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ELI LILLY IN INDIA: RETHINKING THE JOINT VENTURE STRATEGY

Nikhil Celly prepared this case under the supervision of Professors Charles Dhanaraj and Paul W. Beamish solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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In August 2001, Dr. Lorenzo Tallarigo, president of Intercontinental Operations, Eli Lilly and Company (Lilly), a leading pharmaceutical firm based in the United States, was getting ready for a meeting in New York with D. S. Brar, chairman and chief executive officer (CEO) of Ranbaxy Laboratories Limited (Ranbaxy), India. Lilly and Ranbaxy had started a joint venture (JV) in India, Eli Lilly-Ranbaxy Private Limited (ELR), that was incorporated in March 1993. The JV had steadily grown to a full-fledged organization employing more than 500 people in 2001. However, in recent months Lilly was re-evaluating the directions for the JV, with Ranbaxy signaling an intention to sell its stake. Tallarigo was scheduled to meet with Brar to decide on the next steps.

THE GLOBAL PHARMACEUTICAL INDUSTRY IN THE 1990S

The pharmaceutical industry had come about through both forward integration from the manufacture of organic chemicals and a backward integration from druggist-supply houses. The industry's rapid growth was aided by increasing worldwide incomes and a universal demand for better health care; however, most of the world market for pharmaceuticals was concentrated in North America, Europe and Japan. Typically, the largest four firms claimed 20 per cent of sales, the top 20 firms claimed 50 to 60 per cent, and the 50 largest companies accounted for 65 to 75 per cent of sales (see Exhibit 1). Drug discovery was an expensive process, with leading firms spending more than 20 per cent of their sales on research and development (R&D). Developing a drug, from discovery to launch in a major market, took 10 to 12 years and typically cost US\$500 million to US\$800 million (in 1992). Bulk production of active ingredients was the norm, along with the ability to decentralize manufacturing and packaging to adapt to particular market needs. Marketing was usually equally targeted to physicians and the paying customers. Increasingly, government agencies, such as Medicare, and health management organizations (HMOs) in the United States, were gaining influence in the buying processes. In most countries, all activities related to drug research and manufacturing were strictly controlled by government agencies, such as the Food and Drug Administration (FDA) in the United States, the Committee on Proprietary Medicinal Products (CPMP) in Europe, and the Ministry of Health and Welfare (MHW) in Japan.

Patents were the essential means by which a firm protected its proprietary knowledge. The safety provided by the patents allowed firms to price their products appropriately in order to accumulate funds for future research. The basic reason to patent a new drug was to guarantee the exclusive legal right to profit from its innovation for a certain number of years, typically 20 years for a product patent. There was usually a time lag of about eight to 10 years from the time the patent was obtained and the time of regulatory approval to first launch in the United States or Europe. Time lags for emerging markets and in Japan were longer. The "product patent" covered the chemical substance itself, while a "process patent" covered the method of processing or manufacture. Both patents guaranteed the inventor a 20-year monopoly on the innovation, but the process patent offered much less protection, since it was fairly easy to modify a chemical process. It was also very difficult to legally prove that a process patent had been created to manufacture a product identical to that of a competitor. Most countries relied solely on process patents until the mid-1950s, although many countries had since recognized the product patent in law. While companies used the global market to amortize the huge investments required to produce a new drug, they were hesitant to invest in countries where the intellectual property regime was weak.

As health care costs soared in the 1990s, the pharmaceutical industry in developed countries began coming under increased scrutiny. Although patent protection was strong in developed countries, there were various types of price controls. Prices for the same drugs varied between the United States and Canada by a factor of 1.2 to 2.5.¹ Parallel trade or trade by independent firms taking advantage of such differentials represented a serious threat to pharmaceutical suppliers, especially in Europe. Also, the rise of generics, unbranded drugs of comparable efficacy in treating the disease but available at a fraction of the cost of the branded drugs, were challenging the pricing power of the pharmaceutical companies. Manufacturers of generic drugs had no expense for drug research and development of new compounds and only had limited budgets for popularizing the compound with the medical community. The generic companies made their money by copying what other pharmaceutical companies discovered, developed and created a market for. Health management organizations (HMOs) were growing and consolidating their drug purchases. In the United States, the administration under President Clinton, which took office in 1992, investigated the possibility of a comprehensive health plan, which, among other things, would have allowed an increased use of generics and laid down some form of regulatory pressure on pharmaceutical profits.

THE INDIAN PHARMACEUTICAL INDUSTRY IN THE 1990S

Developing countries, such as India, although large by population, were characterized by low per capita gross domestic product (GDP). Typically, healthcare expenditures accounted for a very small share of GDP, and health insurance was not commonly available. The 1990 figures for per capita annual expenditure on drugs in India were estimated at US\$3, compared to US\$412 in Japan, US\$222 in Germany and US\$191 in the United Kingdom.² Governments and large corporations extended health coverage, including prescription drug coverage, to their workers.

In the years before and following India's independence in 1947, the country had no indigenous capability to produce pharmaceuticals, and was dependent on imports. The Patent and Designs Act of 1911, an extension of the British colonial rule, enforced adherence to the international patent law, and gave rise to a number of multinational firms' subsidiaries in India, that wanted to import drugs from their respective countries of origin. Post-independence, the first public sector drug company, Hindustan Antibiotics

¹Estimates of industry average wholesale price levels in Europe (with Spanish levels indexed at 100 in 1989) were: Spain 100; Portugal 107; France 113; Italy 118; Belgium 131: United Kingdom 201; The Netherlands 229; West Germany 251. Source: T. Malnight, <u>Globalization of an Ethnocentric Firm: An Evolutionary Perspective</u>, Strategic Management Journal, 1995, Vol. 16 p.128.

