



NMR, Analytical lab, SPARC

## DIRECTORS' Report

Your Directors take pleasure in presenting the Twentieth Annual Report and Audited Accounts for the year ended March 31, 2012.

### Financial Results

(₹ in million except dividend per share and book value)

Particulars	Year ended March 31, 2012	Year ended March 31, 2011
Total Income	43584	33017
Profit after tax	16975	13838
Dividend on Equity Shares	4401	3625
Corporate Dividend tax	714	588
Transfer to various Reserves	2000	5000
Amount of dividend per equity share of ₹1/- each	4.25	3.5
Book value per equity share of ₹1/- each	76	65

### Dividend

An interim equity dividend of ₹ 4.25 per equity share of face value ₹1/- each (previous year ₹ 3.50 per equity share) for the year ended March 31, 2012 as recommended by the Board of Directors of the Company at their Meeting held on August 10, 2012 was paid on August 22, 2012 to the Equity Shareholders of the Company whose names stood on the Register of Members on August 16, 2012. Your Directors recommend that the interim dividend paid as aforesaid be treated as final for the year ended March 31, 2012.

### Management Discussion and Analysis

The Management Discussion and Analysis on the operations of the Company is provided in a separate section and forms part of this report.



“  
CRISIL continued to reaffirm its highest rating of “AAA/ Stable” and “A1+”, for your Company’s Banking Facilities throughout the year  
”

Scheme of Arrangement in the form of spin off and transfer of Domestic Formulation Division of our Company to Sun Pharma Laboratories Ltd., a wholly owned subsidiary of our Company with effect from March 31, 2012

As all of us are aware that, your Company had undertaken the Scheme of Arrangement in the form of spin off and transfer of domestic formulation undertaking of our Company to Sun Pharma Laboratories Ltd., a wholly owned subsidiary of our Company with effect from March 31, 2012. The said spin off has been sanctioned by the Honourable High Court of Gujarat at Ahmedabad and by the Honourable High Court of Judicature at Bombay, pursuant to Sections 391 to 394 of the Companies Act, 1956 on May 3, 2013. On completion of the necessary formalities, the spin off has been effective from March 31, 2012 and the impact of the spin off has been incorporated in the Audited Accounts for the year under review.

### Human Resources

Human Resource development continues to be a key focus area at Sun Pharma and your Company takes great pride in the commitment, competence and vigor shown by its workforce in all realms of business. You have a dedicated team of over 13000 employees at various locations across our corporate office, various R&D Centers & 23 plant locations (including associate companies) spread across three continents. The Company continues to take new initiatives to further align its HR policies to meet the growing needs of its business. Your Directors truly appreciate the efforts and contribution by Team Sun Pharma for maintaining and further accelerating the growth pace.

Information as per Section 217(2A) of the Companies Act, 1956, read with the Companies (Particulars of Employees) Rules, 1975 as amended, is available at the registered office of your Company. However, as per the provisions of Section 219(1)(b)(iv) of the said Act, the Report and Accounts are being sent to all shareholders of the Company and others entitled thereto excluding the aforesaid information. Any shareholder interested in obtaining a copy of this statement may write to the Company Secretary/Compliance Officer at the Corporate Office or Registered Office address of the Company.

### Information on Conservation of Energy, Technology Absorption, Foreign Exchange Earning and Outgo.

The additional information relating to energy conservation, technology absorption, foreign exchange earning and outgo, pursuant to Section 217(1)(e) of the Companies Act, 1956 read with the Companies (Disclosure of Particulars in the Report of the Board of Directors) Rules, 1988, is given in Annexure and forms part of this Report.

### Corporate Governance

Report on Corporate Governance and Certificate of the auditors of your Company regarding compliance of the conditions of Corporate Governance as stipulated in Clause 49 of the listing agreement with stock exchanges, are annexed.

## Consolidated Accounts

In accordance with the requirements of Accounting Standard AS-21 prescribed by the Institute of Chartered Accountants of India, the Consolidated Accounts of the Company and its subsidiaries is annexed to this Report.

## Subsidiaries

The Ministry of Corporate Affairs, Government of India, New Delhi has issued direction under Section 212(8) of the Companies Act, 1956 vide general circular No.2/2011 dated February 8, 2011 and in accordance with the same, the Balance Sheet, the Profit and Loss Account and other documents of the subsidiary companies are not being attached with the Balance Sheet of the Company. The information relating to each subsidiary including subsidiaries of subsidiaries, as required by the aforesaid circular, is disclosed in the Annual Report. The Company will make available the Annual Accounts of the subsidiary companies and the related detailed information to any member of the Company and its subsidiaries who may be interested in obtaining the same. The annual accounts of the subsidiary companies will also be kept open for inspection by any investor at the Registered Office & Corporate / Head Office of the Company and that of the respective subsidiary companies. The Consolidated Financial Statements presented by the Company include financial results of its subsidiary companies also.

## Finance

CRISIL continued to reaffirm its highest rating of “AAA/ Stable” and “A1+”, for your Company’s Banking Facilities throughout the year enabling your Company to avail facilities from banks at attractive rates. The Company does not offer any Fixed Deposit scheme.

## Corporate Social Responsibility

At the close of a relatively event-free, disaster-free year, your Company persisted with participation in activities at the local, grassroots level across health and education. In the past, support has been offered towards disaster relief as well as participation in the facilitation of civic utilities around the plants/research centers. Your Company remains interested in these contributions.

## Directors

Mr. S. Kalyanasundaram, resigned as the Director of the Company with effect from March 31, 2012 so as to relocate himself to the USA to take care of the Group’s business interests in North and South America. The Directors place on record their appreciation of the services rendered by Shri S. Kalyanasundaram during his tenure of

Directorship with the Company. Mr. Israel Makov was appointed as an Additional Director and Chairman of the Company and Mr. Dilip Shanghvi stepped down from the Chairmanship of the Company at Meeting of the Board of Directors held on May 29, 2012.

At the Twentieth Annual General Meeting of the Company held on November 8, 2012 which was adjourned sine die pending approval of the respective High Courts of Gujarat and Bombay, Mr. Keki M. Mistry, Mr. Sudhir V. Valia and Mr. Ashwin Dani retired by rotation and were re-appointed, the appointment of Mr. Israel Makov as a Director of the Company was confirmed and Mr. Dilip Shanghvi was reappointed as the Managing Director of the Company for a further period of 5 years effective from 1st April, 2013.

## Directors’ Responsibility Statement

Pursuant to the requirement under Section 217(2AA) of the Companies Act, 1956, with respect to Directors’ Responsibility Statement, it is hereby confirmed:

- (i) that in the preparation of the annual accounts for the financial year ended March 31, 2012, the applicable accounting standards have been followed along with proper explanation relating to material departures;
- (ii) that the Directors have selected appropriate accounting policies and applied them consistently and made judgements and estimates that were reasonable and prudent so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and on the profit of the Company for the year under review;
- (iii) that the Directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956 for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities; and,
- (iv) that the Directors have prepared the annual accounts for the financial year ended March 31, 2012 on a ‘going concern’ basis.

## Auditors

Your Company’s auditors, Messrs. Deloitte Haskins & Sells, Chartered Accountants, Mumbai, have already been re-appointed at the Twentieth Annual General Meeting of the Company held on November 8, 2012.

### Cost Auditors

The Company has appointed Messrs Kailash Sankhlecha & Associates, Cost Accountants, Vadodara as Cost Auditors of our Company for conducting Cost Audit in respect of Bulk Drugs & Formulations of your Company for the year ended March 31, 2012.

