## **REPORT ON**

# MICHAEL E. PORTER - FIVE COMPETITIVE FORCES

By

**Group 12** 

Under Supervision of

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**Course Code: Econ F355** 



# **Group Details**

**Group Number: 12** 

**Industry: Pharmaceutical** 

Company Name: Pfizer's Laboratories, Sun Pharmaceuticals Industries

Ltd., Dr. Reddy's Laboratories

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## **ABSTRACT**

The primary motive of this assignment is to study the pharmaceutical sector by taking Dr. Reddy's Laboratories, Sun pharmaceuticals private limited, and Pfizer as the companies. The concern is to check for the industry's competitiveness analysis by applying Michael E. Porter - Five Competitive Forces. Secondly, the motive is to check for the application of Michael E. Porter's generic corporate strategy (Cost Leadership and Differentiation). Analysis includes the business's critical analysis and its riskiness and future growth. relevant data has been collected and presented in the report.







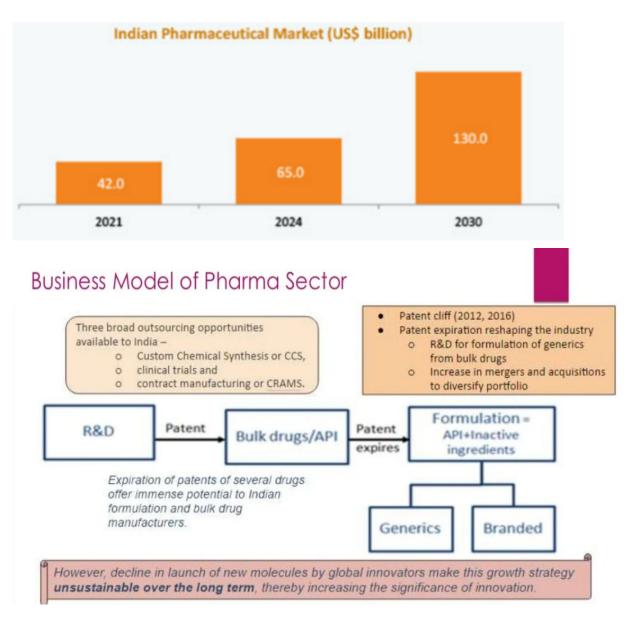
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### 1. Pharmaceutical Industry Overview

India is one of the largest players in the global pharmaceutical and healthcare industries. It is often referred to as the Pharma Capital of the World. The sector is currently valued at \$41.7 billion and is predicted to grow to \$130 billion by 2030. Regarding volume output, India ranks 3rd in the world, and 14th in value production. The majority of pharmaceutical manufacturing in India in 2021 was generic pharmaceuticals, which are cheaper than patented drugs and also satisfy more than half of the world's demand for various vaccines.



#### 1.1 Business Segments of the Pharmaceutical industry in India

#### 1.1.1 APIs (Active Pharmaceutical Ingredients)

APIs are considered the building blocks for the final product we take. These are the chemicals that have therapeutic properties. Eg: paracetamol, an API contained in Dolo 650, is responsible for pain relief. By FY22, domestic API consumption is 6 Business Analysis & Valuation estimated to total US\$ 18.8 billion. More than 60% of India's APIs are now imported from foreign nations. Divis Laboratories and Laurus Labs are 2 of our country's biggest API manufacturers.



#### 1.1.2 Formulations

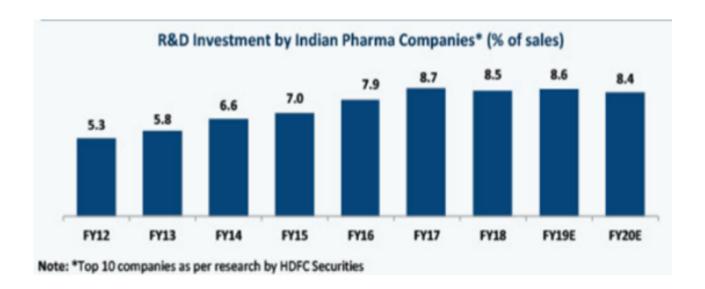
APIs cannot be taken directly as this might disrupt PH stability and odor. Thus, they are combined with other edible excipients to create a stable medium that may be taken. With a 14 % market share and a 13th-place ranking in terms of export value, India is one of the top exporters of formulations in terms of volume. Cipla and Dr. Reddy's Laboratories are two of the leading corporations in this sector.