²Organization of Pharmaceutical Producers of India Report.

Limited (HAL), was established in 1954 with the help of the World Health Organization, and Indian Drugs and Pharmaceutical Limited (IDPL) was established in 1961 with the help of the then Soviet Union.

The 1970s saw several changes that would dramatically change the intellectual property regime and give rise to the emergence of local manufacturing companies. Two such key changes were the passage of the Patents Act 1970 (effective April 1972) and the Drug Price Control Order (DPCO). The Patents Act, in essence abolished the product patents for all pharmaceutical and agricultural products, and permitted process patents for five to seven years. The DPCO instituted price controls, by which a government body stipulated prices for all drugs. Subsequently, this list was revised in 1987 to 142 drugs (which accounted for 72 per cent of the turnover of the industry). Indian drug prices were estimated to be five per cent to 20 per cent of the U.S. prices and among the lowest in the world.³ The DPCO also limited profits pharmaceutical companies could earn to approximately six per cent of sales turnover. Also, the postmanufacturing expenses were limited to 100 per cent of the production costs. At the World Health Assembly in 1982, Indira Gandhi, then Prime Minister of India, aptly captured the national sentiment on the issue in an often-quoted statement:

The idea of a better-ordered world is one in which medical discoveries will be free of patents and there will be no profiteering from life and death.

With the institution of both the DPCO and the 1970 Patent Act, drugs became available more cheaply, and local firms were encouraged to make copies of drugs by developing their own processes, leading to bulk drug production. The profitability was sharply reduced for multinational companies, many of which began opting out of the Indian market due to the disadvantages they faced from the local competition. Market share of multinational companies dropped from 80 per cent in 1970 to 35 per cent in the mid-1990s as those companies exited the market due to the lack of patent protection in India.

In November 1984, there were changes in the government leadership following Gandhi's assassination. The dawn of the 1990s saw India initiating economic reform and embracing globalization. Under the leadership of Dr. Manmohan Singh, then finance minister, the government began the process of liberalization and moving the economy away from import substitution to an export-driven economy. Foreign direct investment was encouraged by increasing the maximum limit of foreign ownership to 51 per cent (from 40 per cent) in the drugs and pharmaceutical industry (see Exhibit 2). It was in this environment that Eli Lilly was considering getting involved.

ELI LILLY AND COMPANY

Colonel Eli Lilly founded Eli Lilly and Company in 1876. The company would become one of the largest pharmaceutical companies in the United States from the early 1940s until 1985, but it began with just \$1,400 and four employees, including Lilly's 14-year-old son. This was accomplished with a company philosophy grounded in a commitment to scientific and managerial excellence. Over the years, Eli Lilly discovered, developed, manufactured and sold a broad line of human health and agricultural products. Research and development was crucial to Lilly's long-term success.

Before 1950, most OUS (a company term for "Outside the United States") activities were export focused. Beginning in the 1950s, Lilly undertook systematic expansion of its OUS activities, setting up several

³According to a study from Yale University, Ranitidine (300 tabs/10 pack) was priced at Rs18.53, whereas the U.S. price was 57 times more, and Ciprofloxacin (500 mg/4 pack) was at Rs28.40 in India, whereas the U.S. price was about 15 times more.

affiliates overseas. In the mid-1980s, under the leadership of then chairman Dick Wood, Lilly began a significant move toward global markets. A separate division within the company, Eli Lilly International Corporation, with responsibility for worldwide marketing of all its products, took an active role in expanding the OUS operations. By 1992, Lilly's products were manufactured and distributed through 25 countries and sold in more than 130 countries. The company had emerged as a world leader in oral and injectable antibiotics and in supplying insulin and related diabetic care products. In 1992, Lilly International was headed by Sidney Taurel, an MBA from Columbia University with work experience in South America and Europe, and Gerhard Mayr, an MBA from Stanford with extensive experience in Europe. Mayr wanted to expand Lilly's operations in Asia, where several countries, including India, were opening up their markets for foreign investment. Lilly also saw opportunities to use the world for clinical testing, which would enable it to move forward faster, as well as shape opinion with leaders in the medical field around the world; something that would help in Lilly's marketing stage.

RANBAXY LABORATORIES

Ranbaxy began in the 1960s as a family business, but with a visionary management grew rapidly to emerge as the leading domestic pharmaceutical firm in India. Under the leadership of Dr. Parvinder Singh, who held a doctoral degree from the University of Michigan, the firm evolved into a serious research-oriented firm. Singh, who joined Ranbaxy to assist his father in 1967, rose to become the joint managing director in 1977, managing director in 1982, and vice-chairman and managing director in 1987. Singh's visionary management, along with the operational leadership provided by Brar, who joined the firm in 1977, was instrumental in turning the family business into a global corporation. In the early 1990s, when almost the entire domestic pharmaceutical industry was opposing a tough patent regime, Ranbaxy was accepting it as given. Singh's argument was unique within the industry in India:

The global marketplace calls for a single set of rules; you cannot have one for the Indian market and the other for the export market. Tomorrow's global battles will be won by product leaders, not operationally excellent companies. Tomorrow's leaders must be visionaries, whether they belong to the family or not. Our mission at Ranbaxy is to become a research-based international pharmaceutical company.⁴

By the early 1990s, Ranbaxy grew to become India's largest manufacturer of bulk drugs⁵ and generic drugs, with a domestic market share of 15 per cent (see Exhibit 3).

