%	0.0%	0.0%	0.0%
Fluoxetine		0.00	122.00	93.20	61.00	61.00	61.00	61.00	61.00
<i>Growth Rate %</i>			#DIV/0!	-23.6%	-34.5%	0.0%	0.0%	0.0%	0.0%
Megestrol		0.00	44.00	82.00	65.60	41.00	41.00	41.00	41.00
<i>Growth Rate %</i>			#DIV/0!	86.4%	-20.0%	-37.5%	0.0%	0.0%	0.0%
Buspirone		0.00	3.00	4.00	3.20	3.20	3.20	3.20	3.20
<i>Growth Rate %</i>			#DIV/0!	33.3%	-20.0%	0.0%	0.0%	0.0%	0.0%
Flecainide		0.00	0.00	10.00	8.00	8.00	8.00	8.00	8.00
<i>Growth Rate %</i>			#DIV/0!	#DIV/0!	-20.0%	0.0%	0.0%	0.0%	0.0%
BMS products		0.00	0.00	9.00	8.10	8.10	8.10	8.10	8.10
<i>Growth Rate %</i>			#DIV/0!	#DIV/0!	-10.0%	0.0%	0.0%	0.0%	0.0%
Total Existing Products	0.00	85.00	274.10	355.52	301.90	277.30	277.30	277.30	277.30
<i>Growth Rate %</i>			#DIV/0!	30%	-15%	-8%	0%	0%	0%
New Products									
Omeprazole (2')				0.00	16.60	18.67	18.67	18.67	18.67
<i>Growth Rate %</i>				#DIV/0!	#DIV/0!	12.5%	0.0%	0.0%	0.0%
Catepres TT				7.94	15.88	15.88	15.88	15.88	15.88
<i>Growth Rate %</i>				#DIV/0!	100.0%	0.0%	0.0%	0.0%	0.0%
Latanoprost				0.00	48.91	29.03	29.03	29.03	29.03
<i>Growth Rate %</i>				#DIV/0!	#DIV/0!	-40.7%	0.0%	0.0%	0.0%
Paroxetine				0.00	32.31	16.16	22.62	22.62	22.62
<i>Growth Rate %</i>				#DIV/0!	#DIV/0!	-50.0%	40.0%	0.0%	0.0%
Flecainide				5.88	1.34	1.51	1.51	1.51	1.51
<i>Growth Rate %</i>				#DIV/0!	-77.1%	12.5%	0.0%	0.0%	0.0%
Other New Products - 2005						39.84	31.87	23.90	
Other New Products - 2006							44.10	35.28	
Other New Products - 2007								47.13	
Total New Products	0.00	0.00	0.00	0.00	13.82	115.04	121.08	163.67	194.02
Cost of Goods Sold	64.14	60.57	92.85	196.95	180.57	207.39	243.28	281.34	303.56
Base Products									
Self-Manufactured		57.67	46.15	56.70	58.50	58.50	58.50	58.50	58.50
Genpham		2.50	10.50	21.50	27.95	27.95	27.95	27.95	27.95
Reddy		0.40	4.00	9.20	14.95	14.95	14.95	14.95	14.95
total Base	0.00	60.57	60.65	87.40	101.40	101.40	101.40	101.40	101.40
Fluoxetine		0.00	24.40	58.30	30.50	33.55	36.60	39.65	39.65
Megestrol		0.00	6.60	28.85	32.80	22.55	24.60	26.65	26.65
Buspirone		0.00	1.20	3.40	1.60	1.76	1.92	2.08	2.08
Flecainide		0.00	0.00	10.00	4.00	4.40	4.80	5.20	5.20
BMS products		0.00	0.00	9.00	4.05	4.46	4.86	5.27	5.27
Total Existing Products	0.00	60.57	92.85	196.95	174.35	168.12	174.18	180.25	180.25
New Products									
Omeprazole				0.00	6.14	9.34	9.34	9.34	9.34
Catepres TT				3.57	7.94	8.73	8.73	8.73	8.73
Latanoprost				0.00	9.78	11.61	14.51	15.96	
Paroxetine				0.00	14.54	14.54	20.36	20.36	
Flecainide				2.65	0.87	0.98	0.98	0.98	
Other New Products - 2005						23.90	20.72	16.73	
Other New Products - 2006							26.46	22.93	
Other New Products - 2007								28.28	
Total New Products	0.00	0.00	0.00	0.00	6.22	39.28	69.10	101.09	123.31
Gross Margin	16.18	24.43	181.25	158.57	135.15	184.95	155.10	159.63	167.76
R&D	6.01	7.63	11.11	15.00	13.32	16.55	16.81	18.61	19.89
<i>as % of Revenue</i>	7.5%	9.0%	4.1%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%
S G&A	13.51	16.30	21.88	27.88	29.16	30.43	31.70	32.98	34.25
<i>Growth Rate %</i>		20.6%	34.2%	27.4%	27.4%	27.4%	27.4%	27.4%	27.4%
<i>as % of Revenue</i>	16.8%	19.2%	8.0%	7.8%	9.2%	7.8%	8.0%	7.5%	7.3%



