Off Wall Street

Consulting Group, Inc.

P.O. Box 2647
Cambridge, MA 02238

tel: 617.868.7880
fax: 617.868.4933
internet: offwallst@yahoo.com

New Rec: Elan Corporation, plc (ELN- $69.69) Nov. 25, 1998

Position: Sell **Target: $35** **Timing: 2 (1=aggressive, 5=cautious)**

$M	Q1 98	Q2 98	Q3 98	Q4 98e	F1998e	F1999e
REVS	134,666	156,141	170,981	215,000	676,788	907,000
EPS $	0.46	0.45	0.50	0.54	1.95	2.30
Y/Y %	33.2%	31.3%	30.3%	18.0%	23.4%	17.9%
PE					38	30
PSR					12.6	9.4
Consen				0.54	1.95	2.50

Shares Out: 123 M **Market Cap: $8,571 M** **FYE: Dec.**

Summary: Wall Street positions Elan as a world class drug delivery and bio pharmaceutical company. The company's base business has been developing products based on its delayed release drug delivery technologies for pharmaceutical companies. In an effort to actually become the world class drug company that Wall Street would like it to be, the company has engaged in other activities, including acquiring,

developing, and marketing of products. While the company has tried to develop this side of its business, it has also attempted to keep its earning on an uptrend. Some of the methods it has used to accomplish this, and the quality of these earnings, are suspect.

Revenue is derived from three categories: products, research, and royalty & fee revenue. Product revenues include both the sales of products distributed through Elan's own sales force and revenue from the manufacture of products sold by other pharmaceutical companies. The majority of research revenue comes from performing research for R&D companies that are related parties. Royalty and fee revenue comes from royalties from licensed drugs and technologies, and from various fees paid to Elan from joint ventures.

In the September 1998 quarter, products accounted for 42% of revenue, with sales up 32% year over year. Research was 14% of revenue, with revenue up 34% year over year, and license and fees were 43% of revenue, with revenue up a surprising 133% year over year.

While these growth rates may seem impressive at first, they are less so on close analysis. Indeed, the areas of strongest growth seem to be the most questionable. Some investors, upon close examination, might question the legitimacy of many of the transactions that provide research and fee and license revenue. They are most unusual.

Product revenue growth has been driven mainly by acquired products, such as those from Athena and Carnrick, and not by internally developed Elan products. Contract manufacturing revenues, which is manufacturing revenue from Elan licensees, was about 55% of total product revenues in 1997, and appear to be up only slightly, year over year. IMS data confirms the sluggishness in retail sales of the three core existing Elan manufacturing products, Cardizem CD/SR, Naprelan and Verelan, all of which are experiencing declining retail sales. In addition, ANDAs have been filed for these three drugs, and generic versions should appear on the market in the next one to two years.

Research revenues are mainly derived from R&D companies formed specifically to take advantage of Elan's technology. There have been four such companies, three of which provided 76% of total R&D revenues in 1996, two of which provided 68% of R&D revenue in 1997, and 65% in the first nine months of 1998. In the first nine months, revenue from these two R&D partnerships has nearly doubled, to $43.6 million from $22.5 million in the comparable period in 1997. Once the cash used to fund these companies is exhausted, Elan has the right, but not the obligation, to purchase the company. The terms of the development contracts between Elan and the R&D companies are extraordinary. We estimate that Elan earns an operating profit margin of about 60% on the payments made to it under these contracts. This operating profit falls straight to the bottom line, since Elan pays no taxes. We estimate that the R&D payments from these R&D companies have provided about 20% of total operating profits since 1996, and 16% of profits in the first nine months of 1998 versus 17% last year.

Nevertheless, despite the long history of R&D company payments to Elan, only one product that we know of has resulted from the research, Naprelan, which was approved in 1996. Naprelan was a product that came out of the 1990 funding of Drug Research Corp. which was bought in 1994 by Elan.

Why do investors participate in these R&D partnerships if they mainly benefit Elan? Investors are confident that Elan will exercise its purchase option, and buy them out at a contractual price that will guarantee them a profit. Indeed, their confidence seems well placed, given the tremendous benefit Elan receives from these deals. What is the profit derived from these partnerships worth to Elan shareholders? These profits would not seem deserving of a high valuation.

Royalties and fees have been the fastest growing revenue category for Elan in 1998. This category includes license payments for drugs and technology, and includes various payments from joint ventures. These joint ventures appear to be highly questionable and their main purpose appears to provide income to Elan.

The joint venture arrangements are highly favorable to Elan's income statement, and EPS. Indeed, they are so favorable for Elan's reported earnings, and appear to have so little business substance, that some might question their true purpose and some might wonder if they are legitimate business transactions, at all.

There have been about seventeen of these transactions since late in 1994. There have been about ten transactions in the last two years, and, recently two additional transactions have been announced that should close in Q4. These transactions are, for the most part, with small speculative biotech companies. Generally, Elan makes a direct equity investment in a company which intends to develop a drug based on Elan's technology. The company receiving the equity investment then turns around and pays most of it back to Elan in the form of a license payment, which Elan books as revenue.

This could be seen by some as a kind of financial alchemy, by which Elan is able to take its equity, make an investment, and then receive most of its equity back as income. Since the income is a license payment, with no associated expenses, the full amount of the payment drops to the bottom line. Since Elan pays no taxes, there is no penalty to equity in this transaction, because all the equity is returned, and Elan is able to book the return of its equity as income. The pace of these transactions has accelerated, and has come to be expected as part of income. In the first nine months they provided 31% of operating income.

Nevertheless, we are unaware of any viable products that have resulted from these joint ventures. The main incentive for the companies closing the deals appears to be the publicity, and the promotion, that goes along with the signing of a deal with Elan, as well as the fact that the partner company gets to retain a small portion of the cash, and the outside chance that one of the joint ventures will actually succeed. While these transactions are probably acceptable in a court of law, we wonder how they will fare in the court of investor opinion once they are understood.

Enough of the revenue side of Elan's business. What about the expense side? Here, too, we find a company that is pushing accounting to the limit, or perhaps beyond. A notable feature of Elan's income statement is a series of huge non-recurring charges. Approximately $2 billion of non-recurring charges have been recorded in just the last nine quarters. There are two components to these charges. The first is the charge-off of in process R&D. Elan charges off between 90% to 100% of the acquisition prices. These charge-offs are very aggressive. They may not survive SEC scrutiny. FASB rules concerning these in process R&D charges are very imprecise, and have left this area of accounting open to abuse. However, the SEC is focusing on this issue and is already forcing several companies to take less aggressive charges.

The second component of the charges is even more questionable, in our opinion. These are the restructuring charges, which may contain reserves, for the acquisitions. Of the approximately $2 billion of charges, we estimate provisions have accounted for approximately $125 million, or 6%. These reserves are subject to abuse. They are potential sources of boosts to EPS in future quarters, as current expenses go against reserves. They also can be used to write-off unwanted assets of expenses at convenient times.

Finally, while bulls tout Elan's product pipeline, it is clear that Elan's track record of actually producing drugs and getting them to market is not great. Elan possesses delayed release technology, but many companies have delayed release technology, and Elan does not seem to have anything special. The company has not demonstrated that it has any significant ability to produce successful drugs in house beyond adding a delayed release feature.

