

## Eon Laboratory, Inc. (ELAB)



*Small and Steady  
Wins the Race*

**- BUY**

(Please see the disclaimer at the end of the report)

### Definition of Ratings:

**Buy:** Undervalued by 20%

**Hold:** Fairly Valued

**Sell:** Overvalued by 20%

**Time Frame:** 12 Months

**Industry:** Generic Pharmaceuticals

**Market Cap:** \$899.1 MM

**Shares Outstanding:** 43.60 MM

**Price:** \$20.64 /share

**52 -wk High:** \$24.11 /share

**52 -wk Low:** \$12.70 /share

**Target Price:** \$29 /share

**EPS:** \$0.68/share

**Beta:** 0.74

### Analyst

**Ellen Hui:** [Ellen.hui@yale.edu](mailto:Ellen.hui@yale.edu)

**Adindu Nwachku:** [Adindu.nwachku@yale.edu](mailto:Adindu.nwachku@yale.edu)

**Liang True Mah:** [Liang.mah@yale.edu](mailto:Liang.mah@yale.edu)

**Nell Xin Wen:** [Nell.wen@yale.edu](mailto:Nell.wen@yale.edu)

### Portfolio Manager:

**Cynthia Kueppers:** [Cynthia.kueppers@yale.edu](mailto:Cynthia.kueppers@yale.edu)

### Executive Summary

- The price of Eon Laboratory, Inc. increased more than 37% ever since its IPO, while the generic industry average index kept almost flat and S&P decreased 17% during the same period. Currently, the ELAB is traded at a premium to its industry peers, with a P/E ratio of around 30, compared to the industry average P/E ratio of 20.
- We foresee this stock continue to outperform the industry and the market in the future twelve months due to its comprehensive product portfolio, its high growth potential, its management competence to capture the high growth potential.
- In the past two years, Eon's product approval has been one of the most robust in the industry. Eon received a total of 24 ANDA approvals during 2000-2001. It has also produced one of the lowest approval times in the industry, approximately 30% below the industry average.
- Management has proven its ability to introduce high-barrier-to-entry products at a fast pace.
- Eon's special ownership configuration enables Eon Labs to capitalize on its close relationship with Hexal from which it can gain further intangible resources such as experience, strategy, internal product development and ability to license sophisticated technology.
- Our target price is \$29, with a possible range from \$22 to \$43 per share. Therefore, we are suggestion a buy strategy for this stock in the future 12 months.

