2019-20
ANNUAL REPORT

सत्यमेव जयते

Government of India
Ministry of Chemicals & Fertilizers
DEPARTMENT OF PHARMACEUTICALS

Annual Report 2019-20

Government of India

MInistry of Chemicals & Fertilizers

Department of Pharmaceuticals

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AN OVERVIEW

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1.1 Pharmaceutical Industry:

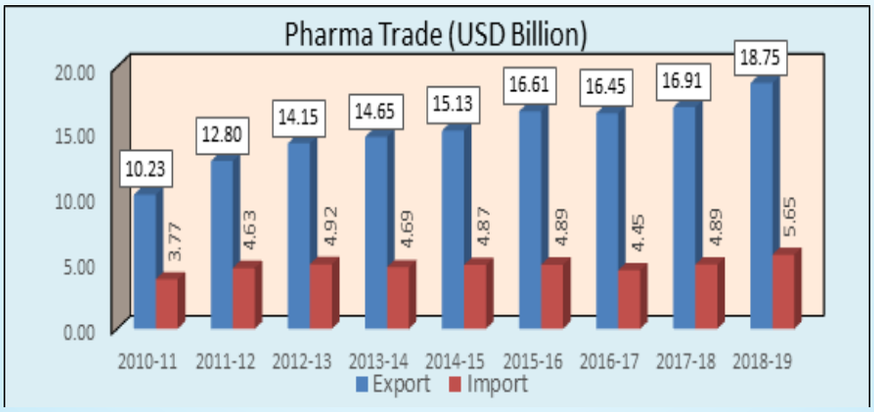
The Indian pharmaceutical industry is the third largest in the World in terms of volume and tenth largest in terms of value. The total size of the industry (including drugs & medical devices) is around US$43 billion (Rs.3,01,000 crore) and is currently having a growth rate of 7-8% in drug sector and 15-16% in medical device sector. Total exports (drugs and medical devices) are to the tune of US$20 billion (Rs.1,47,420 crore) of which drugs form around 90% of the total exports. The imports amount to around Rs. 72,800 crore of which medical devices form around 52%.

India is the largest provider of generic drugs globally. Access to affordable HIV treatment from India is one of the greatest success stories in medicine. India is one of the biggest suppliers of low-cost vaccines in the world. Because of low price and high quality, Indian medicines are preferred worldwide, thereby rightly naming the country "*the pharmacy of the world*". The Pharmaceutical sector currently contributes around 1.72% to the country's GDP.

1.1.1 Trade in Pharmaceuticals

Indian pharma exports are destined to more than 200 countries including highly regulated markets of US, West Europe, Japan and Australia. India exported pharmaceuticals to the tune of Rs. 1,33,910 crore with a recorded growth of 10.72% in 2018-19. Drug formulations & Biologicals was the third largest among the principal commodities exported by India during 2018-19. India exports largely to USA, UK, South Africa and Russia. Imports of drugs during 2018-19 was of Rs. 35,000 crore with bulk drugs and intermediates comprising 63% of the total pharmaceutical imports followed by Drug Formulations and Biologicals (36%). India imports largely from China, USA, Italy and Germany. The country has had surpluses in pharmaceutical trade as shown in the table below.

Table-1A
(Export and import in pharmaceutical sector since 2010-11)



(Source: DGCIS Kolkata)

The Annual Turnover of the Indian Pharmaceutical Industry was estimated to be about Rs. 2,58,534[1] Crore during the year 2018-19. The share of export of Bulk Drugs, Drug Intermediates and Drug Formulations, Biologicals was Rs.1,28,028[2] Crore for the year 2018-19. Indian pharmaceutical industry supplies a significant percentage of global supply of medicines including vaccines, APIs and finished products. India accounts for 20% of global exports in generics.

India's Pharma exports mainly consist of Drug Formulations and Biologicals up to 77% followed by Bulk drugs and intermediates up to 21%.

1.2 National Pharmaceutical Pricing Policy 2012

The Department of Pharmaceuticals notified the National Pharmaceutical Pricing Policy-2012 (NPPP-2012) on 07.12.2012 with the objective to put in place a regulatory framework for pricing of drugs to ensure availability of required medicines – "essential medicines" – at reasonable prices, while providing sufficient opportunity for innovation and competition to support the growth of industry, thereby meeting the goals of employment and shared economic well-being for all. The Government is now contemplating to introduce a new *National Pharmaceutical Policy* with the following objectives:

- Making essential drugs accessible at affordable prices to the common masses;
- Providing a longer-term stable policy environment for the pharmaceutical sector;
- Making India sufficiently self-reliant in end-to-end indigenous drug manufacturing;
- Ensuring world class quality of drugs for domestic consumption & exports;
- Creating an environment for R&D to produce innovator drugs;
- Ensuring growth and development of the Indian Pharma Industry.

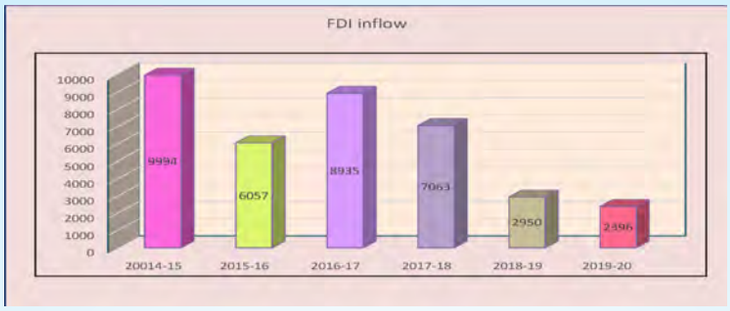
1.3 Foreign Direct Investment (FDI) in Pharmaceutical Sector:

FDI upto 100% in pharmaceutical sector is permissible through automatic route for greenfield investment and upto 74% for brownfield investment. Beyond 74%, FDI in pharmaceutical sector for Brownfield investment is permissible through Government approval route. Union Cabinet in its meeting held on 24.05.2017 approved the abolition of the Foreign Investment Promotion Board (FIPB). The administrative Ministries/ Departments are to process applications for FDI requiring Government approval. The proposals relating to Pharmaceutical Sector are being handled by this Department, based on the Standard Operating Procedure (SOP) issued by Department for Promotion of Industry and Internal Trade (DPIIT) and in consultation with related Government Agencies. After abolition of FIPB, under approval route, Department of Pharmaceuticals has approved 25 FDI proposals worth Rs. 2,496 crores approximately till now. Pharmaceutical is among the top eight sectors of India attracting FDI. FDI in medical devices is under automatic route for both brownfield and greenfield sectors.

[1]Source (PHARMATRAC/NPPA/DGCIS)
[2]Source (DGCIS)

Table-1B

(FDI inflow in Pharmaceutical sector since 2014-15)



Source: DPIIT/RBI (Figure for 2019-20 is up to December 2019)

1.4 Umbrella Scheme - Development of Pharmaceutical Industry:

The Department has an umbrella scheme namely 'Scheme for Development of Pharmaceutical Industry'. Its objective is to increase the efficiency and competitiveness of domestic pharmaceutical industry so as to enable them to play a lead role in the global market and to ensure accessibility, availability and affordability of quality pharmaceuticals for mass consumption. This scheme is a Central Sector Scheme (CS) with a total financial outlay of Rs. 480 crore for a three-year period starting from 2017-18 to 2019-20 and comprises the following five sub-schemes:

a) Assistance to Bulk Drug Industry for Common Facility Centre;

b) Assistance to Medical Device Industry for Common Facility Centre;

c) Assistance for Cluster Development;

d) Pharmaceutical Promotion and Development Scheme (PPDS); and

e) Pharmaceutical Technology Upgradation Assistance Scheme (PTUAS)

The Guidelines for implementation of the sub-schemes are available on the Department's website at https://pharmaceuticals.gov.in/guidelines-implementation-schemes

a) Assistance to Bulk Drug Industry for Common Facility Centre:

This sub-scheme proposes financial assistance for setting up of Common Facility Centres (CFCs) in Bulk Drug Parks in the country at a total cost of Rs. 200 crores for 2018- 2020.

Financial assistance may be provided for creation of common facilities under any upcoming Bulk Drug Park promoted by State Governments/State Corporations.

The Scheme would be implemented through a one-time grant-in-aid to be released to a State Implementing Agency (SIA) set up for the purpose.

Some of the indicative activities under the Common facilities are:-

- Effluent Treatment Plants
- Captive Power Plants

- Steam and Cooling Systems
- Incubation Facilities
- Common Logistics Facilities
- Advance Common Testing Centre
- Regulatory awareness facilitation Centre
- Emergency Response Centre

The maximum limit for the grant-in-aid under this category would be Rs. 100 Crores per Bulk Drug Park CFC *or* 70% of the project cost of CFC, whichever is less.

The Department has given 'in-principle' approval to the proposals received from State Governments of Andhra Pradesh, Telangana, Assam and Himachal Pradesh. State Governments of Gujarat and Tamil Nadu have also shown their interest in establishing bulk drug manufacturing parks.

Once operationalized, these parks are expected to lead the country towards making a major manufacturing hub of bulk drugs.

b) Assistance to Medical Device Industry for Common Facility Centre:

This sub-scheme proposes financial assistance for setting up of Common Facility Centres (CFCs) in Medical Device Parks in the country at a total cost of Rs. 100 crore for 2018-2020.

Financial assistance may be provided for creation of common facilities under any upcoming Medical Device Park promoted by State Governments/State Corporations. The Scheme would be implemented through a one-time grant-in-aid to be released to a State Implementing Agency (SIA) set up for the purpose.

Some of the indicative activities under the Common facilities are:-

- Component Testing Centre
- Electro-magnetic interference laboratory
- Biomaterial / Biocompatibility testing centre
- Medical grade low vacuum moulding
- Cabinet moulding
- Injection moulding centers
- 2D designing and printing for medical grade products
- Sterilization and Toxicity testing centre
- Radiation testing centre, etc.

The maximum limit for the grant-in-aid under this category would be Rs. 25 Crore per Medical

Device Park CFC *or* 70% of the project cost of CFC whichever is less.

The Department has given 'in-principle' approval to the proposals received from State Governments of Andhra Pradesh, Telangana, Kerala and Tamil Nadu. State Governments of Gujarat and Uttarakhand have also shown their interest to establish medical device manufacturing parks.

Once operationalized, these parks are expected to lead the country towards making a major manufacturing hub of medical devices.

c) Assistance for Cluster Development;

This is an existing scheme of the Department, earlier known as Cluster Development Programme for Pharma Sector (CDP-PS), now being subsumed under the umbrella scheme. Under the scheme, financial assistance would be provided for creation of common facilities in any pharma clusters including Bulk Drug, Medical Device, Ayurvedic, Unani and Cosmetics Units. Some of the indicative activities under the Common facilities include Common Testing Facilities, Training Centre, R&D Centers, Effluent Treatment Plant and Common Logistics Centre. The Scheme would be implemented on a Public Private Partnership (PPP) format through one time grant-in-aid to be released to a Special Purpose Vehicles (SPVs) set up for the purpose. A total of Rs. 30 crore has been earmarked for the scheme. The proposal of M/s Chennai Pharma Industrial Infrastructure Upgradation Company (CPIIUC) was approved by Scheme Steering Committee in its 7th meeting dated 05/10/2016 for installation of Common Effluent Treatment Plant (CETP) at Alathur, Tamilnadu, which is to be completed by the end of financial year 2019-20.

d) Pharmaceutical Promotion & Development Scheme (PPDS):

The Objective of Pharmaceutical Promotion & Development Scheme (PPDS) is promotion, development and export promotion in Pharmaceutical sector by extending financial support for conducting seminars, conferences, exhibitions, mounting delegations to and from India for promotion of exports as well as investments, conducting studies/ consultancies, for facilitating growth, exports as well as critical issues affecting Pharma sector. Under PPDS, the Department of Pharmaceuticals may on its own or through financial support by way of Grant-in-aid to the institutions, organizations, voluntary organizations or Non-Government Organizations as mentioned in Rule 228 of GFR 2017:-

i. Conduct Training/knowledge improvement programs/activities on issues/subjects relevant to growth of pharmaceutical industry.

ii. Organize Summits, Convention, Exhibitions, Pharmacy week, meetings etc. in India and abroad and produce promotional materials like films, displays etc.

iii. Conduct research studies, sector reports etc.

iv. Purchase books, quality standards, pharmacopoeias, magazines, directories, software for developing information data banks, developing e-learning modules etc.

v. Give awards to achievers in pharmaceutical industry.

For any other activity not covered under above categories may be decided by the Department of Pharmaceuticals from time to time.

e) Pharmaceutical Technology Upgradation Assistance Scheme (PTUAS):

The main objective of the scheme is to facilitate Small and Medium Pharma Enterprises (SMEs) to upgrade their plant and machinery to World Health Organization (WHO)-Good Manufacturing Practices (GMP) standards so as to enable them to participate and compete in global markets. Assistance in the form of interest subvention against sanctioned loan by any scheduled commercial bank/financial institution, both in Public and Private sector will be provided to 250 pharma SMEs of proven track record.

PTUAS is implemented through a Public Sector Financial Institution (PSFI) to be identified by the Government. The Financial Institution will be selected through a process of open Competitive Bidding amongst the eligible Public Sector Financial Institutions (PSFIs). The framework for selection of the operating PSFI will be based upon competitive bidding in line with Expression of Interest (EoI) to be invited through adequate publicity as mandated for such activities. The upper limit of interest subvention on loans for technology/ infrastructure upgradation shall be restricted to 6% per annum for a period of three years on reducing balance basis. The maximum loan eligible for this purpose will be Rs. 4 crore, availed by the concerned SME for purpose of upgradation to WHO-GMP norms. The scheme is yet to be implemented.

1.5 International cooperation/ export promotion of pharmaceuticals:

1.5.1 Joint Working Group (JWG)/High Technology Cooperation Group (HTCG)

Department of Pharmaceuticals has the following Joint Working Groups/ High Technology Cooperation Group:-

1. EU-India Joint Working Group on Pharmaceuticals, Biotechnology and Medical Devices
2. India-Tunisia Joint Working Group on Drugs and Pharmaceuticals
3. India-Ukraine Joint Working Group on Pharmaceuticals and Healthcare
4. India-Belarus Joint Working Group on Pharmaceuticals
5. India-Philippines Technical Working Group (TWG) for considering “Pharm azone” and “Registration and other Issues related to Pharmaceuticals”
6. India-Algeria Joint Working Group (JWG) on Pharmaceuticals
7. India-Egypt Joint Study Group (JSG) on Pharmaceuticals and Health
8. India-Uzbekistan Joint Working Group on Pharmaceuticals
9. India-Russia Joint Working Group on Pharmaceuticals to readdress the issues on India Pharma Industries
10. India-China Joint Working Group on Pharmaceuticals

International Participations

1. 1st Meeting of India-Russia Joint Working Group on Pharmaceuticals was held on 18th November, 2019 at Moscow, Russia under the Co-Chairmanship of Shri Navdeep Rinwa, Joint Secretary, Department of Pharmaceuticals.

2. 1st Meeting of India-China Joint Working Group on Pharmaceuticals was held on 7th May, 2019 in Beijing under the Co-Chairmanship of Shri Navdeep Rinwa, Joint Secretary, Department of Pharmaceuticals.

1.6 India Pharma 2020 and India Medical Device 2020:–

India Pharma 2020 and India Medical Device 2020- 5th Edition of International Exhibitions & Conferences on Pharmaceuticals and Medical Device sectors is scheduled to be held at the Mahatma Mandir, Gandhinagar, Gujarat from 5th to 7th March, 2020. This year the event is being organized for the first time in the state of Gujarat. The event includes three days of deliberations between policy makers and industry leaders on the roadmap, issues, challenges and opportunities in both these sectors. Both the events would be comprised of International Exhibitions and Conferences along with a series of concurrent events, such as CEOs' Forum, International Drug Regulators' Meet, CEOs' Roundtable with the Hon'ble Minister, 5th India Pharma & India Medical Device Awards, International Buyer Seller Meet, Thematic Conference Sessions etc.

Objective:- The main objective of the event is to provide a platform to global investment community to connect with stakeholders in Pharmaceutical and Medical Device Sectors in India, Central and State Governments, leading business leaders and top executives from the industry, academics and experts from the world. The event is an initiative to increase overall growth of Pharma sector including exports and focus on increase of domestic production in the sector, with active participation from all the stakeholders.

Summary of Event:-The event will cover all the sectors of the pharmaceutical industry starting from finished formulations, APIs, Bio-pharmaceuticals, Fine Chemicals and intermediates, Natural extracts, Excipients and many more. There would be display of latest Pharmaceutical Machinery, Plants, Laboratory Equipments, Analytical Instrument and Clean room Equipments with live demonstration. The event would provide Networking opportunities to more than 5000 global pharmaceutical and biotechnology professionals.

Curtain Raiser Ceremony of India Pharma 2020 and India Medical Device 2020 held on 19th December, 2019 at Ahmedabad, Gujarat

5th India Pharma and Medical Device Awards- 5th India Pharma and Medical Device Awards will be conferred on 5th March, 2020 by Shri D.V. Sadananda Gowda, Hon'ble Minister (Chemicals & Fertilizers) to celebrate innovation and excellence in the Pharma and Med Tech sectors in following categories:-

Table-1C

(Categories of awards)

S. No.	Category
1	India Pharma Leader Award
2	India Pharma Bulk Drug Company of the Year Award
3	India Pharma Innovation of Year Award
4	India Pharma Corporate Social Responsibility (CSR) Programme of the Year Award
5	India Medical Device Company of Year Award
6	India Pharma Swachhta Champion Award

The Curtain Raiser Ceremony of India Pharma 2020 and India Medical Device 2020 was held on 19th December, 2019 at Ahmedabad, Gujarat. The event was attended by Shri D. V. Sadanda Gowda, Hon'ble Minister (Chemicals & Fertilizers) and Shri Mansukh Mandaviya, Hon'ble Minister of State (Chemicals & Fertilizers).

Hon'ble Minister (C&F) at the Curtain Raiser Ceremony of India Pharma 2020 and India Medical Device 2020 held on 19th December, 2019 at Ahmedabad, Gujarat

Outcome of India Pharma 2019 & India Medical Device 2019:-

The event witnessed participation of international drug regulators from 7 countries viz. Russia, Kenya, UK, Malaysia, Guyana, Saudi Arabia & Uzbekistan, along with participation of Indian drug regulators from 13 States. Over 500 Indian and International delegates, 100+ CEOs and MDs of Pharmaceuticals and Medical Device Sector and 250 + academicians and students attended the two-day conference. The Conference was inaugurated by Shri D V Sadananda Gowda, Union Minister of Chemicals & Fertilizers, Government of India, in the presence of Shri Mansukh L. Mandaviya, Minister of State for Chemicals & Fertilizers, Government of India, Shri K L George, Minister for Large & Medium Scale Industries – Commerce & Industries Department, Government of Karnataka and other senior officials of Government of India along with Industry stalwarts. The inaugural was followed by plenary sessions held parallelly for both the sectors. The conference also saw the interaction of Industry CEOs with the Union Minister of Chemicals & Fertilisers along with the other Government officials from Department of Phar-

maceuticals, Ministry of Health & Family Welfare, NPPA, CDSCO, BIS, DPIIT etc. in a series of roundtables organized separately for Pharmaceutical and Medicals Device sector. During the two days, Bureau of Indian Standards (BIS) and World Health Organization (WHO) also conducted technical workshops for the conference delegates. The BIS session was on the theme - 'sensitizing the medical device industry on BIS standardization' and WHO session was on - regulatory systems strengthening and prequalification programme of medical products - recent updates'.

Hon'ble MoS (C&F) at the Curtain Raiser Ceremony of India Pharma 2020 and India Medical Device 2020 held on 19th December, 2019 at Ahmedabad, Gujarat. Lighting the lamp at the Ceremony.

4th India Pharma and Medical Device Awards- To celebrate innovation and excellence in the Pharma and Med Tech sector, 4th India Pharma and Medical Device Awards were conferred by Shri D.V. Sadananda Gowda, Hon'ble Minister (Chemicals & Fertilizers) at Bengaluru. The list of winners is mentioned below –

Table-1D

(Winner-awardees of 2019)

Category	Awardees
India Pharma Leader Award	Akums Drugs & Pharmaceuticals Ltd
India Pharma Innovation of Year Award	Lupin Limited
India Pharma Corporate Social Responsibility (CSR) Programme of the Year Award	Dr. Reddy's Laboratories Ltd.
India Medical Device Company of Year Award	Poly Medicure Ltd.
India Pharma Swachhta Champion Award	Indian Drug Manufacturers' Association (IDMA)

1.7 National Pharmaceutical Pricing Authority (NPPA):

National Pharmaceutical Pricing Authority (NPPA) was established through a Government of India Resolution dated 29th August, 1997 as an independent body of experts for price control of essential and lifesaving medicines. NPPA is an attached office of the Department of Pharmaceuticals and implements the National Pharmaceutical Pricing Policy 2012 and the Drugs (Prices Control) Order as

amended from time to time which were issued by the Department.

NPPA fixes ceiling price to all Drugs notified under Schedule-I of the DPCO, 2013 and monitors annual price increase for these medicines. It has, so far, fixed ceiling prices of 860 scheduled formulations and retail prices for 1189 new drugs. By invoking powers under Para 19 of DPCO, 2013, it has regulated prices of 106 anti-diabetic and cardio vascular drugs, stents and knee implants in public interest.

In February 2019, NPPA launched a Pilot for price regulation of 42 anti-cancer drugs as proof of concept for Trade Margin rationalization of non-scheduled drugs. So far, 526 brands have reported saving up to 90%, amounting to Rs. 984 crore per annum. It is estimated that NPPA has affected a saving of almost Rs.12,447 crore to the consumers since its constitution.