Will the future of Elan's drug development efforts be brighter? The bulls point to a large number of products in the pipeline, but investors should pay more attention to actual results. Recent results for drugs in the pipeline are not very encouraging, and Elan has a lot to prove. In the Sano acquisition, Elan acquired a pipeline that included Transdermal Buspar and a Nicotine/Mecamylamine patch, a smoking cessation product. The Nic/Mec patch has recently failed in clinical trials.

Elan acquired two other late stage products in the Neurex transaction. Corlopam, for severe hypertension, was recently launched, but sold only $2 million in its first quarter. Ziconotide, for acute pain, was heralded as a potential blockbuster drug. Interestingly, when Neurex shares rose on the deal with Elan, Medtronic, whose pump delivers Ziconotide, sold most of its Neurex shares. Just recently, Ziconotide did not succeed in trials for head trauma, and the Phase III trial for that indication was terminated. While it is possible that Ziconotide could be approved for other indications, this is not assured, and this recent disappointment might give investors pause.

Athena may have some interesting products in Alzheimer's disease, but they are far off.

How should Elan shares be valued? In order to arrive at a conclusion we have removed the questionable R&D payments and the questionable license payments from the so called joint ventures, both of which we describe later in detail. We further remove "other income" from the results. We do not include any so called non-recurring charges as expenses. The result of our adjustments is that Elan would have earned $0.79 in the first nine months of 1998, versus the $1.54 that it reported. We then estimate that on an adjusted basis, Elan will earn $1.09 for the full year 1998. Consensus is $1.95. Although Elan pays no taxes, we then award it a peer group market multiple of 32x earnings to arrive at a fair value of $35. ELN shares now sell at a price to sales ratio of nearly 10x next year's revenue, and if the stock price were cut in half it would still be very expensive. We think this is quite generous, especially because it does not penalize Elan for the huge charges that it takes, which we think substantially boost reported earnings before these charges, and it does not penalize the company relative to its peers for paying no taxes. In regard to the charges, we think it is possible that new SEC rules may alter Elan's reported earnings, either on a retrospective or on a prospective basis. We do not know if the SEC would take an interest in the joint venture transactions, some of which we describe in detail in this report.

Discussion:

1. Elan's revenues are comprised of three categories; products, research and licenses. In 1997, product revenues totaled 55% of revenue, while research, and fee and license income were 15% and 30% respectively. By the September 1998 quarter, the revenue breakdown had changed to 42% products, 14% research and 43% licenses.

	1996	**1997**	**+%**	**9 mos 9/97**	**9 mos 9/98**	**+%**

Product sales	158,868	215,486	36%	153,154	210,676	38%
Research revenues	56,138	57,790	3%	42,581	67,336	58%
Royalities & fees	95,414	115,880	21%	84,025	183,776	119%
Total	310,420	389,156	25%	279,760	461,788	65%

The growth in license revenue has recently been dramatic. Comparing the nine months ended September '98 to the nine months ended September '97, we see that while product revenues grew by 38% and research increased by 58%, licenses increased an amazing 119%. We will examine this amazing number later. A closer analysis of these three revenue streams indicates that Elan's growth is not nearly as impressive as it appears. In fact, the "strongest" parts of Elan's business are also the most questionable, and seem to lack substance.

2. Product revenues are split between contract manufacturing sales, and products directly marketed by Elan's own sales force. In 1997, contract manufacturing accounted for 55% of product revenues. During the first three quarters of 1998 Elan successfully closed one acquisition per quarter, digesting Sano in Q1, Carnrick labs in Q2, and Neurex in Q3. Although Sano and Neurex have had minimal product revenues to date, Carnrick had calendar 1997 sales of $51.2 million. That calculates to $12.8 million per quarter, on average. Adjusting the June and September '98 quarters by the estimated Carnrick revenues suggests that recent total product revenue trends are lackluster, and are below the 38% reported growth rate, prior to the inclusion of the Carnrick results. Indeed, without Carnrick, sequential growth is relatively flat.

	3/97	**6/97**	**9/97**	**9Mos 97**
Product revenues	52,606	45,656	54,892	153,154
	3/98	**6/98**	**9/98**	**9Mos 98**
Product revenues	62,617	75,537	72,522	210,676
est. Carnrick addition		(12,800)	(12,800)	(25,600)
Pro forma revenues	62,617	62,737	59,722	185,076
Year/Year growth	19%	37%	9%	21%

In addition, any positive growth at Carnrick would exacerbate the flat sequential revenues apparently in Elan's core product business.

Elan's core manufacturing products include Verelan and Naprelan, and other international products. Cardizem CD is manufactured by Hoechst Marion, and Elan collects a royalty. Cardizem CD was an estimated $700 million drug for Marion in 1997, with estimated royalties to Elan of 2.8%. or about $20 million.

Cardizem CD, Verelan, and Naprelan all face competition from generic manufacturers who have filed ANDAs with the FDA for directly competitive products. We expect severe pricing pressures to further impact these products in the next 12 to 18 months.

Verelan was approximately a $110 million product in 1997. Elan collects both manufacturing revenue and licensing revenue from this product. Although the exact royalty payment rates are not disclosed, we estimate net margin at $20 million.

Naprelan was approximately a $90 million product in 1997. We estimate Naprelan contributed about $15 million to net margin.

Sluggish product sales in Elan's key product manufacturing revenue drivers, and in Cardizem CD, a key source of royalty revenue, are further confirmed by recent IMS National Prescription Audit data.

Dispensed Total Prescriptions, IMS National Prescription Audit

Cardizem CD	**Q1 97**	**Q2 97**	**Q3 97**	**Q4 97**
Dispensed Total Rx	3,211	3,245	3,198	3,124
	Q1 98	**Q2 98**	**Q3 98**	**Q4 98**
Dispensed Total Rx	3,008	3,015		
Total Rx Y/Y	-6%	-7%		

Naprelan	**Q1 97**	**Q2 97**	**Q3 97**	**Q4 97**
Dispensed Total Rx	424	475	463	420
	Q1 98	**Q2 98**	**Q3 98**	**Q4 98**
Dispensed Total Rx	376	372		
Total Rx Y/Y	-11%	-22%		

Verelan	**Q1 97**	**Q2 97**	**Q3 97**	**Q4 97**
Dispensed Total Rx	560	557	539	517
	Q1 98	**Q2 98**	**Q3 98**	**Q4 98**
Dispensed Total Rx	487	475		
Total Rx Y/Y	-13%	-15%		

Competitive pressures in the specific product markets of these drugs make it unlikely that sales of these products will accelerate in the future. Throughout 1997 and 1998 Cardizem and Verelan shipments have consistently declined. The decline in prescription trends noted above appear to be reflected in the sluggish product revenues at Elan.

While analysts cheered Elan's September 23, 1998 decision to repurchase the rights to Verelan and Naprelan from Wyeth-Ayerst, a division of American Home Products, the move may be a defensive one. No terms of the re acquisition were announced. While the two drugs will certainly boost revenue on Elan marketed products, IMS data reflects sluggish retail sales trends. Both products are off patent, and generic competition could begin soon. We wonder if Wyeth-Ayerst was eager to relinquish its sales license, and to sell the license back before generic competition decreases its value. Also, Wyeth-Ayerst may want to focus on new, superior products, such as Lodine XL.