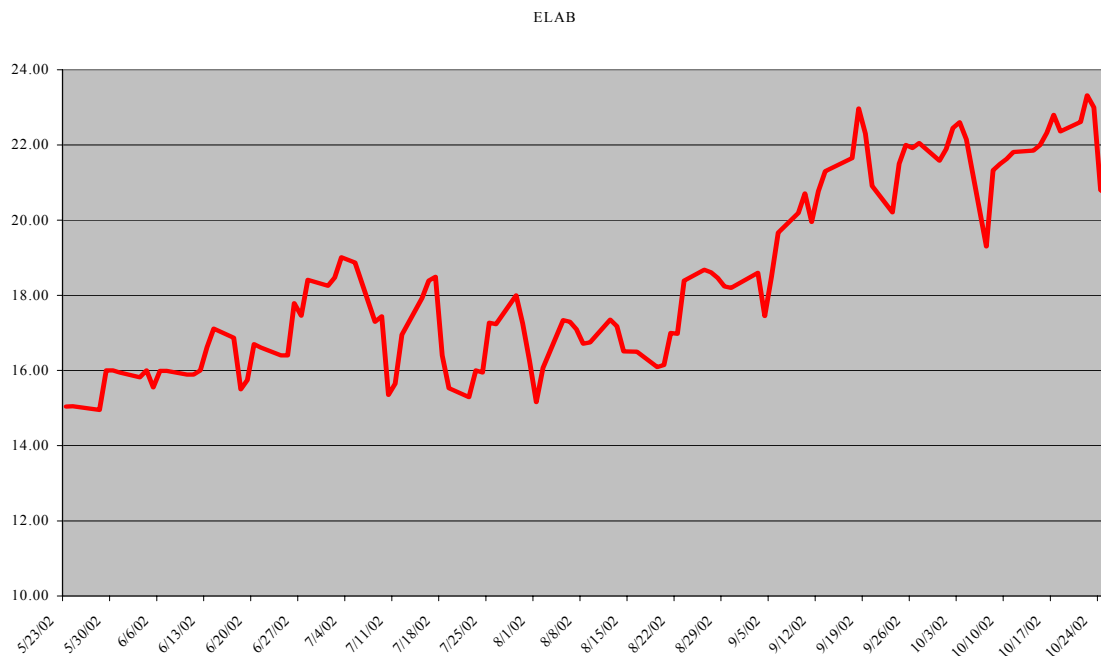


### Recent Developments

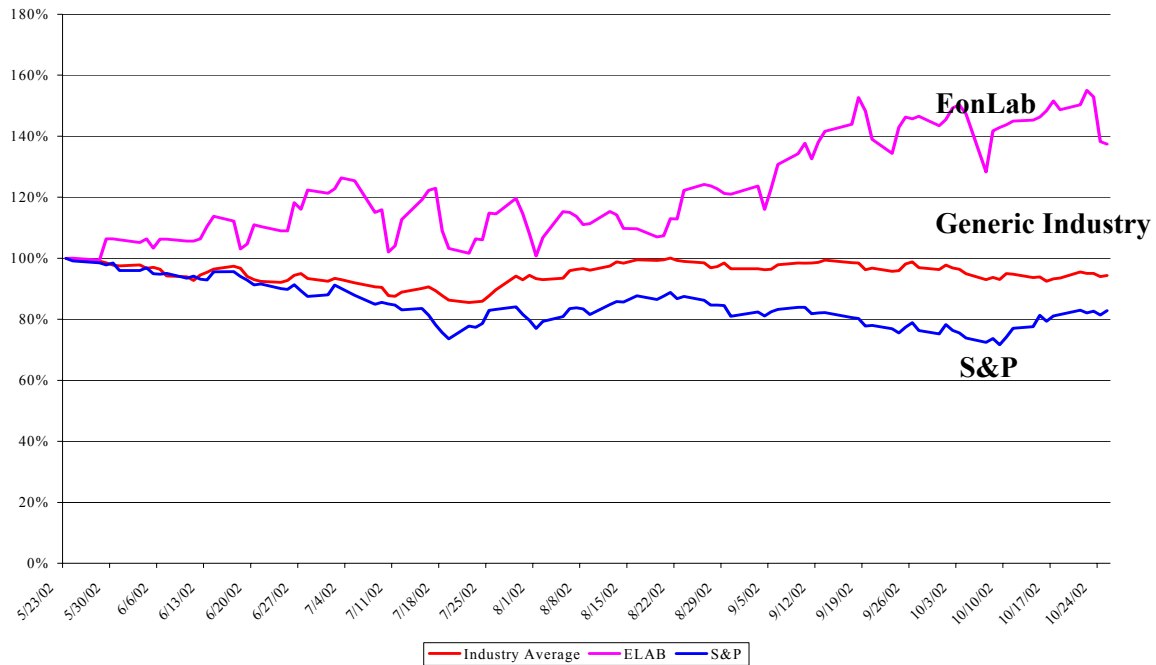
- On October 28, 2002, the Company announced that it had been granted tentative approval for Omeprazole delayed-release capsules, which is the generic alternative for Prilosec®. As there is ongoing litigation surrounding the drug and there are three other companies who have received regulatory clearance from the FDA, it is difficult to predict the outcome of the legal action.
- On September 9, 2002, the company announced the cancellation of a patent infringement suit against it by Novartis. The patent infringement case was regarding Eon Labs's product Cyclosporine USP (Modified) Softgel Capsules. Eon Labs generated legal expenses in excess of \$4 Million to defend against this case. The firm Cohen, Pontani, Lieberman & Pavane in this patent litigation, represented Eon Labs on this case.
- On August 5, 2002--Eon Labs, Inc. reported net income of \$9.5 million for the second quarter ended June 30, 2002, compared to \$5.4 million in the comparable period in 2001, an increase of 77%. Net sales were \$52.0 million for the second quarter ended June 30, 2002, as compared to \$42.6 million in the comparable period in 2001, an increase of 22%. The increase in net sales was primarily as a result of newly introduced generic pharmaceutical products. From January 2002, the Company has received a total of 11 final approvals. Furthermore, the company has 13 ANDAs pending with the FDA, including 4 tentative approvals, representing total annual branded sales exceeding \$7.8 billion..

### Trading Performance

Price Performance since IPO



### Price Performance Compared with Industry and S&P



The above is the price performance of Eon Laboratory since its IPO. We can see that this stock's price increased more than 37% since its IPO, while the industry average index kept almost flat and the S&P 500 Index decreased 17%. Currently, the ELAB is traded at a P/E ratio of around 30, while the industry average P/E ratio is around 20. We foresee this stock continuing to outperform the industry and the market in the future twelve months due to its comprehensive product portfolio, its high growth potential, its management competence to capture the high growth potential and the leverage it can take from its special ownership structure.

### Valuation

Our DCF valuation result gives us a target price of \$29 per share, within a range of \$22 to \$43 per share, by assuming WACC is from 8% to 10%, and the perpetual growth rate is from 2% to 4%. We also used comparable company analysis to value the company, on the condition that we assume this company will be traded at a 50% premium to its peer company due to its comprehensive product portfolio, its high growth potential, and its management competence to capture the high growth potential. Our P/E multiple and EV/EBITDA multiple valuation result gives us a range from \$26 per share and \$41 per share. Overall speaking, we suggest a "buy" 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 which is the driver for its future growth story, its management competence and major risks.

### Existing Drugs

Since January 1, 1996, Eon has received 48 ANDA approvals from the FDA, including tentative approvals. In 2000 and 2001, it received 24 ANDA approvals, including five tentative approvals. In each of 2000 and 2001, it was among the top five companies with the most ANDA approvals in the U.S.

Net sales increased 38.2% from \$119.7 million in 2000 to \$165.4 million in 2001. New products launched during 2001 that contributed to the increase in net sales include, among others, Oxaprozin, Flutamide, USP, Lovastatin, USP, and Methimazole, USP. Net sales of existing products launched before 2000 were up primarily because of increased Phentermine HCl, USP sales. Higher Phentermine HCl, USP sales reflected increased demand, the refilling of distribution channels and improved selling prices resulting from a shortage of the product in the market due to limited availability of the active pharmaceutical ingredient.

For the six months ended June 30, 2002, net sales increased 22.7% from \$81.7 million for the comparable period in 2001 to \$100.2 million. The net sales increase was attributable primarily to sales of products that were introduced after June 30, 2001. These products include Lovastatin USP, Metformin HCl, and Nabumetone. Other factors impacting sales for the six months ended June 30, 2002 included an increase in unit volumes of existing products and changes in product mix and unit prices. The change in product mix and price had an unfavorable impact principally due to a decline in both unit volume and selling prices of Fluvoxamine Maleate and a decline in unit volume of Phentermine HCl, USP. Additional competitive activity caused the decrease in Fluvoxamine Maleate unit volume and price. Phentermine HCl, USP sales in the six months ended June 30, 2001 reflected an increase in unit volume from the refilling of distribution channels following a shortage of the product in the market due to the limited availability of the active pharmaceutical ingredient.

Gross profit as a percentage of net sales decreased from 57.4% for the six months ended June 30, 2001 to 51.4% in the comparable period in 2002. The decrease was mainly due to a decrease in sales and margins for Phentermine HCl, USP and Fluvoxamine Maleate, which had higher gross profit margins than most of the Company's other products in 2001.

#### **Products:**

**FLUVOXAMINE MALEATE.** Fluvoxamine Maleate is the generic equivalent of Solvay S.A.'s Luvox and is used to treat obsessive-compulsive disorder. U.S. sales of Luvox in the 12 months prior to the introduction of a generic alternative were approximately \$199 million. Eon Lab received first-day approvals for Fluvoxamine Maleate tablets in late November 2000 along with one other competitor after an expedited review process. Due to its business model that integrates product development, logistics, API sourcing logistics and manufacturing, Eon Lab was able to bring the product to market in December 2000 before any other competitor. As a result, Eon Lab achieved high sales with attractive margins over the first few months. Despite eight approvals being granted over the following months, Eon Lab has continued to maintain a favorable market share for Fluvoxamine Maleate. As of March 31, 2002, its share of the generic market for Fluvoxamine Maleate was approximately 46%, representing the highest share of any generic participant in the market, with sales of \$20.6 million in 2001. The successful launch of Fluvoxamine Maleate showed first mover advantage. However, with more competition and new substitutes, we expect the revenue for this drug will decrease for the next few years.