## 1.1.3 Contract Research and Manufacturing Services (CRAMS)

To bring down costs and achieve economies of scale, many pharmaceutical companies aim to outsource their manufacturing to other companies. Companies can focus more on their primary strategy, which is research and drug formulations, by outsourcing. CRAMS industries in India grew at a 48% compound annual growth rate (CAGR) from FY15 to FY18 and increased at around 22.5-25% from 2018 to 2021. Companies such as Divi's Labs, and Jubilant Life Sciences are examples.

### 1.2 R&D Investment Trends in India

There is an increasing trend in spending on R&D for drug development, repurposing, process innovations, and digital production. This R&D investment is thought to help India to gain ground in the global markets. Lupin spent the most money on research and development in FY20, followed by Dr. Reddy's.



#### 1.3 Exports from India

Indian pharmaceuticals are exported to over 200 nations around the world, with the United States being the most prominent one and are the world's largest supplier of generic medications (Accounting for ~20% of worldwide generic drug exports) in terms of volumes. Pharmaceutical exports, which brought in almost \$ 17 billion in the fiscal year 2017, grew at a CAGR of around 10% to \$ 24 billion in fiscal year 21. The significant growth of 18% in fiscal year 21 can be attributed to increasing demand for pharmaceuticals related to Covid19. Indian pharmaceuticals, including APIs, intermediates, drug formulations, biologicals, AYUSH and herbal items, surgical products, and medical devices are exported. North America accounted for 32.1% of India's pharma exports in FY20, followed by Africa (17.9%) and the European Union (15.70%).



#### 1.4 Composition of the Indian pharmaceuticals market

The pharmaceutical market can be broadly classified into 2 areas based on the therapeutic effects:

- 1) Acute treatment is a part that deals with disorders that last for a brief period of time, encompassing medicines such as pain relievers, analgesics, and antibiotics.
- 2) Chronic treatment is a sub-segment that deals with long-term treatments such as cancer, diabetes, and so on. In most circumstances, chronic illnesses require the patient's continued use of medications for the rest of their life. Thus, it is predicted to develop substantially faster than the acute segment in the future.

At present, more than 60% of the Indian pharmaceutical market is acute, with the remainder chronic. The largest segment of the Indian pharmaceutical business is generic pharmaceuticals, which account for more than 70% of market sales. Over-the-counter (OTC) medications account for 21%, while patented drugs comprise roughly 9%. Because of the competency in generic medications, the share of generic drugs is likely to continue increasing, and expansion in this sector offers a huge opportunity for Indian enterprises. Anti-Infectives (13.6%), Cardiac (12.4%), and Gastro Intestinal (11.5%) had the most market share in the Indian pharma market in 2018.



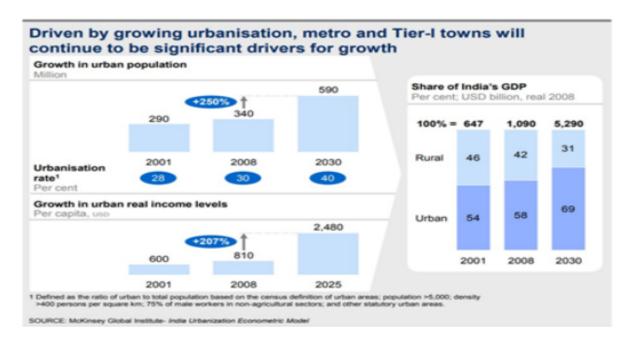
# 1.5 Government Incentives & Policies in India with Respect to Pharmaceuticals

The Government's Department of Pharmaceuticals introduced Pharma Vision 2020, which seeks to make India a significant hub for drug development and innovation in end-to-end drug manufacturing. The government launched a Rs. 15,000 crores production-linked incentive (PLI) scheme for the pharmaceutical industry in September 2020. The Government of India launched a pharmaceutical policy in 2017 with the goal of making vital medicines cheaper to the general public, hence lowering the average cost of health expenses in India. The government is also enticing commercial firms to establish manufacturing units in India by establishing pharmaceutical parks. For example, in October 2019, the government announced a \$ 489 million investment in a pharmaceutical park in Hyderabad.

#### 1.6 Growth drivers

Over the next ten years, approximately 120 medications are predicted to go off-patent, with global income ranging from US\$ 80 to \$250 billion. The increase in the number of cases of lifestyle diseases in India may improve the sale of medications in this category. Pharma corporations have boosted their investments in rural markets and developed better medical infrastructure. The hospital market is predicted to grow by US\$ 200 billion by 2024. The increase in patient influx from foreign countries has resulted in a surge in medical tourism. Increased adoption of non-life insurance,

especially health insurance, will promote the expansion of India's healthcare and pharmaceutical markets.