The re acquisition of Verelan and Naprelan should also be an interesting study of the impact of switching from American Home Products huge sales force to Elan's niche sales force. While Elan may collect a higher percentage of revenues, it will be from a smaller sales force. While these acquisitions may make near term sales difficult to analyze, the longer term outlook for these products could raise questions about Elan's strategy.

The growth in product revenue has come mainly from Elan's directly marketed drugs. The effort to market drugs directly began in 1996 with the acquisition of Athena, which had a sales force. Elan's sales force has grown from about 50 people in 1996 to perhaps about 200 recently.

The products sold by Elan directly are acquired products. Some came in the Athena acquisition. In Q2 98 Elan Pharmaceutical sold $50 million in products versus $22 million in Q2 97, and in Q3 it sold $54.5 million versus $25.2 the year before. The Q3 increase seems to be made up mainly of Zanaflex, an Athena drug, which may have increased by about $8 million, Carnrick products(acquired in Q2 98) of about $15 million, mostly Skelaxin, andMysoline, a product licensed from American Home in Q2 1998, of perhaps $5 million. Last year's Q3 Elan Pharmaceutical revenue appears to be mostly made up of Athena drugs, mainly Diastat, Permax and Xanaflex. While Xanaflex and Diastat appear to be doing well, particularly Xanaflex, an anti epileptic, Permax appears to be having problems competing with better products.

Elan Pharmaceutical appears to be an effort by Elan to be seen as a full line drug company, not just a contract manufacturer or a delayed release company. However, its success will depend on Elan's ability to successfully develop its own drugs and bring them to market, and its ability to purchase and internally grow other successful drugs. While this is now a $225 million annual run rate business, it's growth is due mostly to acquired products, and not internal growth. A look at the recent results of the drug pipeline are not very encouraging for the future. We will address the drug pipeline later in this report.

3. Elan's second source of revenue is research activities. More specifically, the majority of research revenue has been provided by four research & development entities; Drug Research Corporation, Advanced Therapeutic Systems Limited, Axogen Limited and Neuralab. These four companies have been formed to research and develop specific products based on Elan's technology. Once the cash used to fund the companies is exhausted, Elan has the option, but not the obligation, to repurchase the companies. These four companies may be familiar to the financial community, as Elan completed its first funding in 1990 with the $43.2 million closing of Drug Research Corporation, and most recently raised $50 million with the closing of Neuralab Limited in February of 1998.

Elan Captive Research & Development Companies

Research & Development Companies	**Date Formed**	**Date Closed**	**Amount Raised**	**Outcome**
Drug Research Corporation	Nov-90	Mar-93	$45 M	Repurchased for $82.5 M
Advanced Therapeutic Systems, Limited	Jun-93	Nov-96	110 M	Repurchased for $142 M
Axogen, Limited	Nov-96	Open	90 M	
Neuralab Limited	Jan-98	Open	50 M	
Total			$295 M	

The majority of research revenues have been derived from these four R&D companies. As shown in the table, below, payments from the R&D companies accounted for between 53% and 87% of total research revenues, since the first quarter of 1996:

	3/96	**6/96**	**9/96**	**12/96**
Total research revenues	10,488	12,164	18,206	15,280
R&D payments	7,400	10,600	15,400	9,500
Percent of total	71%	87%	85%	62%

	3/97	**6/97**	**9/97**	**12/97**
Total Research revenues	9,745	14,458	18,378	15,209
R&D payments	5,700	12,000	9,807	11,800
Percent of total	58%	83%	53%	78%
Y/Y R&D payments	-23%	13%	-36%	24%

	3/98	**6/98**	**9/98**
Total research revenues	20,820	21,850	24,666
R&D payments	14,400	14,700	14,500
Percent of total	69%	67%	59%
Y/Y R&D payments	153%	23%	48%

More importantly, R&D company payments have been increasing, on a dollar basis, quite dramatically in the first three quarters of 1998, and were up 48%, year over year, in the most recent September 1998 quarter.

Critics of research & development companies have argued that these companies are merely devices to protect earnings from the impact of research expenses. Proponents counter that the R&D revenue is merely an offset to R&D spending, and this approach allows investor’s to gauge operating performance without being distracted by the high research spending that is necessary to develop new products. Moreover, investors willing to participate in a development can reap substantial returns if any drugs are successfully developed. Despite the controversy, R&D partnerships has become an accepted practice with drug companies on Wall Street. The real question is not the form, but rather the result. Are these R&D companies legitimate drug development vehicles or is their purpose to provide income to a drug company? Not all R&D companies are created equal, and the format might be well or ill used.

Elan's deal with its R&D companies is exceptionally favorable to Elan. Instead of merely using R&D companies to offset research expense, the terms of the transactions allow Elan to record very high operating profits on R&D payments. This raises the issue of their true purpose. The terms of the R&D Development from Axogen Limited are presented, below:

"Payments to Elan under the Development Contract for clinical development of the Products will be the full amount of all of Elan’s research expenses, general and administrative expenses, capital asset costs and all other cost and expenses. (the “Development Costs”) incurred by Elan in performing the activities described above, up to the amount of Available Funds. Development Costs consist of

(i) direct research expenses (including direct research salaries, benefits and supplies), which are billed at a rate of cost plus 60% of costs; provided, however, that services provided by third parties will be billed at a rate of cost plus 15% of costs;

(ii) indirect research costs (including general research management and support services) at a fixed rate of direct research salary expenses plus 10%;

(iii) general and overhead expenses billed at a fixed rate of direct research salary expenses less 20%; and

(iv) reimbursement of out-of-pocket costs incurred by Elan including the cost of research materials and external consulting services."

What does this formula mean? It suggests that for every $100 Elan spends, it will be reimbursed by the R&D company approximately $250. That is, Elan records an approximate profit margin of 60% on every dollar received from the R&D companies. Assuming a conservative R&D budget that is 50% salaries, 40% supplies and 10% depreciation, we illustrate below how these payments might work, as detailed in the formula in the Axogen prospectus:

	Expense	Elan R&D Formula	Explanation
Assumed R&D budget			
Salaries	$50		
Supplies	40		
Depreciation	10		
Calculated payment			
(i)Direct research expense		$144	160%*($50+$40)
(ii)Indirect research costs		55	110%*$50
(iii)General & overhead		40	80%*$50
(iv)Reimbursements		10	100%*$10
Total	$100	$249	

The development contract is basically the same for Advanced Therapeutics and for Drug Research Corporation. Neuralab was a private placement, and the prospectus is not publicly available. However, we would expect a similar development contract, with a similar reimbursement formula. While all these development contracts are similar, they stand in stark contrast to the development contracts of R&D companies funded to develop drugs for other publicly traded companies. Alza, Genzyme and Centocor are among other companies that have raised funds through similar structures, but their development contracts provide for dollar-for-dollar reimbursement, plus a small management fee to cover administrative expenses.