**OXAPROZIN.** Oxaprozin is the generic equivalent of Pharmacia Corporation's Daypro and is an anti-inflammatory drug used to treat arthritis. U.S. sales of Daypro in the 12 months prior to the introduction of a generic alternative were approximately \$161 million. Eon Lab received first-day approval for Oxaprozin in January 2001 along with one other competitor. Eon Lab shipped on the first day that generic competition commenced which gave it approximately a 50% share of the generic market over the first few months. Despite additional generic entrants over the next several months, Eon Lab maintained a market share of approximately 46% as of March 31, 2002, representing the highest share of any generic participant in the market. The sales of ELAB for this drug in 2001 were \$5 million, but we expect this number will drop to around \$3 million in the following several years.



**CYCLOSPORINE.** The Cyclosporine product is the generic equivalent of Novartis' Neoral, an immunosuppressant which is taken by patients following transplant surgery and which is also used to treat rheumatoid arthritis and psoriasis. Novartis' Neoral product presented an improved formulation for Cyclosporine with favorable bioavailability. Neoral had worldwide sales of approximately \$1.3 billion in the 12 months prior to the introduction of a generic alternative; sales in the United States alone were approximately \$500 million. Novartis owns numerous patents directed to various Cyclosporine formulations. This technological, patent protected barrier presented a difficult challenge for the development of a generic product. Hexal AG developed a patented formulation for Cyclosporine. Eon Lab licensed that formulation from Hexal AG pursuant to an agreement that grants us an exclusive and perpetual license to use patented technology from Hexal AG and pay Hexal AG a royalty based on sales of Cyclosporine.

Eon Lab received the first generic approval for Cyclosporine capsules in the first quarter of 2000 and launched Cyclosporine in May 2000. Since introducing Cyclosporine to the market, Eon Lab has attained approximately 54% of the generic market share as of March 31, 2002, representing the highest share among the generic participants in the market. Novartis and Apotex, Inc. brought a patent infringement suit against Eon Lab but has withdrawn the case later. The sales of ELAB for this drug in 2001 were \$14.7 million, and we expect this number will reach the maximum of \$18 MM in 2002 and then drop to around \$15 million in the following several years.

**FLUTAMIDE.** Flutamide is the generic equivalent of Schering-Plough Corporation's Eulexin, which is used to treat prostate cancer. U.S. sales of Eulexin in the 12 months prior to the introduction of a generic alternative were approximately \$39.0 million. Flutamide is difficult to manufacture because of the highly potent nature of the active pharmaceutical ingredients which requires that it be produced in a protective facility. Hexal AG developed a separate formulation of Flutamide for Eon Lab's filing with the FDA and manufactures Flutamide in its fully contained special manufacturing suite in its main manufacturing facility in Germany. Eon Lab began selling Flutamide in the United States in September 2001. Its share of the generic market for Flutamide was approximately 35% as of March 31, 2002, representing the highest share among generic participants in the market. The sales of ELAB for this drug in 2001 were \$2 million, and we expect this number will grow to \$4 MM in 2002 and then drop to around \$3.2 million in the following several years.

#### **Revenue and COGS projections assumptions:**

Based on observations on the history, after a generic drug exceeds its 180 days exclusivity, its price and revenue will drop substantially, from 10% to 50%. 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 ELAB, we made projections with two attitudes: **conservative case** and **aggressive case**.

##### Assumptions for conservative case revenue projection:

Sales decline by 20% after exclusivity until the 3<sup>rd</sup> year; in year 4 and thereafter, sales growth rate is 0%;

##### Assumptions for aggressive case revenue projection:

Sales decline by 10% after exclusivity until the 3<sup>rd</sup> year; in year 4 and thereafter, sales growth rate is 3%;

##### Assumptions for COGS projection:



Gross margin after the exclusivity: 55% in year 1, then decreases by 5% each year until 45% for ever; for products older than 4 years, the gross margin is 45%.

### **New Products**

Elab's pipeline can be characterized in two ways. Elab has five Paragraph IV ANDAs pending (Omeprazole, Bupropion HCl, Gabapentin, Intraconazole and Mirtazapine). The Paragraphs IV ANDAs are applications to the FDA alleging non-infringement to existing patented drugs that have not expired. The successful application and court ruling (as the patented drug manufacturers would most likely sue) would mean that Elab can sell the generic versions of the patent drugs even before the patents have expired.

The other part of Elab's pipeline is made up of patented drugs that are expiring soon.

In our analysis of the Paragraph IV ANDAs, we left out Mirtazapine given the highly competitive environment in such a small market (at least 5 generic players in a market with \$300 million of branded sales in 2001). On top of that, Elab's launch is likely to be in 2005 after the court's ruling and the six months exclusivity period (Elab is not the first filer).

### **Assumptions for Valuation of New Products**

The revenue projection of Elab's new products is mainly based on observations made by Salomon Smith Barney (SSB)<sup>1</sup> 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 Elab which is totally dependent on the expected number of players in the market and whether Elab is able to acquire exclusivity for the product.

### **New Products from Paragraph IV ANDAs**

#### **Omeprazole**

Omeprazole is the generic version of Prilosec, an antiulcerant (treatment for stomach ulcers) that had \$4,611 million branded sales in 2001.

Although the court has recently ruled against Andrx and Genpharm's application 3 weeks ago, both companies are going to appeal against the ruling. In addition, decision for the other ANDA applications have not been made yet. We believe that the recent court ruling has delayed the entrance of the generic players by another 12 months. Considering the delay and the six months exclusivity period, we believe that Elab is likely to enter the market in mid-2004.

Our base case scenario has Elab launching the product in mid-2004 and capturing a market share of 5% of the total generic market (\$x impact to share price). In the best case scenario, Elab captures 8% market share (\$x). Worst case scenario depicts a situation where none of the ANDAs were approved within the next 5 years, resulting in no sales for Elab.