### 1.7 Risk For Pharmaceutical Industry in India

Until recently, China was one of the top countries in the production and sale of APIs to the rest of the globe. The outbreak of COVID-19 (whose origin is in China) has changed the world's stance and with its origin being linked to China, API supply has suffered. This could have an impact on the pricing and availability of drugs in nations where Beijing sells essential ingredients. India's enormous growth in pharmaceuticals has resulted in a much larger problem of inferior or outright counterfeit drugs. According to a recent WHO estimate, 20% of pharmaceuticals marketed in India are counterfeit, while India provides 35% of the counterfeit drugs flooding the global market. This has had a very large detrimental impact on India's international reputation as a pharmaceutical investment market. India is a little behind the curve when it comes to creating new drugs. In addition, Indian pharma firms face severe competition from corporations in China, Japan, and Israel, as well as negative lobbying from 'Big Pharma' groups, which accuse Indian enterprises of breaking patent restrictions on a regular basis.

## **SECTION 2**

# Michael E.Porter Industry Competitiveness <u>Analysis</u>

#### 2.1 Rivalry Among Existing Firms

The most significant factor affecting the average degree of profitability in most sectors is the type of competition among already-established businesses. In certain sectors, prices are driven close to the marginal cost by fierce industry competition. Companies in other industries do not engage in as fierce pricing competition. Instead, they devise strategies for pricing coordination or focus competition on non-price factors like innovation and brand image. Industry growth rate, concentration, and balance of rivals, exit obstacles, degree of difference, switching costs, etc. are some characteristics that affect how fiercely current businesses compete with one another. The pharmaceutical sector is very competitive having over 3000 enterprises and 11,000 manufacturing sites spanning over the country. The market has more than doubled since 2005, and during the following ten years, the domestic market is anticipated to increase thrice. By 2030, the whole pharmaceutical industry, presently valued at \$41.7 billion, will be worth \$130 billion. India ranks third globally in terms of output volume and fourteenth globally in terms of output value. The domestic pharmaceutical market in India increased at a CAGR of over 4.5%, reaching \$ 21 billion in fiscal year 21 from over \$ 18 billion in the fiscal year 2017. The sector is appealing to new entrants because of its strong growth potential and statistics. The competition in the market can be observed in the fact that the top four players in the nation only control around 20% of it, while the top 10 players hold about 39%. As a result, this industry has a low level of concentration. One thing to bear in mind is that the pharmaceutical market is stable and that, by and large, its pace of development reflects that of the nation's economy (1.2 times the average in India). Value growth has not kept up with volume growth, despite it being consistent over time.

The low entry barriers to the pharmaceutical sector are a significant factor fueling

commercial competition. While there is no need for fixed expenditures, there is a considerable need for working capital. A key element that offers companies in any industry a competitive advantage is product differentiation. However, since India has long depended on process patents and laws that encourage copying, it is tough to differentiate products in the pharmaceutical sector. The motivating driver is hence cost competitiveness rather than product differentiation. With 71% of the market share, India continues to enjoy a dominant position in the generic medication industry.

#### 2.2 Potential of new entrants into the industry

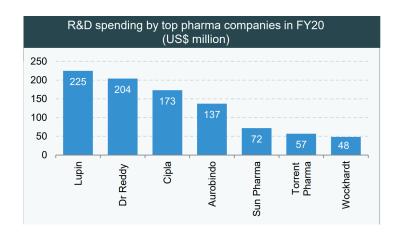
The opportunity to participate in the industry's extraordinary earnings and its attractiveness to new businesses encourage them to enter the market and raise competitiveness levels. This is a key factor in every industry's profitability. More competitors exert lower pressure on prices, expenses, and the rate of investment necessary to compete in a sector by bringing additional capacity and a drive to capture market share. As a result, the possibility of new competitors reduces the potential for an industry to make money. In the pharmaceuticals sector, many startups are formed since there are significant rewards and it is quite simple to obtain money from investors or private equity groups. Small startups in this industry typically aim to sell out to established market players. Because of this, new businesses find the pharmaceutical sector to be appealing. But this industry's drawback is that it has a long gestation time, which makes it challenging to survive, in addition to the stringent laws and regulations established by the government. The degree of entry barriers in a sector and the response newcomers could anticipate from established players determine the risks of entry. The threat of new entrants in the pharmaceutical industry is very low owing to the following factors:

#### **Economies of scale:**

Economies of scale pose a huge barrier to new entrants, especially in industries where firms produce a large quantity of small products like the pharmaceutical industry. Furthermore, most players in this industry try to strengthen their position by investing heavily in research and development. Dr. Reddy's has recently acquired OctoPlus

N.V, a Netherlands-based company, to get access to new technology to help with the formulation of a product. Dr. Reddy's also has 5 research and development centers in 56 countries, including a massive 300,000 sq. ft. one in Hyderabad that houses over 70 laboratories and many experts from around the globe.