One of Ranbaxy's core competencies was its chemical synthesis capability, but the company had begun to outsource some bulk drugs in limited quantities. The company produced pharmaceuticals in four locations in India. The company's capital costs were typically 50 per cent to 75 per cent lower than those of comparable U.S. plants and were meant to serve foreign markets in addition to the Indian market. Foreign markets, especially those in more developed countries, often had stricter quality control requirements, and such a difference meant that the manufacturing practices required to compete in those markets appeared to be costlier from the perspective of less developed markets. Higher prices in other countries provided the impetus for Ranbaxy to pursue international markets; the company had a presence in 47 markets outside India, mainly through exports handled through an international division. Ranbaxy's R&D efforts began at the end of the 1970s; in 1979, the company still had only 12 scientists. As Ranbaxy entered the international market in the 1980s, R&D was responsible for registering its products in foreign markets,

⁴Quoted in <u>Times of India</u>, June 9, 1999.

⁵A bulk drug is an intermediate product that goes into manufacturing of pharmaceutical products.

most of which was directed to process R&D; R&D expenditures ranged from two per cent to five per cent of the annual sales with future targets of seven per cent to eight per cent.

THE LILLY RANBAXY JV

Ranbaxy approached Lilly in 1992 to investigate the possibility of supplying certain active ingredients or sourcing of intermediate products to Lilly in order to provide low-cost sources of intermediate pharmaceutical ingredients. Lilly had had earlier relationships with manufacturers in India to produce human or animal insulin and then export the products to the Soviet Union using the Russia/India trade route, but those had never developed into on-the-ground relationships within the Indian market. Ranbaxy was the second largest exporter of all products in India and the second largest pharmaceutical company in India after Glaxo (a subsidiary of the U.K.-based firm).

Rajiv Gulati, at that time a general manager of business development and marketing controller at Ranbaxy, who was instrumental in developing the strategy for Ranbaxy, recalled:

In the 1980s, many multinational pharmaceutical companies had a presence in India. Lilly did not. As a result of both the sourcing of intermediate products as well as the fact that Lilly was one of the only players not yet in India, we felt that we could use Ranbaxy's knowledge of the market to get our feet on the ground in India. Ranbaxy would supply certain products to the joint venture from its own portfolio that were currently being manufactured in India and then formulate and finish some of Lilly's products locally. The joint venture would buy the active ingredients and Lilly would have Ranbaxy finish the package and allow the joint venture to sell and distribute those products.

The first meeting was held at Lilly's corporate center in Indianapolis in late 1990. Present were Ranbaxy's senior executives, Dr. Singh, vice-chairman, and D.S. Brar, chief operating officer (COO), and Lilly's senior executives, including Gene Step and Richard Wood, the CEO of Lilly. Rickey Pate, a corporate attorney at Eli Lilly who was present at the meeting, recalled:

It was a very smooth meeting. We had a lot in common. We both believed in high ethical standards, in technology and innovation, as well as in the future of patented products in India. Ranbaxy executives emphasized their desire to be a responsible corporate citizen and expressed their concerns for their employees. It was quite obvious Ranbaxy would be a compatible partner in India.

Lilly decided to form the joint venture in India to focus on the marketing of Lilly's drugs there, and a formal JV agreement was signed in November 1992. The newly created JV was to have an authorized capital of Rs200 million (equivalent of US\$7.1 million), and an initial subscribed equity capital of Rs84 million (US\$3 million), with equal contribution from Lilly and Ranbaxy, leading to an equity ownership of 50 per cent each. The board of directors for the JV would comprise six directors, three from each company. A management committee was also created comprising two directors, one from each company, and Lilly retained the right to appoint the CEO who would be responsible for the day-to-day operations. The agreement also provided for transfer of shares, in the event any one of the partners desired to dispose some or its entire share in the company.

In the mid-1990s, Lilly was investigating the possibility of extending its operations to include generics. Following the launch of the Indian JV, Lilly and Ranbaxy entered into two other agreements related to

generics, one in India to focus on manufacturing generics, and the other in the United States to focus on the marketing of generics. However, within less than a year, Lilly made a strategic decision not to enter the generics market and the two parties agreed to terminate the JV agreements related to the generics. Mayr recalled:

At that time we were looking at the Indian market although we did not have any particular time frame for entry. We particularly liked Ranbaxy, as we saw an alignment of the broad values. Dr. Singh had a clear vision of leading Ranbaxy to become an innovation driven company. And we liked what we saw in them. Of course, for a time we were looking at the generic business and wondering if this was something we should be engaged in. Other companies had separate division for generics and we were evaluating such an idea. However, we had a pilot program in Holland and that taught us what it took to be competitive in generics and decided that business wasn't for us, and so we decided to get out of generics.

The Start-up

By March 1993, Andrew Mascarenhas, an American citizen of Indian origin, who at the time was the general manager for Lilly's Caribbean basin, based in San Juan, Puerto Rico, was selected to become the managing director of the joint venture. Rajiv Gulati, who at the time spearheaded the business development and marketing efforts at Ranbaxy, was chosen as the director of marketing and sales at the JV. Mascarenhas recalled:

Lilly saw the joint venture as an investment the company needed to make. At the time, India was a country of 800 million people: 200 million to 300 million of them were considered to be within the country's middle class that represented the future of India. The concept of globalization was just taking hold at Lilly. India, along with China and Russia, were seen as markets where Lilly needed to build a greater presence. Some resistance was met due to the recognition that a lot of Lilly's products were already being sold by Indian manufacturers due to the lack of patent protection and intellectual property rights, so the question was what products should we put in there that could be competitive. The products that were already being manufactured had sufficient capacity; so it was an issue of trying to leverage the markets in which those products were sold into.