For effective monitoring of DPCO in the country, such as monitoring of notified prices of medicines, detection of violation of the provisions of DPCO, pricing compliance and ensuring availability of medicines, cooperation and involvement of State Drug Controllers (SDCs) is important. In view of that, NPPA has decided to setup Price Monitoring and Resource Units (PMRUs), as registered societies under the Societies Registration Act in all the 37 states/UTs to support NPPA and respective State Drug Controllers. As of now, 10 PMRUs have been set up in the states of Kerala, Odisha, Gujarat, Rajasthan, Punjab, Haryana, Nagaland, Tripura, Uttar Pradesh and Andhra Pradesh.

1.8 National Institute of Pharmaceutical Education & Research (NIPER):

Indian Pharma Industry has been a global leader in Generic drugs. In order to acquire leadership position in drug discovery and development and to continue to excel in the formulations, Government recognized that human resources / talent pool is very critical. National Institute of Pharmaceutical Education & Research (NIPER) at SAS Nagar (Mohali) was set up as a registered society under the Societies Registration Act 1860. Subsequently the Institute was given statutory recognition by an act of Parliament, NIPER Act, 1998 and was declared as an Institute of National Importance.

During 2007-08, six new NIPERs were started at Ahmedabad, Guwahati, Hajipur, Hyderabad, Kolkata and Raebareli with the help of Mentor Institutes. Subsequently, NIPER at Madurai was approved in the year 2012. During 2015-16, Finance Minister in his Budget Speech announced 3 new NIPERs for the states of Chhattisgarh, Maharashtra and Rajasthan.

Objectives are (a) to act as nucleus for interaction between academic and industry by encouraging exchange of scientist and other technical staff between the Institute and the industry and by undertaking sponsored and funded research as well as consultancy projects by the Institute, (b) to nurture and promote quality and excellence in pharmaceutical education and research, and (c) to concentrate on courses leading to master's degree, doctoral and post-doctoral courses and research in pharmaceutical education.

NIPER-Mohali has regular faculty posts and non-faculty posts. Department of Expenditure has created 156 faculty and 150 non-faculty posts in six NIPERs viz. Ahmedabad, Guwahati, Hajipur, Hyderabad, Kolkata and Raebareli in January 2019.

NIPERs impart Ph. D and PG level education and grant degree under the NIPER Act 1998. The students are selected through a common entrance examination. Each master student is given stipend

of Rs.12,400/- pm and Ph. D students are given stipend each @Rs.31,000/- to Rs. 33,000/- per month. As per national NIRF ranking, the three NIPERs, namely, NIPER, Mohali, NIPER, Hyderabad and NIPER, Ahmedabad are ranked within first ten.

Since inception, total number of 5901 students (M Pharma/MBA- 5582; PhD- 319) have passed out, 141 MOUs signed with Industries, 223 patents filed/87 granted, about 4016 research papers published in various reputed journals till 31st December 2019 by the seven existing NIPERs.

1.9 Pradhan Mantri Bharatiya Janaushadhi Pariyojana (PMBJP):

With an objective of making quality generic medicines available at affordable prices to all, Pradhan Mantri Bhartiya Jan Aushadhi Pariyojana (PMBJP) was launched in November, 2008. Under this scheme, dedicated outlets known as Pradhan Mantri Bhartiya Janaushadhi Kendra (PMBJK) are opened to provide generic medicines. Under Jan Aushadhi scheme at least one Jan Aushadhi Store will be setup in each District of the country.

Objectives of the Pariyojana-

- Ensure access to quality medicines for all the section of the population especially for the poor and the deprived ones.
- Create awareness about generic medicines through education and publicity to counter the perception that quality is synonymous with high price only.
- Generate employment by engaging individual entrepreneurs in opening of PMBJP kendra.

Savings to the common man

A medicine under PMBJP is priced on the principle of a maximum of 50% of the average price of top three branded medicines. Therefore, the price of Jan Aushadhi Medicines is cheaper at least by 50% and in some cases, by 80% to 90% of the market price of branded medicines. In the current financial year (2019-20), PMBJP has achieved sales of Rs. 258 crores (at MRP), up to 30-11-2019. This has led to savings of approximately Rs. 1800 crores of the common citizens of the country.

Progress Achieved During 2019 as on 20th December, 2019

Coverage of the Pariyojana - As on 20.12.2019, 5891 PMBJP Kendras are functional across the country. Under the PMBJP, 693 districts out of 725, are already covered. BPPI has fixed a target to cover all 725 districts of the country by 31st March, 2020.

Basket of medicines & Stock position – Product basket of BPPI comprises of more than 800 drugs and 154 surgical instruments. Tenders for required medicines are floated on regular basis as it is an ongoing process. Thus, regular efforts are made for augmenting the product basket of PMBJP so that essential medicines are readily available.

Supply of Medicines to PMBJP Kendras – Information Technology (IT) enabled End-to-End supply chain system with Point-of-Sale (POS) application for value added services has been implemented in PMBJP. Bureau of Pharma PSUs of India (BPPI), the implementing agency of PMBJP has four modern warehouses at Gurugram, Bengaluru, Guwahati and Chennai for storage and distribution of drugs. Drugs are made available to all kendras across the country from these warehouses.

CHAPTER 2

FUNCTIONS AND ORGANISATIONAL SET-UP

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2.1 Mandate of Department of Pharmaceuticals

The Department of Pharmaceuticals was created on the 1st July, 2008 under the Ministry of Chemicals & Fertilizers with the objective to give greater focus and thrust on the development of pharmaceutical sector in the country and to regulate various complex issues related to pricing and availability of medicines at affordable prices, research & development, protection of intellectual property rights and international commitments related to pharmaceutical sector which required integration of work with other ministries.

The following works have been allocated to the Department of Pharmaceuticals:

1. Drugs and Pharmaceuticals, excluding those specifically allotted to other departments.
2. Medical Devices- Industry issues relating to promotion, production and manufacture; excluding those specifically allotted to other Departments.
3. Promotion and co-ordination of basic, applied and other research in areas related to the pharmaceutical sector.
4. Development of infrastructure, manpower and skills for the pharmaceutical sector and management of related information.
5. Education and training including high-end research and grant of fellowships in India and abroad, exchange of information and technical guidance on all matters relating to pharmaceutical sector.
6. Promotion of public- private-partnership in pharmaceutical related areas.
7. International Co-operation in pharmaceutical research, including work related to international conferences in related areas in India and abroad.
8. Inter-sectorial coordination including coordination between organizations and institutes under the Central and State Governments in areas related to the subjects entrusted to the Department.
9. Technical support for dealing with national hazards in pharmaceutical sector.
10. All matters relating to National Pharmaceutical Pricing Authority including related functions of price control/monitoring.
11. All matters relating to National Institutes of Pharmaceutical Education and Research.
12. Planning, development and control of, and assistance to, all industries dealt with by the Department.

13. Bengal Chemicals and Pharmaceuticals Limited.

14. Hindustan Antibiotic Limited.

15. Indian Drugs and Pharmaceuticals Limited.

16. Karnataka Antibiotics and Pharmaceuticals Limited.

17. Rajasthan Drugs and Pharmaceutics Limited.

The work of the Department has been mainly divided into Pricing, Policy, Scheme, NIPER, PSU & Medical Device Divisions. National Pharmaceutical Pricing Authority (NPPA) is an attached office of the Department.

2.2 Vision:

To promote Indian pharma as the global leader for quality medicines and to ensure availability, accessibility and affordability of drugs and medical devices in the country.

2.3 Mission:

- investment for Make in India in pharma sector
- Make in India in critical APIs and medical devices
- industry expansion, skilling, R&D and innovation
- stable and effective price regulation and
- generic medicines by expanding Janaushadhi scheme

2.4 Organizational Set-up:

The Department is headed by Secretary to the Government of India who is assisted by two Joint Secretaries and one Economic Adviser.

The Department has as many as 13 Divisions to carry out the various mandated functions and responsibilities. The summary of the various Divisions is given below:

(a) Integrated Finance Division (IFD)- exercising expenditure control and management, ensuring rationalization of expenditure and compliance of economy measures in accordance with the instructions of the Department of Expenditure including regular monitoring of expenditure through monthly/ Quarterly reviews and submission of reports to the concerned. IFD also prepares the budget of the Department in consultation with various Divisions and Department of Expenditure.

(b) Pricing Division- all matters relating to National Pharmaceutical Pricing Authority (NPPA) including administrative/Establishment budgetary matters/Fund release etc.; Review cases against NPPA's orders; Administration of DPEA funds; Administration of DPCO and all issues relating to Pharmaceutical Pricing Policy & Pricing of drugs.

(c) Policy Division- all policy matters other than Pricing Policy; processing of Foreign Direct Investment (FDI) proposals; International Cooperation and any other matters related to WTO/ TRIPS / Patents,

etc. and trade agreements; Joint working groups of various countries, regional groups etc.; Matters related to Ministry of Commerce; issues related to investment in the pharmaceutical and Medical Device sectors.

(d) Public Sector Undertakings (PSUs)- all matters relating to five Central Public Sector Enterprises (CPSEs) under the administrative control of the Department of Pharmaceuticals.

(e) NIPER Division - all matters related to National Institutes of Pharmaceutical Education & Research (NIPERs) under the administrative control of the Department of Pharmaceuticals.

(f) Scheme Division- implementation of the scheme "PMBJP"; Implementation of "Pharmaceuticals Promotion and Development Scheme (PPDS)"; Coordination & Policy matters related to the Umbrella scheme- "Development of Pharmaceutical Industry"; R&D Matters-Promotion & coordination of basic, applied and other research related to Pharmaceutical sector.

(g) Medical device Division- all matters related to Medical Devices & Medical Device Industry including promotion, production & manufacture; implementation of the scheme "Assistance to Medical Device Industry for Common Facility Centres"; Implementation of the scheme "Assistance to Bulk Drug Industry for common facility centres".

(h) Rajbhasha- implementation of the various provisions of the Official Language Policy of the Union of India including those of Official Languages Act, 1963 as well as Official Languages (Use for Official Purposes of the Union) Rules, 1976 and orders issued thereunder.

(i) Establishment & Administration Division- all matters related to Establishment, Information Technology (IT), Cash and Administration, dealing with provision of day to day articles needed for smooth running of office, housekeeping services, maintenance of office equipment including air conditioners, photocopiers etc., printing of annual report, hospitality services. Establishment deals with all service-related matters of officers/officials of Department of Pharmaceuticals.

(j) Parliament Division- all matters related to the Meetings of consultative committee, Standing Committee, Parliamentary Assurances etc and also centralized handling of parliament questions like marking of questions, handling of questions once questions get approved by Joint Secretary/ Secretary, taking approval of Minister and submission of necessary copies to Lok Sabha / Rajya Sabha/ PIB etc.

(h) Coordination Division- all matters of coordination related to intra and inter-Dpartment, RTI, preparation of Department Annual report.

(i) Vigilance Division-all matters related to vigilance, transparency and accountability.

Employment of Scheduled Castes / Scheduled Tribes / Physically Handicapped :-

The status of employment of Scheduled Castes / Scheduled Tribes / Other Backward Classes / Physically handicapped in the Department of Pharmaceuticals, as on 17/12/2019 is as under:-

Table-2A

(Employment position of SC/ST in the Department)

Group	Total No. of Posts	In position	Scheduled Castes	Scheduled Tribes	Other Backward Classes	Physically Handicapped
A	29	21	6	1	1	-
B	46	23	3	3	6	-
C	25	16	5	-	4	-
Total	**100**	**60**	**14**	**4**	**11**	**-**

Officers in Group A include officers belonging to Central Secretariat Service besides officers on deputation from All India Services, Central Services and other Departments/ Undertakings. Appointment to posts in Group B and C is mostly done based on nominations made by the Department of Personnel & Training.

(the organisational chart of the Department is given at Annexure 2A)

2.5 Attached Office: -

National Pharmaceutical Pricing Authority – an attached office of the Department and the functions, inter-alia, include fixation and revision of prices of scheduled formulations under the Drugs (Prices Control) Order (DPCO), as well as monitoring and enforcement of various provisions of DPCO. NPPA also provides inputs to Government on Pharmaceutical policy and issues related to affordability, availability and accessibility of medicines.

2.6 Registered Society: -

Bureau of Pharma PSUs of INDIA (BPPI) – set up on 1st December, 2008 by the Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers, Government of India, with the objective to have focused and empowered structure to implement the Jan Aushadhi Scheme launched by Department of Pharmaceuticals

2.7 Autonomous Institutes: -

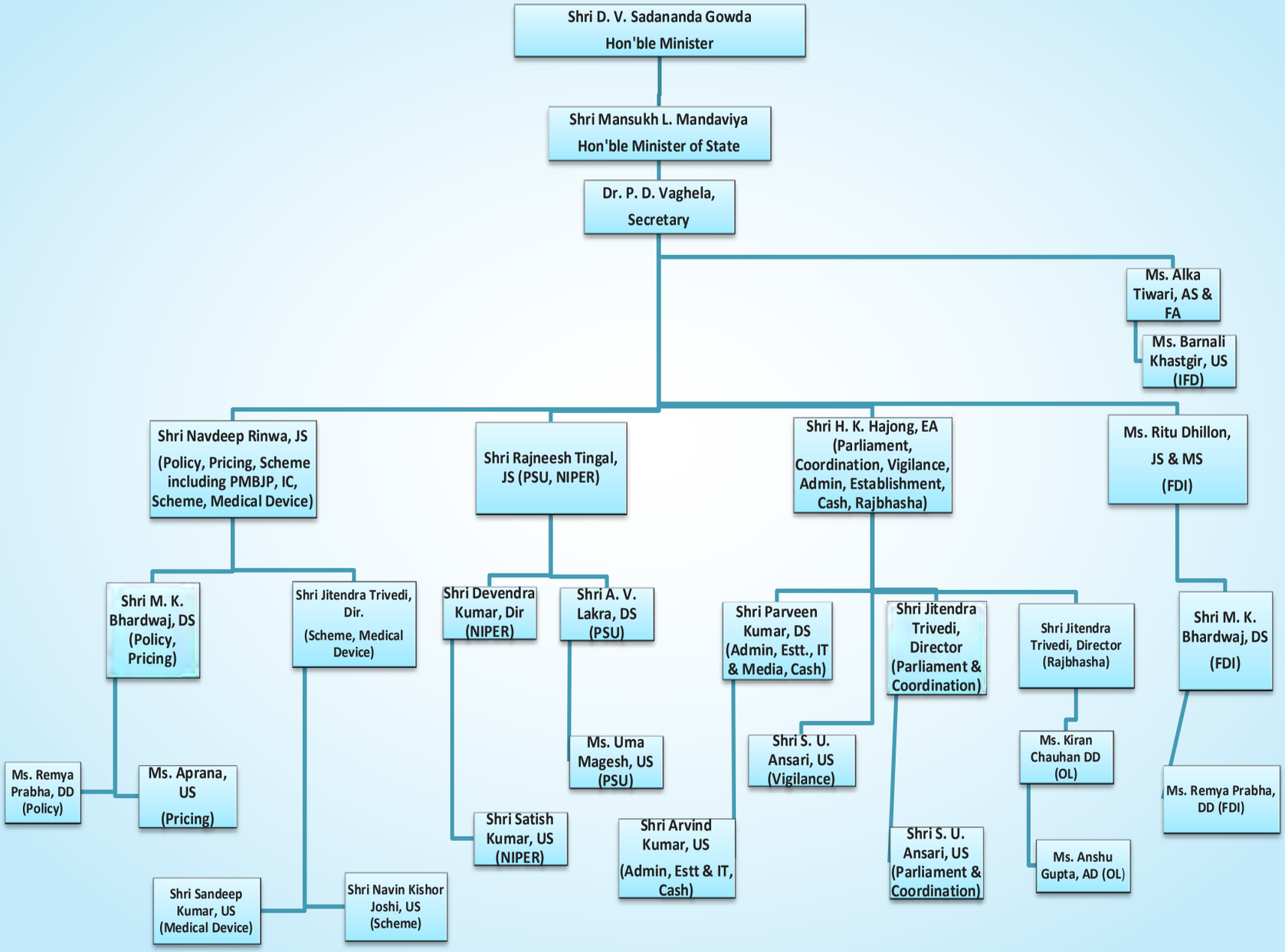
National Institute of Pharmaceutical Education & Research (NIPER)- NIPER at SAS Nagar (Mohali) was set up as a registered society under the Societies Registration Act 1860, Subsequently the Institute was given statutory recognition by an act of Parliament, NIPER Act, 1998 and was declared as an Institute of National Importance. Six more new NIPERs were started at Ahmedabad, Guwahati, Hajipur, Hyderabad, Kolkata and Raebareli with the help of Mentor Institutes during 2007-08.

2.8 Public Sector Undertakings: -

Central Public Section undertakings- the Department has 5 Central Public Section undertakings under its Administrative control, they are (a) Indian Drugs& Pharmaceuticals Ltd. (IDPL), Dundahera Industrial Complex, Dundahera, Gurgaon, Haryana, (b) Hindustan Antibiotics Ltd, Pimpri, Pune, Maharahstra, (c) Karnataka Antibiotics & Pharmaceuticals Limited, Bangalore-560010, (d) Bengal Chemicals & Pharmaceuticals Ltd, Kolkata, West Bengal and (e) Rajasthan Drugs and Pharmaceuticals Limited. Road NO.12, V.K.I. Area, Jaipur-302013.

Annexure-2A

ORGANIZATION CHART – DEPARTMENT OF PHARMACEUTICALS



CHAPTER 3

ABOUT MEDICAL DEVICE INDUSTRY

CHAPTER 3

ABOUT MEDICAL DEVICE INDUSTRY

Medical device industry is a growing field and the potential for growth is the highest among all in the healthcare sector. The various categories of devices starting from consumables to implantable medical devices like cardiac stents and orthopedic implants etc. are being manufactured in India. The major manufacturing of medical devices in the country is currently happening with respect to disposables such as catheter, perfusion sets, extension lines, cannula, feeding tubes, needles, syringes, and implants such as cardiac stents, drug eluting stents, intraocular lenses and orthopedic implants.

High-end medical devices

Medical Devices are very different from Drugs. The Medical Device Industry is highly capital intensive with a long gestation period and requires development/ induction of new technologies. The Medical Device Sector also requires continuous training of health providers to adapt to new technologies. Since most hi-tech innovative products and technology originate from a well-developed eco-system and innovation cycle, which is yet to be fully developed in India, Indian Medical Device industry depends on imports up to the extent of almost 80%. Department of Pharmaceuticals has a mandate to boost the medical device manufacturing sector in India.

Basic medical devices

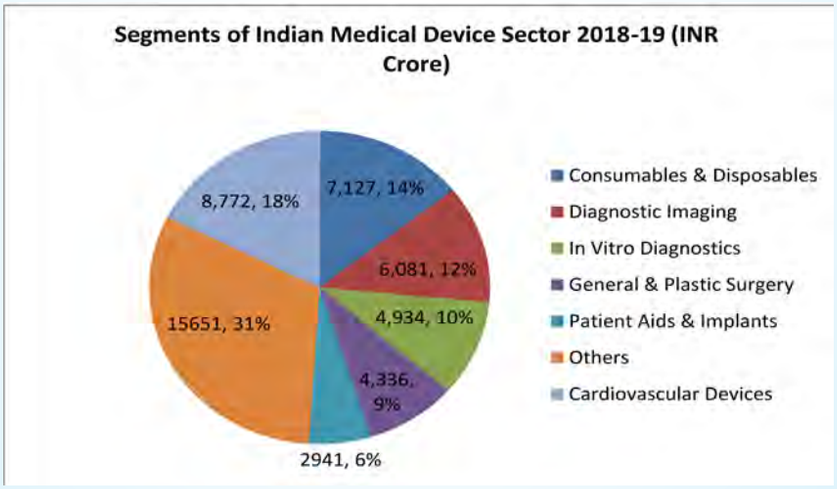
3.1 Indian Medical Device Sector: -

In India, there is skilled manpower having capacity to make devices under the Make in India initiative of the Government. There are growing research and manufacturing opportunities in the country. However, there is still non-availability of Indian players in manufacture of high-end medical devices.

The medical device market encompasses a wide range of products from relatively low value items such as Syringes and Needles to the high value equipment such as CT Scans and Cath Labs etc. The medical devices industry can be broadly classified as consisting of (a) medical disposables and consumables; (b) medical electronics, hospital equipment, surgical instruments; (c) Implants; and (d) Diagnostic Reagents. A statistical view of the Sector is as under :

- India's share in global medical devices market is 1.5%. It was valued close to INR 49842 crore in 2018-19.
- Currently, India is counted among the top 30 global medical device markets and is the 4th largest medical device market in Asia after Japan, China and South Korea.
- In 2018-19, Cardiovascular Devices form the largest segment (18% of the Indian medi cal device industry), constituting about INR 8,772 Crore, while the estimated market size of the consumables segment is INR 6,220 Crore.

Graph-3(i)



Source : Kalam Institute of Health Technology (KIHT)

3.2 Import and Export Trends: -

India's exports and imports of medical devices are growing significantly. In 2018-19, exports were valued at INR 14,867 crore whereas imports were INR 38948 crore with an annual growth rate of 25.29% and 24.2% respectively. The figure shows that India imports a large share of its medical device needs.