Divi's and Sun Pharmacy on the other hand have 400 scientists and 3 centers and 2000 scientists and 6 centers respectively.



#### **Heavy regulation:**

In addition to significant R&D expenses and intellectual property restrictions, businesses must obtain the approval of the nation's food and drug regulatory agency in order to make and sell any medication or food component there. The regulatory approval procedure is highly difficult in many nations, including the US. Before promoting or marketing a new medicine, all required regulatory permissions must be obtained. This is a time-consuming and expensive procedure. Additionally, it can be particularly challenging to win the departments' trust when using a fresh company name or brand that hasn't previously sold.

However, the Government has been making policies that are favorable to the industry in recent years, in an effort to increase India's share of the global market. The government established a production-linked incentive (PLI) program in February 2021 for the pharmaceutical industry from FY21 to FY29. The program is expected to result in investments of Rs. 15,000 crores (\$2.07 billion) for the industry Patents pose another barrier to new entrants. They last for 20 years and force new entrants to come up with new formulations and production processes.

Sun Pharma.: 1400 patents

Dr. Reddy's: 1000 patents since 2006

Divi's: 42 patents



The authority that controls prices in India is called the National Pharmaceutical Pricing Authority (NPPA). Due to the inconsistent, unexpected, and arbitrary price rules that are created, the sector is about to face a struggle. For instance, when price restrictions on cardiac stents were implemented, they were commercially unviable.

#### **Brand image and distribution channels:**

It is challenging for new businesses to generate a strong brand name since the established firms have differentiated themselves from one another and built strong brands with devoted customers. As the end consumers usually only purchase the products that are prescribed to them by their medical institutions, not having access to proper distribution channels may discourage new entrants.

#### 2.3 Threat of Substitute Products

Substitute products are those that have the same shape as current items and fulfill the same function. This component of the research is heavily reliant on product costs and performance since they impact a consumer's propensity to move to other items.

The Pharmaceutical sector will always be in demand, and it will never dry up. As a result of this dynamic, there will always be an advantage for new players to emerge as well as a danger from generic items that are very inexpensive. Generic producers have complete control over the product's pricing, giving them an advantage in the business.

Only during the drug's patent period may it make unusual profits. Once the patent has expired, generic medicine producers provide the identical medication at a reduced cost since

they directly replicate the formula and don't invest much in the drug's R&D. Yoga, meditation, herbal treatment, and homeopathic treatment are some more alternatives to medications and chemicals.

Doctors and physicians play a crucial role in the branded market or the biosimilars since they contact directly with customers and greatly affect their purchasing decisions. Therefore, a major part of raising brand recognition in this area of the pharmaceutical industry should be played by sales and marketing.

#### 2.4 Bargaining Power of Buyers

The bargaining power of buyers in an industry is proportional to the ease with which buyers can drive down prices. It usually depends on the price sensitivity and relative bargaining power of the buyer.

However, the pharma industry is unique. There are two types of consumers: the final consumer (common man) who only plays the role of a consumer, and doctors, who are consumers as well as influencers.

Only doctors/hospitals have bargaining power as there are many pharmaceutical companies in the market that provide similar products with similar functionalities. They can refuse to buy products if they feel the product is overpriced.

The patient, in general, has no knowledge about medicines and relies completely on doctors. Therefore, the final consumer has almost no bargaining power as they are essentially forced to buy what the physician recommends.

There is very low incentive for pharmaceutical companies to decrease prices as consumers have low to medium bargaining power. The NPPA (National Pharmaceutical Pricing Authority) is the main price regulator in the industry and makes up for the lack of bargaining power of buyers.

### 2.5 Bargaining Power of Suppliers

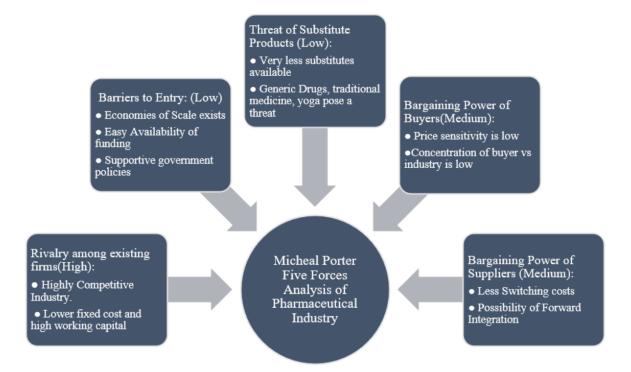
The bargaining power of suppliers in an industry is proportional to how much suppliers can coerce firms in an industry to drive down prices. Since the profit potential of a firm depends on the extent to which costs incurred can be minimized it can therefore be determined by the power of the suppliers.