### Acknowledgements

Your Directors wish to thank all stakeholders and business partners, your Company's bankers, financial institutions, medical profession and business associates for their continued support and valuable co-operation. The Directors also wish to express their gratitude to investors for the faith that they continue to repose in the Company.

For and on behalf of the Board of Directors

**Dilip S. Shanghvi**                      **Sudhir V. Valia**  
Managing Director                      Whole-time Director

May 28, 2013

Mumbai

## ANNEXURE (1) TO DIRECTORS' REPORT CONSERVATION OF ENERGY

2011-12    2010-11

### A. Power and Fuel Consumption

1. Electricity		
(a) Purchased		
Unit (in '000 KWH)	38915	26,775
Total Amount (₹ in Millions)	251	151.5
Rate (₹ /Unit)	6.5	5.7
(b) Own Generation through Diesel Generator		
Units (in '000 KWH)	3,882	2,702
Units per Litre of Diesel Oil	2.9	3.1
Cost (₹ /Unit)	14.8	12.9
(c) Own Generation through Gas		
Units (in '000 KWH)	44,772	45,219
Units per M3 of Gas	3.7	10.8
Cost (₹ /Unit)	6.4	5.5
2. Furnace Oil		
Quantity (in '000 Litres)	568	771
Total Amount (₹ in Millions)	22.8	20.5
Average Rate	40.2	26.6
3 Gas (for Steam)		
Gas Units (in '000 M3)	6,874	6,395
Total Amount (₹ in Millions)	120.6	119.8
Average Rate (₹ /Unit)	17.5	18.7
4 Wood / Briquette		
Quantity (in '000 Kgs)	19,146	29,008
Total Amount (₹ in Millions)	92.1	65.8
Average Rate (₹ /Unit)	4.8	2.3

### B. Consumption per unit of production

It is not feasible to maintain product category-wise energy consumption data, since we manufacture a large range of formulations and bulk drugs that have different energy requirements.

### C. Energy conservation measures

- 1 Improvisation and continuous monitoring of Power Factor, and replacement of weak capacitors after conducting periodical checking of capacitors. We have been able to maintain the Power Factor near unity (above 0.99) and been able to avail rebate.
- 2 Alternative energy sources like steam have been used in place of electricity for heating de-mineralized water, in fluid bed dryers for producing hot air systems, for coating department and for making starch paste. Condensate is collected from equipment and diverted to Boiler Feed water.
- 3 We are using small 600kg baby non IBR boiler instead of Briquette boiler, and can use DG set with smaller capacity for limited periods as at night or on weekly off / Holiday.
- 4 Proper maintenance and preventive maintenance of boilers, resulting in saving of furnace oil .
- 5 Recirculation of condensate water to hot water tank, resulting in saving of water.
- 6 All AHU's have VFD for optimizing power consumption.
- 7 Auto Voltage regulator and Power Factor management system are maintained in the power distribution system.
- 8 Chilled / Cooling water secondary pump stopped by flow optimization to get proper temperature difference across secondary loop.
- 9 Temperature indicator and Controller have been installed in cooling tower fan so that the fans do not run when cooling tower temperature is as per desired range.

## TECHNOLOGY ABSORPTION

### A. Research and Development

1. Specific areas in which R&D is carried out by the Company  
  
We. continue to make fairly large investments for generic-related pharmaceutical research and technology. This research supports our generic business across all the markets we're present in, and ensures

we have a healthy pipeline for future growth. At our four modern R&D centres, expert scientist teams are engaged in complex developmental research projects in process chemistry and dosage forms, including complex generics based on drug delivery systems. This work across formulations and API supports the short, medium and long term business needs of the Company, in India and across .world markets

Projects in formulation development and process chemistry help us introduce a large number of new and novel products to the Indian and rest of the world markets including products with complexity or a technology edge. Expertise in medicinal/ process chemistry equips us to be integrated right up to the API stage, for important products, or products where the API is difficult to source. Strong new product capability is an important part of our strategy, and R&D expertise helps us maintain our leadership position in the Indian and ROW markets with specialty formulations.

The team also works on products that are based on complex drug delivery systems. Complex API like steroids, sex hormones , peptides, carbohydrates and taxanes which require special skills and technology, are developed and scaled up for both API and dosage forms. This complete integration for some products works to the company's advantage. These projects may offer higher value addition and revenues.

#### 2. Benefits derived as a result of the above R&D

In 2011-12, 22 formulations were introduced across marketing divisions, (not including line extensions, but including complex products). All of these were based on technology developed in house. Technology for 25 API was commercialised. For some of the important API that we already manufacture, processes were streamlined or altered so as to have more energy efficient or cost effective or environment friendly processes. Some of the new processes were developed to be non-infringing, so as to support our plans for ANDA filings for the US. A large part of our API sales is to the regulated market of US / Europe, and earns valuable foreign exchange, as also a reputation for quality and dependability. The company's formulation

brands are exported to over 40 international markets where a local field force promotes the same. In addition, Taro's formulation development capability supports the filing and scale up of ANDAs for the US and other markets where it is present.

The Department of Scientific and Industrial Research, Ministry of Science and Technology of Government of India has granted approval to the in house research and development facility of your Company under the provision of the Income Tax Act, 1961.

### 3. Future plan of action

We will continue to invest in people, equipment, infrastructure to compete effectively across world markets. Taro is likely to invest more in R&D as it ramps up its product pipeline for the US.

### 4. Expenditure on R&D

	Year ended 31st March, 2012 ₹ in Million	Year ended 31st March, 2011 ₹ in Million
a) Capital	352.1	236.1
b) Revenue	1831.9	1572.8
c) Total	2184.0	1808.9
d) Total R&D expenditure as % of Total Turnover	9.1%	9.4%

## B. Technology Absorption, Adaptation and Innovation

### 1. Efforts in brief, made towards technology absorption, adaptation and innovation

Year after year, your company continues to invest on R&D. A large part of the spend is for complex products, ANDA filings for the US, and API technologies that are complex and may require dedicated manufacturing sites. Investments have been made in creating research sites, employing scientifically skilled and experienced manpower, adding equipment and upgrading continuously the exposure and research understanding of the scientific team in the technologies and therapy areas of our interest.

### 2. Benefits derived as a result of the above efforts e.g. product improvement, cost reduction, product development, import substitution

- Market leader for several complex products. Offers complete baskets of products under speciality therapeutic classes. Strong pipeline of products for future introduction in India, emerging markets, as well as US and European generic market. Ability to challenge patents in the US market, and earn exclusivity.
- Not dependent on imported technology, can make high cost products available at competitive prices by using indigenously developed manufacturing processes and formulation technologies.
- Offer products which are convenient and safe for administration to patients, products with a technology advantage.
- We are among the few selected companies that have set up completely integrated manufacturing capability for the production of anticancer products, hormones, peptide, cephalosporins and steroidal drugs.
- The Company has benefited from reduction in cost due to import substitution and increased revenue through higher exports.

### 3. Your Company has not imported technology during the last 5 years reckoned from the beginning of the financial year.

## C. Foreign Exchange Earnings and Outgo

	Year ended 31st March, 2012 ₹ in Million	Year ended 31st March, 2011 ₹ in Million
1. Earnings	14645.9	9005.6
2. Outgo	6368.6	5156.8



# MANAGEMENT Discussion and Analysis



## THE GLOBAL PHARMACEUTICAL INDUSTRY

The global pharmaceutical market is estimated to have registered a growth of 6.6% in 2011, to touch a market value of US\$880 billion <sup>[1]</sup>. The epicentre of the global pharmaceutical market has been gradually moving from the developed markets to emerging countries. The developed markets are witnessing a watershed period of patent expiry. That, and an almost universal focus on cost containment have resulted in a transition from brand spending to generics globally.