Lilly was a name that most physicians in India did not recognize. Despite its leadership position in the United States, it did not have any recognition in India. Ranbaxy was the leader within India. When I was informed that the name of the joint venture was to be Lilly Ranbaxy, the first thing I did was to make sure that the name of the joint venture was Eli Lilly Ranbaxy and not just Lilly Ranbaxy. The reason for this was based on my earlier experience in India, where "good quality," rightly or wrongly, was associated with foreign imported goods. Eli Lilly Ranbaxy sounded foreign enough!

Early on, Mascarenhas and Gulati worked on getting the venture up and running with office space and an employee base. Mascarenhas recalled:

I got a small space within Ranbaxy's set-up. We had two tables, one for Rajiv and the other for me. We had to start from that infrastructure and move towards building up the organization from scratch. Rajiv was great to work with and we both were able to see eye-

to-eye on most issues. Dr. Singh was a strong supporter and the whole of Ranbaxy senior management tried to assist us whenever we asked for help.

The duo immediately hired a financial analyst, and the team grew from there. Early on, they hired a medical director, a sales manager and a human resources manager. The initial team was a good one, but there was enormous pressure and the group worked seven days a week. Ranbaxy's help was used for getting government approvals, licenses, distribution and supplies. Recalled Gulati:

We used Ranbaxy's name for everything. We were new and it was very difficult for us. We used their distribution network as we did not have one and Lilly did not want to invest heavily in setting up a distribution network. We paid Ranbaxy for the service. Ranbaxy was very helpful.

By the end of 1993, the venture moved to an independent place, began launching products and employed more than 200 people. Within another year, Mascarenhas had hired a significant sales force and had recruited medical doctors and financial people for the regulatory group with assistance from Lilly's Geneva office. Mascarenhas, recalled:

Our recruiting theme was 'Opportunity of a Lifetime,' i.e., joining a new company, and to be part of its very foundation. Many who joined us, especially at senior level, were experienced executives. By entering this new and untested company, they were really taking a huge risk with their careers and the lives of their families.

However, the employee turnover in the Indian pharmaceutical industry was very high. Sandeep Gupta, director of marketing recalled:

Our biggest problem was our high turnover rate. A sales job in the pharmaceutical industry was not the most sought-after position. Any university graduate could be employed. The pharmaceutical industry in India is very unionized. Ranbaxy's HR practices were designed to work with unionized employees. From the very beginning, we did not want our recruits to join unions. Instead, we chose to show recruits that they had a career in ELR. When they joined us as sales graduates, they did not just remain at that level. We took a conscious decision to promote from within the company. The venture began investing in training and used Lilly's training programs. The programs were customized for Indian conditions, but retained Lilly's values (see Exhibit 4).

Within a year, the venture team began gaining the trust and respect of doctors, due to the strong values adhered to by Lilly. Mascarenhas described how the venture fought the Indian stigma:

Lilly has a code of ethical conduct called the Red Book, and the company did not want to go down the path where it might be associated with unethical behavior. But Lilly felt Ranbaxy knew how to do things the right way and that they respected their employees, which was a very important attribute. So following Lilly's Red Book values, the group told doctors the truth; both the positive and negative aspects of their drugs. If a salesperson didn't know the answer to something, they didn't lie or make up something; they told the doctor they didn't know. No bribes were given or taken, and it was found that honesty and integrity could actually be a competitive advantage. Sales people were trained to offer product information to doctors. The group gradually became distinguished by this "strange" behavior. Recalled Sudhanshu Kamat, controller of finance at ELR:

Lilly, from the start, treated us as its employees, like all its other affiliates worldwide. We followed the same systems and processes that any Lilly affiliate would worldwide.

Much of the success of the joint venture is attributed to the strong and cohesive working relationship of Mascarenhas and Gulati. Mascarenhas recalled:

We both wanted the venture to be successful. We both had our identities to the JV, and there was no Ranbaxy versus Lilly politics. From the very start when we had our office at Ranbaxy premises, I was invited to dine with their senior management. Even after moving to our own office, I continued the practice of having lunch at Ranbaxy HQ on a weekly basis. I think it helped a lot to be accessible at all times and to build on the personal relationship.

The two companies had very different business focuses. Ranbaxy was a company driven by the generics business. Lilly, on the other hand, was driven by innovation and discovery.

Mascarenhas focused his effort on communicating Eli Lilly's values to the new joint venture:

I spent a lot of time communicating Lilly's values to newly hired employees. In the early days, I interviewed our senior applicants personally. I was present in the two-day training sessions that we offered for the new employees, where I shared the values of the company. That was a critical task for me to make sure that the right foundations were laid down for growth.

The first products that came out of the joint venture were human insulin from Lilly and several Ranbaxy products; but the team faced constant challenges in dealing with government regulations on the one hand and financing the affiliate on the other. There were also cash flow constraints.