Table 3A

(Exports over 100 Crores and its correlative imports)

(In Rs. Crore)

Sr. No	HS Code	Product Description	Exports 2018-19	Imports 2018-19
1	901890	Other Instruments and appliances of Medical Science	1530	5189
2	901839	Catheters and The Like; Other Needles	2100	2026
3	902230	X-Ray Tubes	885	249
4	901819	Other Electro-Diagnostic Apparatus Including These For Functional Exploratory Examination Or For Checking Physiological Parameters	770	433
5	902290	Other, Including Parts and Accessories:	682	2005
6	902214	Other, For Medical, Surgical or Veterinary Uses	427	1313
7	382200	Compst Diagnostic/Laboratory Reagents Excl Goods of Heading. No. 3002/3006	385	3334
8	902139	Other	341	936
9	902110	Orthopeaedic Or Fracture Appliances	269	138
10	901832	Tubular Metal Needles and Needles for Suture	249	363
11	902780	Other Instruments and Apparatus of Heading 9027	238	2602
12	901831	Syringes, W/N with Needles	225	424
13	901813	Magnetic Resonance Imaging Apparatus	223	1021
14	300610	Sterile Surgical etc For Surgical Wound Closure sterile Laminaria etc Sterile Absorble Surgical or Dental Haemostatics	219	96
15	901811	Electro-Cardiographs	211	46
16	902790	Microtome; Parts and Accessories of Heading 9027	206	2237
17	901812	Ultrasonic Scanning Apparatus	199	1163
18	901850	Other Ophthalmic Instruments and Appliances:	159	1159
19	902131	Artificial Joints	133	825
20	902710	Gas or Smoke Analysis Apparatus	128	738
21	902750	Other Instruments and Apparatus Using Optical Radiations (UV, Visible, IR):	125	991
22	940290	Medical, Surgical, Veterinary Furniture and Parts	113	290
23	902190	Other Appliances of Heading 9021	102	974

Source: Engineering Export Promotion Council (EEPC)

3.3 Investment Scenario in Medical Device Sector in India: -

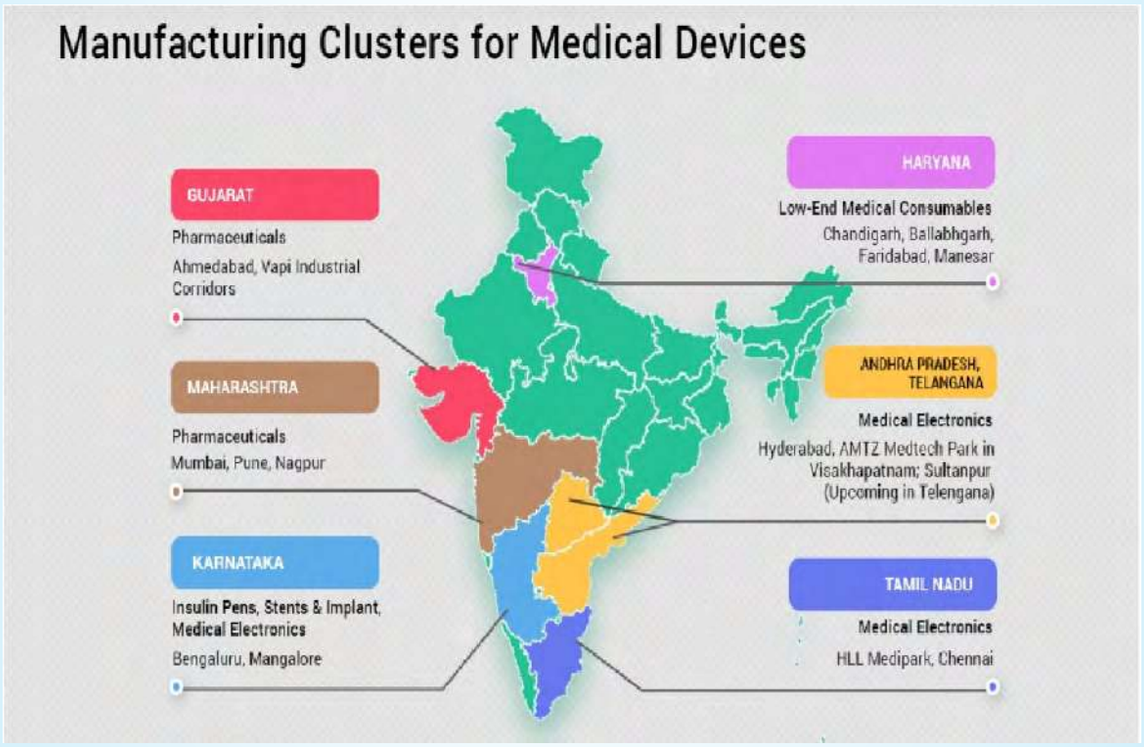
The medical device sector has been seeing considerable Foreign Direct Investment (FDI), Venture Capital (VC) and Angel funding activity as well.

In January 2015, Government of India modified the FDI regulations allowing 100 per cent FDI under automatic route in Greenfield and brownfield projects in medical device sector. USA, Europe and Japan are the key source countries for FDI in medical devices. The equipment and instruments, consumables and implants segments have attracted the most FDI.

3.4 Existing & Proposed Medical Device Clusters in India: -

Over the years, various medical device clusters have emerged across the country. Some of the key states housing Indian and multinational medical device players are as under.

Graph-3(ii)



Medical Device Clusters in India

3.5 Initiatives for Promotion of Medical Device Industry: -

The vision of the Department is to catalyse and encourage quality, productivity and innovation in Medical Device Sector and to enable the Indian Medical Device Industry to reduce the dependence on import of Medical Devices. For this, world class quality manufacturing facilities with high level of productivity with innovative capabilities are required. However, these are very capital intensive and cannot be established and opened by Medical Device Manufacturing Units on their own due to financial constraints. Department of Pharmaceuticals has contemplated the following sub-scheme for this purpose:

The sub-scheme- “promotion of Medical Device parks” aims to support ‘Make in India’, reduce import dependence, easy access to standard testing facilities, reduce the cost of production for affordability and value addition in the domestic medical device industry. The sub-scheme would be implemented through a one-time grant-in-aid to be released for creation of identified infrastructure and common facilities to a State Implementing Agency set up for the purpose. The total size of the Scheme is proposed as Rs. 600 crore for five years (2020-2025). Under the sub-scheme, financial assistance to the tune of Rs. 100 crore or 70% of the project cost may be provided for creation of common facilities in any upcoming Medical Device Parks promoted by State Governments/ State Corporations. In case of SC & ST communities and North East Region, the grant-in-aid would be Rs. 100 crore per Medical Device Park or 90% of the project cost of Common Facilities, whichever is less. The Scheme Steering Committee under the Chairmanship of Secretary Pharma is empowered to approve projects under the sub-scheme.

CHAPTER 4

PRADHAN MANTRI BHARTIYA JANAUSHADHI PARIYOJANA (PMBJP)

Chapter 4

PRADHAN MANTRI BHARTIYA JANAUSHADHI PARIYOJANA (PMBJP)

4.1 Background of the Scheme:

With an objective of making quality generic medicines available at affordable prices to all, Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) was launched by the Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers, Government of India. Under this scheme, dedicated outlets known as Pradhan Mantri Bhartiya Janaushadhi Kendras (PMBJK) are opened to provide generic medicines.

Objectives of the Pariyojana: -

- Ensure access to quality medicines for all the section of the population especially for the poor and the deprived ones.
- Create awareness about generic medicines through education and publicity to counter the perception that quality is synonymous with high price.
- Generate employment by engaging individual entrepreneurs in opening of PMBJP kendras.

Bureau of Pharma Public Sector Undertakings of India (BPPI):

Bureau of Pharma Public Sector Undertakings of India (BPPI) was set up by the Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers, Government of India, with major objective to have focused and empowered structure to implement the Jan Aushadhi Campaign initiated by the Department of Pharmaceuticals.

The Need:

Despite being one of the leading exporters of generic medicines to the world, majority of Indians have no access to affordable medicines. As per a recently published research paper based on cross-sectional analysis of National Sample Survey Organization (NSSO) data, 55 million Indians were pushed into poverty in a single year because of having to fund their own healthcare, and out of this, 38 million fell below the poverty line due to spending on medicines alone.

It is true that the total expenditure on out-patient care is significantly higher than the in-patient care. Further, as per the 71st Round (January-June 2014) report of the National Sample Survey Organization (NSSO) on Health in India, purchase of medicine accounted for around 72% in rural sector, and 68% in urban sector, of the total expenditure on non-hospitalized treatment of ailments.

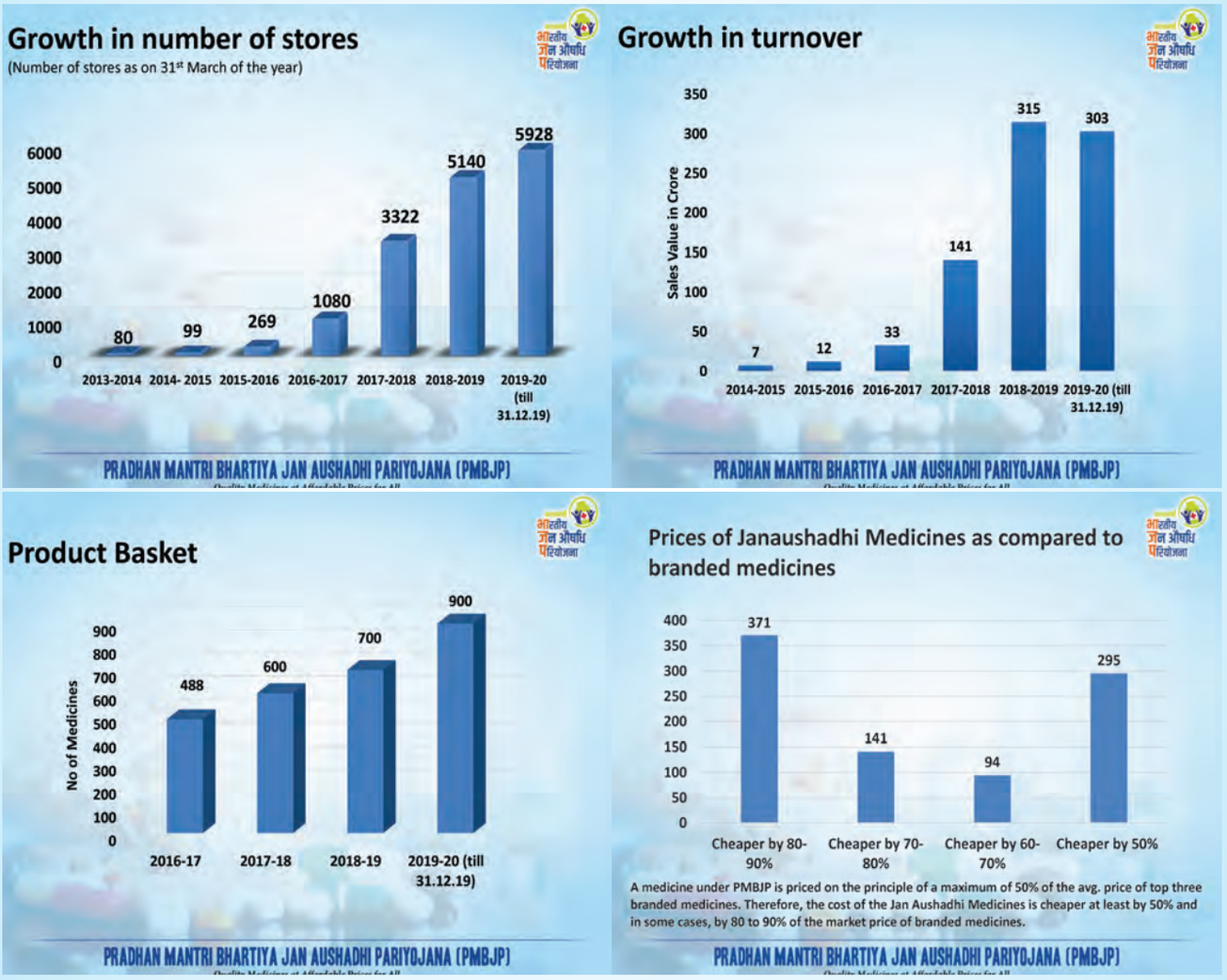
Salient features of the Scheme

In order to increase the reach to general public and to create employment opportunities, PMBJP Kendras are allowed to be opened by individual entrepreneurs, NGOs, societies, Institutions, pharmacists, government bodies at any suitable place. This has provided direct source of sustainable employ-

ment for about 11600 educated unemployed youth of the country by engaging them in the scheme.

- PMBJK opened by the any individual entrepreneurs is extended an incentive of 15% of monthly purchases subject to a ceiling of Rs. 10,000/- per month up to a total limit of Rs. 2.5 lakh.
- For the north eastern states, Naxal affected area and tribal areas, the rate of incentive is 15% of monthly purchases subject to a ceiling of Rs. 15,000/- per month up to a total limit of Rs. 2.5 lakh. Individual SC/ST and differently abled entrepreneurs are also provided medicines worth of Rs. 50,000/- in advance.

Graph-4(i)



Savings to the common man

A medicine under PMBJP is priced on the principle of a maximum of 50% of the average price of top three branded medicines. Therefore, the price of Jan Aushadhi Medicines is cheaper at least by 50% and in some cases, by 80% to 90% of the market price of branded medicines. In the current financial year (2019-20), PMBJP has achieved sales of Rs. 258 crores (at MRP), up to 30-11-2019. This has led to savings of approximately Rs. 1800 crores of the common citizens of the country.

4.2 Progress Achieved During 2019-20

Coverage of the Pariyojana – Presently, 6068 PMBJP Kendras are functional across the country. Under the PMBJP, 696 districts out of 725, are already covered. BPPI has fixed a target to cover all 725 districts of the country by 31st March, 2020.

Basket of medicines & Stock position – Product basket comprises of more than 800 drugs and 154 surgical instruments. Tenders for required medicines are floated on regular basis as it is an ongoing process. Thus, regular efforts are made for augmenting the product basket of PMBJP so that essential medicines are readily available.

Supply of Medicines to PMBJP Kendras – Information Technology (IT) enabled End-to-End supply chain system with Point-of-Sale (POS) application for value added services has been implemented in PMBJP. Bureau of Pharma PSUs of India (BPPI), the implementing agency of PMBJP has four modern warehouses at Gurugram, Bengaluru, Guwahati and Chennai for storage and distribution of drugs. Drugs are made available to all kendras across the country from these warehouses.

Quality of Medicines under PMBJP –

BPPI procures medicines only from World Health Organization – Good Manufacturing Practices (WHO-GMP) certified suppliers for ensuring the quality of the products. Apart from this, each batch of drugs is tested at laboratories accredited by 'National Accreditation Board for Testing and Calibration Laboratories' (NABL). Only after passing the quality tests, the medicines are dispatched to PMBJP Kendras.

Awareness & Publicity –

Bureau of Pharma PSUs of India (BPPI), the implementing agency of PMBJP is spreading awareness about the salient features of Pradhan Mantri Bhartiya Janaushadhi Pariyojana through various types of advertisement such Print Media, Radio advertisement, TV advertisement, Cinema Advertisement and Outdoor publicity like Hoardings, Bus Queue Shelter branding, Bus branding, Auto wrapping etc . In addition to this, BPPI also educates the public about the usages of Jan Aushadhi generic medicines through social media platforms like Facebook, twitter, Instagram, YouTube, etc. on regular basis.

4.3 Achievement of first 100 Days of incumbent government-

1) Launch of Jan Aushadhi Suvidha Sanitary Napkin @ Rs. 1/- per pad

To ensure easy availability of the menstrual health services to all women across India, "Janaushadhi Suvidha" sanitary pads have been made available for sale @ Rs 1.00 per pad since 27th August, 2019 in more than 5800 "Pradhan Mantri Bhartiya Janaushadhi Kendras" across the country. More than 60.25 lakh pads have been sold @ Rs. 1.00 per pad since 27th August, 2019.

Rs. 1/- sanitary napkin launched by the Hon'ble Minister (C&F) and Hon'ble MoS (C&F) on 27th August, 2019 in New Delhi

2) **Opening of 300 new kendras across the nation**

313 new kendras were opened across the nation.

3) **Inauguration of regional warehouse in Chennai**

Modern warehouse was inaugurated in Chennai for better logistics in Southern India.

Modern warehouse for Jan Aushadhi medicines inaugurated by Hon'ble Minister (C&F) in Bengaluru on 20.02.2019.

Modern warehouse for Jan Aushadhi medicines inaugurated by Hon'ble MoS (C&F) in Gurugram on 16.10.2018

4.4 Technology oriented initiatives

(a) Launch of mobile application for ease of access to Janaushadhi stores and price comparison: In order to make use of digital technology for easing the life of consumers, a mobile application for Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) i.e. "Janaushadhi Sugam" was launched for facilitating the general public by providing a digital platform at the tip of their fingers, by virtue of which they can avail a host of user-friendly options like locating nearby Janaushadhi Kendra, direction guided through Google Map for location of the Janaushadhi kendra, searching Janaushadhi generic medicines, analyzing product comparison of Generic vs Branded medicine in form of MRP & overall Savings, etc. The mobile application is available on both Android & iOS platforms. It can be downloaded free by the user from Google Play Store and Apple Store.

'Jan Aushadhi Sugam' mobile app launched by the Hon'ble Minister (C&F) and MoS (C&F) on 27th August, 2019 in New Delhi

Thus, this application will be instrumental in creating better accessibility to affordable medicines and creation of awareness about generic medicines.

(b) Digital payment options: Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) has entered into an MoU with Paytm (One97) in the month of May 2019 for providing the PMBJK the option to receive payments from its retailers/customers through Paytm platform amongst other payment options for various products/services distributed/sold by them. On boarding option is being rolled out by Paytm in a phased manner and the PMBJK is at liberty to avail the option out of choice

4.5 Progress likely to be made by 31st March 2024 as envisaged in vision plan-

1. **Coverage:** Target is to cover all districts of the country by opening at least one PMBJK in every district, so that a total of 10000 kendras become functional by the end of 31st March 2024.

2. **Basket of medicines:** The present product basket consists of more than 800 medicines and 154 surgical instruments. Target is set to enhance it up to 2000 medicines and 300 surgical products,

so that all essential medicines covering therapeutic groups, like - Anti Diabetics, Cardiovascular Drugs, Anti-Cancer, Analgesics & Antipyretics, Anti Allergic, Gastro Intestinal Agents, Vitamins, Minerals & Food supplements, Tropical Medicines, etc. get included.

3. **Storage & Logistics:** Establishment of an effective IT-enabled logistics and supply-chain syste- for ensuring real time distribution of medicines at all outlets to avoid stock out situation. BPPI has four warehouses at present at Gurugram, Chennai, Bengaluru & Guwahati. Further, it has planned to open two more warehouses in Western and Central India, respectively.

Jan Aushadhi Diwas celebration –

For the announcement of Jan Aushadhi Diwas, a Press conference was held on 6th March, 2019 at PIB Hall, Shastri Bhawan, New Delhi. It was announced during the conference that Hon'ble Prime Minister Shri Narendra Modi would interact with beneficiaries of the scheme as well as persons running the outlets through video conferencing and this would be telecasted live through 'Door-Darshan'.

All Kendra Owners of PMBJP celebrated the "Janaushadhi Diwas on 7th March, 2019" at their outlets or any convenient place where they could telecast the message of Hon'ble Prime Minister with TV sets. Events at the stores commenced at 12 noon. The Hon'ble Prime Minister started interacting with beneficiaries at 1 pm. The event was attended by 8 Minister of States of different Central Government Departments. Minister of State for Chemicals & Fertilizers, Shri Munsukh Madaviya attended the event at Lucknow. Other Ministers attended the functions organized at different places. Further, doctors, pharmacists, representatives from NGO, media and other eminent personalities participated in events. Bike Rallies, padayatras, nukkad nataks, health camps and other events were organised for creating awareness about quality and affordability of 'janaushadhi'. It aroused interest of common man about the scheme. It got active coverage from all corners of media and they published news & discussed the event in detail. Further, Joint Secretary (Pharma) Shri Navdeep Rinwa & CEO BPPI, Shri Sachin Singh appeared in 2 different talk shows at Doordarshan and talked about various features of the scheme. A talk show was also organised by All India Radio which was aired at 9.45 pm on the same day. Event ended with message of Hon'ble Prime Minister.

CHAPTER 5

NATIONAL INSTITUTES OF PHARMACEUTICAL EDUCATION & RESEARCH (NIPERs)

CHAPTER 5

National Institutes of Pharmaceutical Education & Research (NIPERs)

5.1 Background

1. Indian Pharma Industry has been a global leader in Generic drugs. In order to acquire leadership position in drug discovery and development and to continue to excel in the formulations, Government recognized that human resources/talent pool is very critical. National Institute of Pharmaceutical Education & Research (NIPER) at SAS Nagar (Mohali) was set up as a registered society under the Societies Registration Act 1860. Subsequently the Institute was given statutory recognition by an act of Parliament, NIPER Act, 1998 and was declared as an Institute of National Importance.

2. During 2007-08, six new NIPERs were started at Ahmedabad, Guwahati, Hajipur, Hyderabad, Kolkata and Raebareli with the help of Mentor Institutes. Subsequently, NIPER at Madurai was approved in the year 2012. During 2015-16, Finance Minister in his Budget Speech announced 3 new NIPERs for the states of Chhattisgarh, Maharashtra and Rajasthan. The present status of NIPERs is as under:

Table-5A

(Present status of NIPERs)

NIPER	Academic session started in	Status of land/construction
Mohali	1998	NIPER, Mohali has its own campus in 129.25 Acres of land.
Ahmedabad	2007	60 acres land in Gandhinagar, Gujarat has been allocated and Hindustan Steelworks Corporation Limited (HSCL) has been selected as Project Management Consultant (PMC). The tender for construction of campus has been finalized.
Guwahati	2008	51.42 acres land at Village Sila, Changsari Dist, Kamrup has been allocated and Engineering Projects India Limited (EPIL) has been selected as Project Management Consultant (PMC). Construction was started in June 2015. More than 80% construction work of the campus has been completed.
Hajipur	2007	12.5 acres of land at EPIP Campus, Industrial Area, Hajipur has been allocated by Govt. of Bihar.
Hyderabad	2007	Government of Telangana has allocated 50 acres of land for construction of NIPER-Hyderabad campus. The Department has proposed to allot 50 acres of IDPL land to NIPER-Hyderabad for construction of permanent campus.
Kolkata	2007	10 acres of land at Mouza-Gopalpur, P.S. Kalyani, Dist Nadia has been allocated by Govt. of West Bengal. Department has proposed to allot 25 acres of land of BCPL to NIPER-Kolkata for construction of permanent campus.
Raebareli	2008	49 acres land at Village Vinayakpur, Pargana Bachrawan, Tehsil Maharajganj, Raebareli has been allocated.