In addition, Despite the nearly $250 million invested in Elan's R&D partnerships, only one specific product, Naprelan, has come from any of the four R&D companies. Naprelan was a child of Drug Research Corp. yet Naprelan was not approved by the FDA until January 1996, long after May 1993, when Drug Research had spent all its funds and was repurchased by Elan. The lack of other products, and the significant time between the new drug application for Naprelan and the final FDA approval suggest that the R&D companies are more useful as an EPS booster than as a legitimate vehicle for developing new products.

Why, then, are investor's willing to invest in Elan's R&D companies? Elan has set a precedent, acquiring the first two, even though the second did not generate any commercial products. Investors are therefore confident that they will be taken out at a profit. The return on investment, if the development is acquired, can be substantial. The terms of Elan's purchase option are presented in the Axogen prospectus. Axogen was priced at $18 per special share, on November 19, 1996:

If the Axogen shares are acquired	Option price	Min IRR
Before January 1, 2000	$34.56	23.27%

On or after 1/1/00 and on or before 12/31/00	$45.04	17.17%
On or after 1/1/01 and on or before 12/31/01	$61.04	13.59%

The rates of return are high, indeed. This is true even if the R&D company does not develop any technology and Elan elects to repurchase it anyway, in order to be able to fund similar companies in the future.

Elan, it appears, is mainly interested in these R&D partnerships because of the substantial income statement benefit of these transactions. If we assume that Elan earned a 60% profit on each payment from a R&D company, and then back out the profit, the existence of the R&D companies has boosted Elan's operating earnings since 1996, on average, by 25.7%.

	3/96	6/96	9/96	12/96
Operating income, adj.	18,874	17,549	15,915	25,009
Operating income, reported	23,302	23,892	25,130	30,694
Percent difference	23%	36%	58%	23%

	3/97	6/97	9/97	12/97
Operating income, adj.	28,131	27,050	25,052	29,726
Operating income, reported	31,542	34,231	30,920	36,787
Percent difference	12%	27%	23%	24%

	3/98	6/98	9/98
Operating income, adj.	35,362	47,880	56,102
Operating income, reported	43,979	56,676	64,779
Percent difference	24%	18%	15%

4. The third source of revenue for Elan is listed on the income statement as "Royalties and Fees." This revenue stream includes payments for licensed drugs and technology, as well as other more questionable transactions, recorded as "joint ventures". Although described as joint ventures, in reality these transactions appear to be schemes designed to make "investments" in third parties, and then have the majority of the investment returned to the company as income in the form of a license payment. Since license payments entail minimal associated costs, the total amount of the license payment flows directly to the bottom line of Elan's income statement.

The beauty of these transactions is that they change equity to income, which is then returned to equity. Since Elan pays no taxes, the equity is made nearly whole, because the amount of the income is only slightly less than the equity investment. This is really having your cake and eating it, too. Elan is able to impress Wall Street with added earnings that appear to be manufactured by these transactions.

Since October 1994, Elan has entered into at least 17 various transactions with third parties. The company has completed at least ten transactions in the last two years, and has announced two additional transactions that will be completed in the fourth quarter of 1998. Many of these deals are with small, speculative biotech companies whose market capitalizations are below $100 million and whose shares trade for under $5. It is not at all clear that these companies can be considered legitimate business partners. They benefit mostly by their association with Elan, and by being able to promote themselves because of a deal with a big drug company. They get to keep very little money, and the odds of actually getting a commercial product out of the deal are low.

These transactions have been occurring with greater frequency, creating an earnings booster that the “street” has come to depend upon to meet expectations.

Elan does not fully describe these transactions in its press releases. However, many of Elan's joint venture partners are publicly traded, and file their financials with the SEC. Only by studying what Elan's partner's disclose can we figure out the actual financial flows among Elan, the joint venture, and the partner company.

Third Party Investment Transactions since January 1, 1996:

Third Party	Quarter Completed	Amount paid **to** Elan to date	Amount paid **by** Elan to date
Cytogen	Q3 96, Q3 97	$10.0 M, 7.5 M	$20.0 M
Iomed	Q1 97	15.0 M	15.7 M
Bioject	Q3 97	15.0 M	15.0 M
Combichem	Q4 97	N.A.	10.0 M
RTP Pharma	Q2 97	10.4 M	12.5 M
Endorex	Q1 98	10.0 M	10.0 M
Sheffield Pharm	Q2 98	12.5 M	17.5 M
Delsys	Q3 98	N.A.	6.0 M
Ligand Pharm	Q3 98	15.0 M	33.0 M
Electropharmacology	Q3 98	7.5 M	7.5 M
Endorex	Q4 98	10.0 M	10.9 M
Medi-Ject	Q4 98	N.A.	1.0 M*

* Recently announced. Full transaction terms not disclosed.

The basic format of the “joint venture” is Elan completes a direct equity, or equity-type investment in the partner, for the stated purpose of developing a new product. The product to be developed, however, is based upon Elan technology, and the company receiving the investment immediately returns the investment to Elan as a license payment. In some instances only a note payable is returned to Elan. The table shows that, on average, where we know the amounts on both sides of the transaction, Elan has so far received about 80% of what it has paid out.

A brief evaluation of three recent transactions will give a better understanding of the dubious nature of these joint ventures.

A. Endorex Medipad Joint Venture

On October 23, 1998 Elan announced it would form a joint venture with Endorex for the "exclusive research, development, and commercialization of products using Elan's Medipad delivery system for two drugs in undisclosed fields." The terms of the transaction are that Elan and Endorex have together contributed a total of $10.5 million to the venture, which will be initially owned 80.1% by Endorex and 19.9% by Elan. It appears that Elan is contributing $2.5 million, and Endorex is contributing $8 million. Elan also purchased $8.4 million in Endorex preferred stock, exchangeable into either stock of the joint venture, or into Endorex common stock. Elan granted an exclusive worldwide license for the use of the Medipad system, in exchange for an initial $10 million license payment to Elan.

After all the payments have been made, Elan has made a $10.5 million investment in the joint venture, but has received in return a $10 million license payment, which it will record as revenue. Like magic, Elan has created $10 million of revenue, and $10 million in after tax profit for itself. The majority of the assets contributed to the joint venture have been paid back to Elan, leaving only $500,000 to pursue the development of Medipad products in the joint venture. This paltry sum is hardly enough to develop a commercial product and strengthens our conviction that the purpose of the transaction is to generate revenue for Elan, using Elan's own equity.

Endorex is a small company, with a $2 share price and a market capitalization of about $20 million. The company only recently moved from the OTC Bulletin Board in August 1998. The Medipad joint venture is the second transaction with Elan, and follows an earlier joint venture completed in the first quarter of 1998, where Elan recorded $10 million in license fees as revenue.

Below, we diagram the terms of the Endorex joint venture, to be recorded in the fourth quarter of 1998 results.