<sup>1</sup> Generically Speaking II March 2002



## Bupropion HCl

Elab's non-infringement case for Bupropion HCl (an antidepressant drug) is still pending and is likely to launch in 2004 upon successful court ruling. The branded sales for the product were \$1,143 million in 2001 and so far have 5 generic applicants.

We conservatively estimate Elab's market share to be 15% of the total generic market in the base case scenario (\$x). Elab's is estimated to capture 20% market share in the best case scenario (\$x) and 10% in the worst case scenario (\$x).

## Gabapentin

Gabapentin is an anti-epileptic drug that is also used to treat neuropathic pain. Branded sales for 2001 were \$1,708 million. Elab is one of five generic applicants and has received FDA tentative approval in April 2002. Depending on the summary judgment, we believe that Elab is likely to launch the product in 2005.

We conservatively estimate Elab's market share to be 15% of the total generic market in the base case scenario (\$x). Elab's is estimated to capture 20% market share in the best case scenario (\$x) and 10% in the worst case scenario (\$x).

## Itraconazole

Itraconazole is an anti-fungal drug that generated \$200 million of sales in 2001. Elab has achieved first-filer status for the drug and is estimated to go on trial in mid-2003<sup>1</sup>.

We assume in the base case scenario that Elab will launch the product in mid-2004 with exclusivity (\$x). If the court decision is not in favor of Elab, the product will not be launched (worst case scenario). Best case scenario will have Elab capturing higher market share upon the end of the six months exclusivity (\$x).

## New Products from off-patent generic drugs

Unlike Pharmaceutical Resources, Elab has a more diversified product base and is not too dependent on any products (For details, please read the PRX report). However, this also makes it more difficult to estimate the sales growth for Elab.

In projecting the sales growth of new products from off-patent generic drugs, we make use of our generic industry analysis.

Year of Patent Expirations	2001 Annual Sales	Growth in generic market from patent expirations	Total Generic Market	% Growth
2000			13,094	
2001			15,262	17%
2002	11,960	2,512	17,774	16%
2003	6,700	1,407	19,181	8%
2004	8,286	1,740	20,921	9%
2005	4,749	997	21,918	5%

<sup>1</sup> CIBC estimates



2006	20,695	4,346	26,264	20%
2007	11,374	2,389	28,652	9%
2008	4,486	942	29,595	3%
2009	2,417	508	30,102	2%
2010	9,004	1,891	31,993	6%
2011	5,949	1,249	33,242	4%
2012	4,965	1,043	34,285	3%
2013	9,141	1,920	36,204	6%

Source: IMS America, FDA Orange Book, Salomon Smith Barney

In our industry report, we estimated the growth in the generic market from patent expirations for the next few years. A reasonable way to project Elab's revenue from new generic products from patent expirations is to estimate Elab's market share of the increase in industry sales.

Given that there are 23 players in the industry<sup>1</sup>, one way of estimating Elab's market share is to assume that Elab will get its fair share of the increase in sales which is about 4.3%. Another way is to look at the estimated sales generated from new products for Elab in 2002 and compared that to the total increase in industry sales in 2002. By doing so, we get about 2.3% market share for Elab.

In our base case scenario, we conservatively estimate Elab's market share to be 2.3% for the next five years given that Elab's fair share is actually 4.3% (\$x). Our best case scenario assumes that Elab does get its fair share of the market for the next five years.

### **Management Expertise**

The core management team is made up ten experienced professionals of whom half are PhD holders. Bernhard Hampl, PhD who has served as CEO since October 1995, leads the management team. Dr. Hampl was responsible for U.S. expansion and the strategy that has proved successful to date. For over 21 years, Dr. Hampl has held various positions in the pharmaceutical industry. Over the last two years, the firm was able to bring nine products to market on the first day that generic competition commenced or immediately thereafter<sup>2</sup>. Exhibit 1 and Exhibit 2 explain how efficient and competent this management is to bring the products to the market.

The firm employs a triple-prong strategy: to select attractive product candidates, execute an efficient product launch, and minimize the time it takes from selection to marketing the products.

The following key factors best summarize the firm's strategy:

**First to market:** The firm aims to take advantage of the first mover advantage inherent in the generic market. By being the first to market generic alternatives, the firm has a greater chance of achieving favorable market share, which in turn enhances profitability. The firm plans to promptly ship new products as soon as the branded drug expires. It is important to note that first to market refers does not refer to a period of exclusivity.

<sup>1</sup> Hoovers

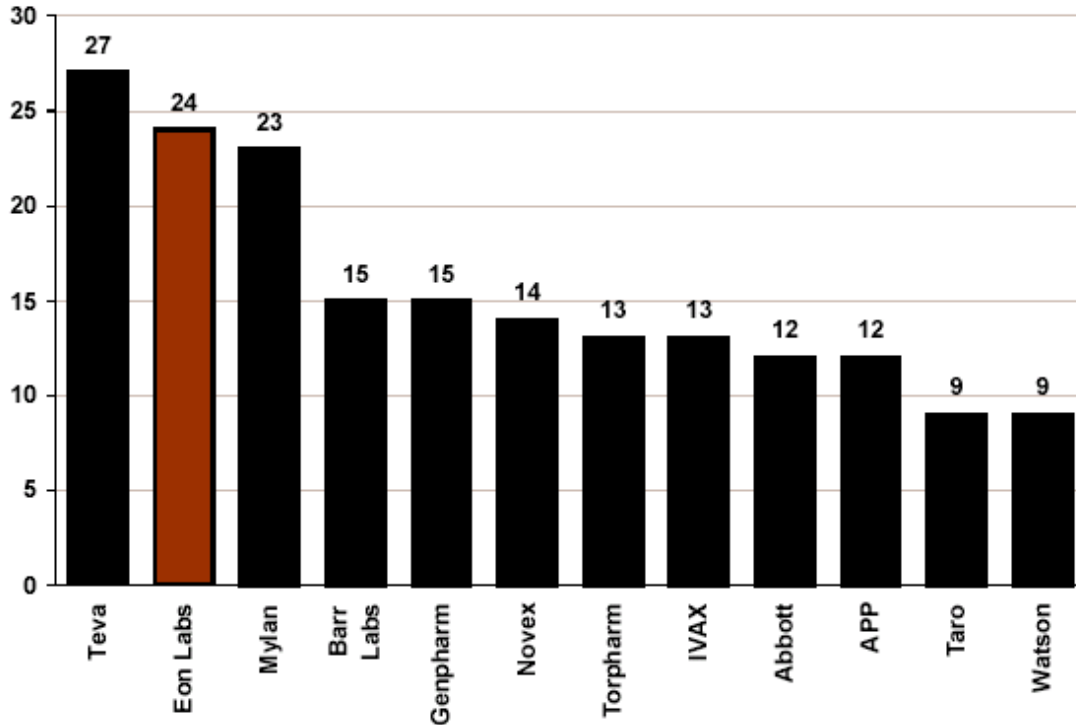
<sup>2</sup> <http://www.sec.gov/Archives/edgar/data/>