The aims and objectives of NIPER are:

(i) to nurture and promote quality and excellence in pharmaceutical education and research:

(ii) to concentrate on courses leading to master's degree, doctoral and post-doctoral courses and research in pharmaceutical education;

(iii) to confer honorary awards or other distinctions:

(iv) to cooperate with educational or other institutions having objectives wholly or partly similar to those of the Institute by exchange of faculty members and scholars and generally in such manner as may be conductive to their common objective

(v) to conduct courses for teachers, pharmaceutical technologies, community and hospital pharmacists and other professionals:

(vi) to collect and maintain world literature on pharmaceutical and related sciences and technology so as to develop an information centre of its own kind for other institutions within the country and in the developing world:

(vii) to create a central faculty of pharmaceutical instrumentation and analysis for use by the researches within and outside the Institute:

(viii) to have a centre to experiment and innovate and to train teachers and other workers in the art or science or pharmaceutical teaching:

(ix) to develop a world level centre for creation of new knowledge and transmission of existing information in pharmaceutical areas with focus on national, educational professional and industrial commitments:

(x) to develop a multi-disciplinary approach in carrying out research and training of pharmaceutical manpower so that the larger interests of the profession academia and pharmaceutical industry are better served and a pharmaceutical work culture is evolved which is in tune with the changing world trends and patterns of pharmaceutical education and research:

(xi) to organise national or international symposia, seminars and conferences in selected areas of pharmaceutical education, from time to time:

(xii) to arrange courses catering to the special needs of the developing countries:

(xiii) to act as nucleus for interaction between academic and industry by encouraging exchange of scientist and other technical staff between the Institute and the industry and by undertaking sponsored and funded research as well as consultancy projects by the Institute: and

(xiv) to pay due attention to studies on the distribution and usage of drugs by the rural masses, taking into account the socio-economic spectrum in the country.

Administrative structure of NIPERs

NIPER Act was notified in the year 1998 (Amended in 2007), NIPER Statutes were notified in 2003 (Amended in 2014), NIPER Ordinances notified in 2005 (Amended in 2014).

Board of Governors and other Committees

Board of Governors (BoG) of the respective Institute is responsible for general superintendence, direction and control of its affairs. Chairman, BoG is appointed by the Visitor. Director of the Institute is appointed by the BoG with prior approval of Visitor. BoG of NIPER Mohali was constituted on 03.10.2016 for a term of three years, which has expired on 02.10.2019. First BoG of other six NIPERs constituted on 09.03.2019.

Table-5B

(Board of Governors of NIPERs)

NIPER	**Chairman: BoG NIPER**
NIPER-Ahmedabad	**Dr. Ketan R. Patel** Chairman-cum Managing Director, Troikaa Pharmaceuticals Ltd., Gujarat
NIPER-Guwahati	**Dr. S Chandra Shekhar** Director, CSIR-IICT, Tarnaka, Hyderabad
NIPER-Hajipur	**Dr. Sanjay Singh** Vice Chancellor, Babasaheb Bhimrao Ambedkar University, Lucknow
NIPER-Hyderabad	**Dr. Satish Reddy** Chairman, Dr. Reddy's Laboratory Ltd. Hyderabad
NIPER-Kolkata	**Prof. (Dr.) Bhabatosh Biswas** Former Vice Chancellor Bengal University of Health Sciences Kolkata
NIPER-Raebareli	**Prof. Rakesh Kapoor** Director, Sanjay Gandhi P.G.I.M.S. Lucknow

An Apex Council for policy issues and coordination amongst various NIPERs was constituted with approval of Minister (C&F) on 07.05.2019.

Other Statutory Committees of the Institutes include:

- Senate
- Academic Planning and Development Committee
- Finance Committee
- Laboratory Services, Building and Works Committee

Admission Procedure in NIPERs:

At present these NIPERs impart Ph.D. and PG level education and grant degree under the NIPER Act, 1998. The students are selected through a common entrance examination. Each Master student is given stipend of Rs. 12,400/- and Ph. D students are given a stipend of Rs. 31,000 – Rs. 33,000/- per month.

National Institutional Ranking Framework (NIRF):

As per National Institutional Ranking Framework of the Ministry of Human Resource Development, under the pharmacy category, three NIPERs are amongst the top ten pharmacy Institute in the country as under:-

Table-5C

(NIPERs in NIRF ranking)

NIPERs	2017	2018	2019
Mohali	2nd	1st	3rd
Hyderabad	5th	6th	6th
Ahmedabad	-	14th	9th

Approval of Expenditure Finance Committee (EFC)

The EFC in its meeting held on 26.3.2018 for construction and equipping of ten NIPERs including new announced NIPERs, approved Rs 959.53 crore for the period 2017-18 to 2019-20. Construction of regular campus was approved for NIPER Ahmedabad and Guwahati only @ Rs 103.88 crore each. Further, Rs 100.00 crore each were approved for equipment to NIPER Ahmedabad, Guwahati & Hyderabad while Rs 55.00 crore each approved for NIPER Hajipur, Kolkata & Raebareli. The EFC, however, deferred setting up of the proposed four new NIPERs at Madurai and in the States of Maharashtra, Rajasthan and Chhattisgarh till March 2020.

Creation of regular faculty and non-faculty posts

NIPER-Mohali has regular faculty posts and non-faculty posts. Department of Expenditure has created 156 faculty and 150 non-faculty posts in six NIPERs viz. Ahmedabad, Guwahati, Hajipur, Hyderabad, Kolkata and Raebareli in January 2019. The details of the posts filled by NIPERs in phase I are as under:-

Table-5D

(Details of posts filled by NIPERs in Phase-I)

NIPER	No. of Posts Sanctioned		No. of Posts filled.	
	Faculty	Non-faculty	Faculty	Non-faulty
NIPER-Ahmedabad	33	25	21	25 posts has been advertised and likely to be filled shortly.
NIPER-Guwahati	33	25	8	6

NIPER-Hajipur	19	25	Under process	
NIPER-Hyderabad	33	25	14	7
NIPER-Kolkata	19	25	7	7
NIPER-Mohali	62	223	26	127
NIPER-Raebareli	19	25	11 faculty and 10 non faculty posts has been advertised and likely to be filled by 31st January 2020.	

The remaining posts will be filled by six NIPERs in Phase II and Phase III.

Students passed out, Research papers published, Patent filed and MoU signed

Since inception, total number of 5901 students (M Pharma/MBA- 5582; PhD- 319) have passed out, 141 MOUs signed with Industries, 223 patents filed/87 granted, about 4016 research papers published in various reputed journals till 31st December 2019 by the seven existing NIPERs.

5.2 NIPER Mohali

NIPER Mohali has been conceptualized, planned and set up to provide leadership in pharmaceutical sciences and related areas not only within the country, but also to the countries in South East Asia, South Asia and Africa. It is only one of its kind in its domain and is highly valued for its outcomes – namely well trained and focused human resources (students / researchers); publications of high impact and novel processes / outputs of industrial relevance in its chosen areas of working. NIPER Mohali has a campus that caters for research facilities for ten different fields, three boys hostels and a girls hostel, one married hostel unit, 133 quarters for the NIPER staff. Board of Governors has been constituted to oversee its functioning. NIPER offers Masters' and Ph.D. degrees in 15 streams and caters to the various needs of pharmaceutical industry:

1. Achievements –

Academic excellence: In 2019-20, the Institute has published 81 articles in journals of repute (till 31st December, 2019). Institute has filed 190 patents and out of which 87 are granted till date. Since the inception of academic programme (till 31st December, 2019), 3496 students have passed out (Masters 2579, MBA 597 & Ph.D. 320).

2. Research –

A. Neglected diseases - Research is carried out in the areas of tuberculosis, leishmaniasis and malaria. New molecules are being synthesized and their mechanisms of action are being worked out.

B. Other diseases - Metabolic pathways in diseases like inflammation, infection, cancer, diabetes, obesity, Parkinson's disease, neurodegeneration are being worked out.

C. Drug development and formulation

i. Improvement of oral bioavailability, synergistic anticancer efficacy and reduced toxicity of drugs has been attempted.

ii. New formulations are being developed.'

iii. Standardization of Herbal drugs and formulations

iv. Toxicological studies

D. Other areas

i. Biopharmaceuticals

ii. Epigenetics

iii. Chemo-enzymatic synthesis of drugs

iv. Monograph on herbals is being developed.

v. Study of the effect of RNA aptamers on stabilization of misfolded proteins

vi. Assessment of an appropriate and reliable method to diagnose neuropathic pain

vii. Artificial intelligence, Machine Learning, Big data Analytics.

viii. Utility of Physiology Based Pharmacokinetic (PBPK) Modeling in prediction of PK of drugs in special populations and in study of food effects on drug PK

3. Academic and Non – academic Staff

Table-5E

(Academic and non-academic staff position)

Man-Power	Sanctioned	In-Position	Vacancy
Academic	62	26	36
Non-Academic	223	127	96

4. Total fund allocated by the Government during the last 4 years

Table-5F

(Allocation of fund by the Government during last 4 years)

(Rs. In cr.)

Year	Allocation BE	Allocation RE	Total Release
2016-17	27.49	27.48	27.48
2017-18	27.74	42.32	42.31
2018-19	32.00	29.00	29.00
2019-20*	30.60	30.60	26.20

*Fund released till December 2019

5. Students

Degrees/ programmes offered and subjects offered (with year) with admission status

Table-5G

(Degrees/ programmes/ subjects offered year-wise with admission status)

Level Masters/ Doctoral	Degree MS/MBA/M.Tech/ Ph. D	Discipline	No. of students admitted	
	Years		2018-19	2019-20
Masters'	M.S.(Pharm.)	Medicinal Chemistry	26	28
Doctoral	PhD		2	2
Masters'	M.S.(Pharm.)	Pharmacoinformatics	20	17
Doctoral	PhD		2	0
Masters'	M.S.(Pharm.)	Natural Products	12	13
Doctoral	PhD		0	4
Masters'	M.S.(Pharm.)	Traditional Medicine	3	5
Masters'	M.S.(Pharm.)	Pharmaceutical Analysis	8	9
Doctoral	PhD		0	0
Masters'	M.S.(Pharm.)	Pharmacology & Toxicology	18	18
Doctoral	PhD		3	4
Masters'	M.S.(Pharm.)	Regulatory Toxicology	8	9
Masters'	M.Tech.(Pharm.)	Pharmaceutical Technology (Formulations)	6	7
Doctoral	PhD		0	0
Masters'	M.Tech.(Pharm.)	Pharmaceutical Technology (Process Chemistry)	16	17
Doctoral	PhD		4	1
Masters'	M.Tech.(Pharm.)	Pharmaceutical Technology (Biotechnology)	8	11
Doctoral	PhD		2	0
Masters'	M.S.(Pharm.)	Pharmaceutics	18	20
Doctoral	PhD		1	3
Masters'	M.S.(Pharm.)	Biotechnology	32	35
Doctoral	PhD		5	0
Masters'	M.Pharm.	Pharmacy Practice	8	9
Doctoral	PhD		1	1

6. Teacher-Student ratio:-

Table-5H

(Teacher-student ratio)

Course	Ratio
	2019-2020
Ph.D.	26:100
Masters' (Science)	23:392
MBA (Pharma)	3:82

7. Placement:-

Placements status: in campus/off campus

Table-5I

(Placements status: in campus/off campus)

Academic Year	Total Students	No. of students Interested	No. of students placed	Average salary of placed students per annum (Amount in Rs.)
2016-18	247	240	136	Rs 4.67 Lacs
2017-19	242	232	155	Rs 4.73 Lacs
2018-20	224	203	90* (till 31 Dec 2019)	Rs 6.31 Lacs (till 31 Dec 2019)

8. Innovation / knowledge transfer

i. Patents and Commercialization: 190 (filed)/87 (granted)/08 (licensed) since inception

ii. Research income earned from industry: Rs.27 lakhs (receipts in 2019-20 till date)

iii. Citation per faculty: 2482 (till 22-11-2019- Scopus and No. of Faculty Considered-29 (FY-2019-20))

iv. H Index - NIPER SAS Nagar - H index- 110 (till 22-11-2019- Scopus)

9. MoUs signed recently:

Table-5J

(MoUs signed during the current year)

Sr. No	Party to the MOU	Date of Execution
1	Johnson & Johnson Education Grant Agreement	25-09-2019
2	Johnson & Johnson Master Service Agreement	25-09-2019
3	Zoetis Post Doctoral Research Fellow Agreement	23-08-2019

4	Andijan State Medical Institute (ASMI) Uzbekistan	23-07-2019
5	National Research Development Corporation (NRDC)	24-04-2019

10. Institution leadership

i. Ranked #3 in the category 'Pharmacy' in NIRF MHRD 2019 Rankings.

ii. NIPER SAS Nagar Ranked No. 1 Government Pharmacy College in India (2019) by Career360 magazine (Outlook group)

iii. Green Maple Foundation Prestigious Shining Glory Award – 2019 for outstanding contribution in the field of economic and social development of India and conducting awareness programs on issues related to the protection of environmental, plantation and greenbelt development, safety, child education, women empowerment and education and other social activities.

iv. Member, WHO Expert advisory panel on the International Pharmacopoeia and Pharmaceutical Preparations; Advisor, WHO expert committee on specifications for pharmaceutical preparations; Member Scientific Body, IPC.

v. Institute has initiated skill development trainings programs for pharmacy and science students for different role in pharmaceutical industry.

vi. Institute has established an office for NIPER SAS Nagar Alumni association to mobilise national and international alumnus for their contribution towards the development of the institute.

11. Impact of NIPER

The success of NIPER, S.A.S. Nagar has encouraged the GoI to set up more NIPERs across the country to meet the growing demands of the pharmaceutical sector. In addition, NIPER has carried out training programmes for personnel from India and abroad under ITEC-SCAAP, capacity building programmes (World Bank-sponsored) and SMPIC. Participation in rebuilding of public sector enterprises like IDPL, BCPL, HAL, etc. Skill development trainings under skill Vigyan program were sanctioned by PSCST & DBT program for different role in pharmaceutical industry.

- Institute has trained pharmacy and science students under skill development trainings. 82 student's/Industry employees were trained at SMPIC, 14 at IPR cell and 69 at TDC-Dosage form and 28 at TDC-API pilot plant.
- 87 foreign Participants from 34 countries were trained in 4 different ITEC programs sponsored by DPA-II, MEA, GoI.
- Training and analytical services provided to small and medium-scale enterprises (SMEs): Setting up of a centre for SMEs
- Member of committee evaluating 'Investigational New Drugs' (IND) applications
- Member of committee revising Indian pharmacopeia

- Contribution of monographs to Ayurvedic pharmacopeia of India
- Carried out study on "Impact of TRIPS on pharmaceutical prices with special focus on generics in India", under the work plan of WHO biennium and MHFW (GOI).

12. Various events/ workshops carried out by the Institute:

Table-5K
(Events/ workshops organized by the Institute)

11 May, 2019	National technology Day
21 May, 2019	Dr. Parvinder Singh Memorial Award lecture
19-21 June, 2019	Yoga Camp on International Yoga Day
20 June, 2019	Inauguration of Alumni Office
31 July, 2019	Astrazeneca Award
19-29 August, 2019	Two weeks Intensive ITEC Training Programme on Recent Trends & Challenges in Biopharmaceuticals
1-15 September, 2019	Swachhata Pakhwada
1-15 September, 2019	Hindi Pakhwada
9-19 September, 2019	Two weeks Intensive ITEC Training Programme on Advanced Analytical Techniques Basic Principles and application for Quality Assessment of Drugs and Pharmaceuticals
14-24 October, 2019	Two weeks Intensive ITEC Training Programme on Recent Trends and challenges in Regulation and Standardization of Herbal Drugs and Formulations
1 November, 2019	National Unity Day
1 November, 2019	SMPIC Seminar on Risk analysis on Pharmaceuticals
26 November, 2019	Constitution Day
18-28 November, 2019	Two Weeks Intensive ITEC Training Programme on Pharmaceutical Quality by Design: A Risk Based Approach – ITEC programme

NIPER NSS activity during Swachhata Pakhwada

5.2 NIPER- Hyderabad

NIPER-Hyderabad started functioning as one of the six new NIPERs in September 2007, in the premises of IDPL, R&D centre, Balanagar, Hyderabad. The Institute has been functioning with the mission of developing human resource with excellence through conducting Post Graduate and PhD courses. NIPER-Hyderabad has M.S. (Pharm), M. Tech. and MBA courses in different disciplines i.e., Medicinal Chemistry, Pharmaceutical Analysis, Pharmacology & Toxicology, Pharmaceutics, Process Chemistry, Regulatory Toxicology and Pharmaceutical Management.

1. Achievements:

Table-5L

(Achievements of NIPER Hyderabad)

1	Master Students Passed Out	842
2	Students pursuing Ph.D course	74
3	Doctoral degree awarded	31
4	Patents (filed)	15
5	Research Publications	584
6	Sanctioned extramural research projects	32

2. Details of Faculty & Staff :

i.	Regular Faculty	:	01, Director
ii.	Contractual Faculty	:	18
iii.	Contractual Administrative and Technical Staff	:	41

3. Total Allocation by the Government during the last 4 years (Rs. in crores)

Table-5M

(Allocation of fund by the Government during the last 4 years)

Year	Allocation BE	Allocation RE	Total Release
2016-17	35.00	35.00	35.00
2017-18	20.00	30.00	30.00
2018-19	24.00	24.00	24.00
2019-20*	25.00	25.00	25.00

*Fund released till December 2019.

4. Teacher-Student ratio:

Presently **1: 8**

5. Employability/ Placements Status:-

A. Year wise Companies participated in campus selection/placement

Every year students were placed in reputed companies' like- Novartis, Biocon, Dr Reddy's, GVK, Mylan, Astra Zeneca, Shasun, Lupin, Aurobindo, Biological E, Eli lily, Aizant, Cipla, Cognizant Health care, Core Diagnostics, Johnson & Johnson, Macleods Pharmaceuticals, Roche etc.

B. Last few years placements status: in campus/off campus

Table-5N

(Placements status: in campus/off campus)

Year	2012	2013	2014	2015	2016	2017	2018
In campus Placements (%)	88	85	82	82	80	83	100

6. Teachers

NIPER has some of the talented and dedicated faculty who came from the best institutions and having good training abroad as post-doctoral fellows in their specializations.

7. Recognition to Faculty

Dr. Shashi Bala Singh, Director, NIPER Hyderabad received the prestigious 'FICCI Award of Excellence Women in R&D' from Hon'ble Nkandu Luo, Minister of Higher Education, Government of Zambia, on February 21, 2019 at DST FICCI GLOBAL R&D SUMMIT 2019, Hyderabad.

8. Peer review system:

The performance of the faculty is assessed periodically. The assessment is based on the student feedback, output from the research activities and contributions to institutional growth assessed by subject experts.

9. Core Research areas:

- Integrated Drug Discovery & Product Development Programmes

  Cancer, Inflammation and related proliferative diseases

  Diabetes and other metabolic disorders

  Infectious diseases

  Psoriasis

- In-vitro and in-vivo screening
- Development of novel Process for NCEs, Bulk Drugs and Intermediates

- Development of Analytical Methods, Impurity Profiling and Stability studies
- Solid state characterization

10. Awards:

A. Mr. Harsh Barua from department of Pharmaceutics has been awarded the LUPIN MERIT SCHOLARSHIP of rupees fifty-one thousand. He was awarded the scholarship for his scholastic achievements during the academic year 2017- 2019 at NIPER Hyderabad.

B. Mr. Srinivas Angapally, research scholar-Department of Medicinal Chemistry was received best poster presentation award in SPER 7th Annual International Conference & Exhibition [SPER 2018], which was held at B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai [Tamil Nadu], during 23rd-24th February,2018.

11. Innovation / knowledge transfer

A. Patents and commercialization- 15 patents filed in areas of Cancer Drug Discovery, Formulation Development and Analytical Method Development

B. Revenue Generation: 3.39 Crores

12. Impact of NIPER:

Creating human resources by imparting high quality education and training in pharmaceutical sciences which would help the pharmaceutical industry. Serving as an research institute and focusing on thrust areas of national and international relevance. Fostering academic and industrial collaborations to address some of the key issues in the pharma sector and the needs of Pharmaceutical industry in the country.

13. Collaborations / MoUs

NIPER-Hyderabad signed 18 MoUs with national and international bodies to enhanced research areas and multidimensional research. The principal collaborators are:

- Dr Reddy's Laboratory
- Daewoong Pharma
- Extrovis, NATCO
- ISSAR pharmaceuticals limited
- INST, Hebrew University
- DST-UKIERI (Univ of Manchester)
- DST Indo-Poland (Univ of Bialystok)
- DST Indo Brazil (Univ of Sao Paulo)
- DST DAAD: RWTH Aachen University

14. Various events/ Workshops carried out by the institute:-

NIPER Hyderabad conducted various scientific events, workshops training for students. Follow-

ing are some photograph of the various events in NIPER-Hyderabad.