Structure of the Elan - Endorex "Joint Venture"

Ending result of Elan - Endorex "Joint Venture"

B. Electropharmacology Iontophoretic Patch Technology Investment

On October 2, 1998, Elan announced the closing of an investment in Electropharmacology whereby Elan invested $7.5 million in Electropharmacology convertible preferred stock and warrants, and committed to invest an additional $2 million in Electropharmacology common stock. In exchange, Electropharmacology made a $7.5 million up front payment to Elan, and will pay royalties and license fees in the event any revenue comes from the commercialization of the technology. Although the exact amount of the license payment was not disclosed in the Elan press release, the total dollar amount was given in a recent Electropharmacology SEC document. The transaction closing date was September 30, 1998, the final day of Elan's third quarter. We wonder how Electropharmacology will ever be able to develop a product with this expensive Elan technology, since the company only had $207,425 in cash, as of September 30, 1998, as Elan was eager to have it's $7.5 million "investment" immediately returned. This transaction is far more beneficial for Elan than it is for Electropharmacology, as the $7.5 million license payment boosts revenue and drops straight to Elan's bottom line.

Electropharmacology is also a small company, with a $0.875 share price at the time of the announcement, and a current market capitalization of about $10 million. The company was delisted from the NASDAQ small capitalization market in September 1997, and currently trades on the Bulletin Board at about $0.50.

C. Ligand Pharmaceuticals Morphelan License Agreement

Also late in the third quarter, on September 29, 1998, Elan entered into an agreement with Ligand Pharmaceuticals, whereby Elan initially purchased $14.9 million in Ligand stock, and $40 million in 10 year 8% zero coupon senior notes three quarters of which are convertible into stock. We estimate the cost at about $18 million. Elan also purchased an additional $5.1 million in stock on November 9, 1998. In exchange, Ligand purchased an exclusive license for the U.S. and Canada for Morphelan. Elan will also receive milestone payments for certain events, including the New Drug Application for Morphelan. Elan received a total consideration of $15 million: $5 million through the issuance of Ligand stock and $10 million from the issuance of Ligand notes.

Once again, Elan's equity investment of $15 million in Ligand is being immediately returned as license revenue, although in the form of stock and notes. The impact to the income statement is still the same. The equity is returned. We would not be surprised to see the $5 million, second equity investment also returned to Elan as revenue in the fourth quarter, or to see the some of the funds invested in convertibles returned as the "milestone" payments are made.

Ligand Pharmaceuticals is a larger drug company, with a market capitalization of approximately $425 million, and a share price about $10. Unlike high flier Elan, Ligand's shares have languished for the last several years and the 52 week high/low is $16.625/$5.50.

The Ligand transaction also allows Elan to conveniently recycle the Morphelan license. Previously, Morphelan was licensed to Targon, a partnership Elan had formed with Cytogen. Targon paid Elan a $7.5 million license fee as recently as the third quarter of 1997 (funded by a $10 million investment by Elan, of course!). Targon was responsible for the clinical development of the drug, and was preparing the New Drug Application submission to the FDA. Cytogen announced on August 14, 1998 that it would unwind the Targon Corp., and under the terms of the agreement, all assets, except those contributed by Cytogen, will be acquired by Elan. What is notable in this transaction is Elan has recycled the Morphelan license, and has booked $22.5 million in license fees related to Morphelan, and yet the product still an NDA has not been submitted.

In all of these transactions, Elan appears to get a revenue generating license payment in exchange for its participation in the transaction. Yet, the small amount of funds remaining in the joint ventures leave limited resources to develop the products. Still, Elan speaks enthusiastically about these products in the press releases describing the transactions. In most instances the investment Elan made is returned in the form of license revenue and is either cash or a note.

By the way, securities that have been bought in these transactions remain on the balance sheet, in the "Financial Assets" section. There is about $193 million in investments, split $76.9 million in quoted investments, and $116.0 in unquoted investments and loans, probably preferred stock, convertible debt, warrants, or other non-traded securities, on Elan's balance sheet as of December 31, '97. Many of the share prices of the publicly traded joint venture partners are much lower than they were when Elan entered the joint ventures, and we doubt that these assets are worth the amounts for which they are carried on the books. A substantial portion of Elan's investments are in the form of preferred stock, or convertible debt, and other equity derivative securities without a quotable market price, but whose value is largely tied to the stock price. The claimed "unquotable" price would allow Elan to avoid "marking to the market" the actual value of these investments.

The questionable nature of these joint venture transactions is also evident in the lack of products developed by the companies licensing the technology from Elan. In several situations, the licensing fee paid to Elan is greater than all of the other assets of the company. These licensing fees would not exist if Elan had not made an investment in these companies. Furthermore, Elan's enthusiasm to "sell" worldwide licensing rights to a certain technology to an underfunded drug company raises questions the true value of the technology itself. For instance, a full page in the 1997 "glossy" annual report reviews the Medipad drug delivery systems as evidence of Elan's technological prowess. Yet worldwide rights to this technology was licensed to Endorex in the previously discussed joint venture relationship, and only $500,000 was left in the partnership to develop the technology.

Elan is able to fully benefit from these dubious transactions because it is located in Ireland, and is not subject to taxes, or US GAAP. The company claims there would be no difference if its financial statements were presented under GAAP. However, it is clear that the financials would be quite different if Elan were a US company, and subject to normal taxation, then the benefit of these joint ventures would then be altogether questionable. Indeed, under normal taxation, it would probably mean that these transactions would not take place.

5. Since we do not think that investors should award Elan shares with a high valuation for investments with no economic substance, in thinking about a reasonable share price for Elan we think they should begin by evaluating Elan’s income statement excluding the questionable R&D and licensing payments. The quarterly income statement for the period beginning January 1, 1997, presented excludes the 60% profit margin (excess R&D) on the Research & Development payments discussed earlier in this report, and the joint venture license payments to Elan that we able to evaluate.

Adjusted Income Statement:

	3/97	6/97	9/97	12/97	3/98	6/98	9/98
Product sales	52,606	45,656	54,892	62,332	62,617	75,537	72,522
Research revenues	9,745	14,458	18,378	15,209	20,820	21,850	24,666
Less: excess R&D	(3,411)	(7,181)	(5,868)	(7,061)	(8,617)	(8,796)	(8,677)
Royalties and fees	26,696	25,724	31,605	31,855	51,229	58,754	73,793
Less: JV payments	(15,000)	(10,380)	(22,500)	0	(10,000)	(12,500)	(28,300)
Total revenues	70,636	68,277	76,507	102,335	116,049	134,845	134,004
Cost of goods sold	20,041	20,680	33,251	32,210	29,073	34,668	34,153
SG&A	17,337	14,909	18,744	20,900	27,797	33,669	41,959
R&D	20,127	16,018	21,960	19,499	33,817	31,128	30,090

Total expenses	57,505	51,607	73,955	72,609	90,687	99,465	106,202
Op. income, adjusted	13,131	16,670	2,552	29,726	25,362	35,380	27,802
Op. income, reported	31,542	34,231	30,920	36,787	43,979	56,676	64,779
Percent overstated	+140%	+105%	+1112%	+24%	+73%	+60%	+133%
Other income, net	6,005	5,656	15,634	15,404	10,898	3,680	2,552
Pre-Charge Net income, adjusted	19,136	22,326	18,186	45,130	36,260	39,060	30,354
Pre-Charge EPS							
EPS, Adjusted	$0.20	$0.23	$0.16	$0.44	$0.34	$0.35	$0.25
EPS , As reported	$0.38	$0.40	$0.42	$0.51	$0.51	$0.53	$0.54
Percent overstated	+94%	+79%	+153%	+15%	+50%	+53%	+119%
Operating EPS							
EPS, Adjusted	$0.14	$0.17	$0.02	$0.29	$0.24	$0.32	$0.23
EPS , As reported	$0.32	$0.35	$0.28	$0.36	$0.41	$0.50	$0.53
Percent overstated	+140%	+105%	+1112%	+24%	+73%	+60%	+133%

6. The result of excluding these questionable income items is that operating income before charges is substantially reduced. For the first nine months of 1998, operating income before charges is reduced by an amazing 46%, and earnings per share before charges is reduced by 41%. If we remove the income from the questionable R&D and joint venture transactions, Elan would have reported nine month EPS of $0.94, before charges, versus the reported $1.58.