Appendix VIII**Pharmaceutical Resources, Inc. - Financials**

	Historical			Projections					
	1999	2000	2001	2002	2003	2004	2005	2006	2007
Working Capital Schedule									
Accounts Receivable	19.00	22.31	38.01	46.93	41.67	51.79	52.59	58.21	62.21
<i>Turnover</i>		88.7	40.2	48.2	48.2	48.2	48.2	48.2	48.2
<i>as % of Revenue</i>		24.3%	11.0%	13.2%	13.2%	13.2%	13.2%	13.2%	13.2%
Inventory		20.25	31.46	66.28	60.77	69.80	81.88	94.69	102.16
<i>Turnover</i>		122.0	123.7	122.8	122.8	122.8	122.8	122.8	122.8
<i>as % of COGS</i>		33.4%	33.9%	33.7%	33.7%	33.7%	33.7%	33.7%	33.7%
Other Account Receivable		4.02	38.64	33.47	29.73	36.94	37.51	41.52	44.38
<i>as % of Revenue</i>		4.7%	14.1%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%
Total Current Assets		257.86	272.38	318.18	303.66	330.02	343.46	365.90	380.24
Accounts Payable		11.48	18.01	37.75	34.61	39.76	46.64	53.93	58.19
<i>Turnover</i>		69.1	70.8	70.0	70.0	70.0	70.0	70.0	70.0
<i>as % of COGS</i>		18.9%	19.4%	19.2%	19.2%	19.2%	19.2%	19.2%	19.2%
Other Payables		5.74	54.74	67.39	61.78	70.96	83.24	96.27	103.87
<i>as % of COGS</i>		9.5%	59.0%	34.2%	34.2%	34.2%	34.2%	34.2%	34.2%
Total Current Liability		17.22	72.74	105.14	96.40	110.72	129.88	150.20	162.06
Working Capital		240.65	199.64	213.03	207.26	219.30	213.58	215.71	218.19
Change in WC			-41.01	13.40	-5.77	12.04	-5.72	2.12	2.48
PP&E Schedule									
PP&E Beginning Balance	24.12	23.38	23.56	24.35	27.23	31.63	37.36	43.94	50.65
Capex	2.35	3.21	4.62	6.48	8.57	10.65	12.38	13.40	14.50
<i>Growth Rate %</i>		36.4%	44.1%	40.2%	32.2%	24.2%	16.2%	8.2%	8.2%
Depreciation	3.09	3.03	3.35	3.59	4.17	4.93	5.80	6.68	7.59
<i>as % of Total PP&E</i>	11.7%	11.4%	11.9%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%
PP&E Ending Balance	23.38	23.56	24.35	27.23	31.63	37.36	43.94	50.65	57.56
Cash Flow Statement									
EBIT	-3.34	0.50	148.26	115.68	92.67	137.97	106.58	108.05	113.62
Tax on EBIT	0.00	0.00	22.02	33.54	26.87	40.00	30.90	31.32	32.94
Depreciation & Amortization	3.09	3.03	3.35	3.59	4.17	4.93	5.80	6.68	7.59
Change in Working Capital	0.00	0.00	41.01	-13.40	5.77	-12.04	5.72	-2.12	-2.48
Capex	2.35	3.21	4.62	6.48	8.57	10.65	12.38	13.40	14.50
Free Cash Flow	-2.60	0.32	165.97	65.86	67.18	80.21	74.82	67.89	71.29
EBITDA	-0.25	3.53	151.61	119.28	96.85	142.89	112.38	114.73	121.21

Source: Company's 10-K and our estimates.