## Long-Term Growth Drivers <sup>[3]</sup>

- Growing share of healthcare budget is being used for drug therapy
- Improved compliance rates among patients
- Increased diagnosis of conditions that don't present obvious symptoms
- Emergence of new therapeutic platforms or new treatment alternatives for existing disease
- Aging population, economic development, need for cost containment



Spending on medicines is expected to be over US\$1 trillion in 2014 and reach US\$1.1 trillion by 2015.



Organic Chemistry Department, Baroda

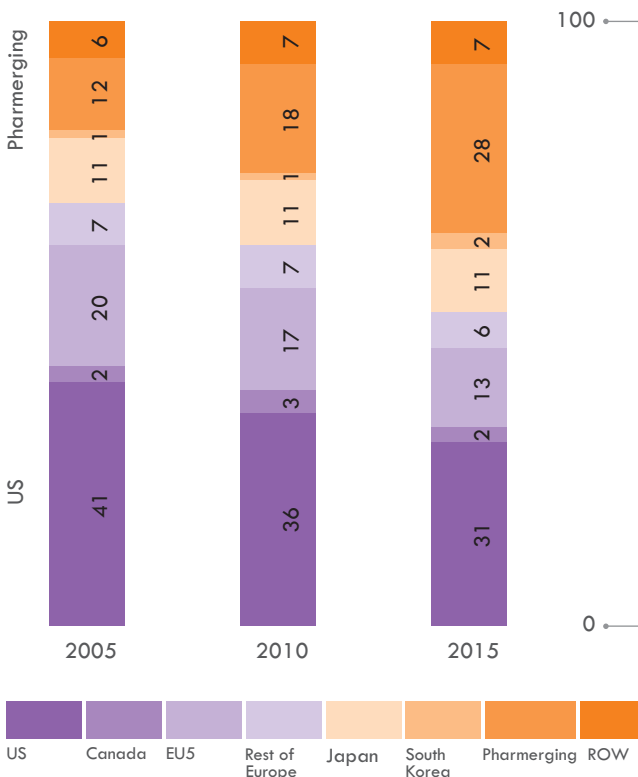
Outlook <sup>[4]</sup>

- Spending on medicines is expected to be over US\$1 trillion in 2014 and reach US\$1.1 trillion by 2015.
- Absolute growth in spending would likely be around US\$210-240 billion, growing at a CAGR of 3-6% between 2011-15.
- The US share of global spending is projected to decline from 41% in 2005 to 31% in 2015, on account of patent expiries for several important products. However, volume growth is expected to continue.
- Spending by the EU 5\* countries is anticipated to decline to 13% from 20% by 2015, as the market continues to move from branded to branded generic/ generic.
- Driven by demographics and economic trickle-down, the pharmerging\*\* market are expected to outpace other markets, and to contribute 28% to the global spending by 2015 from 12% in 2005.

(\*Germany, France, Italy, Spain and UK)

(\*\*China, Brazil, India, Venezuela, Poland, Argentina, Turkey, Mexico, Vietnam, South Africa, Thailand, Indonesia, Romania, Egypt, Pakistan, Ukraine and Russia.)

Percentage share of spending by Geography <sup>[2]</sup>



The global pharmaceutical market is predicted to cross the \$1 trillion mark in 2015, approximately \$400 billion to \$430 billion, or 39 percent <sup>[5]</sup>, will come from the sale of generic drugs.



Global Generics

The global pharmaceutical market is predicted to cross the \$1 trillion mark in 2015, approximately \$400 billion to \$430 billion, or 39 percent <sup>[5]</sup>, will come from the sale of generic drugs.

The peak phase of patent expiries of blockbuster drugs commencing from 2012 is expected to provide a solid base for the robust growth of generics. The US, UK, Germany, France, Canada, Italy, Spain and Japan account for 80% of the global generic market. Generic markets are expected to continue showing growth driven by cost containment strategies implemented by governments, a shift towards cheaper generics, aging populations and treatments sought for chronic disease. <sup>[6]</sup>

Trends <sup>[7]</sup>

- The global generics market is anticipated to touch around US\$ 400-430 billion by 2015 from US\$ 225 billion in 2011.
- The North American market, the largest generics market, is expected to be almost US\$73 billion in 2011, and projected to grow at a CAGR of 7.9% to reach US\$ 107 billion in 2016. Currently, over 78% of prescriptions in the US are filled with generics.
- Emerging economies represent the second largest generic market, with a value of US\$57 billion in 2011, projected to grow at a CAGR of 15.1%, reaching a market value of US\$115 billion by 2016.



## Branded Drugs vs. Generics<sup>[4][8][9]</sup>

### BRANDED DRUGS

#### SPENDING

Accounted for 64% in 2010 of total global pharma spending, the share is expected to decline to 53% in 2015

#### GROWTH

Protected brands are projected to grow at 7-8%

#### US

Patent expiries of branded drugs are estimated to be ~US\$97 billion between 2011-15. New product approvals are slowing down, which may mean lesser generic products in the future

#### CHALLENGES

Higher FDA approval hurdles, patent exclusivity risk, weak pipelines and reimbursement pressure

### GENERICS

#### SPENDING

Accounted for 27% of the global pharma spending, the share is expected to rise to 39% in 2015

#### GROWTH

Generic drugs are projected to grow at a CAGR of 9.7%

#### US

Generics market expected to touch US\$ 83 billion by 2020

#### CHALLENGES

New market entrants, patent settlement scrutiny, customer cost pressures intensifying and greater FDA manufacturing/quality expectations



Autoclave, Panoli plant

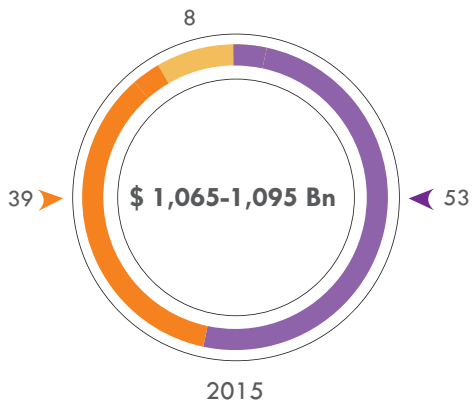
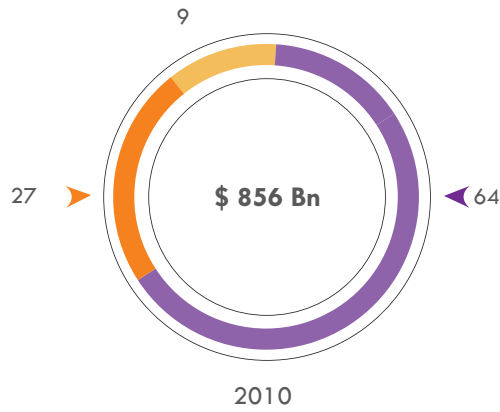
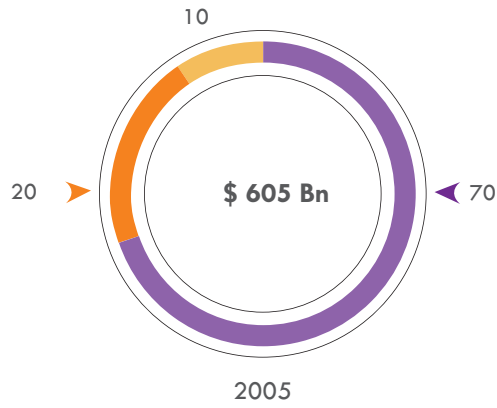
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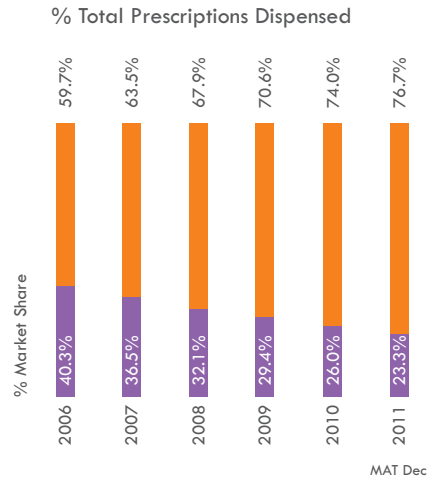
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### Segment-wise spending (%) <sup>[4]</sup>



### Generics Share



## API

The global API market is estimated to be growing at a CAGR of around 8% during 2012-2015, driven by factors such as patent expiration of blockbuster drugs, and increasing sales of generics and branded generics worldwide.