We also think that other income should be removed from the equation, to get a true picture of Elan's earnings before the R&D and joint venture adjustments. When we remove other income, we find that Elan would have reported $0.79 in EPS, versus the $1.58 it did report, for the first nine months of 1998. We think these adjusted numbers, without R&D partnership income, and without joint venture fees, and without other income, are the actual earnings numbers on which investors should focus. We remind investors that when comparing these earnings to other drug companies they also should remember that Elan pays no taxes.

7. The adjusted income statement shown above is also charitable to Elan in that it lacks another notable feature of Elan’s income statement: a string of huge “non-recurring” charges. Four charges, totaling an astounding $1.955 billion have been taken over the last nine quarters. The two most recent charges have resulted mainly from the write-off of Research & Development associated with the acquisition of Sano in Q1 '98, and the R&D associated with the acquisition of Neurex in Q3 '98. The other

two, one in each of the third and fourth quarter of 1996, reflect mainly the write-off of R&D associated with the acquisition of Athena Neurosciences, and in-process R&D associated with the acquisition of Advanced Therapeutic Systems, one of Elan's R&D companies.

Comparison of acquisition price paid to charge recorded:

Completed Acquisitions	Quarter Completed	Acquisition Price ($)	Charges Recorded in period	Identified Reserve Portion
Athena Neurosciences	Q3 1996	$592 M	$485 M	$70 M
Advanced Therapeutic Systems	Q4 1996	$154 M	$175 M	
Sano	Q1 1998	$470 M	$479 M	
Neurex Corporation	Q3 1998	$8-900 M	$816 M	

We think the most distinguishing feature of the table, above, is the size of the charge taken, relative to the size of the acquisition completed. With the acquisition of Athena Neurosciences, in addition to the R&D write-off, Elan management created a $70 million reserve. Although when the charge was first announced, management claimed that it was taking a $30 million "provision for the integration, rationalization, and repositioning of certain Elan businesses including the disposal of non-strategic interests," later, in the annual report, it is disclosed that the actual restructuring provision was $70 million, with the additional $40 million being used for the integration of Athena's operations.

Elan's 1997 annual report shows how the total of $70 million in restructuring provisions taken in 1996 at the time of the Athena acquisition were utilized in 1996 and in 1997:

	9 months 1996	12 months 1997	Total
Equipment write-offs	5,986	0	5,986
Rationalization of corporate functions	2,571	0	2,571
R&D Rationalization & integration	8,943	15,333	24,276
Manufacturing operations	20,355	15,564	35,919
Other	412	836	1,248
Total provision utilization	38,267	31,733	70,000

From the table, above, it appears that over half of the charge could have been used to offset manufacturing operations, which could have directly impacted cost of goods sold. Adjusting gross profit for the manufacturing provisions would decrease the gross margin as a percent of revenue dramatically:

	As reported		As adjusted	
	1996	1997	1996	1997
Product revenue	158,868	215,486	158,868	215,486
Cost of goods sold	84,930	106,182	84,930	106,182
Manuf. operations restr. provision	-	-	20,355	15,564
Gross profit	73,938	109,304	53,583	93,740
Gross profit margin	46.5%	50.7%	33.7%	43.5%

In the fourth quarter of 1996, it appears Elan used the charge resulting from the write off of Advanced Therapeutic Systems, a research & development company that Elan elected to purchase, as an opportunity to clean up other businesses. Along with the $154 million R&D charge for the acquisition, management also took an additional $18 million related to the disposal of Elan's medical nutrition business, and $2 million in other unspecified charges. The $20 million in additional charges is important because it seems to indicate that Elan was overstating the financial performance of its medical nutrition, and other non specified business.

The acquisition of Sano provides another instance where Elan is able to create reserves or is able to take a needed loss with a "non-recurring charge." We estimate that Elan paid about $471 million, based on 7.6 million shares of Elan issued at $62 to complete the acquisition. Elan took a $479 million charge related to the acquisition. The Elan Q1 98 earnings press release admits to the addition of an additional charge, but no amount is specified. "The one-time charge includes an estimated provision to integrate, rationalize and reposition certain activities arising from the acquisition of Sano."

As of September 30, 1997, Sano had $32 million of assets, $25 million of which was cash. If we take the $25 million in cash out of the purchase price of $471 million and assume that this $446 million was written off, then the excess charges over that amount were $33 million.

To put the magnitude of this charge into perspective, we looked at Sano's operations before being acquired. In the September 97 quarter, general and administrative charges totaled $1.14 million, or a $4.56 million annual run rate. The company had 82 full time, and 34 part time employees, as of 12/31/96. Sano had only one 83,000 square foot facility in Florida, with annual rent of approximately $348,000. $33 million in excess charges would amount to over seven years of general and administrative expenses, or over $284,000 in charges per employee. As a result, this charge seems out of proportion with what would have been required to "rationalize" Sano, and we suspect it has other uses.

Most recently, Elan took a $816 million charge after acquiring Neurex in an exchange of each Neurex share for 0.51 shares of Elan's ADRs. Although the size of the charge has been disclosed, the exact purchase price is difficult to determine, because Elan has not released the number of shares issued pursuant to the merger. Shares outstanding in June 1998 totaled 23.3 million shares, and options at the end of 1997 totaled 3.1 million, so we estimate the total acquisition price at between approximately $800 million and $908 million. Neurex had tangible assets net of liabilities of $32 million, all of which was in cash. The magnitude of the charge suggests all in-process R&D was written off. Whether or not a restructuring provision was also recorded is not known, but may be available once the annual report is filed. In any event, it appears that between 90% and 100% of the acquisition price was charged off.

The magnitude of these charges is important because the Securities & Exchange Commission has recently highlighted large in process write-offs as an area of concern. The SEC is concerned that companies may be misrepresenting earnings by using large write-offs to create reserve provisions that may be used at management's discretion. These large write-offs can also eliminate amortization charges from goodwill, which would lower future reported earnings. The SEC's chief accountant, Lynn Turner, has asked a panel at the American Institute of Certified Public Accountants to develop guidelines that describe how to account for acquired research. The accounting guidelines on these issues has been very vague, and not well developed. APB 16 is the guiding document for the accounting, but it is not very helpful, which has resulted in a wide range of questionable practices. In a recent article by Bloomberg, Turner cited "abuses in the valuation of in-process research and development" as a reason for the rapid rise in R&D write-offs. Companies such as WorldCom and America Online have recently been scrutinized by the SEC for taking large charges after acquisitions. Bloomberg cites WorldCom as an example of a company that announced its intention to take a charge of $6-7 billion after the acquisition of MCI, but ultimately wrote off only $3 million after "guidance" from the SEC.