Shri Mansukh L. Mandaviya, Honorable Minister Addressing the NIPER Hydereabd Faculty

Interaction of school children with Dean, faculty and students of NIPER Hyderabad

Good Laboratory Practice Workshop

Synergy-2018-NIPER -Pharma Industry Meet: Role of Academia in Strengthening of the Indian Pharma

5.3 NIPER Guwahati

NIPER Guwahati started functioning from 2008 under the Mentor Institute, Guwahati Medical College, Guwahati (up to 31 July 2017). Dr. USN Murty took over the charge of the Director of the In-

stitute from 3rd November 2016. NIPER-Guwahati is functioning from the NITS-Mirza Campus since August 2017.

1. **Achievements: -**

i. Ph.D. - 44 (enrolled), Degrees awarded – 09 (since inception),

ii. Total M.S. (Pharm.) (since inception),

Students enrolled – 460

Graduated - 324 (135 students are currently pursuing their P.G. courses)

iii. Till date 6 students got placed in Novartis through on-campus placements.

iv. Publications: In total, 130 research articles have been published out of which 24 articles have been published in 2019-20 in various National and International Journals.

v. Institute has total 5 patents and 1 copyright of which 3 patents are filed in the year of 2019.

2. **Details of faculty & staff: -**

Administrative Staff : 09

Academic Staff:

Associate Professors : 04

Assistant Professors : 07

Research Associate : 03

Staff: Technical : 05

Multi-Task Staff : 12

3. Total Allocation by the Government during the last 4 years.

Table-5O

(Allocation of fund by the Government during last 4 years)

(Rs. in crores)

Year	Allocation BE	Allocation RE	Total Release
2016-17	19.50	26.27	26.27
2017-18	31.50	52.00	52.00
2018-19	33.50	33.50	33.50
2019-20*	36.90	36.90	36.90

*Fund released till December 2019

4. **Students:-**

Degrees/programmes offered and Subjects offered (with year)

Table-5P

(Degrees/programmes and subjects offered year-wise)

Level	Degree	Discipline	Year		
Masters/ Doctoral	MS/ MBA/ M.Tech/ Ph.D		2017-18	2018-19	2019-20
Masters	MS (Pharm)	Pharmacology and Toxicology	20	15	15
Masters	MS (Pharm)	Biotechnology	9	10	10
Masters	M. Pharm.	Pharmacy Practice	10	10	9
Masters	M. Pharm.	Pharmaceutics	Not started	15	18
Masters	M. Pharm.	Pharmaceutical Analysis	Not started	15	18
Doctoral	Ph.D.	Pharmacology and Toxicology	2	2	1+2*
Doctoral	Ph.D.	Biotechnology	1	1	0
Doctoral	Ph.D.	Pharmacy Practice	1	1	1
Doctoral	Ph.D.	Pharmaceutics	Not started	2	1+2*
Doctoral	Ph.D.	Pharmaceutical Analysis	Not started	1	1+1*

5. Teacher-Student ratio:

Biotechnology:	1:5
Pharmacology and Toxicology:	1:8
Pharmacy Practice:	1:5
Pharmaceutics:	1:8
Pharmaceutical Analysis:	1:8

6. Employability/ Placements Status

In the academic session, 2019-20, 6 students have been placed in Novartis, Hyderabad. Many other companies are in pipeline for placements.

7. Research

BIOTECHNOLOGY:

Development of Biopharmaceuticals using Biomolecular Engineering/Synthetic Biology approaches -

- Oncogenic mRNA cleaving Deoxyribozymes
- Development of new approaches of Immune rerouting for targeting cancer cells
- Riboswitch mediated gene regulation of oncogenes
- Generation of random Protein coding sequences & Aptamer based therapeutics and diagnostic tools

Investigation on **Genomics and Proteomics to study various diseases** like Multiple Myeloma, Acute Myeloid leukemia, Chronic Myeloid leukemia, Myodisplastic syndrome, Ischemia-Stroke disorder, Neuropathic Pain, etc.

PHARMACOLOGY AND TOXICOLOGY:

- Molecular Pharmacology
- Development of Cancer targeted drug delivery systems
- Screening Indian biodiversity and Indian Systems of Medicine in search of newer compounds in the area of inflammation, arthritis, diabetes, cancer and hepatoprotective activities
- Targeting RANKL for the treatment of inflammation and cancer induced bone disorders
- Screening of NCE's & North-East plant products for anti-Parkinson's and antidepressant effects
- Studies on the mitigation of drug induced toxicities through natural products derived from Northeast India

PHARMACY PRACTICE:

- Study of drug utilization pattern for antiepileptic and antipsychotic drugs
- Impact of Lipodystrophy on Quality of Life, Social and Psychological Aspects in PLHIV on First line and Second line Anti Retroviral regimen
- Haemovigilance: An important tool for improving safe blood transfusion practices

PHARMACEUTICS:

- Lipid nanoarchitectonics against dreadful diseases
- Pharmacooengineering & Molecular Pharmaceutics
- Ligand anchored targeted drug delivery systems
- Drugs in-adhesive (DIA) matrix patch design
- Pathogen mimetic delivery devices

- Nanomedicines & Nanobiotechnology
- Translational cutting edge pharmaceutical & biomedical research
- Preformulation studies of active pharmaceutical ingredients
- Dosage form development and optimization for poorly water-soluble drug molecules
- Drug targeting using lipid-and polymer-based nanoparticulate systems
- Micro-and nano-theragnosis concepts for the early detection and treatment of malignant diseases and other life-threatening diseases
- Eradication of biofilm-producing microorganisms from the surfaces of implanted or inserted medical devices into human body

PHARMACEUTICAL ANALYSIS:

- Bioavailability, IVIVC and IVIVE analysis
- Analytical (ICH Guidelines) & Bio-analytical (FDA-Industry Guidance) method development & validation using HPLC, UPLC, LC- MS/MS
- Short-term/accelerated, mid-term and long-term stability testing of formulations and degradation studies.
- Pharmacokinetic, Toxicokinetic, Metabolic and Impurity profiling

8. Students enrolment:

Current strength of Ph.D. students: 31

(Pharmacology & Toxicology-13; Biotechnology-06; Pharmacy Practice-04; Pharmaceutics-06 and Pharmaceutical Analysis-03)

Current strength of Masters Students: 135

(Pharmacology & Toxicology-30; Biotechnology-20; Pharmacy Practice-19; Pharmaceutics-33 and Pharmaceutical Analysis-33)

9. Patents and Commercialization:

Institute has total 5 patents and 1 copyright, of which 3 patents are filed in the year of 2019.

10. Collaboration

During the year, NIPER-Guwahati has exchanged MoUs with the following Institutes:

1. Institute of Liver and Biliary Sciences (ILBS), Dated - 4th **January 2019**
2. Innotech Interventions Pvt. Ltd, Dated - 15th **March 2019**

3. Royal Global University, Dated - 6th **July 2019**

4. BVG Life Sciences Ltd. (BVG Group), Dated - 6th **July 2019**

11. Impact of NIPER:

The establishment of NIPER-Guwahati has given a strong boost to the promotion of Pharmaceutical Education & Research in the North East region of India. Research efforts of NIPER Guwahati have revived the studies on medicinal value of local herbs of North East Region against various diseases.

NIPER-Guwahati has organized a National conference entitled "Ethno-medicine and Traditional Health Practices in Northeast region of India" in collaboration with the Society for Ethnopharmacology (SFE), India, on 25th August 2018. This conference focussed on several contemporary issues of drug discovery & development from medicinal and aromatic plants together with their quality evaluation, validation and safety related aspects.

NIPER-Guwahati played a pivotal role in a grand assembly of plant-derived medicine practitioners (Traditional Healers living in the North-East states of India) on 26th August 2018 at NIPER-Guwahati premises. Around 76 traditional healers from Assam, Mizoram, Meghalaya, Sikkim and Tripura attended this meet and showcased their plant-derived medicinal products in individual stalls.

The faculty members of NIPER-Guwahati have been awarded 06 Extramural projects in the year 2018 from different funding agencies like DBT, DST, DRDO, Ministry of Environment, Forest and Climate Change, etc.

NIPER-Guwahati is the only NIPER to have a Synthetic Biology Laboratory, which has been awarded 'Genome Editing Task Force' project by DBT, Govt. of India.100% MS(Pharm) and M. Pharm. admissions during this academic year (2018-19) reflects the growing reputation and the stature of NIPER-Guwahati among the Students and the Industrial counterparts. The Institute has entered into several MoUs with leading Research institutes, Hospitals and Pharmaceutical Industries to give students and faculty the best of the academic and research support to eventually come up with technologies and products for the benefit of the society.

12. Number of students received M.S./M. Pharm. degree during the 3rd Convocation held on 7th July, 2019.

Table-5Q

(Students who received M.S./M. Pharm. degree during the 3rd Convocation held on 7th July, 2019)

Sl. No.	Batch	Number of students enrolled	Number of students received degree
1	2015-17	26	26
2	2016-18	35	35
3	2017-19	39	39
Total		100	100

Felicitation of Chief Guest, Prof. Anil D. Sahasrabudhe, Chairman, AICTE (From L to R: Prof. Anil D. Sahasrabudhe, Dr. USN Murty, Dr., S Chandrasekhar. Degree recipient of 3rd Convocation at NIPER-G)

Group photo at Global Bio India-2019, NIPER-G

Performing yoga during International Yoga Day at NIPER-

5.4 NIPER KOLKATA

The National Institute of Pharmaceutical Education & Research Kolkata (NIPER-Kolkata) was established as an Institute of National Importance by the Government of India through Act of Parliament (NIPER Act 1998 & NIPER amendment Act 2007). The Institute functions from its campus at "Chunilal Bhawan", 168, Maniktala Main Road, Kolkata – 700 054. NIPER Kolkata is striving to achieve academic excellence through teaching, research and scholarship. At the moment teaching remains central function and overriding goal. NIPER-K is trying to stretch in the field of research by setting ambitious goal towards developing newer therapeutics against tuberculosis and Leishmaniasis. Students are thriving both nationally and internationally in the different research laboratories/ industries and institutes as researchers.

1. Achievements

In 2019-20 (till December 2019) 17 research papers published, 7 MoU signed. Since inception, 452 students have been graduated. Master- 450 students and PhD- 2 students).

2. Academic and Non-Academic staff:

Total 19 posts of faculty and 25 posts of Non-faculty have been approved by Department of Expenditure in January 2019.

3. Total allocation by the Government during the last 4 years:-

Table-5R
(Allocation of fund by the Government during the last 4 years)

(Rupees in Crore)

Year	BE	RE	Total Release
2016-17	08.00	08.00	08.00
2017-18	09.00	11.50	11.50
2018-19	12.00	12.00	12.00
2019-20	*16.00	16.00	16.00

*Fund released till December 2019-20.

4. Students

Degrees/programs offered and Subjects offered (with year) with admission status:

Table-5S
(Degrees/programs and Subjects offered year-wise with admission status)

Level	Degree	Discipline	No. of students admitted				
			2015-16	2016-17	2017-18	2018-19	2019-21
Masters	M.S. (Pharm.)	Medicinal Chemistry	17	14	16	08	08
		Natural Products	13	14	14	08	06
		Pharmacoinformatics	09	14	14	03	04
		Pharmacology & Toxicology	-	-	-	08	13
		Rare disease	-	-	-	-	-
Doctoral	Ph.D.	Medicinal Chemistry	-	04	04	-	-
		Natural Products	-	04	04	01	-
		Pharmacoinformatics	-	02	04	-	
		Pharmacology & Toxicology	-	-	-	-	01

5. Teacher-Student ratio: 1:11

Classes are managed by NIPER faculty and visiting faculty /guest faculty.

6. Employability/ Placements Status

Since inception, large number of Pharma Companies came to NIPER-Kolkata to recruit students. Most of the students have been absorbed in the industries, colleges and research institutes. A number of students are pursuing higher studies within the country as well as abroad. Placement was achieved for these students according to their options for employment in companies as well as in Institute for teaching and higher studies.

Table-5T

(Employability/ Placements Status)

Masters : M.S. (Pharm.)		
Year (Batch)	Total No. of students	No. of students placed (*as per available records with us)
2007-2009	29	24
2008-2010	32	26
2009-2011	40	29
2010-2012	49	33
2011-2013	47	30
2012-2014	37	29
2013-2015	49	20
2014-2016	42	29
2015-2017	39	32
2016-2018	42	36
2017-2019	44	32
Total	***450***	***320***
Doctorate: Ph.D.		
2016-2020	10	09 Pursuing
2017-2021	12	10 Pursuing
2018-2022	01	01Pursuing
2019-2023	01	01Pursuing
Total	**22**	**21 Pursuing**

7. Recognition to Faculty:

Faculty of NIPER-Kolkata of its own includes DST awarded/funded faculty and other guest faculty are also involved from the Mentor Institute and other Institutes of Kolkata, such as Calcutta University, Jadavpur University, Indian Association for the Cultivation of Science Kolkata, Bose Institute Kolkata, Saha Institute of Nuclear Science, CSIR-CGCRI, NICED, AIIH&PH and SSKM Hospital, TCG Life Sciences and they are well recognized in their own areas. For rare diseases 16 guest faculty from AIIHPH, Kolkata Medical College, Kolkata Apollo Hospital, Medical super specialty hospital, Tata Medical centre all from Kolkata, Drugs controller Kolkata, CSIR-IICB etc. Five adjunct faculties (2 from Sanofi India Ltd., 1 from Biological E and 2 from CSIR-CGCRI) are also part of our faculty.

8. Research

- Structural bioinformatics; New drug discovery/repurposing for Infectious Diseases and Metabolic disorders.
- Structural bioinformatics; New drug discovery/repurposing for Infectious Diseases and Metabolic disorders.
- Metabolic bio-engineering for production of small molecules
- Immunology, *Leishmania* biology, Vaccines.
- Diabetes mediated Non-alcoholic steatohepatitis and Hepatocellular carcinoma: Pharmacological and biochemical characterization.
- Phytochemistry; Chemicals transformation; Herbal products analysis
- Network Pharmacology of herbal medicines in Respiratory diseases
- Biopharmaceuticals

9. Innovation/ Knowledge transfer/ MoUs signed

Memorandum of Understanding was signed between Chittaranjan National Cancer Institute (CNCI), Kolkata and NIPER Kolkata to promote academic and research co-operation for fostering research work.

10. Impact of NIPER:

a. A total of 450 highly skilled students have been graduated.

b. 2 scholars have been awarded with the Ph.D. degree.

c. 320 students are engaged to work in companies/institutions.

d. 89 Research papers have been published.

e. M.S. (Pharm.) students of NIPER-Kolkata stood 1st and 2nd position in the National Eligibility Test for Ph.D. course admission conducted by NIPER-Hyderabad, Mohali and Ahmedabad continuously three years 2016-17, 2017-18 and 2018-19 respectively.

11. Institution Leadership Impact of NIPER

Institutions are important for the development and success of a society. Institutions serve as a place for the evolution of ideas. An institute must labor to meet the requirement of social circumstances. NIPER-K has taken a major research drive towards developing newer strategies to tackle two important infectious diseases like tuberculosis and Leishmaniasis.

Dr. P.D. Vaghela, I.A.S., Secretary Pharma, addressing the students and dignitaries during the event.

Dr. P. D. Vaghela, IAS; Secretary Pharma inaugurated NMR facilities at NIPER Kolkata campus in presence of Prof. Bhabatosh Biswas, Chairman, BoG, NIPER Kolkata and Prof. V. Ravichandiran, Director, NIPER Kolkata on 30th October 2019.

Prof. V. Ravichandiran, Director, NIPER Kolkata administered the Pledge to the Students, Faculty and Staff members on the occasion of Rashtriya Ekta Diwas on 31st October, 2019.

5.5 NIPER- RAIBARELI

National Institute of Pharmaceutical Education and Research (NIPER), Raebareli was established in 2008 after the 1998 NIPER Act was amended by the Parliament in 2007. It is an autonomous Institute with its own Board of Governors and functions within the Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers (MoCF), Government of India with the aim to meet the growing demands of skilled pharmaceutical professionals, new pharmaceutical technologies and fundamental research. NIPER, Raebareli offers courses for M. S. (Pharm.) in Medicinal Chemistry, Pharmaceutics, Pharmacology & Toxicology, and Regulatory Toxicology with 142 enrolled students and Ph.D. programmes (started w.e.f. 2017) in first three disciplines in order to boost R&D activities in pharmaceutical research.

1. Achievements:-.

- The Division of Pharmaceutics at NIPER-Raebareli developed new technologies for nano-based drug-delivery systems for better delivery of anti-psychotic and anti-tubercular drugs.
- The Institute has filed 5 patents and one copyright in 2019.
- Department of Medicinal Chemistry was awarded DST-SERB Core Research Grant (41 Lakhs) to do research in the area of Tuberculosis.
- Nearly 100 publications in last 3 years (42 publications in the current year) in the journals of International repute.

- One book entitled "Handbook on the Preparedness on Chemical Warfare Agents" published by Elsevier/ Academic Press (USA).
- Central Instrumentation Facility was created housing sophisticated instruments such as Nuclear Magnetic Resonance (NMR), LC-MS (QTOF-HRMS), HPLC, FT-IR etc.
- Dr. Munindra Ruwali in the department of Pharmacology and Toxicology received DST-TARE grant.
- Dr. Revati Raman Ujwal in the department of Pharmaceutics received National Post-Doctoral Fellowship from DST-SERB.

2. Academic/Non-Academic staff:-

Academic	=	01	Director	(Regular)
		10	Assistant Professor/ Assistant Professor (Contract)	(Contractual)
Non-Academic	=	25	Administrative/Technical Staff	(Contractual)

The Institute recruits teachers/staff on yearly contractual basis.

Total 19 posts of regular faculty and 25 posts of regular Non-faculty have been approved by Department of Expenditure in January 2019 which are likely to be filled shortly.

3. Total fund allocation by the Government during the last 4 years:-

Table-5U

(Allocation of fund by the Government during the last 4 years)

(Rs. in Crore)

Year	Allocation BE	Allocation RE	Total Release
2016-17	7.00	6.25	6.25
2017-18	8.50	9.50	9.45
2018-19	12.00	15.00	15.00
2019-20*	16.00	16.00	16.00

* Fund released till December 2019.

4. Students:-

Degrees/programmes offered and subjects offered (with year) with admission status:

Table-5V

(Degrees/programmes and subjects offered year-wise with admission status)

Subject	Degree	Sanctioned seats	Admission Status
Medicinal Chemistry	M.S. (Pharm)	22	20
Pharmaceutics	M.S. (Pharm)	17	15

Pharmacology and Toxicology	M.S. (Pharm)	16	15
Regulatory Toxicology	M.S. (Pharm)	11	11
Medicinal Chemistry	Ph.D	02	02
Pharmaceutics	Ph.D	02	02
Pharmacology and Toxicology	Ph.D	02	02

5. Teacher: Student Ratio -

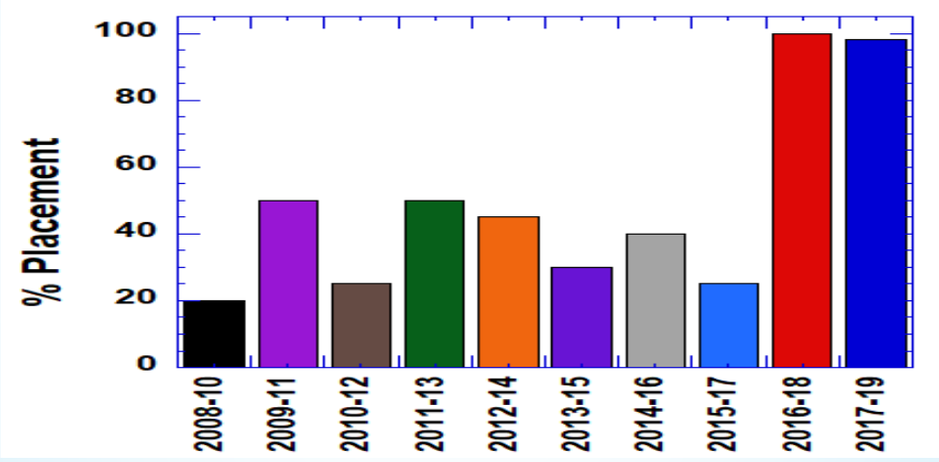
(1:14)

6. Employability/ Placements Status:-

A graph showing the year-wise placement status of NIPER-Raebareli.

Graph 5(i)

(Year-wise placement status of NIPER-Raebareli)



7. Awards/ Teachers:-

- Dr S.J.S. Flora has been nominated as Councilor for Asia by the International Society for Trace Element Research in Humans (ISTERH)

- Dr S.J.S. Flora was nominated as Editorial Board Member of three international research journals Current Medicinal Chemistry (USA), Cellular and Molecular Biology (France) (Associate Editor for Asia) and Journal of Heavy Metal and Chelation Therapy (USA).

- Dr. S.J.S Flora gave CSIR Platinum Jubilee Foundation Day oration lecture at CSIR-IITR, Lucknow on September 28, 2017.

- Dr. S.J.S. Flora was felicitated by Academy of Environmental Biology (AEB) with AEB HONOR for his life time achievements in the field Environmental Biology & Toxicology on Octo-

ber 3, 2018.

- Dr. S.J.S. Flora was conferred with "LIFE TIME ACHIEVEMENT AWARD" by Indian Society for Lead Awareness & Research (InSLAR) for his outstanding contributions in the field of Chemical Toxicology in General and Metal Toxicologyon October 4, 2018.

8. Research

a) Active Research Areas:

- Neurodegenerative diseases
- Heavy Metal Toxicity study
- Tuberculosis
- Development and evaluation of drugs using Nano formulations.
- Development of green and eco-friendly synthetic methods

b) Projects: Ongoing: 02

c) Publications: 50 Total so far,

9. Impact of NIPER

NIPER-Raebareli has emerged as an Institution of significance both in academics and research particularly in Central India with modern laboratories, highly sophisticated instrument. We have achieved number of milestones and Pharma industries have shown interest in collaborating with us besides training our students for short term and long term basis. We have initiated collaborative projects/ work with national and international academic and research institutes in the area of our immediate importance like such as *Japanese Encephalitis*, Tuberculosis and Neurodegenerative diseases. An online portal has been created to facilitate seamless sample analysis for drug discovery. We are also providing highly skilled human resources for the Indian Pharmaceutical Industry.