According to an industry association, contract manufacturing and outsourcing is a \$45 billion market in 2012, and API and intermediates account for 60% of this opportunity. Global API sales are expected to reach \$126.3 billion in 2015.

Synthetic APIs continue to dominate global API markets. However, the growth in biotech APIs is expected to be faster. Given the complexities of manufacture, biotech products continue to be largely made in-house by originator companies even after patent expiry.

Although, the API industry is highly fragmented, consolidation is expected to take place. As big pharma continues to scale down on manufacturing, more opportunities will evolve for outsourced molecules both in bio pharmaceuticals and small molecule API segments.



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SPARC Centre, Baroda

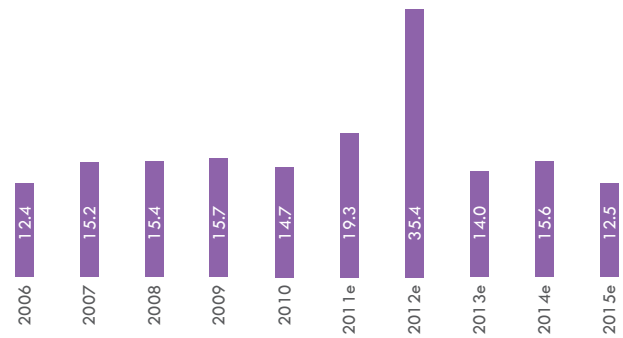
## USA

The US is the largest pharmaceutical market, valued at \$320 billion in 2011. Factors that have fuelled the growth of the US market include the large US health care system, high per capita income and large investments in drug development. It is also the largest generic market, driven by demand for cost-effective drugs, government regulations, and patent expirations. The US is expected to face the highest patent expiries (to the tune of US\$97 billion) between 2011-15 <sup>[6]</sup>.

The US pharmaceutical market is expected to grow at a CAGR of around 1-4% over 2011-15. The US's share of global spending is set to decline to 31% in 2015, from 41% in 2005, although it is likely to witness the largest expansion of generic spending <sup>[11]</sup>.

## Value of patent expiries in US<sup>[12]</sup>

(US\$ billion)



API Plant, Panoli

## Executive orders passed by the US government

In recent years, shortages of pharmaceutical drugs have posed a serious threat to public health in the US. The affected medicines range across cancer treatment, anesthesia drugs, and other drugs, which are an integral part of critical care. Most of these drugs belong to the sterile injectable segment. President Obama had signed an Executive Order to help the FDA in its efforts to prevent and resolve prescription drug shortages.

## Major reasons for drug shortages in the US <sup>[13]</sup>

- Manufacturing constraints
- Stringent manufacturing norms enforced by the USFDA, which lead to shutdown of facilities
- Use of capacity to make other products
- Limited supplies of some ingredients

## Strategic initiatives taken at the FDA to prevent drug shortages <sup>[14]</sup>

- Requires drug manufacturers to notify in advance production discontinuation
- USFDA intends to proactively expedite regulatory reviews, evaluate new drug suppliers, manufacturing sites, and manufacturing changes in order to mitigate potential drug shortages
- USFDA to involve Department of Justice when required; for example, if shortages have led market participants to stockpile the affected drugs or sell them at exorbitant prices

USFDA says the number of drug shortages has nearly tripled over the last six years - jumping from 61 drug products in 2005 to 178 in 2010 - and that doesn't include shortages of vaccines, immune globulin products, and other biologics, or products made from blood, tissue, or other biological source.

After the Executive Order was implemented, FDA's efforts made a significant difference in avoiding shortages. In a span of just six months post the order, the USFDA could prevent 128 shortages. 42 new drug shortages were reported till May 2012 <sup>[15]</sup>.

## GDUFA: User Fee Framework to aid timely approvals at the US FDA

In September 2011, the FDA announced the ratification of a proposed Generic Drug User Fee Act (GDUFA) to collect fees from finished dose and API manufacturers and use them for the review of ANDAs, referenced DMFs and conduct associated facility inspections for fiscal years 2012-2017. The program would provide the FDA with funds to adequately resource the review ANDAs in a timely manner, provide transparency within the complex pharmaceutical supply chain, and improve the safety of generic medicines.

These new regulations will also require the identification of facilities involved in manufacturing both finished dose and active ingredients, and by 2017, ensure parity of inspections between US and overseas manufacturers, with a goal of biennial inspections of both finished dose and API manufacturers.

By the end of 2017, FDA has indicated that it would try to review 90% of the backlog ANDAs and reduce the primary review time for ANDAs submitted after Oct. 1, 2012 to 10 months. Currently there are more than 2,000 ANDAs queued in the approval backlog.

The annual funding from GDUFA user fees is agreed at \$299 million (inflation adjusted) to be implemented as on October 1, 2012 and would continue for a period of five years till 2017.

Approximately half of the fees are expected to come from finished dosage form facilities, with the remaining half divided among fees from ANDA filings, API facility fees and DMF first reference fees.

## Shift to pharmerging economies

The pharmaceutical market is witnessing a gradual shift from developed markets to emerging markets. Incremental growth in the global pharmaceutical market will likely emanate from emerging markets, especially Brazil, Russia, India, China, Turkey and South Korea. The pharmerging markets are expected to grow at a CAGR of 13-16%<sup>[16]</sup> for the next decade.

Pharmerging markets are being driven by growth in their economies, rising per capita income, increasing prevalence of lifestyle diseases led by rapid urbanization, enhanced access and affordability for healthcare services. Most of these markets are branded generic markets with strong local competition and strong or increasing multinational interest. While most of the governments are pro-generic, there is a likelihood of pricing controls in some of these markets, or moves that may treat local manufacturing preferentially.