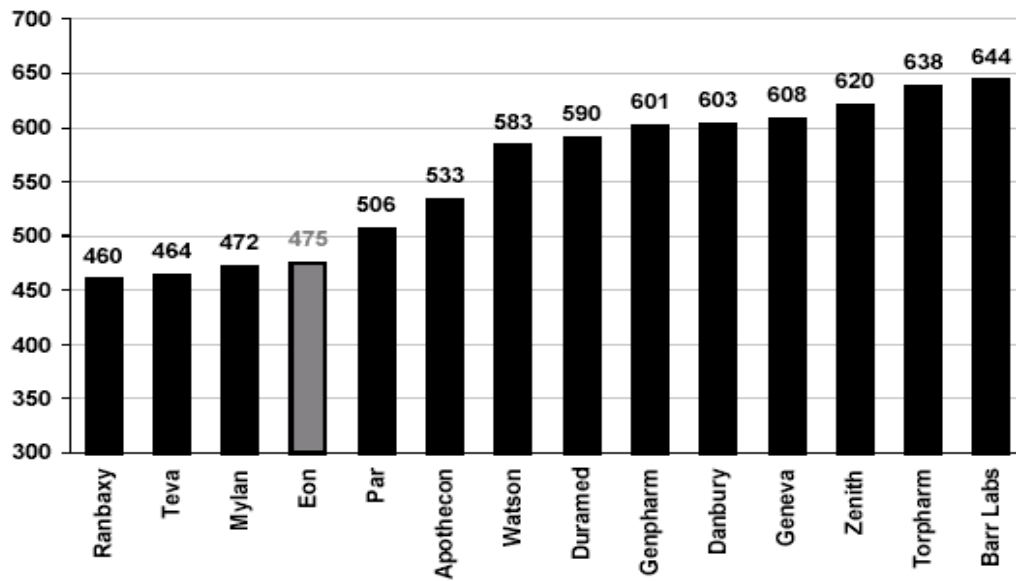
**Focus on products with high barriers to entry:** The firm focuses on those drugs that have relatively high barriers to entry. Those barriers may include developmental, manufacturing, technological, difficult to obtain raw materials or patent related challenges. It is likely that Eon Labs can maximize the opportunities presented by such drugs for two reasons. Its current management team is quite seasoned in the industry and it maintains a close relationship with one of the largest pharmaceutical companies in the world from which it can gain further intangible resources such as experience, strategy, internal product development and ability to license sophisticated technology.

**Exhibit 1. Total ANDA Approvals 2000-01**



Source: FDA, Company reports



**Exhibit 2. Median FDA Approval Time (Days - ANDAs Approved From 1/98)**

Source: FDA, CIBC research

**Maintain steady stream of products:** The firm aims to developing a steady stream of new generic products in multiple categories including blockbusters. In the generic industry, revenues (thus earnings) are closely tied to new product developments. Unstable revenues invariably lead to wide fluctuations in the firm's value. So far, the management has been able to deliver on this point. As the firm is a young one, the track record is limited.

**Grow business through strategic alliances:** In addition to internal growth, the firm plans to grow by utilizing external measures such as strategic relationships and acquisitions. The firm presently has a "right of first look" agreement with Hexal AG. Such agreements can translate to a competitive advantage over the long run with regards to product flow. However, as Hexal AG owns a large chunk of the company, it may not be easy for the firm to enter into strategic alliances with other firms. With regards to acquisitions, it is too early to determine whether the firm can execute acquisitions in an efficient manner.

**Maintain excellent FDA compliance record:** As a new firm, Eon Labs can strive to maintain its clean record with the FDA. Management has stated that they are committed to this end. This factor may lead to timely ANDA approvals.

**Manufacturing Facilities:** As a new firm, Eon Labs has modern manufacturing facilities which leads to a higher level of efficiency.

### **Ownership Structure**

In the company prospectus prior to the IPO, the company indicated that the "owners" would retain approximately 70.2% of the outstanding capital stock following the closing of the offering. The "owners" are primarily two entities Santo and Hexal AG. Santo Holding (Deutschland) GmbH, a company organized in Germany, owns 100% of the outstanding capital stock of Hexal Pharmaceuticals, Inc., or HPI, a Delaware corporation. Santo and Hexal AG are majority owned by one family.

Of recent, the ownership stake of the “owners” has been estimated at about 77%<sup>1</sup>. This ownership configuration is a positive sign over the short and intermediate term for the following reasons: first, Eon Labs can capitalize on its close relationship with Hexal from which it can gain further intangible resources such as experience, strategy, internal product development and ability to license sophisticated technology. In addition, the firm presently has a “right of first look” agreement with Hexal AG, which can translate, to a slight competitive advantage over the long run with regards to product flow. Furthermore, wealthy individual owners of common stock have lower turnover than professional investors. This leads to less variability in the stock price especially on the downside. Finally, as the supply of the remaining outstanding shares is limited, shifts in the demand can increase the price substantially.

### Risks and Concerns

**Control Issues** Hexall AG, a German pharmaceutical firm owns a large stake of the company. The interests of Hexall may be in conflict with other shareholders especially with regards to decisions affecting capital structure, mergers/acquisitions and any other potentially economic enhancing options.