10. Various events/workshops carried out by the institute:-

(i) Distinguished Lecture Series

NIPER-Raebareli has started the "Distinguished Lecture Series" during this academic season to bring the subject experts in the field of Pharmaceutical Sciences on a regular basis. The purpose of this lecture series was to bring eminent researchers to our campus to talk about their research and also to acquaint young students with the emerging trends in this field. To start this series. Various eminent academic & Industry experts were invited who, visited NIPER-R campus & interacted with faculty & students of NIPER-R for possible research collaboration.

(ii) Conferences/Workshops/Seminars/Training Programs

The faculty member participated in the one day National Seminar on Intellectual Prop e r t y Rights organized by CCRUM, Ministry of AYUSH at CRIUM, Lucknow on 10th July 2019. "Train the Train-

er" course on developing and sustaining India's capacity for Pre- clinical Drug Discoveries at the National Institute of Nutrition in Hyderabad, Telangana from July 8th-12th 2019 and Quality Improvement Program (QIP) for Teachers on "NANOMATERIALS" hosted By School of Materials Science & Technology, Indian Institute of Technology (BHU), Varanasi.The students of department of Medicinal Chemistry and Pharmaceutics attended PharmaRIA, the Indian Pharmaceutical Association convention held at Vigyan Bhawan in New Delhi on September 11th and 12th 2019.

(iii) Rajbhasha Workshop

Hindi workshop was organized on 14th June to promote progressive use of Hindi as an official language and in accordance with Official Language Act, rules and orders.

(iv) Workshop on "Impact of Plastic on Environment and Human Health"

To spread the awareness about plastic waste within our institution we organized One Day Workshop on "Impact of Plastic on Environment and Human Health" on September 24, 2019, in which all the faculty, staff and students participated.

(v) Workshop on GEM

NIPER-R is highly committed to enhancing transparency, efficiency, and accountability in the purchase of scientific equipments and goods of common laboratory use.

Dr P.D. Vaghela, Secretary Department of Pharmaceuticals was the Chief Guest of 5th Convocation of NIPER-Raebareli

NIPER-Raebareli Symposium.

5.6 NIPER- AHMEDABAD

NIPER-Ahmedabad was established with an aim to train individuals displaying competency in the pharmaceutical sector to meet the requirements of the ever-growing healthcare sector. NIPER-Ahmedabad is currently offering MS and Ph.D program in Pharmaceutics, Pharmaceutical Analysis, Pharmacology & Toxicology, Biotechnology, Natural Products, Medicinal Chemistry and is the premier Institute conducting MS and PhD programmes in Medical Devices in the country. It is currently functioning from transient temporary building on 60-acre landsite at Gandhinagar since August 2016. It plans to establish Centre for Medical Devices (CMD) to cater as well as nurture the need of booming medical device industries within and outside India. The interdisciplinary courses and cultural diversity at NIPER-Ahmedabad sparks the spirit of innovative research and all-round development of its students. The location of the Institute ensures a symbiotic association with pharmaceutical industries, medical centres and technological universities. NIPER-Ahmedabad aspires to be a Nationally and Internationally recognized premier Centre of Excellence in Teaching, Research and Entrepreneurial Training in Pharmaceutical Sciences and Biomedical Technologies.

1. Achievements:

Publications - The Institute has published 146 articles in peer reviewed journals of repute (Nov.2018 to Dec.2019).

Students in MS Programme

i. 511 M.S Pharm. students have already graduated from NIPER- Ahmedabad and are well placed in various Pharma industries in India and abroad.

ii. Presently, 204 students are pursuing their M.S. (Pharm) course in 7 disciplines.

Students in PhD Programme

i. 06 students have been awarded Ph.D. Degree till date.

ii. 45 students are continuing with their PhD studies.

Patents - Institute has filed up till now 8 patents wherein faculty or students of NIPER-Ahmedabad are inventors.

Placement of Students - 100% placement of willing students has been achieved

2. Details of Faculty & Staff :

Director – Permanent Post.

Faculty	Count
Associate Professor (Regular)	7*
Assistant Professor (Regular)	13**
Assistant Professor (Contractual)	4***

*1 Associate Professor to be join in February 2020
** 7 Assistant Professor to be join in March 2020
***1-Ramalingaswami Fellow

Contractual Technical Staff	–	05
Contractual Admin Staff	–	09

Post-Doc Fellow – 01

3. Total Allocation by the Government during the last 4 years

Table-5W
(Allocation of fund by the Government during the last 4 years)
(Rs. in crores)

Year	Allocation BE	Allocation RE	Total Release
2016-17	21.96	21.96	19.48
2017-18	22.96	27.96	27.96
2018-19	12.00	12.00	12.00
2019-20*	15.00	15.00	15.00

* Fund released till December 2019

4. Students

Degrees/programmes offered and Subjects offered (with year) with admission status

Table-5X

(Degrees/programmes and Subjects offered year-wise with admission status)

Level-Masters/ Doctoral	Degree MS /PhD	Discipline	No. of students admitted	
			2018-19	2019-20
Masters	M.S.(Pharm.)	Biotechnology	10	11
Doctoral	PhD		01	1
Masters	M.S.(Pharm.)	Medicinal Chemistry	16	17
Doctoral	PhD		02	3
Masters	M.S.(Pharm.)	Medical Devices	10	11
Doctoral	PhD		01	0
Masters	M.S.(Pharm.)	Natural Products	10	11
Doctoral	PhD		01	1
Masters	M.S.(Pharm.)	Pharmaceutical Analysis	19	22
Doctoral	PhD		01	2
Masters	M.S.(Pharm.)	Pharmacology & Toxicology	16	18
Doctoral	PhD		02	3
Masters	M.S.(Pharm.)	Pharmaceutics	18	22
Doctoral	PhD		01	2
			108	**124**

Degree/MS/MBA/M.Tech/ Ph.D	Discipline	No. of students admitted		
		2017-19	2018-20	2019-20
MS	7 Disciplines	72	96	108
Ph.D	7 Disciplines	11	8	12

5. Teacher-Student ratio:

Presently **1: 13 (18 Faculty: 249 students)**

Table-5Y

(Teacher-student ratio)

Course	Ratio
Ph.D.	(S-45:F18) 2.5:1
Masters' (Science)	(S-204:F18) 11.3 :1

* Guest faculty members are also taking classes

6. Employability/ Placements Status: Last 2 years placements status: in Campus/off campus

Table-5Z

(Employability/ Placements Status)

Batch	Total no of student	Not placed	Total no of student placed	Going for higher studies
2016-18	69	6	54	9
2017-19	72	1	46	25

List of some of the companies participated in the year 2019

VYOME True Sense Dermatology | ERIS pharma | janssen Pharmaceutical Companies of Johnson & Johnson | Astral Pharmaceuticals

Johnson & Johnson | amneal | Phyto Life Sciences P. Ltd. | FTF Pharma Pvt. Ltd.

Lupin Pharmaceuticals | Torrent Pharmaceuticals Ltd. | ERIS pharma | Mylan

CORONA Remedies Pvt. Ltd. | Piramal Healthcare | PL | laila Pharma

VIPRO Life Science | ACCUPREC Research Labs Pvt. Ltd. Ultimate solution... | WOCKHARDT | ADVANTAGE

Sahajanand Laser Technology Ltd. | SAMI LABS | Meril More to Life | NOVARTIS

sparc | Aten Porus Lifesciences

7. Teachers: International Research Collaboration

NIPER-Ahmedabad has established an **International Research Collaboration** with faculties from Harvard Medical School, Boston, USA, Johns Hopkins University School of Medicine, Baltimore, MD, USA, Massachusetts Institute of Technology, USA; Miller School of Medicine,USA, University of Washington, Seattle, USA; University of Newcastle, School of Biomedical Sciences and Pharmacy, Australia; University of Mississippi School of Pharmacy, USA; Wayne State University Use-inspired Biomaterials & Integrated Nano Delivery Systems Laboratory, USA; and National University of Ireland, Galway, Ireland. Under this initiative research, faculties from these foreign Universities/Institutes have agreed to establish future research collaborations and academic partnership with the faculty members from NIPER-Ahmedabad.

8. MoUs signed recently:

Table-5AA

(MoUs signed recently by NIPER Ahmedabad)

12-11-2018	Sanat Products Limited, Delhi - 110092
03-12-2018	Gujarat University, Navrangpura, Ahmedabad - 380009
21/3/2019	University of Prince Edward Island, 550, University Avenue, Charlottetown, PE CIA 4P3, Canada AK
01-04-2019	UPEC, Université Paris-Est Créteil Val de Marne 61, avenue du Général de Gaulle 94010 Créteil Cedex France
03-09-2019	Ophthalmic marketing & Services Pvt.Ltd. Plot No. 87/3/B, Industries Road, Phase I, GIDC Vatwa, Ahmedabad, Gujarat 382445

9. Research: Active Research Areas:

Department of Biotechnology:-

Genetic profile and biomarker identification of OSCC patients through transcriptome analysis We are currently working in an extensive area of transcriptome analysis of tobacco-addicted patients of oral squamous cell carcinoma on tumour samples taken from Gujarat population. The results obtained can pave the way for identifying better targeting approaches and the idea of personalized medicine which is presently in the boom.

Epigenetic modulation in diabetic nephropathy through miRNA – The Institute currently working on Diabetic nephropathy and its new therapeutic targets for its treatment

Targeting breast cancer stem cells using collateral lethality approach.

Bioengineered three-dimensional stem cell niche for intervertebral disc repair and regeneration.

Department of Medicinal Chemistry:-

Multi target directed Peptides and peptidomemetics in Alzheimer's proteopathy

Mis-folded proteins (both intracellular as well as extracellular) is a hallmark feature in numerous human disorders including sickle cell anemia, neurodegenerative diseases such as Alzheimer's disease (AD), Parkinson's disease (PD) and metabolic diseases such as type II diabetes.

Alzheimer's disease:

Construction of pharmaceutically important molecules through C–H bond activation

Sustainable functionalization of heterocycles using water as reaction medium.

Department of Medical Devices:-

- Biomaterial Platforms: New concepts in material fabrication methods have been utilized in developing advanced forms of hydrogel and particles for specific medical and biotechnological applications.

- Lab-on-a-chip: Bioengineered three-dimensional inflammatory disease model of degenerated tissues
- Smart 3D scaffolds for tissue regeneration and repair by nanotechnology intervention
- Advanced strategies for cancer theranostics
- Paper microfluidics for diagnostic applications
- Micro/nanodevices for life-sciences and biomedical applications

Department of Natural Product:-

- LC-MS based dereplication strategy for isolation of novel bioactive natural products from plant sources :- Natural products play a very important role in the discovery of new drugs. Dereplication technique has reinvigorated the natural product based drug discovery process by improvising the time required for isolation of novel molecules.
- Fingerprinting herbal extracts by LC-UV-MS for chemical marker identification
- Bio-prospecting of endolichenic fungi to discover novel bioactive scaffolds
- Identification of a Natural Products possessing GLP-1R agonist activity from the plants recognized to have anti-diabetic potential; in silico approach followed by the testing of shortlisted molecules by specific in vitro assay.

Department of Pharmaceutical Analysis:-

- Metabolite profiling of drugs by using HPLC and LC-MS/MS

  Drugs are metabolized in the body and converted to more polar compounds and eliminated easily. These are metabolized by phase 1 and phase 2 reactions. Enzymes involved in the phase 1 reactions are Cytochrome P450s, flavin containing monooxygenases and epoxide hydrolases. In the phase I reactions, oxidation, reduction and hydrolytic reactions were observed. In the phase II reactions, enzymes involved are sulfotransferases (SULT), UDP-glucuronosyl transferases (UGT), glutathione-S-transferases (GST), N-acetyl transferases (NAT), and methyl transferases.

- Forced degradation and impurity profiling of drugs by HPLC and LC-MS-MS
- Drug-excipient compatibility studies using isothermal stress testing

Department of Pharmacology and Toxicology:-

- Mitochondrial protection in ischemic stroke using intra-arterial mesenchymal stem cell treatment. In last decade, laboratory studies suggest stem cell therapy as a prospective treatment for stroke. Studies demonstrate that the post-ischemic delivery of mesenchymal stem cells (MSCs) significantly reduces ischemic brain damage in animal models of ischemic stroke.
- Stem Cell Therapy to Counteract Endoplasmic Reticulum Stress in Ischemic stroke.
- Exploring neuroprotective effect of Phyllanthus emblica in animal model of ischemic stroke.

- Exploring DAP-kinase pathway in Ischemic stroke by Intra-Arterial Mesenchymal Stem Cells (MSCs) intervention.

Department of Pharmaceutics:-

- Development of novel polymeric nanomaterial for effective cytosolic delivery of anticancer bioactives: The focus of this research is towards the successful delivery of therapeutic agents in a controlled and targeted manner and the development of advanced delivery systems for a variety of applications. Projects ranging from fundamental science to industrially relevant applications are undertaken by Postdoc, Ph.D and postgraduate students within the cluster.
- Formulation Development of Injectable RNA interfering nanoparticle for targeted therapy of diabetic nephropathy
- Tripartite approach for treatment of triple negative breast cancer (TNBC) using graphene oxide wrapped polymeric nanoparticles
- NIR laser activatable Nanoplates for the treatment of resistant tumours

10. Institution leadership:-

NIPER Ahmedabad, aspires to be an internationally recognized premier centre of excellence in teaching, research, and entrepreneurial training. The interdisciplinary courses and cultural diversity at NIPER-Ahmedabad sparks the spirit of innovative research and all-round development of its students. NIPER-Ahmedabad has served as a good launching platform to revamp the pharma education and research, to initiate the new era of pharmaceutical and biomedical sciences. National Institutional Ranking Framework (NIRF) by Ministry of Human Resource Development, Govt. of India, has ranked NIPER – Ahmedabad **1st Rank in TLR and overall 9th best Pharma Institute in India** as per The National Institutional Ranking Framework-2019 (NIRF) released by Ministry for Human Resource Development, Government of India..

11. Impact of NIPER :

NIPER-Ahmedabad serves as a good launching platform to revamp the pharma education and research, initiating the new era of pharmaceutical and biomedical sciences. NIPER-Ahmedabad is committed to building human resource for promoting research and development in the country and contribute towards **''Make in India''** initiative as a part of its national responsibility.

The Institute has outreached to fetch scholars with excellent postdoctoral and teaching experiences from all over the world to enrich the education and research quality of the institute. With these exceptional faculties, the Institute motivates its students to achieve the highest standards of excellence in their courses.

NIPER-Ahmedabad has established itself as one of the top technological pharmacy research institutes in the country with research collaboration as an integral part of the growth strategy. NIPER-Ahmedabad has expanded its outreach to the industry as well as collaborated with the best academic institution of USA, UK, Australia, Ireland and Malaysia for collaborating research, faculty visit, syllabus up-gradation and regulatory reforms with several industries and leading institutes.

NIPER-Ahmedabad has actively committed to promote research and stimulate scientific cross

talk across various disciplines. It has conducted various conferences, symposiums, discussions on chemistry, biology, medicine and materials attended by masters' students, Ph.D, post docs and researchers from academia and industry. The discussions are scientifically stimulating and have led to healthy cross talks and collaborations.

12. Awards - Poster Presentation 39 Students participated in different Poster Presentation and among them 9 students were awarded first & second prize in respective poster competition.

13. Patents and Commercialization:

1. **Patent Title :** Process of isolation and purification of Swertiamarin from Enicostemme littorale, Indian Patent No. 201621008411 (Date: 10/03/2016) **Name of Inventor:** Vinod Jairaj, Satyendra Kumar, Kiran Kalia.

2. **Patent Title:** Cartilage Regeneration Using Piezoelectric Based Scaffold" Indian Patent No. 201621008797 (Date: 14/03/2016). **Name of Inventor:** Govinda Kapusetti, Jaicy Jacob, Kiran Kalia and Piyush Gondaliya

3. **Patent Title:** Minicircle DNA vector for inducing pluripotency in nucleated blood cells and other cell types and its re-differentiation for use in regenerative medicine, Indian Patent No. 201621031592 (Date: 16/09/2016). **Name of Inventor:** Neelam Chauhan, Shaishavi Jansari, Kiran Kalia.

4. **Patent Title:** Graphene Oxide/Polypyrrole/Polyaniline / Zinc Oxide Nanocomposite Based Electrode for Effective Detection of Cholesterol and Bilirubin, Indian Patent Application No. 201821040222 (Date: 25/10/2018). **Name of Inventor:** Anup Kumar, Namdev More, Kiran Kalia,and Govinda Kapusetti.

5. **Patent Title** : Mix-and-Deliver-Type' In Vivo applicable Polymeric Gene Transfecting Reagent for Cancer Therapy, Indian Patent No. 201821043610 (Date: 20/11/2018). **Name of Inventor:** Rakesh K. Tekade, Kaushik Kuche, Piyush Gondaliya, VishakhaTambe, Kiran Kalia.

6. **Patent Title :** Supermacroporus, drug-loaded collagen punctum plug, Indian Patent No.201821045485 (Date: 02/12/2018). **Name of Inventor**: Akshay Srivastava, Gopal Agarwal, Silvy Mary Sebastian.

7. **Patent Title** : Targeting Peripheral Neurons using Tramadol hydrochlorideopioid- encapsulated PEGylated albumin nanoparticles for safe and effective antinociceptive activity, Indian Patent No.201921010920 (Date: 20/03/2019). **Name of Inventor :** Rakesh K. Tekade, Vinod Tiwari, Pankaj Bidve, Dilip Sharma, Namrata Prajapati, Nidhi Raval, Kiran Kalia.

8. **Patent Title :** Process and Composition for loading, stabilization, and delivery of RNAi Therapeutics in Anionic polymer, Indian Patent Application No. 201921019898(Date: 21/05/2019). **Name of Inventor:** Nidhi Raval, Hardi Jogi, Piyush Gondaliya, Kiran Kalia, Rakesh Kumar Tekade.

6th Convocation of NIPER-A

Shri Rajneesh Tingal, J.S Visited NIPER - A and Inaugurated The Fe- Sem Instrument Facility Of The Institute

Dr. P.D Vaghela, Secretary Pharma, visited NIPER-Ahmedabad

First BoG Meeting Held At NIPER-A

5.7 NIPER-Hajipur

NIPER-Hajipur started functioning in 2007 under the mentorship of Institute Rajendra Memorial Research Institute of Medical Sciences (RMRIMS), Patna. There are 3 (courses) viz., (i) M.S. in Biotechnology, (ii) M. Pharm. in Pharmacy Practice and (iii) M. S. Pharmacoinformatics with an intake of 15 in each course.

1. Achievements

Since inception total 294 students have been passed out (M.pharm- 286 and Ph.D- 8), 93 research papers have been published and 4 MoUs have been signed.

2. Details of faculty & staff are appended below

Academic : 08 (on contract)

Non-Academic : 08 (on contract)

3. Fund allocation by the Government during the last 4 years:

Table-5AB
(Allocation of fund by the Government during the last 4 years)

(Rs. in crores)

Year	Budget Estimated	Revised Estimated	Total Release
2016-17	6.00	5.00	5.00
2017-18	6.00	5.00	5.00
2018-19	9.50	9.50	9.50
2019-20*	10.50	10.50	3.00

*Fund released till December 2019.

4. Students

Students are admitted through Joint Entrance Examination (JEE) conducted by the NIPER. The PG sanctioned seat intake in each of the **03** (three) existing departments is **16** (sixteen) and **02** (two) for Ph.D. in each Department.

Table-5AC

(Capacity intake for PG and Ph.D degrees)

Students	Male	Female	General	OBC	SC	ST	Total
PG Pass-outs	18	14	13	14	05	00	32
PG-II (Batch 2018-20)	26	15	19	13	07	02	41
PG-I (Admitted in July 2019)	28	15	08	21	10	04	43
Ph.D. (on roll)	10	04	11	01	02	00	14

5. Teacher-Student ratio 1:9.9

6. Employability/ Placements Status

Most of the students passed out from NIPER Hajipur have got their jobs at suitable places and National importance Institute.

7. Research

7.1. Departmental Research Activities: Dept. of Biotechnology

- Antibiotic sensitivity profiles of *Staphylococcus* isolates from skin of human subjects and its relation to other dermal infections.
- Application of Nanotechnology as a biosensor for detection and diagnosis of diseases.
- Application of functionalized and conjugated gold Nanoparticles for improved antimicrobial efficacy.
- Ubiquitin conjugating enzymes as drug targets in *Leishmania donovani.*
- Effect of different fruits, vegetables and beverages on the growth of a commercially available probiotic under simulated gastric conditions.
- Effect of commercially available nasal sprays, perfumes, floral oils and vegetable extracts on staphylococcal population of smokers and non-smokers.
- Green synthesized gold nanoparticles as antifungal and antiparasitic agents.

7.2. Departmental Research Activities: Dept. of Pharmacy Practice

- Dietary Assessment of Type-2 Diabetic Patients: A single centered hospital based Prospective Study.
- Evaluation of Efficacy and Toxicity of Concurrent Capacitabine with Radiation in Locally Advanced Rectal Cancer Patients of Bihar.
- Knowledge, Attitude and Practices study regarding awareness on cervical cancer screening and HPV Vaccination in Bihar, India.
- Evaluation of Adverse Drug Reaction of Imatinib with reference to P110 & p190 fusion Transcripts in Chronic Myloid Leukemia Patients and its exploration in Indian Populations.
- Knowledge, Stigma, Health Seeking Behavior and its Determinants among Patients with Post Kala azar Dermal Leishmaniasis, Bihar, India.
- Assessment of Risk Factors and Management of Post Kala Azar Dermal Leishmaniasis, Project .
- HPV and its Associated Clinical Outcomes in Cervical Cancer. (Project Ongoing)

7.3. Departmental Research Activities: Dept. of Pharmacoinformatics

- Identification of novel inhibitors for cysteine synthase enzyme for *Leishmania donovani*, using structure based pharmacophore models, molecular dynamics studies and virtual screening methods.