Appendix VIII:**Pharmaceutical Resources, Inc. - Valuation Matrix**

	2002	2003	2004	2005	2006	2007			
Earning/share	2.47	1.98	2.95	2.28	2.31	2.43	Multiple Valuation		
EBIDTA/share	3.61	2.93	4.33	3.41	3.48	3.67	Industry Average		
Revenue/share	10.77	9.57	11.89	12.07	13.36	14.28	P/E 39.72		
Free Cash Flow / share	2.00	2.04	2.43	2.27	2.06	2.16	EV/EBITDA 44.73		
Number of shares	33.00						PRX at 70% discount		
Total Debt (2002.6.30)	1.18						P/E 27.80		
Total Cash (2002.6.30)	24.45						EV/EBITDA 31.28		
Net Debt	-23.27								
Discount Rate	10%			11%			12%		
Perpetual Growth Rate (%)	2.00	3.00	4.00	2.00	3.00	4.00	2.00	3.00	4.00
PV of Cash Flows	331.26	331.26	331.26	323.98	323.98	323.98	317.00	317.00	317.00
Terminal Value	864.17	983.37	1,140.70	770.75	864.17	983.37	695.55	770.75	864.17
PV of Terminal Value	519.44	591.08	685.66	441.97	495.54	563.89	380.66	421.81	472.94
Enterprise Value	850.69	922.34	1,016.92	765.95	819.52	887.87	697.66	738.81	789.94
Terminal Value as % of EV	61%	64%	67%	58%	60%	64%	55%	57%	60%
Equity Value	873.97	945.61	1,040.19	789.22	842.79	911.14	720.93	762.08	813.21
Price/share	26.48	28.65	31.52	23.92	25.54	27.61	21.85	23.09	24.64
Implied Multiples (2003E)									
P/E	13.40	14.50	15.95	12.10	12.92	13.97	11.05	11.68	12.47
EV/EBITDA	8.78	9.52	10.50	7.91	8.46	9.17	7.20	7.63	8.16
P/Revenue	2.77	3.00	3.29	2.50	2.67	2.89	2.28	2.41	2.58
P/Cash Flow	13.01	14.08	15.48	11.75	12.55	13.56	10.73	11.34	12.11

Pharmaceutical Resources, Inc. - Comparable Company Analysis

10/11/2002	Ticker	Price	Beta	Number of shares	Market Cap.	EBITDA	Total Debt	Enterprise Value	Trading Multiples				
									Price/Earning	Price/Sales	Price/Book	Price/Cash	EV/EBITDA
	Teva	67.03	-0.19	128.10	8,586.54	414.80	1,429.70	10,016.24	26.81	4.33	5.60	54.22	24.15
	Mylan	32.32	0.68	125.30	4,049.70	470.70	19.74	4,069.43	15.17	3.61	2.84	6.80	8.65
	Barr-Lab	58.40		43.60	2,546.24	309.20	47.97	2,594.21	12.64	2.24	3.82	7.68	8.39
	Watson	23.66	0.18	106.80	2,526.89	109.10	450.89	2,977.78	32.41	2.21	1.46	7.46	27.29
	IVAX	11.00	0.76	194.60	2,140.60	214.00	955.50	3,096.10	13.75	1.84	3.46	12.22	14.47
	SICOR	14.89	0.57	116.10	1,728.73	111.30	71.11	1,799.84	18.85	4.10	2.92	7.41	16.17
	Andrx	19.99	1.48	70.90	1,417.29	-25.70	0.00	1,417.29	199.90	1.85	2.26	6.62	-55.15
	Econ-Lab	21.81		43.60	950.92	57.40	14.17	965.09	32.07	4.09	4.09	12.12	16.81
	Pharmaceut PRX	25.16	1.20	32.50	817.70	136.30	1.18	818.88	9.05	2.08	4.54	33.11	6.01
	Mean		0.67		2,751.62	199.68		3,083.87	20.09	2.93	3.44	16.41	15.24
	Medium		0.68		2,140.60	136.30		2,594.21	17.01	2.24	3.46	7.68	15.32

Source: Company's 10-Ks and Annual Reports, Finance Yahoo!, and our estimates.