**Litigation**<sup>2</sup> It is highly likely that the firm may face considerable unexpected expenses due to litigation. There are two main types of litigation the firm is exposed to patent related and adverse health effect suits.

**Patent-related Suits:** Over the last couple of years, the firm has been involved in the following patents suits:

Bupropion	The generic equivalent of GlaxoSmithKline PLC's Wellbutrin Hydrochloride
Gabapentin	The generic equivalent of Pfizer Inc.'s Neurontin
Itraconazole	The generic equivalent of Janssen Pharmaceutica, Inc.'s Sporanox;
Mirtazapine	The generic equivalent of Organon Inc.'s Remeron;
Nabumetone	The generic equivalent of GlaxoSmithKline PLC's Relafen; and
Omeprazole	The generic equivalent of AstraZeneca PLC's Prilosec.

**Adverse health effects Suits:** From May 1997 to present, the firm has been named a party in approximately 6,310 lawsuits in connection with the manufacture of the two prescription diet drugs, fenfluramine and phentermine, a combination popularly known as "fen-phen." At the present time, the firm has exhausted their product liability insurance covering all “fen-phen” related lawsuits, the firm may continue to bear the costs of defense as well as all damages that may be awarded against them. The outcome of these suits can materially affect the financial performance of the firm.

<sup>1</sup> Yahoo Finance

<sup>2</sup> <http://www.sec.gov/Archives/edgar/data/>, Yahoo finance, Corporate Website: <http://www.corporate-ir.net/>, FSA report (5/8/02).



“As of February 25, 2002, there has been no finding of liability against us and no settlement by us in any combination-related phentermine or non-combination lawsuit. There has been no scientific testimony accepted by any court that establishes a connection between the use of phentermine and the allegations made by plaintiffs in these lawsuits<sup>1</sup>”

**Competition** Eon Labs like other generic firms are subject to a changing and increasingly more competitive environment due to a rise in consolidation in the distribution channel, which in turn can result in downward pricing pressure and lower margins.

**Environmental Regulation** The nature of the manufacture of pharmaceuticals leads to the production of high levels of highly toxic and hazardous materials. The disposition of these materials is intensively regulated and costs associated with the disposal of hazardous waste are erratic. These costs may increase substantially in a short period of time. Clearly, this factor can lead to unexpected negative surprises. In addition, government environmental regulation may change unexpectedly which further complicates the problem<sup>2</sup>.

**Technology** Technological advances and innovation can fundamentally change the landscape rendering the firm’s products, processes and/or technologies obsolete.

## Appendix

### DCF Valuation and Comparable Company Analysis

### Eon Laboratory, Inc.

---

<sup>1</sup> Company Prospectus

<sup>2</sup> Corporate Website: <http://www.corporate-ir.net/>, FSA report (5/8/02).



**Appendix I:**

## Eon Laboratory, Inc. - Assumptions

### General Information

Project Name	ELAB
Fiscal Year	31-Dec
Update Time	29-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	3.7	4	4.3
P/Cash Flow	15	16	17
EV/EBITDA	14	15	16

### WACC

	<u>7.72%</u>	<u>8.7%</u>	<u>9.72%</u>
Risk Free Rate	4.65%		
Risk Premium	6%		
Beta	0.74		
Cost of Equity	8.72%		

### Existing Product Scenarios

Base Case

Upside Case    Base Case

### New Products Scenarios

	Upside Case	Base Case	Downside Case	Not Launch
Omeprazole	Base Case			
Bupropion	Base Case			
Gabapentin	Base Case			
Itraconazole	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%

Manufacturing cost %	2002	2003	2004	2005	2006	2007
Omeprazole		0.26	0.37	0.5	0.5	0.5
Bupropion HCL			0.49	0.49	0.49	0.49
Gabapentin			0.49	0.49	0.49	0.49
Itraconazole		0.49	0.49	0.49	0.49	0.49
Other new products	0.49	0.49	0.49	0.49	0.49	0.49