- Development of novel inhibitors for G-Protein Coupled Receptor 3(GPR3) for the treatment of Alzheimer's disease (AD) using QM docking studies, homology modelling, molecular dynamics (MD) studies, free energy calculation studies.

- Development of novel inhibitors for G-Protein Coupled Receptor 3(GPR3) for the treatment of Alzheimer's disease (AD) using QM docking studies, homology modelling, molecular dynamics (MD) studies, free energy calculation studies.

8. Impact of NIPER

NIPER Hajipur has successfully produced 314 students in three disciplines namely, Biotechnology, Pharmacoinformatics and Pharmacy Practice who are either employed in different pharmaceutical industries or pursuing their higher education in different institutes or universities across the globe. Many of NIPER Hajipur ex-students are engaged as faculty at different institutions.

International Yoga day celebration

Swachhata Pakhwada

CHAPTER 6

PUBLIC SECTOR UNDERTAKINGS (PSUs)

CHAPTER 6

PUBLIC SECTOR UNDERTAKINGS

6.1 CENTRAL PUBLIC SECTOR UNDERAKINGS (CPSUs)

There are five Central Public Sector Undertakings (CPSUs) under the administrative control of the Department of Pharmaceuticals. The Government has decided to close two PSUs, viz. Indian Drugs & Pharmaceuticals Limited (IDPL) and Rajasthan Drugs & Pharmaceuticals Limited (RDPL) and strategically sell the remaining three PSUs, viz., Hindustan Antibiotic Limited (HAL), Bengal Chemicals & Pharmaceuticals Limited (BCPL) and Karnataka Antibiotic & Pharmaceuticals Limited (KAPL). The gist of these PSUs is as under:

Table-6A

(Summary of CPSUs of the Department)

(As on December 2019)

	HAL	IDPL	RDPL	BCPL	KAPL
Established in	1954	1961	1978	1981	1981
Classification	Sick	Sick	Incipient sick	Sick (now Profit Making)	Profit Making
Net worth (in cr.)	-430.58	-7626.58	-76.88	-66.78	179.58
Turnover (in cr.)	66.85	33.96	Nil	100.50	360.36
Operating profit/ loss (in cr.)	-38.30	-13.25	Balance sheet not finalised	25.26	25.23
Liabilities (in cr.)	806.82	7812	114 Cr	208.92	168.81
No. of Employees	918	15	128	195	658
Officer level	174	3	12	51	225
Worker level	744	12	116	144	433
Total land	263.57 acres	1815.048 acre	9.35 acre	72.89 acre	40.34 acres
Leasehold	Nil	833.878 acre	9.35 acre	1.10 acre	Nil
Freehold	263.57 acres	981.17 acre	Nil	71.79 acre	40.34 acres

Gist of Cabinet decisions on Pharma PSUs :

(A) Based on recommendations of a Committee of Ministers, the Cabinet in its meeting held on 28.12.2016 decided that:

(i) Only that much of surplus land of HAL, IDPL, RDPL and BCPL as would be required to meet the liabilities be sold through open competitive bidding to Government agencies and the outstanding liabilities be cleared from the sale proceeds. Voluntary Separation Scheme/ Voluntary Retirement Scheme also be implemented in these PSUs to pave way for their closure. Remaining part of the land should be managed in accordance with guidelines of Department of Investment and Public Asset Management (DIPAM) and Department of Public Enterprises (DPE) in this regard and if need be, vested in a SPV created for this purpose.

(ii) After liabilities have been met, balance sheet cleansed and the Voluntary Separation Scheme/ Voluntary Retirement Scheme effected, the Department to close IDPL and RDPL and HAL and BCPL be put up for strategic sale.

(iii) While taking a decision to close the PSUs, the Department may also explore the possibility of hiving off the subsidiary companies of HAL and IDPL for private participation, wherever found viable.

(B) As no bids for surplus land were received from Government agencies, the Union Cabinet on 17.07.2019 modified its earlier decision and permitted sale of surplus land as per revised DPE's guidelines dated 14.06.2018 and to provide budgetary support as loan of Rs 330.35 cr. for meeting the employees liabilities (Unpaid salary – Rs. 158.35 cr. + VRS Rs . 172.00 cr.) as under:

a. IDPL – Rs. 6.50 cr.

b. RDPL – Rs. 43.70 cr.

c. HAL – Rs. 280.15 cr.

The Cabinet further decided for constitution of a Committee of Ministers for taking all decisions pertaining to closure/ strategic sale including the sale of assets and clearance of outstanding liabilities. Further action for implementation of the Cabinet's decisions is being taken.

(C) Separately, the Cabinet Committee of Economic Affairs (CCEA) in its meeting held on 01.11.2017 accorded in-principle approval for strategic disinvestment of 100% Government of India equity in KAPL. The decision is presently kept on hold as the matter is pending before the Supreme Court.

(D) Further, the Union Cabinet on 20.11.2019 has approved extension of Pharmaceutical Purchas Policy (PPP) till final closure/ strategic sale of the pharma PSUs.

6.2 INDIAN DRUGS AND PHARMACEUTICALS LTD. (IDPL)

Background:

Indian Drugs & Pharmaceuticals Limited (IDPL) was incorporated as a public limited company on 5th April, 1961 under the Companies Act, 1956. The main objectives of the company were to create self-sufficiency in respect of essential life saving medicines, to free the country from dependence on imports and to provide medicines to the millions at affordable prices. IDPL was basically conceived and established as a part of Healthcare Infrastructure and has played a pioneering infrastructural role in the growth of Indian Drugs Industry base.

The Registered Office of the Company is located at IDPL Complex, Dundahera, Gurgaon. The company has three main Plants at Rishikesh (Uttarakhand), Gurugram (Haryana), Hyderabad (Telangana) and two 100% wholly owned subsidiaries, namely, IDPL (Tamil Nadu) Limited, Chennai (Tamil Nadu) and Bihar Drugs & Organic Chemicals Limited (BDOCL) at Muzaffarpur (Bihar). In addition, IDPL has one Joint Venture, promoted in collaboration with Industrial Promotion & Investment Corporation of Orissa Limited (IPICOL), Government of Odisha, namely Odisha Drugs & Chemicals Ltd. (ODCL) Bhubaneswar having share of 51% and 49% respectively.

IDPL has played a major role in the strategic National Health Programmes like Family Welfare Programme & Populations Control (Mala-D & Mala-N), anti-malarial (Chloroquine) and prevention of dehydration (ORS) by providing quality medicines. IDPL has encouraged indigenous production and supporting Government in meeting emergent situations in Cyclone, Flood and Earthquake in Odisha, Uttrakhand and J&K providing life saving medicines on time. The main objectives of setting-up IDPL were not to earn profits but to encourage indigenous production of pharmaceuticals and to support various health programmes of the Central Government.

100% wholly owned subsidiaries

a) IDPL (Tamil Nadu) Ltd, Chennai.

IDPL (TN) Ltd. Chennai was incorporated in September, 1965. Initially it was a Surgical Instruments Plant and later diverted for formulations. In terms of revival package approved by BIFR in 1994, the Plant was converted into a wholly owned subsidiary in the name and style of IDPL (Tamilnadu) Limited, Chennai with effect from 1.4.1994. It was a Schedule-M compliant plant engaged in manufacture of pharmaceuticals formulations up to September'2018. There is no production activity in the Unit since October' 2018.

b) Bihar Drugs & Organic Chemicals Ltd. (BDOCL), Muzaffarpur

Bihar Drugs & Organic Chemicals Ltd., (BDOCL) Muzaffarpur was incorporated in 1979, converted into a wholly owned subsidiary with effect from 1.4.1994. Since November 1996 there is no production activity in BDOCL Plant.

Joint Venture

Orissa Drugs and Chemicals Ltd (ODCL)

Orissa Drugs & Chemicals Limited (ODCL) was incorporated in 1979 and commissioned fully for production from September, 1983. ODCL is a Joint Venture promoted by Indian Drugs & Pharmaceuticals Ltd. (IDPL) and Industrial Promotion & Investment Corporation of Orissa (IPICOL). IDPL holds 51% of the equity shares and 49% is with IPICOL. BIFR passed orders for winding up in April, 2003 under the provisions of SICA Act, 1985. High Court of Orissa had appointed a provisional Liquidator. This has since been stayed by a larger Bench of the Odisha High Court.

Presently Company is engaged in manufacture of pharmaceuticals formulations in the form of Tablets, Capsules, Powder, ORS and Injectables etc. ODCL Plant is Schedule-M compliant and company has earned operating profit since 2011-12.

Injectible section-ODCL

Modernization of Plants (Government assistance projects and status):

To make all IDPL Plants WHO-GMP compliant fund of Rs 740 lacs was released by the Government. Out of Rs. 740 lacs, a fund of Rs.65.67 lacs was utilised towards WHO GMP work of Rishikesh and ODCL. Later, in view of Cabinet decision to close IDPL Units, the un-utilised fund of Rs. 674.33 lacs has been returned back to the Department in July,2019. Rishikesh Plant is Schedule 'M' and WHO-GMP compliant. COPP has been received for 9 products. Whereas Gurgaon Plant, Tablets Section is also Schedule-M compliant.

Product profile and Range:

Presently, IDPL is manufacturing nearly 86 products (PPP) and 25 products (Non-PPP) in the form of Capsules, Tablets, Dry Syrup, Liquid Oral and Injection.ORS, based on mainly following therapeutic groups:

- Antibacterial /Anti-infective, Analgestic /Anti-inflammatory, Gastrointestinal, Respiratory Tract, Contraceptive/OCP, Vitamins/ Mineral, Anti allergic, Anti fungal Antimalarial Anti diabetic Cardiovascular.

Popular Brands: Deacos, 110 ml, Sukcee Tab, Cebxin-Z are popular brands.

Manpower- Presently IDPL has 15 regular employees and 96 on contractual basis in the Company in cluding 100% Subsidiaries. Company appointed contractual manpower only on need basis in statutory and critical position to perform the day-to-day activities and safe guard of the Company's property. At present IDPL bears all liabilities from its internal resources.

Distribution network if any; Company is selling its products through C&F/Distributors to Institutions located all over India.

Performance: In-house production figures for the last five years (up to December' 2019) are as under:

Table-6B

(In-house production figures for the last five years)

(Rs. in Crore)

Subject	2015-16	2016-17	2017-18	2018-19	2019-20
Production	87.94	78.34	34.58	33.96	7.08
Sales	86.41	79.45	31.75	33.95	10.83

Marketing: Share of Institutions and retail: The Company is supplying its products to Govt. Institutions on PPP as per NPPA certified rates. Major Institutions are ESIC, Ministry of Health, Defence, Railways, State Governments/Corporations and Public Sector Enterprises Hospitals who place orders under different categories of Therapeutic Medicines. Apart from above the company is fully supporting Pradhan Mantri Jan Aushadhi Pariyojna.

Present status:

In view of Cabinet decision dated 28.12.2016 and 17.07.2019, the company is in the process of closure. An MoU between IDPL and Land Management (LMA) NBCC (National Building Construction Corporation has been signed in October,2019 for disposal of its land /immovable properties. Also, an MoU between IDPL and Auctioning Agency (AA) Metal Scrap Trading Corporation (MSTC) has been signed in October, 2019 for sales of its moveable and immovable properties by e-auctioning. A valuer has also been appointed to assess the moveable and immoveable properties of IDPL.

6.3 Hindustan Antibiotics Limited (HAL)

1.0 Background:

Hindustan Antibiotics Ltd (HAL) is wholly owned Government Company engaged in the manufacturing & marketing of life saving drugs. HAL was established in 1954 with WHO/ UNICF assistance. HAL is first to Manufacture the Antibiotics like Bulk drugs, Streptomycin and Gentamycin. HAL has rare distinction of inventing two new molecules viz. Hamycin and Auerofungin.

HAL, at present, is bouncing back to productive and efficient work culture and taking all the steps to achieve the enhanced turnover and profitability for the company.

HAL - Building Front View Of Cephalosporin Plant

Performance Rating Under MOU:

HAL has entered into MOU for the year 2018-19 with the Department. Based on the Audited Results of the Company, HAL is likely to receive "VERY GOOD" MOU Rating for the year 2018-19. HAL has been rated "GOOD" in the MOU 2017-18 and 2016-17 by Department of Public Enterprises (DPE).

Corporate Governance:

HAL is committed to follow Good Corporate Governance Practices in conducting business in

legal, ethical & transparent manner. During the Year 2018-19, HAL got the "EXCELLENT" rating in self evaluation of compliance of Guidelines on Corporate Governance issued by DPE for CPSEs. During 2019-20 also, HAL is expected to get "EXCELLENT" rating.

2.0 Board Of Directors:

Ms. Nirja Saraf	:	Managing Director
Mr. Manoj Kumar Bhardwaj	:	Govt . Nominee Director
Mr. Dinesh Kodarbhai Makwana	:	Independent Director

3.0 Subsidiaries of HAL:

Table-6C

(Subsidiaries of HAL)

Sr. No.	Particulars	Year
a.	Maharashtra Antibiotics and Pharmaceuticals Limited (MAPL)	1979 till date
b.	Manipur State Drugs & Pharmaceuticals Limited (MS-DPL)	1989 till date

4.0 Brief of Facilities available:

HAL manufacturing facilities include the following:

a) Bulk Plant:

HAL is having fermentation-based manufacturing facilities including 19X92M3 fermenter along with its downstream processing, solvent recovery and associated utilities like steam, chilled water, cooling tower water, compressed air etc. This facility earlier was used for manufacturing fermentation-based bulk drugs like Penicillin-G, Streptomycin Sulphate. This facility is idle at present and is available for leasing

b) Formulation facility:

HAL is focusing at present on manufacturing Pharma formulation and promising Agro- formulation to cater to wide range of Pharma and Agro market. HAL Pharma products includes various dosage forms like Injectable products, Tablets, Capsules, Intra-Venous products, Liquid Syrup etc. At present, manufacturing formulation capacities including Pharma & Agro-Chem, are as under:

Table-6D

(Manufacturing formulation capacities including Pharma & Agro-Chem)

Sr. No.	Production facilities	Capacities (Existing) Lac Nos. / annum
A. Pharma Plants		
1	**Powder Injectable**	

a.	Cephalosporin	450
b.	Penicillin	450
2	**Tablets**	
a.	Penicillin	1200
b.	Non-Penicillin	2400
3	**Penicillin Capsules**	**2500**
4	**I.V. Fluids**	**120**
5	**Liquid Syrup & External preparation**	**24**
B Agro-Chem Plants		
1	Agro- Chem (Streptocycline)	180
2	Humaur formulation	210 KL*
3	Aureofungin Bulk	0.810 tonnes
4	Azotomeal	50 KL*
5	Phosphmeal	50 KL*
C Alcoholic Hand Disinfectant (AHD)		12

*Capacity of these products can be increased depending upon requirement since HAL is having idle sizable fermentation facilities

c) During the year 2018-19, HAL entered into MoU with another CPSU M/s Mishra Dhatu Nigam Ltd. (MIDHANI), under the administrative control of Ministry of Defence, for marketing of Bio-Implants manufactured by MIDHANI.

d) During the year 2018-19, HAL re-started manufacturing of following Agro Products which were closed down for the last 8 to 10 years:

i) Aureofungin

ii) Humaur

iii) Phosphomeal

iv) Azetomeal

e) During the year 2019-20, HAL has re-started marketing of one of its premium product which was closed down since 2010, namely Pen-V tablet, which is used in curing Rheumatic Heart Disease. HAL is the only unit in the country, for manufacturing of Pen-V tablets. Discussions are going on with Ministry of Health and ICMR for orders, which are expected in January 2020.

f) Research and Development:

HAL's R & D Department is engaged in manufacturing standard size Narcotic Drugs Detection Kits, Precursor Chemicals Detection Kits and Ketamine Detection Kits as per requirements of Narcotic Control Bureau, Department of Internal Security, Ministry of Home Affairs, Govt. of India, New Delhi. HAL is the only exclusive manufacturer of this product in the country.

5.0 Present Status of the Company

Company is having manpower strength of 888 employees as against the requirement of 350 employees. The Company has initiated the process of VRS for the employees in the month of September 2019. A total of 580 employees have submitted application for VRS. The process of relieving the employees is in progress. The Company is having 263 acres of land, out of which Cabinet has sanctioned sale of surplus 87.70 acres of land to meet up its liabilities. The Company has signed an MOU with NBCC on 26.10.2019 as Land Management Agency for sale of land. The Company has submitted details of surplus land of HAL and all properties of its 2 Subsidiary Companies namely, MAPL, Nagpur and MSDPL, Manipur to NBCC.

6.0 Details of Production, Sales, Turnover and Net Profit / Loss for the last three years:

Table-6E

(Production, Turnover and Net Profit for the last three years)

(Rs in Crores)

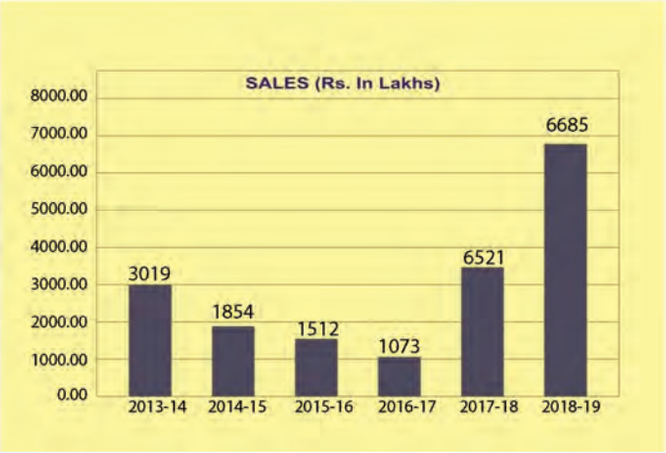
Particulars	2015-16	2016-17	2017-18	2018-19	2019-20 (upto Dec.' 2019)
Production	14.45	11.36	37.44	54.51	26.25
Sales Turnover	15.12	10.73	35.21	66.85	36.40
Net Profit (Loss)	(74.68)	78.24	208.32*	(71.10)	(42.70)

*** Net Profit is the result of an extraordinary item of income viz. waiver by Govt. of India of its Plan and Non-Plan loan of Rs.186.96 crores and the interest there on of Rs.89.94 crores.**

The increase in sales turnover of Rs. 66.85 Crores as compared to Rs. 35.21 Crore during the previous year has been possible due to restarting of production activities of various plants including Pilot Plant (for manufacture of Aureofungin & Humaur) & IVF Plant (for manufacture of large volume parenterals).

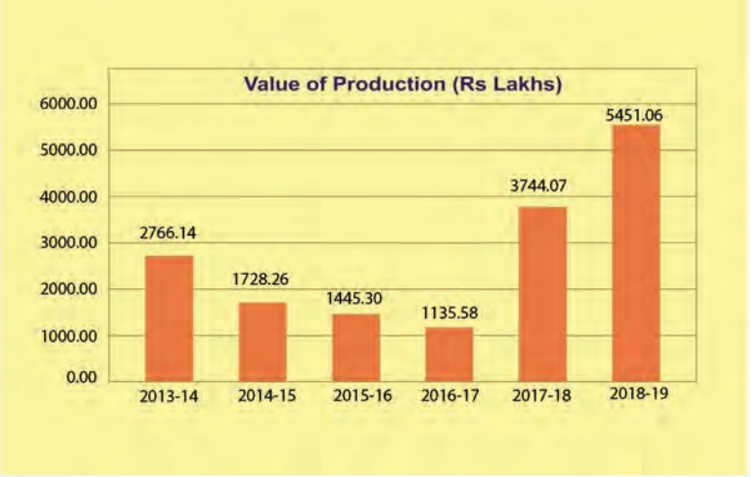
Graph-6(i)

(Sales of HAL since 2013-14)



Graph-6(ii)

(Value of production in HAL since 2013-14)



7.0 Projects implemented so far:

HAL has completed setting-up of new Cephalosporin power injectable facilities. This facility was accredited with WHO-GMP certification in July 2010. The upgradation of Betalactam & Quality Control Lab is complete and ready for WHO-GMP inspection. Non-Parental facility is also being planned to be upgraded to WHO-GMP compliance, during 2020-21.

8.0 Planned Projects:

HAL is planning upgradation of following facilities to generate more funds for the company:

1.1 Facility for bulk Amoxicillin Trihydrate IP with initial capacity of around 50 to 60 Tonnes per month.

1.2 Facility for bulk Sulbactum Sodium IP .

1.3 Facility for Alcoholic Handrub Disinfectant, the only CPSU to have such facility.

1.4 Marketing of Bio-medical Implants manufactured by Mishra Dhatu Nigam Ltd., a CPSU under the Ministry of Defence, GOI, having certification of ISO 9001:2015 & AS 9001:2016.

1.5 Rooftop Solar Panels for generation of power equivalent to 1 MW.

The funding for the above projects shall be done through internal resources. The manufacturing of bulk APIs shall also compliment the Hon'ble Prime Minister's 'Make in India' initiative for bulk drugs / API's.

9.0 Strategy for Marketing:

HAL's sales are at present largely dependent on institutional sale with PPP model. For reducing the dependence on PPP business following strategy would be adopted by the Company:

- Enhancing the Trade Sale through well established distribution network of distributors, C & F agents and branches to support product supply chain.
- Inducting new products having high value & high margin & phasing out products which are at the end of their life cycle.
- Increasing the sales of existing high margin products.
- To be competitive in Institutional business with cost reduction.
- To expand Agro-vet business having high potential & better margin.
- To capture growing export markets since the manufacturing facilities would be WHO-GMP compliant.