## Pharmerging markets CAGR 2011-15 <sup>[11]</sup>

Tier 1 (China)	16-19%
Tier 2	12-15%
Brazil	12-15%
Russia	11-14%
India	14-17%
Tier 3	10-13%
Pharmerging	13-16%

## Pharmerging markets growth trends <sup>[17]</sup>

	Brazil	Mexico	Russia and CIS	S. Africa	Turkey	MENA**
GDP Growth (%) 2012	4.0%	4.0%	4.5%	4.3%	2.3%	3.8%
Healthcare spending as % of GDP	7.5%	7.5%	5.5%	8.70%	6.70%	6.00%
Nature of market	Branded Generic	Branded Generic	Branded Generic	Branded Generic	Branded Generic	Branded Generic
Generic Penetration (volume)	60%	65%	70%	40%		NA
Out of pocket spending	30%	83%	75%	70%	20%	80%
Market size (2010) US\$ Bn	22.9	11	15.5	4.0	9.0	7.3
Expected market size by 2015 US\$ Bn	33	19	26	8	15	13
CAGR	8%	12%	11%	15%	11%	12%
Regulatory Environment	Pro-generic	Pro-generic	Pro-generic	Pro-generic	Regulated	Semi-regulated
Distribution network	Concentration is high among wholesalers	Concentration is high among wholesalers	Wholesalers concentration is high with over 80% share among top-3 players	Concentration is high among wholesalers	Concentration is high among wholesalers	Fragmented
Local competition	Dominated by local players	Dominated by local players	Dominated largely by global pharma companies	Highly concentrated market; high competition from local players	High level of local competition	Fragmented market

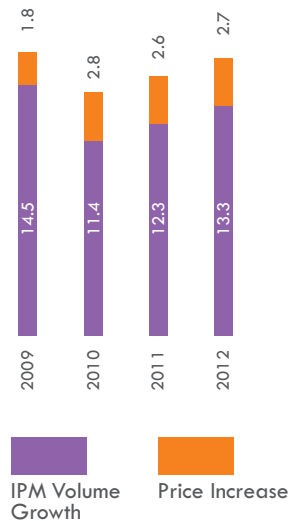
\*\* Middle East and North Africa



## OVERVIEW OF THE INDIAN PHARMACEUTICALS SECTOR

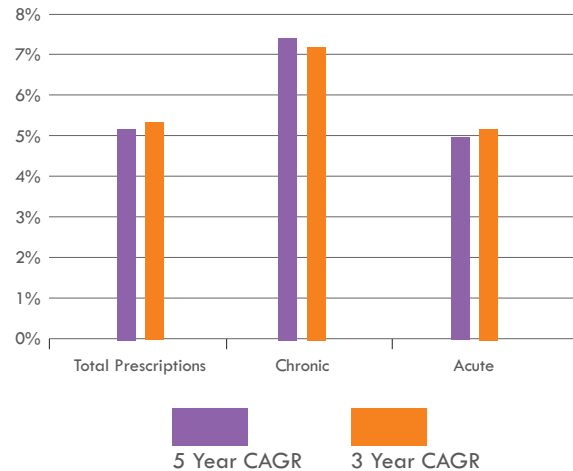
The domestic pharma industry has registered a growth of 16%, highest in the past three years, during 2011-12<sup>[18]</sup>. The Indian pharmaceutical market is anticipated to expand to US\$ 55 billion by 2020, from US\$ 12.3 billion in 2010.

### Volume growth of domestic market (%) <sup>[19]</sup>



The Indian pharmaceutical market is highly fragmented and competitive. Over the past few years, the market has witnessed fundamental shifts: an increase in lifestyle related diseases,

### Segmental growth <sup>[19]</sup>



improving healthcare infrastructure and delivery systems and gradual penetration in smaller towns and rural areas.

## National Pharmaceutical Pricing Policy, 2013

To regulate and control the pricing of the National List of Essential Medicines (NLEM), the Government of India, released the National Pharmaceutical Pricing Policy (NPPP) in 2013. The provisions are in accordance with the regulatory pricing framework of essential drugs, based on their strengths and dosages. These drugs satisfy the healthcare needs of a majority of the population. However, combination drugs are not under the purview of price control. Further, any new combination of two NLEM products or an NLEM combination will require Government approval (to be covered under the Department of Pharmaceuticals, which will monitor the quality and production of the NLEM drugs). The government expects the policy to become effective in 2013.

### Pricing control

The NPPP proposes to bring 348 essential medicines, as specified in NLEM, under price control. The prices of these drugs are based on the fixing of a Ceiling Price (CP) on the market-based pricing (MBP) basis. The manufacturers of these drugs will have to fix a price for their products equal to or below CP. The policy will be applicable for the imported drugs as well.

## Annual price increments

An automatic annual price adjustment, linked to the Wholesale Price Index, will be allowed for the products. The CP will go through a revision every five years and as and when there is a revision in the NLEM.

## Existing DPCO drugs

The existing DPCO products which are also a part of NLEM will attract the provisions of the NPPP after completing one year from the date on which the current prices were notified under the existing policy. The existing DPCO products which are not a part of NLEM 2011 will not attract price controls.

## Original research products

Original research products, having either process or product patents registered in their names, will not be covered under the purview. Moreover, New Drug Delivery System (NDDS) products are exempted from the purview for five years.

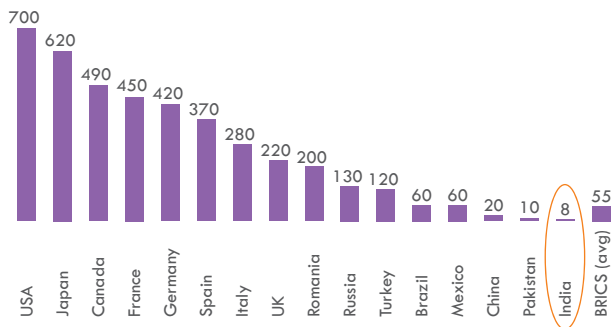
## Growth Drivers <sup>[21]</sup>

### Rising per capita income

India's per capita income and healthcare expenditure are directly correlated. Currently, India's per capita expenditure (US\$ 8) on healthcare is one of the lowest globally. Hence a rise in per capita income may result in higher healthcare spending. Healthcare spending is expected to result in significant growth rates over the next two decades across various sectors. The healthcare spend is expected to touch 13% of the GDP by 2025.

### India's per capita spend on healthcare

(USD)



### Rising health insurance penetration to improve affordability

At present, a very small proportion of Indian population is covered by health insurance. Going ahead, the health insurance sector is expected to show robust growth on the strength of regulatory reforms (non-life tariff deregulation), lower capital requirements for players, and increase in FDI limits and so on. An increase in health insurance penetration would help patients access complex therapies and stimulate the demand for pharma products.

### Rising government expenditure on healthcare

According to the India Brand Equity Foundation (IBEF), the rising government spends on healthcare augurs well for the sector. Currently, healthcare expenditure stands at 1.4% of the GDP, which is expected to increase to 2.5% of GDP by the end of the Twelfth Five-Year Plan (2012-17).

## Proposed initiatives <sup>[22]</sup>

- Permission of 100 percent FDI for health and medical services under the automatic route
- Increased fund allocation for the National Rural Health Mission (NRHM) from ₹ 181 billion in 2011-12 to ₹ 208 billion in 2012-13
- Launch of the National Urban Health Mission
- Various initiatives under Pradhan Mantri Swasthya Suraksha Yojana

## Improving healthcare infrastructure <sup>[21]</sup>

India has one of the lowest hospital beds to people ratio amongst emerging countries (9 beds per 10,000 people), the ratio is likely to double by 2015. The country's current doctor-population ratio (5 doctors per 10,000 people) is low compared to many countries of the world. This ratio is also set to improve, following an increase in the number of students seeking admission to medical colleges.

## Rising urbanization

The urban population is expected to reach 34% of the total population by 2020.