### Appendix II:



## Eon Laboratory, Inc. - Financials

	Historical			Projections					
	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>Income Statement</b>									
<b>Revenue</b>	78.00	119.70	165.40	220.28	231.48	314.80	395.20	489.56	521.12
<i>Growth Rate %</i>		153%	138%	33%	5%	36%	26%	24%	6%
Base Products									
Phentermine HCl	6.30	20.30	31.00	20.00	16.00	14.40	12.96	11.66	10.50
Fluvoxamine Mal. (Luvox)	0.00	6.20	20.60	13.00	10.40	8.32	6.66	6.66	6.66
Cyclosporine (Neoral)	0.00	8.20	14.70	18.00	21.00	25.00	20.00	20.00	20.00
Sotalol HCl (Betapace)	0.00	5.50	8.90	5.00	4.00	3.20	2.56	2.56	2.56
Indomethacin ER (Indocin SR)	7.80	6.00	8.50	8.00	6.40	5.12	4.10	4.10	4.10
Rifampin (Rifadin)	7.50	6.70	8.00	8.50	8.50	8.50	8.50	8.50	8.50
Cholestyramine (Questran)	8.80	6.50	7.70	8.00	8.00	8.00	8.00	8.00	8.00
Labetalol HCl (Normodyne)	2.50	2.30	5.70	6.50	6.50	6.50	6.50	6.50	6.50
Amiodarone HCl (Cordarone)	5.60	4.50	5.50	7.50	6.00	4.80	3.84	3.84	3.84
Bisoprolol Fumerate (Zebeta)	0.00	2.30	5.40	8.00	6.40	5.12	4.10	4.10	4.10
Oxaprozin(Daypro)	3.00	4.00	5.00	3.50	4.00	3.20	2.56	2.56	2.56
Flutamide(Eulexin)	0.00	0.00	2.00	4.00	3.20	2.56	2.05	2.05	2.05
Other	36.50	47.20	42.40	52.50	52.50	52.50	52.50	52.50	52.50
Total Base Products	78.00	119.70	165.40	162.50	152.90	147.22	134.32	133.02	131.85
New Products									
Omeprazole					0.00	17.29	41.50	48.42	55.33
<i>Growth Rate %</i>							140.0%	16.7%	16.7%
Bupropion					0.00	23.40	41.15	46.29	46.29
<i>Growth Rate %</i>							75.8%	12.5%	12.5%
Gabapentin					0.00	0.00	53.80	61.49	69.17
<i>Growth Rate %</i>								14.3%	14.3%
Itraconazole					0.00	24.00	19.20	16.20	16.20
<i>Growth Rate %</i>							-20%	-16%	0%
Other New Products - 2002				57.78	78.58	102.89	105.24	184.15	202.27
Total New Products	0.00	0.00	0.00	57.78	78.58	167.58	260.89	356.54	389.26
<i>Growth Rate %</i>					36%	113%	56%	37%	9%
<b>Cost of Goods Sold</b>	39.60	56.60	73.30	101.44	115.76	153.65	202.12	248.35	263.81
Base Products									
Phentermine HCl	2.84	9.14	13.95	9.00	8.80	7.20	7.13	6.42	5.77
Fluvoxamine Mal. (Luvox)	0.00	2.79	9.27	5.85	5.20	4.16	3.66	3.66	3.66
Cyclosporine (Neoral)	0.00	3.69	6.62	8.10	10.50	12.50	11.00	11.00	11.00
Sotalol HCl (Betapace)	0.00	2.48	4.01	2.25	2.00	1.60	1.41	1.41	1.41
Indomethacin ER (Indocin SR)	4.29	2.70	3.83	3.60	3.20	2.56	2.25	2.25	2.25
Rifampin (Rifadin)	4.13	3.02	3.60	3.83	4.25	4.25	4.68	4.68	4.68
Cholestyramine (Questran)	4.84	2.93	3.47	3.60	4.00	4.00	4.40	4.40	4.40
Labetalol HCl (Normodyne)	1.38	1.04	2.57	2.93	3.25	3.25	3.58	3.58	3.58
Amiodarone HCl (Cordarone)	3.08	2.03	2.48	3.38	3.00	2.40	2.11	2.11	2.11
Bisoprolol Fumerate (Zebeta)	0.00	1.04	2.43	3.60	3.20	2.56	2.25	2.25	2.25
Oxaprozin(Daypro)	1.65	1.80	2.25	1.58	2.00	1.60	1.41	1.41	1.41
Flutamide(Eulexin)	0.00	0.00	0.90	1.80	1.60	1.28	1.13	1.13	1.13
Other	17.41	23.98	17.95	23.63	26.25	26.25	28.88	28.88	28.88
Total Base Products	39.60	56.60	73.30	73.13	77.25	73.61	73.87	73.16	72.52
New Products									
Omeprazole					0.00	6.40	20.75	24.21	27.67
Bupropion					0.00	11.47	20.16	22.68	22.68
Gabapentin					0.00	0.00	26.36	30.13	33.90
Itraconazole					0.00	11.76	9.41	7.94	7.94
Other New Products - 2006				28.31	38.51	50.41	51.57	90.23	99.11
Total New Products	0.00	0.00	0.00	28.31	38.51	80.04	128.25	175.19	191.29
<b>Gross Margin</b>	38.40	63.10	92.10	118.84	115.73	161.15	193.08	241.21	257.31
R&D	10.89	13.44	12.22	13.00	13.65	14.33	15.05	15.80	16.59
<i>as % of Revenue</i>	14.0%	11.2%	7.4%	5.9%	5.9%	4.6%	3.8%	3.2%	3.2%
S G&A	20.27	27.73	42.28	30.00	31.53	42.87	53.82	66.68	70.97
<i>Growth Rate %</i>		36.8%	52.5%	-29.0%	5.1%	36.0%	25.5%	23.9%	6.4%
<i>as % of Revenue</i>	26.0%	23.2%	25.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%
<b>Operating Profit</b>	7.25	21.94	37.60	75.84	70.55	103.94	124.21	158.74	169.74
Other Expense / (Income)	0.00	0.40	0.04	0.15	0.15	0.15	0.15	0.15	0.15
Interest Expense	0.06	1.89	9.32	3.76	3.76	3.76	3.76	3.76	3.76
Income before Tax	7.18	19.65	28.24	71.94	66.64	100.04	120.30	154.83	165.84
Income Tax	3.13	9.30	13.03	32.85	30.44	45.69	54.94	70.71	75.74
<i>Income Tax Rate %</i>	43.6%	47.3%	46.1%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%
<b>Net Income</b>	4.05	10.35	15.21	39.08	36.21	54.35	65.36	84.12	90.10



## Eon Laboratory, Inc. - Financials

	Historical			Projections					
	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>Working Capital Schedule</b>									
Accounts Receivable		29.62	27.29	36.34	38.19	51.94	65.21	80.78	85.98
Turnover		90.3	60.2	60.2	60.2	60.2	60.2	60.2	60.2
as % of Revenue		24.7%	16.5%	16.5%	16.5%	16.5%	16.5%	16.5%	16.5%
Inventory		18.57	31.19	38.22	43.62	57.90	76.17	93.59	99.41
Turnover		119.8	155.3	137.5	137.5	137.5	137.5	137.5	137.5
as % of COGS		32.8%	42.6%	37.7%	37.7%	37.7%	37.7%	37.7%	37.7%
Other Account Receivable		18.36	25.12	33.62	35.34	48.05	60.33	74.73	79.55
as % of Revenue		15.3%	15.2%	15.3%	15.3%	15.3%	15.3%	15.3%	15.3%
Total Current Assets		277.21	299.74	306.50	315.46	356.20	400.01	447.40	463.25
Accounts Payable		7.23	10.43	13.69	15.62	20.74	27.28	33.52	35.61
Turnover		46.6	51.9	49.3	49.3	49.3	49.3	49.3	49.3
as % of COGS		12.8%	14.2%	13.5%	13.5%	13.5%	13.5%	13.5%	13.5%
Other Payables		34.05	37.30	56.32	64.27	85.31	112.22	137.89	146.47
as % of COGS		60.2%	50.9%	55.5%	55.5%	55.5%	55.5%	55.5%	55.5%
Total Current Liability		41.27	47.73	70.01	79.89	106.05	139.51	171.41	182.08
Working Capital		235.93	252.01	236.49	235.56	250.15	260.50	275.99	281.17
Change in WC			16.08	-15.52	-0.93	14.59	10.35	15.49	5.18
<b>PP&amp;E Schedule</b>									
PP&E Beginning Balance	12.15	12.19	37.60	39.50	37.80	36.54	35.66	35.12	34.87
Capex	1.60	27.70	4.28	4.49	4.71	4.95	5.20	5.46	5.73
Growth Rate %		1632.6%	-84.6%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Depreciation	1.56	2.29	10.50	6.18	5.97	5.83	5.74	5.70	5.70
as % of Total PP&E	11.3%	5.8%	25.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%
PP&E Ending Balance	12.19	37.60	39.50	37.80	36.54	35.66	35.12	34.87	34.90
<b>Cash Flow Statement</b>									
EBIT	7.25	21.94	37.60	75.84	70.55	103.94	124.21	158.74	169.74
Tax on EBIT	3.16	10.38	17.34	34.64	32.22	47.47	56.73	72.50	77.52
Depreciation & Amortization	1.56	2.29	10.50	6.18	5.97	5.83	5.74	5.70	5.70
Change in Working Capital	0.00	0.00	-16.08	15.52	0.93	-14.59	-10.35	-15.49	-5.18
Capex	1.60	27.70	4.28	4.49	4.71	4.95	5.20	5.46	5.73
Free Cash Flow	4.05	-13.86	10.40	58.41	40.52	42.76	57.67	71.00	87.02
EBITDA	8.80	24.23	48.09	82.02	76.52	109.77	129.95	164.44	175.45