The ministry of health provided limitations on Lilly's pricing, and even with the margin the Indian government allowed, most of it went to the wholesalers and the pharmacies, pursuant to formulas in the Indian ministry of health. Once those were factored out of the gross margin, achieving profitability was a real challenge, as some of the biggest obstacles faced were duties imposed by the Indian government on imports and other regulatory issues. Considering the weak intellectual property rights regime, Lilly did not want to launch some of its products, such as its top-seller, Prozac.⁶ Gulati recalled:

We focused only on those therapeutic areas where Lilly had a niche. We did not adopt a localization strategy, such as the ones adopted by Pfizer and Glaxo⁷ that manufactured locally and sold at local prices. India is a high-volume, low price, low profit market, but it was a conscious decision by us to operate the way we did. We wanted to be in the global price band. So, we did not launch several patented products because generics were selling at 1/60th the price.

Product and marketing strategies had to be adopted to suit the market conditions. ELR's strategy evolved over the years to focus on two groups of products: one was off-patent drugs, where Lilly could add

⁶Used as an antidepressant medication.

⁷An industry study by McKinsey found that Glaxo sold 50 per cent of its volume, received three per cent of revenues and one per cent of profit in India.

substantial value (e.g. Ceclor), and two, patented drugs, where there existed a significant barrier to entry (e.g. Reopro and Gemzar). ELR marketed Ceclor, a Ranbaxy-manufactured product, but attempted to add significant value by providing medical information to the physicians and other unique marketing activities. By the end of 1996, the venture had reached the break-even and was becoming profitable.

The Mid-Term Organizational Changes

Mascarenhas was promoted in 1996 to managing director of Eli Lilly Italy, and Chris Shaw, a British national who was then managing the operations in Taiwan, was assigned to the JV as the new managing director. Also, Gulati, who was formally a Ranbaxy employee, decided to join Eli Lilly as its employee and was assigned to Lilly's corporate office in Indianapolis in the Business Development — Infectious Diseases therapeutic division. Chris Shaw recalled:

When I went to India as a British national, I was not sure what sort of reception I would get, knowing its history. But my family and I were received very warmly. I found a dynamic team with a strong sense of values.

Shaw focused on building systems and processes to bring stability to the fast-growing organization; his own expertise in operations made a significant contribution during this phase. He hired a senior-level manager and created a team to develop standard operating procedures (SOPs) for ensuring smooth operations. The product line also expanded. The JV continued to maintain a 50-50 distribution of products from Lilly and Ranbaxy, although there was no stipulation to maintain such a ratio. The clinical organization in India received top-ratings in internal audits by Lilly, making it suitable for a wider range of clinical trials. Shaw also streamlined the sales and marketing activities around therapeutic areas to emphasize and enrich the knowledge capabilities of the company's sales force. Seeing the rapid change in the environment in India, ELR, with the support of Mayr, hired the management consulting firm, McKinsey, to recommend growth options in India. ELR continued its steady performance with an annualized growth rate of about eight per cent during the late 1990s.

In 1999, Chris Shaw was assigned to Eli Lilly's Polish subsidiary, and Gulati returned to ELR as its managing director, following his three-year tenure at Lilly's U.S. operations. Recalled Gulati:

When I joined as MD in 1999, we were growing at eight per cent and had not added any new employees. I hired 150 people over the next two years and went about putting systems and processes in place. When we started in 1993, and during Andrew's time, we were like a grocery shop. Now we needed to be a company. We had to be a large durable organization and prepare ourselves to go from sales of US\$10 million to sales of US\$100 million.

ELR created a medical and regulatory unit, which handled the product approval processes with government. Das, the chief financial officer (CFO), commented:

We worked together with the government on the regulatory part. Actually, we did not take shelter under the Ranbaxy name but built a strong regulatory (medical and corporate affairs) foundation.

By early 2001, the venture was recording an excellent growth rate (see Exhibit 5), surpassing the average growth rate in the Indian pharmaceutical industry. ELR had already become the 46th largest

pharmaceutical company in India out of 10,000 companies. Several of the multinational subsidiaries, which were started at the same time as ELR, had either closed down or were in serious trouble. Das summarized the achievements:

The JV did add some prestige to Ranbaxy's efforts as a global player as the Lilly name had enormous credibility, while Lilly gained the toehold in India. In 10 years, we did not have any cannibalization of each other's employees, quite a rare event if you compare with the other JVs. This helped us build a unique culture in India.

THE NEW WORLD, 2001

The pharmaceutical industry continued to grow through the 1990s. In 2001, worldwide retail sales were expected to increase 10 per cent to about US\$350 billion. The United States was expected to remain the largest and fastest growing country among the world's major drug markets over the next three years. There was a consolidation trend in the industry with ongoing mergers and acquisitions reshaping the industry. In 1990, the world's top 10 players accounted for just 28 per cent of the market, while in 2000, the number had risen to 45 per cent and continued to grow. There was also a trend among leading global pharmaceutical companies to get back to basics and concentrate on core high-margined prescription preparations and divest non-core businesses. In addition, the partnerships between pharmaceutical and biotechnology companies were growing rapidly. There were a number of challenges, such as escalating R&D costs, lengthening development and approval times for new products, growing competition from generics and follow-on products, and rising cost-containment pressures, particularly with the growing clout of managed care organizations.