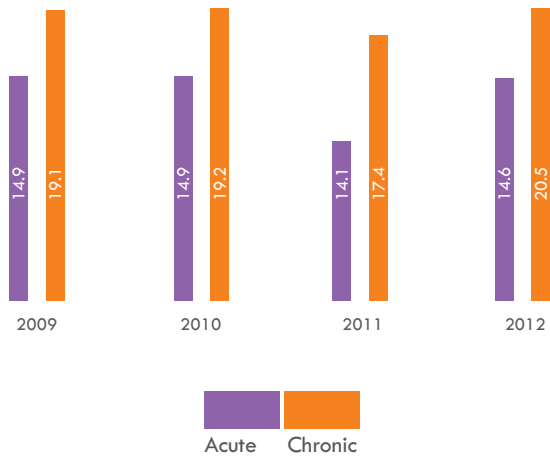
A combination of increasing urbanization, higher affordability, better medical infrastructure and wider detection and treatment of chronic diseases is expected to lead to healthy demand growth for pharmaceuticals.

## Chronic and acute segments

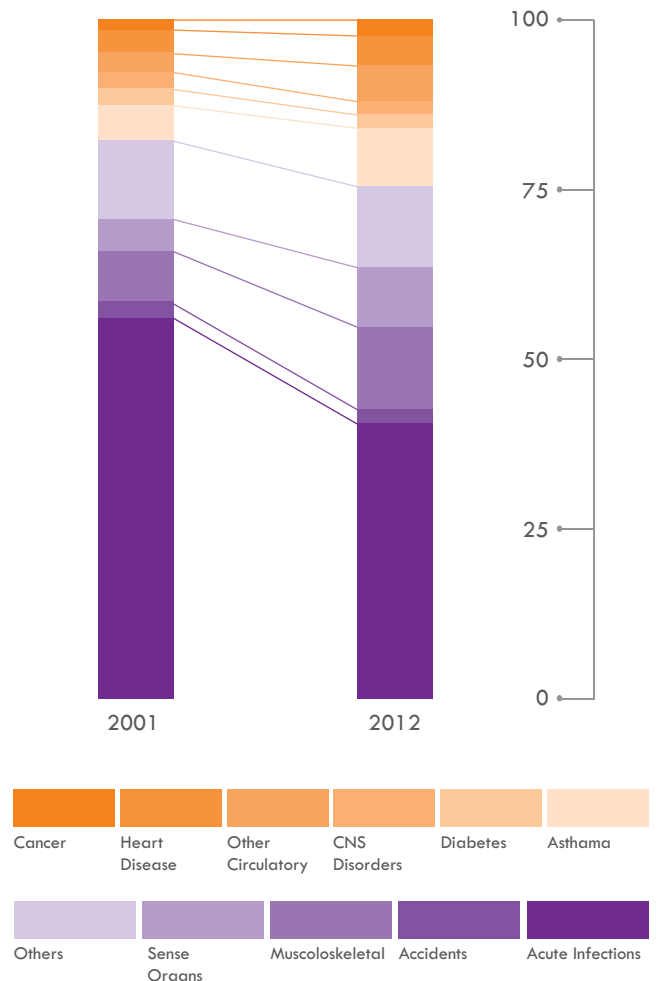
The chronic segment saw a strong growth of 21% during the year 2011-12, driven by higher prevalence and improved contribution from higher value new products. The acute segment has also registered steady growth of 14%-15%. The growth in chronic segment is driven by a) higher prescription compliance (led by rising disposable income and health awareness) b) higher growth for chronic drugs and increase in proportion of chronic prescription c) increase in contribution from generic-generic and OTC drugs and d) doctor's prescribing more medicines per prescription <sup>[18]</sup>.

Already a competitive market, competition is expected to intensify as global players enhance Indian operations and domestic players expand market presence.

### Growth in acute and chronic segment (%) <sup>[18]</sup>



### Shift in disease profile towards chronic ailments (%) <sup>[23]</sup>





API Plant, Ahmednagar

## SUN PHARMACEUTICAL INDUSTRIES LIMITED (SUN PHARMA)

//

22 ANDA approvals received from the USFDA, including the first generic Sumatriptan autoinjector and generic Cardizem CD.



### 2011-12, a round-up

- In the ongoing pending litigation regarding generic Pantoprazole products, Wyeth had submitted to the District Court confidential expert reports claiming damages against defendants, arising out of defendants earlier at-risk launches. Wyeth's experts have estimated the purported damages from Sun Pharma to be \$ 960 million.
- Due to the critical shortage in the US market of Doxil® (Doxorubicin HCL liposome injection) from Janssen Products (a subsidiary of Johnson and Johnson), we coordinated with the USFDA for temporary import of Lipodox into the US market.
- Taro sales grew 32% primarily based on price increases
- Indian branded generics grew 22% to reach ₹ 29,154 million, as reported.
- ROW branded generic sales (which includes Taro's sales in ROW markets) grew 61% to reach ₹ 11,124 million
- 22 ANDA approvals received from the USFDA, including the first generic Sumatriptan autoinjector and generic Cardizem CD.
- R&D expenses were ₹ 4,449 million
- In a landmark judgment on Prandin, the US Supreme Court concluded that Caraco can seek correction of Novo Nordisk's inaccurate use code. This decision is expected to prevent brand companies from improperly delaying or preventing generics by misrepresenting their patents to the USFDA.

# FINANCIAL Highlights 2011- 12

40%



**Net sales** grew 40% to reach ₹ 80,057 million

**Staff cost** is 15% of net sales

15%

41%



**EBITDA** jumped 41% to reach ₹ 32,506 million

**Other expenditure** is 24% of the net sales

24%

34%



**Net profit** surged 34% to reach ₹ 26,567 million

**EBIT** margin is at 37%

37%

21%

**Material cost** stood at 21% of net sales

**Diluted EPS** is ₹ 25.70, significantly up from ₹17.5 for the last year

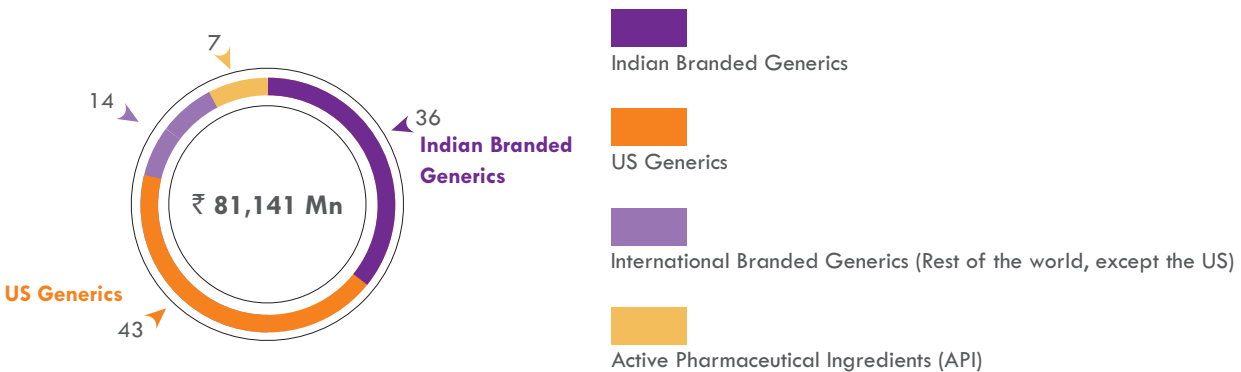


₹ 25.7

## Note

Financials include significant components of non-recurring sales and profits contributed in second half of FY 12

## Revenue pie business division wise in 2011-12 (%)



### Indian branded generics

Divisional revenue	₹ 29,154 million
Divisional revenue growth	23%
Last 5-year revenue CAGR	20%
Divisional revenue share in total revenue	36%
Market share	4.6%

### DIVISIONAL OVERVIEW

- We continue to add strength in chronic therapy areas with a complete basket of products including several technically complex products.
- Our 3,600-strong representative team continues to build prescription share based on ethical and scientific marketing aimed at 140,000 specialist doctors.