Suppliers have moderate bargaining power in the Pharma industry as the raw materials or APIs are sourced from the chemical industry which already has a large number of players in that sector in turn leading to a low switching cost. This can be solved if suppliers go for forward integration and can pose a threat to other suppliers.



Factors affecting bargaining power of supplier

#### 2.6 Conclusion on Porter's Analysis



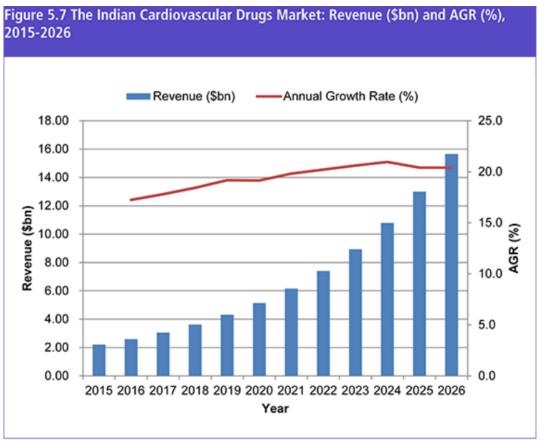
# **SECTION 3: Summary**

The Indian Economic Survey 2021 estimates that the size of the home market would increase to 3 times in the next decade. India's domestic pharmaceutical industry is projected to increase To us\$ 65 billion by 2024 and US\$ 120-130 billion by 2030, up from an US\$ 42 billion in 2021. In the next five years, India's expenditure on medicines is predicted to increase by 9 to 12 percent, propelling it into the top ten nations in terms of drug spending.

In the future, the capacity of firms to orient their product portfolio towards chronic treatments for illnesses such as cardiovascular, anti-diabetes, antidepressants, and anti-cancers, which are on the increase, will also impact the growth of domestic sales.

In India, the Biotechnology industry comprises of biopharmaceuticals, bio-services, bio-agriculture, bio-industrial, and bioinformatics. In 2019, the biotechnology industry in India was worth 64 billion US dollars, and by 2025, it is expected to be worth 150 billion US dollars. The Indian market for medical equipment was worth \$10.36 billion in FY20. The market is expected to grow at a CAGR of 37% from 2020 to 2025, reaching \$50 billion. The Indian government has made several measures to decrease prices and healthcare costs. Focus has remained on the rapid entry of generic pharmaceuticals to the market, which is anticipated to help Indian pharmaceutical businesses.

In addition, the emphasis on rural health programmes, lifesaving medications, and preventative immunizations bodes well for the pharmaceutical industry.



Source: visiongain 2015

#### Porter's Five Force Analysis: India Veterinary Pharmaceuticals

#### **ENTRANTS - Moderate**

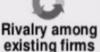
- Primary threat for entrance from generic drug.
- Making products available to all the retailers is hard and time taken.
- Animal drug competition is less susceptible to generic influence except some or al supplement as well as nutritional products.
- Large economies of scale that create high barriers to entry. Small scale start-ups require a large amount of capital and face many risks,

#### BUYERS - High, Moderate

- In oral nutritional supplement the buyer power is very high, implying strong downward pressure on prices
- The treatment products such as antibiotics which is prescribed by veterinarian leads to compulsion for buyer.
   Switching cost is somewhat low
- Rivalry between one company to another is heavily severe.
- •processes are similar as human pharma, creating similar high costs to develop and release new drugs

Threat of new entrants Bargaining power of suppliers

INDUSTRY COMPETITORS



Bargaining power of buyers

Threat of substitutes

K.S.Niranjan

#### SUPPLIERS - Moderate

- Feed Supplement- Low
- · Therapeutic- Moderate
- ·Biological & Hormonal preparation- High.
- The animal health industry is a primary manufacturer and has few and diversified suppliers.
- Some chemical and other ingredients used by pharmaceuticals company has very high quality standard, this can lead to a form of market power so there are relatively few supplier of a products who can provide those quality assurance

#### SUBSTITUTES - High

- Retailers can be easily replaced by other products.
- Generic manufacturer and local company create substitute for pioneer drugs, these represent a copy cat strategy in feed supplement and anthelmintics.
- High margin and high promotional discount is also another reason for substitutes.
- In pets products and biological products there is less substitute as compare to large animal products.

# **SECTION 4: References**

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