SEC Chairman Arthur Levitt recently claimed that, as part of its increased effort to police accounting "irregularities" it had plans to file charges against an unnamed company and its senior management for allegedly creating excess reserves. Levitt's crusade appears directed against companies that create excess reserves, in good times, and utilize the said reserves to patch over bad times. He is reported to have said that reserves need to have a legitimate basis.

Needless to say, any change in rules for R&D charges and other acquisition related charges would have a negative impact of Elan's reported financial performance.

8. Many of Elan's core manufacturing products and royalty products are in decline, as we have previously noted. Analysts demonstrate some enthusiasm for the product pipeline, but the product pipeline is of doubtful quality and should be judged on results. The recent results are disappointing, and several recent approval setbacks call into question Elan's ability to get new products to market.

Most recently, on November 24, 1998, Elan's nicotine skin patch failed to prove its efficacy in Phase III clinical trials. The product was the nicotine/ mecamylamine combination patch. The product was acquired with Sano, and was one of two late stage patch products at Sano. Elan management dismissed the failure, and claimed it has eleven other product candidates at Phase III or later stages of development. Sales were expected to be $25 million in 1999 and $75 million in 2000, and were expected to generate royalty payments of $5 and $15 million. However, we believe this setback increases the urgency and importance of other new products, leaving little comfort room for "Street" estimates.

Transdermal buspirone is the other late stage product acquired with Sano. Although "street" analysts have high expectations for this drug, which will be distributed through Bristol-Myer Squibb, the drug is a product extension, rather than a new market. Buspirone comes off patent in the year 2000, which should result in a lower priced generic product on the market.

In a 1996 interview with Investor's Business Daily, the Vice President and Treasurer of Neurex, Brad Wait said that the company's SNX-111 drug had "definite blockbuster potential." SNX-111, or Ziconotide, is to be used in reducing severe nerve damage caused by head trauma, and for acute pain. Neurex, and now Elan, had been collaborating with Warner-Lambert to use the drug for nerve damage. However, the two partners recently terminated Phase III trials of Ziconotide for head trauma based on the interim analysis of more than 200 patients.

According to a November 1998 article in BioCentury, Ziconotide trials have been suspended twice before, and the most recent news could be the final blow for the head trauma indication.

Elan claims that studies in pain indications will not be affected by this decision. However, the problems with the head trauma indication could foreshadow future approval problems with the drug.

Corlopam, another Neurex drug with high expectations that won FDA approval in September has had a tepid welcome. It its first quarter Corlopam only sold $2 million.

We conclude from the above that the value of Elan's drug pipeline is difficult to assess, and its success is far from assured. Indeed, in our opinion, the recent failures especially cast serious doubt on the quality of the pipeline.

9. How should Elan shares be valued? As we argued in this report, we do not believe investors should reward Elan management for deals that have little economic value by placing a multiple on the reported earnings. Instead, we focus on the economic earnings. We remove the excess profit from the R&D payments and we remove the questionable license fee payment from the joint ventures, Since "other income" is interest and the gain on investment sales we also exclude this income item. In being conservative, we have not placed any of the expenses associated with the so called non-recurring charges back on the income statement. The result of our adjustments is that Elan would have earned $0.79 in the first nine months of 1998, versus the $1.54 that it reported. By our calculations, Elan will probably earn an adjusted $1.09 for fiscal 1998, versus consensus EPS of $1.95.

Although Elan is not a taxpayer, we will award it a peer group multiple anyway, even though the company would be priced at a lower multiple if our comparison multiples were based on operating earnings. A 32x earnings multiple calculates to a $35 share price. We think that this is quite generous, especially since it does not penalize the company for restructuring provisions already taken, and does not penalize the company for not paying taxes. We think future SEC rules will lower Elan's reported earnings, either retrospectively or prospectively.

Financials:

INCOME STATEMENT	**3/98**	**6/98**	**9/98**	**12/98E**
PRODUCTS	62,617	75,537	72,522	125,000
RESEARCH	20,820	21,850	24,666	25,000
LICENSES	51,229	58,754	73,793	65,000
TOTAL	134,666	156,141	170,981	215,000
COST OF GOODS	29,073	34,668	34,153	49,450
SG&A	27,797	33,669	41,959	58,050
R&D	33,817	31,128	30,090	37,625
TOTAL	90,687	99,465	106,202	145,125
OP. INC	43,979	56,676	64,779	69,875
INT. & OTHER	11,187	3,680	2,552	4,300
INTEREST EXP.				
SHARE OF LOSSES	(289)			
MINORITY INTEREST				
NET INCOME BF TAX	54,877	60,356	67,331	74,175
TAXES	(397)	(756)	(981)	(860)
CHARGES	(478,609)	0	(816,355)	

NET INCOME	(424,129)	59,600	(750,005)	73,315
EPS BEFORE CHARGE	0.51	0.53	0.54	0.60
DIL. EPS B/F CHARGES	0.46	0.45	0.50	0.54

PERCENT	**3/98**	**6/98**	**9/98**	**12/98E**
PRODUCTS	46.5%	48.4%	42.4%	58.1%
RESEARCH	15.5%	14.0%	14.4%	11.6%
LICENSES	38.0%	37.6%	43.2%	30.2%
TOTAL	100.0%	100.0%	100.0%	100.0%
COST OF GOODS	21.6%	22.2%	20.0%	23.0%
SG&A	20.6%	21.6%	24.5%	27.0%
R&D	25.1%	19.9%	17.6%	17.5%
TOTAL	67.3%	63.7%	62.1%	67.5%
OP. INC	32.7%	36.3%	37.9%	32.5%
INT. & OTHER	8.3%	2.4%	1.5%	2.0%
INTEREST EXP.	0.0%	0.0%	0.0%	0.0%
SHARE OF LOSSES	-0.2%	0.0%	0.0%	0.0%
MINORITY INTEREST	0.0%	0.0%	0.0%	0.1%
NET INCOME BF TAX	40.8%	38.7%	39.4%	34.5%
TAXES	-0.3%	-0.5%	-0.6%	-0.4%
CHARGES	-355.4%	0.0%	-477.5%	0.0%
NET INCOME	-314.9%	38.2%	-438.6%	34.1%

YEAR/YEAR	**3/98**	**6/98**	**9/98**	**12/98E**
PRODUCTS	19.0%	65.4%	32.1%	100.5%
RESEARCH	113.6%	51.1%	34.2%	64.4%
LICENSES	91.9%	128.4%	133.5%	104.0%
TOTAL	51.2%	81.9%	63.0%	96.5%
COST OF GOODS	45.1%	67.6%	2.7%	53.5%
SG&A	60.3%	125.8%	123.9%	177.8%
R&D	68.0%	94.3%	37.0%	93.0%
TOTAL	57.7%	92.7%	43.6%	99.9%
OP. INC	39.4%	65.6%	109.5%	89.9%
INT. & OTHER	73.6%	-47.8%	-85.1%	-72.7%
INTEREST EXP.	-100.0%	-100.0%	-100.0%	-100.0%
SHARE OF LOSSES	-178.1%			
MINORITY INTEREST				
NET INCOME BF TAX	46.2%	51.3%	44.6%	42.1%
TAXES	1.0%	-740.7%	107.8%	95.9%
CHARGES				
NET INCOME	-1241.5%	49.0%	-1727.5%	41.7%
EPS BEFORE CHARGE	33.2%	31.3%	30.3%	18.0%
DIL. EPS B/F CHARGES	27.8%	18.4%	19.0%	13.4%