By 1995, Lilly had moved up to become the 12th leading pharmaceutical supplier in the world, sixth in the U.S. market, 17th in Europe and 77th in Japan. Much of Lilly's sales success through the mid-1990s came from its antidepressant drug, Prozac. But with the wonder drug due to go off patent in 2001, Lilly was aggressively working on a number of high-potential products. By the beginning of 2001, Lilly was doing business in 151 countries, with its international sales playing a significant role in the company's success (see Exhibits 6 and 7). Dr. Lorenzo Tallarigo recalled:

When I started as the president of the intercontinental operations, I realized that the world was very different in the 2000s from the world of 1990s. Particularly, there were phenomenal changes in the markets in India and China. While I firmly believed that the partnership we had with Ranbaxy was really an excellent one, the fact that we were facing such a different market in the 21st century was reason enough to carefully evaluate our strategies in these markets.

Ranbaxy, too, had witnessed changes through the 1990s. Dr. Singh became the new CEO in 1993 and formulated a new mission for the company: to become a research-based international pharmaceutical company with \$1 billion in sales by 2003. This vision saw Ranbaxy developing new drugs through basic research, earmarking 20 per cent of the R&D budget for such work. In addition to its joint venture with Lilly, Ranbaxy made three other manufacturing/marketing investments in developed markets: a joint venture with Genpharm in Canada (\$1.1 million), and the acquisitions of Ohm Labs in the United States (\$13.5 million) and Rima Pharmaceuticals (\$8 million) in Ireland. With these deals, Ranbaxy had manufacturing facilities around the globe. While China and Russia were expected to remain key foreign markets, Ranbaxy was looking at the United States and the United Kingdom as its core international markets for the future. In 1999, Dr. Singh handed over the reins of the company to Brar, and later the same

year, Ranbaxy lost this visionary leader due to an untimely death. Brar continued Singh's vision to keep Ranbaxy in a leadership position. However, the vast network of international sales that Ranbaxy had developed created a large financial burden, depressing the company's 2000 results, and was expected to significantly affect its cash flow in 2001 (see Exhibit 8). Vinay Kaul, vice-chairman of Ranbaxy in 2001 and chairman of the board of ELR since 2000, noted:

We have come a long way from where we started. Our role in the present JV is very limited. We had a smooth relationship and we have been of significant help to Lilly to establish a foothold in the market here in India. Also, we have opened up a number of opportunities for them to expand their network. However, we have also grown, and we are a global company with presence in a number of international markets, including the United States. We had to really think if this JV is central to our operations, given that we have closed down the other two JV agreements that we had with Lilly on the generics manufacturing. It is common knowledge that whether we continue as a JV or not, we have created a substantial value for Lilly.

There were also significant changes in the Indian business environment. India signed the General Agreement on Tariffs and Trade (GATT) in April 1994 and became a World Trade Organization (WTO) member in 1995. As per the WTO, from the year 2005, India would grant product patent recognition to all new chemical entities (NCEs) (i.e., bulk drugs developed from then onward). Also, the Indian government had made the decision to allow 100 per cent foreign direct investment into the drugs and pharmaceutical industry in 2001.⁸ The Indian pharmaceutical market had grown at an average of 15 per cent through the 1990s, but the trends indicated a slowdown in growth, partly due to intense price competition, a shift toward chronic therapies and the entry of large players into the generic market. India was seeing its own internal consolidation of major companies that were trying to bring in synergies through economies of scale. The industry would see more mergers and alliances. And with India's entry into the WTO and its agreement to begin patent protection in 2004-2005, competition on existing and new products was expected to intensify. Government guidelines were expected to include rationalization of price controls and the encouragement of more research and development. Recalled Gulati:

The change of institutional environment brought a great promise for Lilly. India was emerging into a market that had patent protection and with tremendous potential for adding value in the clinical trials, an important component in the pharmaceutical industry. In Ranbaxy, we had a partner with whom we could work very well, and one which greatly respected Lilly. However, there were considerable signals from both sides that were forcing us to evaluate the strategy.

Dr. Vinod Mattoo, medical director of ELR, commented:

We have been able to achieve penetration in key therapeutic areas of diabetes and oncology. We have created a high caliber, non-unionized sales force with world-class sales processes. We have medical infrastructure and expertise to run clinical trials to international standards. We have been able to provide clinical trial data to support global registrations, and an organization in place to maximize returns post-2005.

⁸In order to regulate the parallel activities of a foreign company, which had an ongoing joint venture in India, the regulations stipulated that the foreign partner must get a "No objection letter" from its Indian partner, before setting up a wholly owned subsidiary.

EVALUATING STRATEGIC OPTIONS

Considering these several developments, Tallarigo suggested a joint task force comprising senior executives from both companies:

Soon after assuming this role, I visited India in early 2000, and had the pleasure of meeting Dr. Brar and the senior executives. It was clear to me that both Brar and I were in agreement that we needed to think carefully how we approached the future. It was there that I suggested that we create a joint task force to come up with some options that would help us make a final decision.

A task force was set up with two senior executives from Lilly's Asia-Pacific regional office (based in Singapore) and two senior executives from Ranbaxy. The task force did not include senior executives of the ELR so as to not distract the running of the day-to-day operations. Suman Das, the chief financial officer of ELR, was assigned to support the task force with the needed financial data. The task force developed several scenarios and presented different options for the board to consider.