### Divisional strength

- Fourth largest branded generics player in India by prescription share
- Ranked 1 based on the share of prescriptions by six classes of specialists: psychiatrists, neurologists, cardiologists, ophthalmologists, orthopaedics and gastroenterologists.
- Market leader in chronic segments
- Amongst the top 3 in over 50% of more than 600 brands
- Extensive chronic area coverage – from older molecules to the latest alternatives for that therapy area

### Divisional round-up, 2011-12

- Revenues increased from ₹ 23,801 million in FY 11 to ₹ 29,154 million in FY 12. This includes an element of one time sales of ₹ 1.8 billion in the fourth quarter.
- Market share of 4.6% for the year ending March 31, 2012, according to AIOCD AWACS.
- Launched 22 products including several technology-based products
- Licensed-in two anti-diabetic brands from Merck-Istamet and Istavel.
- At the close of the year, top 10 brands contributed 20% to domestic formulation sales.

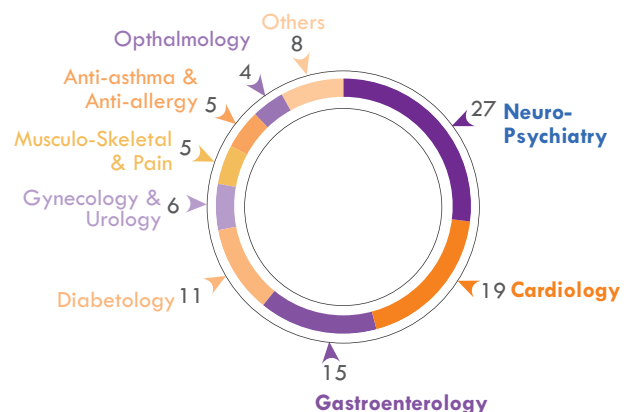


Blender, API processing area

### Divisional strategy

- Focus on regular coverage of key prescribing doctors
- Use innovative, informational marketing inputs that enhance knowledge, keep improving the quality of these inputs
- Introduce and market niche products that meet patient requirements better, improve the quality of life

### Divisional revenue pie: Therapy-wise (%)





## Partnership for India

Last year, Sun Pharma and MSD (India) entered into a strategic partnership to co-market MSD's diabetes drugs, Sitagliptin and Sitagliptin plus Metformin with the brand names Istavel and Istamet.

This molecule offers the benefits of a new class of drugs much earlier in the patients' disease cycle, and this partnership takes the drug to more patients than would be otherwise possible.

We continue to run focused and lean marketing divisions that rank among the most efficient in the country. Since we operate in a multi source branded generic market, building strong customer relationships is of primary importance, and we continue to focus on building trust through academic activities and continuing medical education-directed marketing. Several programs in Neurology/ Psychiatry were held, like the internationally renowned Movement Disorder- Aspen course, Neuro Ophthalmology & Neuro-Otology

Course, Neurosurgery Conference on Controversies and Consensus, etc. To meet the educational needs of Gastro PG students, a program called GYM (Gastroenterology Young Masters) was organized along with Indian Society of Gastroenterology. A patient education booklet was created for IBD to help patients live better. CME programs brought excellent international conferences such as The Best of ADA, The Best of ACC, Nephrology Summit, Endocrine Summit etc.

### Therapy-wise Ranking <sup>[24]</sup>

Therapeutic segment	Ranking
Psychiatrists	1
Neurologists	1
Cardiologists	1
Orthopaedic	1
Ophthalmologists	1
Gastroenterologists	1
Diabetologists	2
Chest Physicians	4
Nephrologists	5
Oncologists	7
Gynaecologists	7
Consulting Physicians	8

### Top 10 brands contribute 20% of the sales in India

Brand	Therapy
Pantocid	Proton pump inhibitor/ antiulcerant
Glucored Group	Oral antidiabetic
Aztor	CVS, cholesterol reducing agent
Susten	Women's healthcare
Pantocid-D	Proton pump inhibitor/ antiulcerant
Gemer	Oral antidiabetic
Levipil	CNS
Clopilet	CVS, anticlotting agent
Repac Group	CVS, Hypertension
Cardivas	CVS

## US generics

Divisional revenue	₹ 34,716 million
Divisional revenue growth	57%
Last 5-year revenue CAGR	46%
Divisional revenue share in total revenue	43%

## DIVISIONAL OVERVIEW

We continue to build our US generics business based on products that offer volume, where we can employ cost and manufacturing efficiencies; as well as relatively limited competition products such as controlled substances, dermatologicals, and the rare patent-challenge based product. While we continue to gradually add prescription share, our current size is fairly small compared to the market opportunity.

A strong manufacturing backup supports our US plans with plants on mainland US as well as elsewhere - three facilities each in the US and India, and plants in Canada, Israel and Hungary. One of the US sites is approved for controlled substances.

## Divisional strength

- Product basket includes large generics and limited competition products
- Selective patent challenge.
- Launched technically complex products, such as Sumatripan auto injector, Diltiazem CD, Azelastine nasal spray. In the past have launched Amifostine, Lupreolide, Octreotide and Vecuronium



Analytical Development Department, Baroda

## Divisional strategy

- Focus on complex generics, including injectables and differentiated dosage forms
- Flexibility for filings from Indian locations as well as plants in the US
- Several products integrated to own API
- Capability for manufacturing large volumes.

## ANDA Filings and Approvals

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11 (with Taro)	2011-12
Filings	40	59	96	142	177	207	377	397
Approvals	15	20	29	53	69	84	225	250

Taro's net sales grew 29% to US\$ 506 million in 2011; simultaneously the net profit escalated to US\$ 183 million. This growth in revenues is led by short term price increase on a select set of products, volume growth has been flat.

Our Detroit production facility-previously Caraco's plant-which had been shut following FDA action and a consent decree in 2008, continues to be non-operational. Remediation efforts at the facility are ongoing, and our internal quality compliance teams have been working with consultants to make the plant operational. However, overall sales of products from other manufacturing locations have been good during the year, partly driven by Lipodox and limited competition products.

## International Generics (ex-US)

Divisional revenue	₹ 11,124 million
Divisional revenue growth	61%
Last 5-year revenue CAGR	41%
Divisional revenue share in total revenue	14%

## DIVISIONAL OVERVIEW

Our presence encompasses branded generics and generics across ROW markets.

Branded generics, often with the same brand name as we have in India, are marketed in over 40 emerging markets. Each country has a unique selection of products, and a field force on the ground. Our major markets are Mexico, Brazil, CIS, China, and South Africa. A well trained team of 600 sales representatives promotes brands to doctors in order to create a prescription pull. While we reach most markets with products manufactured at our approved plants in India, we have also set up plants in Brazil, Mexico and Bangladesh in order to be able to compete better.

Generics, mainly hospital injectables, are sold in Western Europe. Taro's dermatologicals and other generics find markets across Europe, Canada and Israel.

### Divisional strength

- Over 1,600 registered products and more than 900 products in the pipeline
- Using technology as a differentiator
- Country specific product selection

### Divisional round-up, 2011-12

- In Mexico, one of our key markets and where we're present through a joint venture, we have registered good growth with a basket of CNS products, and have begun to register other products.
- Sun Pharma successfully completed filings of a few speciality products in Brazil. This market has one of the most stringent registration processes in the world
- In Russia, we have launched and established certain speciality products that have received good prescription support.



Halol Plant

**Sun Pharma and MSD partnership for Innovative Branded Generics:** This partnership, as we had shared last year, has commenced identification of products for development. The joint venture seeks to develop, manufacture and commercialize new combinations and formulations of incrementally innovative, branded generics in the emerging markets, excluding India. The joint venture would have access to SPARC Ltd's technologies as well, in these emerging markets.