INCOME STATEMENT	3/99	6/99	9/99	12/99
PRODUCTS	125,000	130,000	132,000	135,000
RESEARCH	26,000	27,000	28,000	29,000
LICENSES	65,000	68,000	70,000	72,000
TOTAL	216,000	225,000	230,000	236,000
COST OF GOODS	49,680	51,750	52,900	54,280
SG&A	58,320	60,750	62,100	63,720
R&D	37,800	39,375	40,250	41,300
TOTAL	145,800	151,875	155,250	159,300
OP. INC	70,200	73,125	74,750	76,700
INT. & OTHER	4,320	4,500	4,600	4,720
INTEREST EXP.				
SHARE OF LOSSES				
MINORITY INTEREST				
NET INCOME BF TAX	74,520	77,625	79,350	81,420
TAXES	(864)	(900)	(920)	(944)
CHARGES				
NET INCOME	73,656	76,725	78,430	80,476
EPS BEFORE CHARGE	0.60	0.63	0.64	0.66
DIL. EPS B/F CHARGES	0.55	0.57	0.58	0.60

PERCENT	3/99	6/99	9/99	12/99
PRODUCTS	57.9%	57.8%	57.4%	57.2%
RESEARCH	12.0%	12.0%	12.2%	12.3%
LICENSES	30.1%	30.2%	30.4%	30.5%
TOTAL	100.0%	100.0%	100.0%	100.0%
COST OF GOODS	23.0%	23.0%	23.0%	23.0%
SG&A	27.0%	27.0%	27.0%	27.0%
R&D	17.5%	17.5%	17.5%	17.5%
TOTAL	67.5%	67.5%	67.5%	67.5%
OP. INC	32.5%	32.5%	32.5%	32.5%
INT. & OTHER	2.0%	2.0%	2.0%	2.0%
INTEREST EXP.	0.0%	0.0%	0.0%	0.0%
SHARE OF LOSSES	0.0%	0.0%	0.0%	0.0%
MINORITY INTEREST	0.1%	0.1%	0.1%	0.1%
NET INCOME BF TAX	34.5%	34.5%	34.5%	34.5%
TAXES	-0.4%	-0.4%	-0.4%	-0.4%
CHARGES	0.0%	0.0%	0.0%	0.0%
NET INCOME	34.1%	34.1%	34.1%	34.1%

YEAR/YEAR	3/99	6/99	9/99	12/99
PRODUCTS	99.6%	72.1%	82.0%	8.0%

RESEARCH	24.9%	23.6%	13.5%	16.0%
LICENSES	26.9%	15.7%	-5.1%	10.8%
TOTAL	60.4%	44.1%	34.5%	9.8%
COST OF GOODS	70.9%	49.3%	54.9%	9.8%
SG&A	109.8%	80.4%	48.0%	9.8%
R&D	11.8%	26.5%	33.8%	9.8%
TOTAL	60.8%	52.7%	46.2%	9.8%
OP. INC	59.6%	29.0%	15.4%	9.8%
INT. & OTHER	-61.4%	22.3%	80.3%	9.8%
INTEREST EXP.				
SHARE OF LOSSES				
MINORITY INTEREST				
NET INCOME BF TAX	35.8%	28.6%	17.9%	9.8%
TAXES	117.6%	19.0%	-6.2%	9.8%
CHARGES				
NET INCOME	-117.4%	28.7%	-110.5%	9.8%
EPS BEFORE CHARGE	18.0%	18.0%	18.2%	9.8%
DIL. EPS B/F CHARGES	18.9%	26.6%	16.5%	9.8%

INCOME STATEMENT	**1997**	**1998**	**1999**
PRODUCTS	215,486	335,676	522,000
RESEARCH	57,790	92,336	110,000
LICENSES	115,880	248,776	275,000
TOTAL	389,156	676,788	907,000
COST OF GOODS	106,182	147,344	208,610
SG&A	71,890	161,475	244,890
R&D	77,604	132,660	158,725
TOTAL	255,676	441,479	612,225
OP. INC	133,480	235,309	294,775
INT. & OTHER	46,341	21,719	18,140
INTEREST EXP.	(5,842)	0	0
SHARE OF LOSSES	1,939	(289)	0
MINORITY INTEREST	261	0	0
NET INCOME BF TAX	176,179	256,739	312,915
TAXES	(1,186)	(2,994)	(3,628)
CHARGES	0	(1,294,964)	0
NET INCOME	174,993	(1,041,219)	309,287
EPS BEFORE CHARGE	1.71	2.18	2.52
DIL. EPS B/F CHARGES	1.58	1.95	2.30

PERCENT	**1997**	**1998**	**1999**
PRODUCTS	55.4%	49.6%	57.6%
RESEARCH	14.9%	13.6%	12.1%

LICENSES	29.8%	36.8%	30.3%
TOTAL	100.0%	100.0%	100.0%
COST OF GOODS	27.3%	21.8%	23.0%
SG&A	18.5%	23.9%	27.0%
R&D	19.9%	19.6%	17.5%
TOTAL	65.7%	65.2%	67.5%
OP. INC	34.3%	34.8%	32.5%
INT. & OTHER	11.9%	3.2%	2.0%
INTEREST EXP.	-1.5%	0.0%	0.0%
SHARE OF LOSSES	0.5%	0.0%	0.0%
MINORITY INTEREST	0.1%	0.0%	0.0%
NET INCOME BF TAX	45.3%	37.9%	34.5%
TAXES	-0.3%	-0.4%	-0.4%
CHARGES	0.0%	-191.3%	0.0%
NET INCOME	45.0%	-153.8%	34.1%

YEAR/YEAR	**1997**	**1998**	**1999**
PRODUCTS	63.2%	55.8%	55.5%
RESEARCH	106.4%	59.8%	19.1%
LICENSES	65.5%	114.7%	10.5%
TOTAL	69.2%	73.9%	34.0%
COST OF GOODS	100.7%	38.8%	41.6%
SG&A	15.8%	124.6%	51.7%
R&D	92.8%	70.9%	19.6%
TOTAL	64.7%	72.7%	38.7%
OP. INC	78.6%	76.3%	25.3%
INT. & OTHER	907.4%	-53.1%	-16.5%
INTEREST EXP.			
SHARE OF LOSSES			
MINORITY INTEREST			
NET INCOME BF TAX	122.0%	45.7%	21.9%
TAXES	28.9%	152.4%	21.2%
CHARGES			
NET INCOME	123.1%	-695.0%	-129.7%
EPS BEFORE CHARGE	167.1%	27.5%	15.8%
DIL. EPS B/F CHARGES			17.5%