There were rumors within the industry that Ranbaxy expected to divest the JV and invest the cash in its growing portfolio of generics manufacturing business in international markets. There were also several other Indian companies that offered to buy Ranbaxy's stake in the JV. With India recognizing patent protection in 2005, several Indian pharmaceutical companies were keen to align with multinationals to ensure a pipeline of drugs. Although there were no formal offers from Ranbaxy, the company was expected to price its stakes as high as US\$70 million. One of the industry observers in India commented:

I think it is fair for Ranbaxy to expect a reasonable return for its investment in the JV, not only the initial capital, but also so much of its intangibles in the JV. Ranbaxy's stock has grown significantly. Given the critical losses that Ranbaxy has had in some of its investments abroad, the revenue from this sale may be a significant boost for Ranbaxy's cash flow this year.

Gerhard Mayr, who in 2001, was the executive vice-president and was responsible for Lilly's demand realization around the world, continued to emphasize the emerging markets in India, China and Eastern Europe. Mayr commented on Ranbaxy:

India is an important market for us, and especially after patent protection in 2005. Ranbaxy was a wonderful partner and our relationship with them was outstanding. The other two joint ventures we initiated with them in the generics did not make sense to us once we decided to get out of the generics business. We see India as a good market for Lilly. If a partner is what it takes to succeed, we should go with a partner. If it does not, we should have the flexibility to reconsider.

Tallarigo hoped that Brar would be able to provide a clear direction as to the venture's future. As he prepared for the meeting, he knew the decision was not an easy one, although he felt confident that the JV was in good shape. While the new regulations allowed Lilly to operate as a wholly-owned subsidiary in India, the partnership has been a very positive element in its strategy. Ranbaxy provided manufacturing and logistics support to the JV, and breaking up the partnership would require a significant amount of renegotiations. Also, it was not clear what the financial implications of such a move would be. Although Ranbaxy seemed to favor a sell-out, Tallarigo thought the price expectations might be beyond what Lilly was ready to accept. This meeting with Brar should provide clarity on all these issues.

WORLD PHARMACEUTICAL SUPPLIERS 1992 AND 2001 (US\$ millions)

Company	Origin	1992 Sales [*]	Company	Origin	2001 Sales **
Glaxo	US	8,704	Pfizer	USA	25,500
Merck	UK	8,214	GlaxoSmithKline	UK	24,800
Bristol-Myers Squibb	US	6,313	Merck & Co	USA	21,350
Hoechst	GER	6,042	AstraZeneca	UK	16,480
Ciba-Geigy	SWI	5,192	Bristol-Myers Squibb	USA	15,600
SmithKline Beecham	US	5,100	Aventis	FRA	15,350
Roche	SWI	4,897	Johnson & Johnson	USA	14,900
Sandoz	SWI	4,886	Novartis	SWI	14,500
Bayer	GER	4,670	Pharmacia Corp	USA	11,970
American Home	US	4,589	Eli Lilly	USA	11,540
Pfizer	US	4,558	Wyeth	USA	11,710
Eli Lilly	US	4,537	Roche	SWI	8,530
Johnson & Johnson	US	4,340	Schering-Plough	USA	8,360
Rhone Poulenc Rorer	US	4,096	Abbott Laboratories	USA	8,170
Abbott	US	4,025	Takeda	JAP	7,770
			Sanofi-Synthélabo	FRA	5,700
			Boehringer Ingelheim	GER	5,600
			Bayer	GER	5,040
			Schering AG	GER	3,900
			Akzo Nobel	NTH	3,550

Market Share Reporter, 1993.
Pharmaceutical Executive, May 2002.

Exhibit 2

INDIA'S ECONOMY AT A GLANCE

	1992	1994	1996	1998	2000
Gross domestic product (GDP) at current market prices in US\$ Consumer price index (June 1982=100) in local	244	323	386	414	481
currency, period average	77.4	90.7	108.9	132.2	149.3
Recorded official unemployment as a percentage of total labor force Stock of foreign reserves plus gold (national	9.7	9.3	9.1	9.2	9.2
valuation), end-period Foreign direct investment inflow	8,665	23,054	23,784	29,833	48,200
(in US\$ millions) ¹	252	974	2,525	2,633	2,319
Total exports	19,563	25,075	33,055	33,052	43,085
Total imports	23,580	26,846	37,376	42,318	49,907
Population (millions)	886	938	973	1,008	1,042

¹United Nations Commission on Trade and Development. Source: The Economist Intelligence Unit.

TOP 20 PHARMACEUTICAL COMPANIES IN INDIA BY SALES (Rs billions)

Company	1996*	Company	2000
Glaxo-Wellcome	4.97	Ranbaxy	20.00
Cipla	2.98	Cipla	12.00
Ranbaxy	2.67	Dr. Reddy's Labs	11.30
Hoechts-Roussel	2.60	Glaxo (India)	7.90
Knoll Pharmaceutical	1.76	Lupin Labs	7.80
Pfizer	1.73	Aurobindo Pharma	7.60
Alembic	1.68	Novartis	7.20
Torrent Pharma	1.60	Wockhardt Ltd.	6.80
Lupin Labs	1.56	Sun Pharma	6.70
Zydus-Cadila	1.51	Cadilla Healthcare	5.80
Ambalal Sarabhai	1.38	Nicholas Piramal	5.70
Smithkline Beecham	1.20	Aventis Pharma	5.30
Aristo Pharma	1.17	Alembic Ltd.	4.80
Parke Davis	1.15	Morepen Labs	4.70
Cadila Pharma	1.12	Torrent Pharma	4.40
E. Merck	1.11	IPCA Labs	4.20
Wockhardt	1.08	Knoll Pharma	3.70
John Wyeth	1.04	Orchid Chemicals	3.60
Alkem Laboratories	1.04	E Merck	3.50
Hindustan Ciba Geigy	1.03	Pfizer	3.40

* 1996 figures from ORG, Bombay in Lanjouw, J.O., <u>www.oiprc.ox.ac.uk/EJWP0799.html</u>, NBER working paper No. 6366. Source: "Report on Pharmaceutical Sector in India," <u>Scope Magazine</u>, September 2001, p.14.