### Divisional strategy

- Focus on chronic therapies like metabolic syndrome, diabetes, neurology and cardiology
- Expanding into newer geographies

### Future plans

- Sun Pharma is scouting for add-on acquisition opportunities in key markets
- Open to partnering with innovative companies to enrich product pipeline
- Plan to add new therapeutic segments in select markets: oncology, ophthalmology, cardiology.

## API

Divisional revenue	₹ 6,147 million
Divisional revenue growth	18%
Last 5-year revenue CAGR	14%
Divisional revenue share in total revenue	7%

### DIVISIONAL OVERVIEW

Backward integration into specialty API has helped us compete globally. We make the API for some of our key products, and meet a large part of our internal requirement.

We are also a large player in products like Pentoxifylline, Clomipramine and Mesalazine, which we supply to large international companies and branded generic companies.

Our Panoli and Ahmednagar API facilities hold international approvals and have special facilities to manufacture peptides, anti-cancers, steroids and sex hormones. Our Hungary unit and Tennessee plants are specialised for controlled substances. Taro has API plants in Israel and Canada with significant approvals.



Dissolution Lab, Baroda

### Divisional strength

- Marketed in over 56 countries, sold to large companies or innovator companies
- Manufacture over 170 APIs; most of these are used inhouse to manufacture our brands
- Taro manufactures 107 APIs
- World-class facilities, accredited by ISO 14001 and ISO 9002
- Most of our plants have developed market approvals : USFDA / European/ Australian
- Scale up around 25 API processes annually

### Divisional strategy

- Strengthen presence in Japan and China, and the API hubs of Germany and Italy
- Continue to establish long-term contracts with customers for sustainable revenue growth and margins
- Build on the advantages of integration, continue to support our formulation business

### Divisional round-up, 2011-12

- Filed 225 DMF/ CEPs
- Revenues moved up from ₹ 5,212 million to ₹ 6,147 million.
- Scaled up 25 API

## FOCUS ON RESEARCH & DEVELOPMENT

Our R&D productivity ranks amongst the highest for Indian pharma companies. R&D provides crucial support for all our manufacturing and new product plans. It also enables us to compete cost effectively, and with technology as a differentiator, across markets.

Most of the product and process development is undertaken at our R&D centres at Baroda and Mumbai. In addition, Taro has R&D centres in Israel and Canada for the development of generics, mainly dermatologicals, and for API development.

Over 870 scientists are part of our R&D team, and Taro has a 122 person strong scientist team across locations.

Our formulation development team has the tech skills to handle products such as liposomal products, inhalers, lyophilised injections, nasal sprays in addition to developing several kinds of controlled release dosage forms.

At our Baroda R&D centre, we develop complex APIs and dosage forms for India, ROW markets, the US and Europe. Our Mumbai R&D centre develops differentiated dosage forms and generics for developed markets like the US and Europe. Taro's R&D group at Brampton has 44 scientists working on formulation development, while 66 scientists out of the Haifa Bay, Israel center work on API and product development.

### Research and Development Investment Trend

(₹ in million)

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Expenditure on R&D	2,859	3,320	2,242	3,313	4,449
Expenditure as a % of Revenue	9	8	6	6	6

### Research and Development-Filings

397	250	225	154	559
Cumulative ANDAs filed	Cumulative ANDAs Approved	DMF / CEP cumulative applications filed	DMF / CEP cumulative applications approved	Total patent applications submitted
<b>276</b>	<b>20</b>	<b>25</b>	<b>18</b>	<b>27</b>
Total patents granted	ANDAs filed in 2011-12	ANDAs approved in 2011-12	DMFs filed in 2011 -12	DMFs approved in 2011-12

### Regulatory

Our value chain functions encompass product development, manufacturing, marketing and quality compliance of regulatory requirements. We regularly update ourselves with the changing regulations across different countries and adopt the norms accordingly.

Operating in such a competitive environment, it is imperative to be the first mover in adapting to changing regulations. We also adopt and periodically upgrade regulatory norms across our plants in India.



Formulation Development Lab, Baroda

## QUALITY IMPERATIVE

Sun Pharma is committed to enhance its quality edge to sustain market leadership. We are focused on quality-conscious regulated markets. Therefore, our products must abide by the highest quality standards. Our global Quality Management Team comprises over 1200 members. Nearly all our facilities have received quality accreditations and repeat approvals from stringent regulatory bodies.

We are committed to ensure that every product we manufacture and distribute complies with internationally accepted standards of quality, purity, efficacy and safety.

We have put in place systems and procedures to ensure that each batch of the product conforms to highest quality standards. To maintain quality standards, each plant has well defined procedures and systems in compliance with cGMP requirements. This focus ensures that our operating procedures continue to meet demanding regulatory standards, such as that of the USFDA, EMEA, MHRA and TGA, among others.

Quality systems are well defined and validated to ensure consistency in deliveries. Quality units across plants are independent from manufacturing and other support functions, such as warehousing and engineering support. All quality personnel are qualified and well trained. Each site has a dedicated team of quality personnel from quality assurance, quality engineering, quality control and regulatory affairs departments, ensuring strict adherence to the quality systems and procedures. The site quality teams at manufacturing locations, is guided by a Corporate Quality Unit (CQU). CQU ensures that all the latest updates in GMP are being translated into Guidelines, SOPs and Protocols. The team also ensures that these guidelines, SOPs and protocols are implemented to deliver quality products consistently.

In addition, an independent Corporate Compliance department audits all the sites to ensure continual compliance/improvement of system in line with regulatory requirements and to ensure product quality, safety.

## PEOPLE AT SUN PHARMA

Human resources continued to be one of the critical assets of the organization. Attracting high- quality human talent represents a key focus area for Sun Pharma. We have been paying special attention to training, welfare and safety of our people, strengthening the human resources. The total employee strength as of March 31, 2012 stood at 12,600.

Growth across markets will need the right talent. One of the steps we have initiated is the Speed Programme in partnership with the SP Jain Institute of Management and Research. This is an executive education development programme, where fifty managers from various departments have been selected for an intensive course that will earn them an Executive MBA.

## INTERNAL CONTROLS

Sun Pharma's defined organizational structure, documented policy guidelines and adequate internal controls ensure efficiency of operations, compliance with internal policies, applicable laws and regulations, protection of resources and assets, and accurate reporting of financial transactions.

Moreover, we continuously upgrade these systems in line with the best available practices. The internal control system is supplemented by extensive internal audits, conducted by independent firms of Chartered Accountants to cover various operations on a continuous basis.



## DISCLAIMER

Statements in this “Management Discussion and Analysis” describing the Company’s objectives, projections, estimates, expectations, plans or predictions or industry conditions or events may be “forward looking statements” within the meaning of applicable securities laws and regulations. Actual results, performance or achievements could differ materially from those expressed or implied. Important factors that could make a difference to the Company’s operations include global and Indian demand supply conditions, finished goods prices, feedstock availability and prices, and competitors’ pricing in the Company’s principal markets, changes in Government regulations, tax regimes, economic developments within India and the countries within which the Company conducts businesses and other factors such as litigation and labour unrest or other difficulties. The Company assumes no responsibility to publicly update, amend, modify or revise any forward looking statements, on the basis of any subsequent development, new information or future events or otherwise except as required by applicable law. Unless the context otherwise requires, all references in this document to “we”, “us” or “our” refers to Sun Pharmaceutical Industries Limited and consolidated subsidiaries.

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