### Appendix III:

### Eon Laboratory, Inc. - Comparable Company Analysis

	Ticker	10/25/2002			Trading Multiples								
		Price	Beta	Number of shares	Market Cap.	EBITDA	Total Debt	Enterprise Value	Price/Earning	Price/Sales	Price/Book	Price/Cash	EV/EBITDA
Teva	TEVA	68.04	-0.19	128.10	8,715.92	414.80	1,428.70	10,145.62	27.22	4.40	5.68	55.04	24.46
Mylan	MYL	30.11	0.68	125.30	3,772.78	470.70	19.74	3,792.52	14.14	3.36	2.65	6.34	8.06
Barr-Lab	BRL	61.07		43.60	2,662.65	309.20	47.97	2,710.62	13.22	2.34	3.99	8.04	8.77
Watson	WPI	25.82	0.18	106.80	2,757.58	109.10	450.89	3,208.47	35.37	2.41	1.59	8.15	29.41
IVAX	IVX	12.95	0.76	194.60	2,520.07	214.00	955.50	3,475.57	16.19	2.17	4.07	14.39	16.24
SICOR	SCRI	15.84	0.57	116.10	1,839.02	111.30	71.11	1,910.13	20.05	4.36	3.11	7.88	17.16
Andrx	ADRX	12.61	1.48	70.90	894.05	-25.70	0.00	894.05	126.10	1.17	1.42	4.18	-34.79
Pharmacei	PRX	22.35	1.20	32.50	726.38	136.30	1.18	727.55	8.04	1.85	4.03	29.41	5.34
Eon-Lab	ELAB	20.67		43.60	901.21	57.40	14.17	915.38	30.40	3.88	3.88	11.48	15.95
Mean			0.67		2,754.41	199.68		3,086.66	20.58	2.88	3.38	16.10	15.67
Medium			0.68		2,520.07	136.30		2,710.62	18.12	2.41	3.88	8.15	16.09





**Appendix VI****Eon Laboratory, Inc. - Valuation Matrix**

	2002	2003	2004	2005	2006	2007			
Earning/share	0.90	0.83	1.25	1.50	1.93	2.07	<b>Multiple Valuation</b>		
EBIDTA/share	1.88	1.76	2.52	2.98	3.77	4.02	Industry Average		
Revenue/share	5.05	5.31	7.22	9.06	11.23	11.95	P/E 17.09		
Free Cash Flow / share	1.34	0.93	0.98	1.32	1.63	2.00	EV/EBITDA 27.51		
Number of shares	43.60						ELAB at 50% premium		
Total Debt (2001)	26.75						P/E 25.63		
Total Cash (2001)	17.62						EV/EBITDA 40.65		
Net Debt	9.13								
Discount Rate	8%			9%			10%		
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	288.02	288.02	288.02	280.76	280.76	280.76	273.82	273.82	273.82
Terminal Value	1,521.25	1,843.55	2,339.13	1,294.87	1,521.25	1,843.55	1,127.14	1,294.87	1,521.25
PV of Terminal Value	1,035.49	1,254.87	1,592.20	840.26	987.16	1,196.30	697.58	801.39	941.50
Enterprise Value	1,323.51	1,542.89	1,880.22	1,121.02	1,267.91	1,477.06	971.40	1,075.21	1,215.31
Terminal Value as % of EV	78%	81%	85%	75%	78%	81%	72%	75%	77%
Equity Value	1,314.38	1,533.76	1,871.09	1,111.89	1,258.78	1,467.93	962.27	1,066.08	1,206.18
Price/share	30	35	43	26	29	34	22	24	28
Implied Multiples (2003E)									
P/E	36.30	42.36	51.68	30.71	34.77	40.54	26.58	29.44	33.31
EV/EBITDA	17.30	20.16	24.57	14.65	16.57	19.30	12.69	14.05	15.88
P/Revenue	5.68	6.63	8.08	4.80	5.44	6.34	4.16	4.61	5.21
P/Cash Flow	32.44	37.85	46.18	27.44	31.07	36.23	23.75	26.31	29.77

**Import Disclaimer**

Please read this document before reading this report.

This Report has been written by MBA students at Yale's School of Management in partial fulfillment of their course requirements. The report is a student and not a professional report. It is intended solely to serve as an example of student work at Yale's School of Management. It is not intended as investment advice. It is based on publicly available information and may not be complete analysis of all relevant data.

If you use this report for any purpose, you do so at your own risks. YALE UNIVERSITY, YALE SCHOOL OF MANAGEMENT, AND YALE UNIVERSITY'S OFFICERS, FELLOWS, FACULTY, STAFF, AND STUDENTS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, ABOUT THE ACCURACY OR SUITABILITY FOR ANY USE OF THESE REPORTS. AND EXPRESSLY DISCLAIM RESPONSIBILITY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, CAUSED BY USE OF OR RELIANCE ON THESE REPORTS.