VALUES AT ELI LILLY-RANBAXY LIMITED

PEOPLE

"The people who make up this company are its most valuable assets"

- Respect for the individual
 - Courtesy and politeness at all times
 - Sensitivity to other people's views
 - Respect for ALL people regardless of caste, religion, sex or age
- Careers NOT jobs
 - Emphasis on individual's growth, personal and professional
 - o Broaden experience via cross-functional moves
 - "The first responsibility of our supervisors is to build men, then medicines"

ATTITUDE

"There is very little difference between people. But that difference makes a BIG difference. The little difference is attitude. The BIG difference is... Whether it is POSITIVE or NEGATIVE"

"Are we part of the PROBLEM or part of the SOLUTION?"

TEAM

"None of us is as smart as all of us"

INTEGRITY

- Integrity outside the company
 - a) "We should not do anything or be expected to take any action that we would be ashamed to explain to our family or close friends"
 - b) "The red-faced test"
 - c) "Integrity can be our biggest competitive advantage"
- Integrity inside the company
 - o With one another: openness, honesty

EXCELLENCE

- Serving our customers
 - "In whatever we do, we must ask ourselves: how does this serve my customer better?"
- Continuous improvement

"Nothing is being done today that cannot be done better tomorrow"

• Become the Industry Standard

"In whatever we do, we will do it so well that we become the Industry Standard"

ELI LILLY-RANBAXY INDIA FINANCIALS 1998 to 2001 (Rs'000s)

	1998-1999	1999-2000	2000-2001
Sales	559,766	632,188	876,266
Marketing Expenses	37,302	61,366	96,854
Other Expenses	157,907	180,364	254,822
Profit after Tax	5,898	12,301	11,999
Current Assets	272,635	353,077	466,738
Current Liabilities	239,664	297,140	471,635
Total Assets	303,254	386,832	516,241
No. of Employees	358	419	460
Exchange Rate (Rupees/US\$)	42.6	43.5	46.8

Note: Financial year runs from April 1 to March 31.

Source: Company Reports.

Exhibit 6

LILLY FINANCIALS 1992 to 2000 (US\$ millions)

	1992	1994	1996	1998	2000
Net sales	4,963	5,711	6,998	9,236	10,862
Foreign sales	2,207	2,710	3,587	3,401	3,858
Research and development expenses	731	839	1,190	1,739	2,019
Income from continuing operations before					
taxes and extraordinary items	1,194	1,699	2,131	2,665	3,859
Net income	709	1,286	1,524	2,097	3,058
Dividends per share*	1.128	1.260	0.694	0.830	1.060
Current assets	3,006	3,962	3,891	5,407	7,943
Current liabilities	2,399	5,670	4,222	4,607	4,961
Property and equipment	4,072	4,412	4,307	4,096	4,177
Total assets	8,673	14,507	14,307	12,596	14,691
Long-term debt	582	2,126	2,517	2,186	2,634
Shareholder equity	4,892	5,356	6,100	4,430	6,047
Number of employees*	24,500	24,900	27,400	29,800	35,700

* Actual value

Source: Company files.

PRODUCT SEGMENT INFORMATION Lilly and Ranbaxy 1996 and 2000

	Eli Lilly in 1996	Eli Lilly in 2000
Anti-infectives	35%	8%
Neurosciences	26%	48%
Diabetes care	13%	_
Animal health	9%	6%
Gastrointestinal (GI)	6%	3%
Other pharmaceutical	11%	1%
Endocrinology	_	24%
Cardiovascular	_	5%
Oncology	_	5%

	Ranbaxy in 1996	Ranbaxy in 2000
Anti-infectives	49%	56%
GI Tract	10%	9%
Nutritionals	8%	9%
NSAIDS	7%	_
Central Nervous System	3%	3%
Cardiovascular	1%	5%
Others	22%	5%
Orthopaedics/Pain management	_	9%
Dermatological	-	4%

RANBAXY FINANCIALS 1992 to 2000 (Rs millions)

	1992-93	1994-95	1996-97	* 1998	2000
Sales	4,607	7,122	11,482	10,641	17,459
Foreign sales	1,408	3,019	5,224	4,414	8,112
Profit before tax	358	1,304	1,869	1,240	1,945
Profit after tax	353	1,104	1,604	1,170	1,824
Equity dividend	66.50	199.80	379.10	560.10	869.20
Earnings per share (Rs)	16.21	25.59	32.47	13.46	15.74
Net current assets	1,737	5,790	9,335	8,321	8,258
Share capital	217.90	430.50	494.00	1,159.00	1,159.00
Reserves and surplus	1,028	6,000	11,056	12,849	16,448
Book value per share (Rs)	57.16	149.08	233.70	120.90	136.60
No. of employees	4,575	4,703	6,131	5,469	5,784
Exchange rate (US\$1 = Rs)	29.00	31.40	35.90	42.60	46.80

* The financial year for Ranbaxy changed from April 1 to March 31 to calendar year in 1998. Also, the company issued a 1:2 bonus issue (see the changes in share capital and book value per share). The 1998 figures are based on nine months April to December 1998.

Source: Company files.