10.0 Rationalization of Manpower:

The Company has 918 employees on 31st March, 2019. The Company has 110 women employees. As on 1st December, 2019, the total number of employees is 885. Various social security schemes like Provident Fund, Gratuity & Medical schemes are also in place in the Company. HAL has not received salary revision since 1997, whereas employees of other CPSU's are already receiving salary as per 2007/2017 revision. It is necessary to revise pay scales so as to get quality personnel in core areas.

11.0 ERP system for efficient functioning:

a. All the systems including receipt in the Stores, issue for production, consumption of raw material as well as packaging material for the product, out-turn of production to marketing & distribution, Personnel including time-office is being computerized using ERP System.

b. This system will enable to have updated information instantly and thereby can have efficient monitoring of inventory, consumption and reduce manpower.

12.0 Cost cutting measures:

a. System of regular monitoring of 'A' category raw material and packaging material with respect to the standard consumption norms is being introduced.

b. Utilization of funds to reduce interest burden and controls on fund management.

c. Cost cutting measures in all the areas of operation is strictly enforced.

d. Optimum utilization of available manpower is enforced.

13.0 Social Commitments of HAL:

a. Swachha Bharat Abhiyan was held in HAL from 16.08.2019 to 20.09.2019

b. "Hindi Pakhwada" programme was organized by HAL from 14/09/2019 to 14/10/2019.

c. Vigilance Awareness Week was celebrated in HAL with effect from 28.10.2019. Pledge was taken and various competitions like Debate, Essay and Slogans organized.

Prize Distribution - Vigilance Awareness Week at HAL

6.4 KARNATAKA ANTIBIOTICS & PHARMACEUTICALS LIMITED (KAPL)

BACKGROUND

Karnataka Antibiotics and Pharmaceuticals Limited (KAPL) is a Profit making Joint Sector Company incorporated in the year 1981 [with 59% share by Government of India and 41% share by Government of Karnataka through Karnataka State Industrial and Infrastructure Development Corporation (KSIIDC)]. The basic objective of the Company is to make available life saving drugs of good quality to Government Hospitals and other Institutions along with Private Medical Practitioners. The Company has WHO-GMP Certified manufacturing facilities for Dry Powder Injectables, Liquid Injectables, Tablets, Capsules, Dry Syrups and Suspensions. The paid-up share capital of the Company as on date is Rs. 13.49 crores.

Production and Sales Performance:

Table-6F

(Production and Sales Performance)

(Rs. in Crores)

Year	Production	Sales
2014-2015	281.81	247.24
2015-2016	342.01	326.92
2016-2017	405.51	386.27
2017-2018	366.82	353.83
2018-2019	388.63	360.36
2019-20(Nov.2019)	298.98	280.67

PAST ACHIEVEMENTS:

- Mini Ratna CPSE
- ISO 9001 (QMS) AND ISO 14001 (EMS)
- PIC/S Certification

POPULAR BRANDS:

PHARMA – TRADE

Table-6G

(Pharma trade)

No.	Products	Therapy Segments	NLEM	Monopoly	Market Value
1	Grenil	Anti-Migraine	No	No	Rs. 794.65 lakhs
2	Oxytocin	Hormone	Yes	No	Rs. 474.71 lakhs
3	Cyfolac	Probiotics	No	No	Rs. 345.32 lakhs
4	Remcc	Cough & Cold	No	No	Rs. 176.07 lakhs
5	Verclav	Antibiotic	Yes	No	Rs. 160.71 lakhs
6	POP E	Platelet Booster	No	No	Rs. 155.39 lakhs
7	Zinfe	Haematinic	No	No	Rs. 138.86 lakhs
8	Numol	Pain Medication	No	No	Rs. 111.37 lakhs

AGROVET:

Table-6H

(Agrovet)

No	Products	Therapy Segments	Monopoly	Market Value
1	Kalvimin	Animal Feed Supplement	No	Rs. 3.0 Cr
2	K-live	Liver Tonic	No	Rs. 2.5 Cr
3	Cal K	Animal Feed Supplement	No	Rs. 2.5 Cr

DISTRIBUTION NETWORK:

PHARMA

The Company has been expanding its operations in Retail Trade Sector with a planned effort so as to cater to the needs of the Private Medical Practitioners. In this direction the Company has been periodically launching New Products in the various Therapeutic Segments. The Domestic operations spans through the country manned by a highly dedicated Professional Field Force and backed by a well knit Channel of Distribution ensuring KAPL's presence at the Metro as well as Micro Markets.

KAPL has its Branches located in almost all the State Head Quarters. The Company also has an excellent Distribution Network at almost 20 branches at Major Cities catering to the respective State area through Channel Marketing. The supplies are made effective through approved Stockists to Retailers, Nursing Homes and Dispensing doctors in the Trade Segment and directly to Institutions in Rate Contract (RC) & Non-Rate Contract (NRC) Sectors.

MARKETING:

PHARMA:

The Company has been mainly focusing on Prescription Market as Medical Professional as our Customers, where many of the MNCs and Private Pharma Players have a major share. The Company is also dependant on PPP Policy for Institutional Business, where our concentration is on Govt. Hospitals, State Government Hospitals, Corporates, PSU Hospitals, Defence and Insurance. It has potential to expand in Trade Segment and also to increase volumes by focusing on CPSE Hospitals and large Corporate Hospitals.

AGROVET:

The Company is focusing on Agro Dealers, Department of Agriculture / Horiculture for Agro Products. Products are being focused on Veterinary Practitioners, Farmers, Animal Husbandary Department of all States and Milk Unions for Veterinary Products and Feed Supplements.

NEW PRODUCTS (PHARMA & AGROVET) FOR 2019-20

Table-6I

(New products- pharma & agrovet - for 2019-20)

Sl. No	Products	Therapeutic Category
PHARMA		
a)	Kapitra 100	Antifungal
b)	Kapitra 200	Antifungal
c)	Kaplicon	Antifungal
AGROVET		
d)	Vet CPM Injection	Anti Alergic
e)	Pensbiotic MD 5 gm	Antibiotic

Presently Company is manufacturing and marketing Oxytocin Injection as per the decision of Government of India.

FUTURE PLANS:

WHO GMP CERTIFICATION OF AYURVEDA DHARWAD PLANT

Combiline both Vials and Ampoules inauguration at Small Volume Parenterals (SVP) at Factory.

Inauguration of New Formulation Development Department by Shri Sunil Kumar Kaimal, Managing Director during October 2019.

6.5 Bengal Chemicals & Pharmaceuticals Ltd. (BCPL)

Background:

Bengal Chemicals and Pharmaceuticals Limited (BCPL) was formed in 1901 by Acharya Prafulla Chandra Roy, a renowned Scientist and Academician. Government of India had taken over its Management in 1977, nationalised in 1980 and Registered it as Bengal Chemicals & Pharmaceuticals Limited (BCPL) under the Companies Act in 1981.

Business Operations:

Headquartered in Kolkata, BCPL is engaged in the business of industrial chemicals (Alum), branded and unbranded generic pharmaceuticals, hair oil and disinfectants such as Phenol, Naphthalene balls, Bleaching powder, Toilet cleaners and Floor cleaners.

Manufacturing Locations: At present BCPL has four factories; at Maniktala and Panihati in West Bengal, Mumbai and Kanpur.

Maniktala Unit: This unit was set up in 1905 and primarily produces Pharmaceuticals formulations which include branded as well as unbranded generic products. Commercial production in Tablet, Capsule and Ointment sections is going on full-fledged.

Panihati Unit: Panihati unit was set up in 1920 and is located in North 24 Parganas, West Bengal. Panihati unit primarily produces Industrial Chemicals and Home Products which include Pheneol, Naphthalene Balls, and other disinfectants. Commercial production in most of the renovated production-blocks such as Ferric Alum, Pheneol, Napthalene and White Tiger have commenced.

Mumbai Unit: Mumbai unit was set up in 1938 and further the commercial space developed has been leased out to third parties for generation of additional sources of income.

Kanpur Unit: Kanpur Unit was set up in 1949, primarily produces low-value tablets.

Past Achievements: The Company has retained its brand position in home products even during the crisis period and well set to capitalize on these brands now.

Product profile and range:

The products manufactured under each of these business segments are mentioned below:

Product Profile

Table-6J
(Product Profile)

Division - I	Division – II		Division – III		
Industrial Chemicals	**Pharma Generics**	**Pharma Branded**	**Disinfectants**	**Hair Oil**	**Other Products**
Alum Bleaching Powder	Tablets, Capsules, Injectables Ointments Liquids External-Liquids ASVS	Aqua Ptychotis Kalmegh Eutheria Benflam	Pheneol White Tiger Klin Toilet Lysol	Cantharidine Hair Oil	Naphthal-ene Balls Liquid Soap Aguru Essence

Popular brands: Pheneol – Lamp brand, White Tiger, Naphthalene, Cantharidine Hair Oil.

Manpower:

Table-6K
(Manpower)

Particulars	Manpower (As on 30.11.2019)
Executives	51
Supervisors	22
Workers	102
Grand Total	**175**

Distribution network if any:

The company has a strong distribution network pan India with 6 Depots and 6 C&F Agencies. BCPL has opened 5 Retail Stores in Kolkata.

Performance:

Details of Production, Turnover and Financial Performance of BCPL for last five years is under:

Table-6L

(Financial Performance of BCPL for last five years)

(Rs. in Crores)

Particulars	2018-19	2017-18	2016-17	2015-16	2014-15
Production	123.45	98.18	102.69	106.70	64.10
Income	119.67	94.80	110.25	112.76	65.53
Gross Margin(Loss)	32.83	24.23	24.05	11.24	1.65
Interest Expenses (Finance cost)	2.45	9.05	15.07	16.42	15.36
Depreciation	5.12	5.12	4.47	3.95	3.61
Net Profit(Loss)	25.26	10.06	4.51	(9.13)	(17.32)

DPE rating:

Table-6M

(DPE rating)

Year	MOU Assessment	Corporate Governance
2014-15	"Good"	"Fair"
2015-16	"Excellent"	"Excellent"
2016-17	"Very Good"	"Excellent"
2017-18	"Not applicable"	"Excellent"
2018-19	"Not applicable"	"Excellent"

Future plans:

Cabinet has decided on 28th December 2016 for strategic disinvestment of the company after meeting all its liabilities from sale of surplus land through open competitive bidding to Government Agencies. Bengal Chemicals Sramik Karmachari Union filed a Writ Petition before the Hon'ble High Court of Calcutta on 20/06/2017 against the decision of the Union Cabinet of Strategic Sale of BCPL. Vide its dated February 13, 2018, the High Court of Calcutta has set aside the decision of the Union Cabinet regarding strategic sale of BCPL. An appeal has been filed at the Division Bench.

38th AGM of BCPL Held on 22nd May 2019

Visit of Secretary, Department of Pharmaceuticals, Government of India, to Maniktala factory

6.6. Rajasthan Drugs & Pharmaceuticals Ltd. (RDPL)

Rajasthan Drugs & Pharmaceuticals Limited (RDPL) is a Central Public Sector Unit in Joint Sector with a total paid-up equity capital of Rs. 4.98 crore where Government of India (GoI) and Rajasthan State Industrial Development & Investment Corporation Limited (RIICO, Govt. of Rajasthan) hold 51% and 49% shares respectively. It was incorporated in 1978 and commercial production started in 1981. The Company has its manufacturing facilities & registered office at Road no. 12, VKI Industrial Area, Jaipur (Rajasthan).

The company has a well-equipped laboratory with modern equipment like HPLC, FTIR, etc., for ensuring high quality parameters. The Company was engaged in manufacture and selling of medicines of high quality at reasonable rates to the Govt. of Rajasthan, Central Government Institutions, viz ESIC, Defence, Railways, other PSUs and also to other State Govt. Institutions. RDPL had supplied medicines for implementation of 'JAN AUSHADHI' programme where quality generic medicines are made available to the public at large in the country at affordable prices. The production of the Company has stopped since October 2016 due to fire at its plant.

Performance:

Table-6N
(Performance of RDPL)

(Rs. in Crore)

Particulars	2016-17	2017-18	2018-19
Net Worth	(-) 39.53	(-) 54.78	(-) 69.88
Turnover	7.66	0.40	0.14
Earnings (Before Tax)	(-) 14.88	(-) 15.25	(-) 15.10
Earnings (After Tax)	(-) 14.88	(-) 15.25	(-) 15.10
Net Profit/Loss	(-) 14.88	(-) 15.25	(-) 15.10

Union Cabinet decided on 28.12.2016 for closure of RDPL after meeting its liabilities from sale of its surplus land to government agencies. M/s MSTC Ltd. was appointed as auctioning agency for e-auction of RDPL on 19.04.2017. Central Government/State Government/leading PSUs/Financial Institutions were invited to bid for the land, but no response was received. The Union Cabinet has on 17.07.2019 modified its earlier decision and permitted sale of surplus land to any entity. Further, it has sanctioned Rs. 43.70 cr. for meeting employees' liabilities.

CHAPTER 7

NATIONAL PHARMACEUTICAL PRICING AUTHORITY (NPPA)

CHAPTER 7

7.1 NATIONAL PHARMACEUTICAL PRICING AUTHORITY (NPPA)

i. The National Pharmaceutical Pricing Authority (NPPA), an independent body of experts in the Ministry of Chemicals and Fertilizers was constituted by the Govt. of India vide Resolution published in the Gazette of India No. 159 dated 29.08.97. The functions of NPPA, inter-alia, include fixation and revision of prices of scheduled formulations under the Drugs (Prices Control) Order (DPCO), as well as monitoring and enforcement of various provisions of DPCO. NPPA also provides inputs to Government on pharmaceutical policy and issues related to affordability, availability and accessibility of medicines.

ii. The Government notified DPCO, 2013 on 15th May 2013 in supersession of DPCO, 1995.

iii. Salient features of DPCO, 2013 are as follows.

- The National List of Essential Medicines (NLEM), notified by the Ministry of Health & Family Welfare is adopted as the primary basis for determining essentiality and is incorporated in the First Schedule of DPCO, 2013 which constitutes the list of scheduled medicines for the purpose of price control.

- Ceiling prices of scheduled formulations are fixed based on 'market-based data'.

- Price control is applied to specific formulations with reference to the medicine (active pharmaceutical ingredient), route of administration, dosage form / strength as specified in the First Schedule.

- The National List of Essential Medicines 2015 (NLEM 2015) was notified by the Ministry of Health and Family Welfare in December 2015. NLEM 2015 was thereafter notified as the First Schedule of DPCO 2013, in March 2016, by the Department of Pharmaceuticals.

iv. The functions of the National Pharmaceutical Pricing Authority (NPPA) are:

- To implement and enforce the provisions of the DPCO, 1995 / 2013 in accordance with powers delegated to it.

- To undertake and/or sponsor relevant studies in respect of pricing of drugs/formulations.

- To monitor the availability of medicines, identify shortages, if any, and to take remedial steps.

- To collect/maintain data on production, exports and imports, market share of individual companies, profitability of companies etc. for bulk drugs and formulations.

- To deal with all legal matters arising out of the decisions of the Authority.

- To render advice to the Central Government on changes/revisions in Pharmaceutical policy.

- To render assistance to the Central Government in parliamentary matters relating to Pharmaceutical pricing.

7.2 PRICING DIVISION

A. Price Fixation

i. Ceiling Price

NPPA fixes the ceiling price of formulation listed in Schedule I of DPCO, 2013. Under the market-based approach adopted in DPCO, 2013, the ceiling price of a scheduled formulation is determined by first working out the simple average of price to retailer (PTR) in respect of all branded-generic and generic versions of that particular formulation having a market share of one percent and above, and then adding a notional retailer margin of 16 percent to it. The maximum retail price (MRP) for that drug formulation must not exceed the notified ceiling price plus applicable taxes.

NLEM 2015 contains 954 scheduled drug formulations spread across 31 therapeutic groups. NPPA also fixes the ceiling prices of formulations listed under Explanation-I to Schedule – I of DPCO 2013. NPPA has fixed the ceiling prices of **860** formulations under DPCO, 2013 till **December 2019**.

Statement showing range of reduction in ceiling price of scheduled formulation with respect to the highest price on the basis of data furnished by pharmatrac / pharmaceutical companies.

Table-7A

(Statement showing % range of reduction in ceiling price)

% reduction with respect to Maximum Price	No. of formulations
0<= 5%*	236
5<=10%	138
10<=15%	98
15<=20%	100
20<=25%	92
25<=30%	65
30<=35%	46
35<=40%	26
Above 40%	59
Total formulations in NLEM 2015	**860**

The prices are notified through Gazette Notifications which are also uploaded on NPPA's website at www.nppaindia.nic.in. The ceiling prices become operative and legally enforceable from the date on which the price is notified in the Gazette.

NPPA also capped the maximum retail price of 106 formulations (anti-diabetic and cardiovascular under para 19 of DPCO 2013 in July 2014.

ii. Retail Price

NPPA fixes the retail price of medicine based on the Form-I application received from the manufacturing/ marketing companies. The notified retail prices are applicable only to the applicant manufacturing/ marketing companies. The retail prices of the medicine are also fixed on the same method as applicable for fixation of ceiling price. ***NPPA is actively taking up the New drugs applications of Pharma companies and has fixed the retail price of 329 retail prices during 2018-19, 195 New drugs applications in 2019-20 till December 2019 and pendency has been brought to concurrent level***. NPPA notified retail prices of total 1189 'new drugs' [those qualifying as 'new drugs' as per para 2(u) of DPCO, 2013] till December, 2019 under DPCO, 2013.

Moreover, NPPA has implemented 47 Review cases pertaining to 68 formulations during 2018-19 and 6 in 2019-20 (till date). The pendency has been brought to concurrent level.

B. Review Order

Any company aggrieved by the orders of NPPA files review application to Department of Pharmaceuticals under para 31 of DPCO, 2013. Department of Pharmaceuticals after physical hearing gives necessary review directions. NPPA implements the review directions of Department of Pharmaceuticals on merit.

NPPA has taken special efforts for implementation of review orders in time and implemented 47 review orders comprising 68 formulations during 2018-19 and 5 review orders in 2019-20 (Till 18th December 2019) and as on 18.12.2019 no review orders are pending for implementation.

C. Price Fixation of Medical Devices:

i. Coronary Stents:

Government had included Coronary Stents in Schedule-I of DPCO, 2013 in December 2016. Afterward, Government had notified the ceiling prices for Coronary Stents vide notification dated 13th February 2017 for the period of one year. Since the ceiling price fixed on 13th February 2017 was valid for one year, NPPA re-fixed the ceiling prices for Coronary Stents vide Order dated 13th February 2018. The same has been revised several times considering increase in Wholesale Price Indexes. A summary of price revision for Coronary Stents is as under:

Table-7B

(Price revision of Coronary Stents)

Particulars	Drug Eluting Stents (Rs.)	Bare Metal Stents (Rs.)	Remarks
Ceiling prices fixed on 13-02-2017 under Para 19 of the DPCO, 2013	29,600	7,260	Initial fixation of ceiling prices
Ceiling prices w.e.f. 01-4-2017	30,180	7,400	WPI increase @ 1.97186%
Ceiling prices re-fixed on 13-02-2018 under Para 19 of the DPCO, 2013	27,890	7,660	Ceiling prices revisited in Feb'18
Ceiling prices w.e.f. 01-4-2018	28,849	7,923	WPI increase @ 3.43812%
Ceiling prices w.e.f. 01-4-2019	30,080	8,261	WPI increase @ 4.2662%.

The aforesaid ***price reduction for Coronary Stents worked out up to 85% for Bare Metal Stents and 74% for Drug Eluting Stents***. The ceiling price fixation of Coronary Stents resulted in notional saving of Rs. 4,547 crores annually to the consumers/patients.

ii. Orthopedic Knee Implants for Knee Replacement System:

NPPA has also fixed the ceiling price of the Non-scheduled Orthopedic Knee Implants for the first time on 16th August 2017 under Para 19 of the DPCO, 2013 in the extraordinary circumstances. The above ceiling price was to be maintained for one year i.e. up to 15th August 2018. Subsequently, NPPA vide Order dated 13th August 2018, extended the applicability of above ceiling prices for another one year (i.e. up to 15th August 2019). After revisiting the ceiling prices of the orthopedic knee implants, NPPA vide Order dated 13th August 2019 has allowed the manufacturers/importers of knee implants to take increase in Maximum Retail Prices (MRPs) of orthopedic Knee Implants up to 10% of the previous MRP. The previous MRP may be considered as price in compliance to the Notifications No. S.O. 2668(E) dated 16th August 2017 and S.O. 3987(E) dated 13th August 2018 plus applicable Taxes. A summary of price revision for orthopedic Knee Implants is as under:

Table-7C

(Price revision of orthopedic Knee Implants)

Type of Knee Implant	Ceiling Price w.e.f. 16/08/2017 to 15/08/2019 (Rs.)	**Ceiling Price w.e.f. 16/08/2019**
Primary Knee Implants		NPPA vide Order dated 13th August 2019 has allowed the manufacturers/importers of knee implants to take increase in Maximum Retail Prices (MRPs) of orthopaedic Knee Implants up to 10% of the previous MRP.
Cobalt Chromium (widely used)	54,720	
Special Metal like Titanium & Oxidized Zirconium	76,600	
High Flex Implant	56,490	
Revision Knee Implants		
Revision Implants	1,13,950	

The aforesaid ***price reduction for orthopedic Knee Implants worked out up to be 69%.*** The ceiling price fixation of orthopedic Knee Implants resulted in notional saving of Rs.1,500 crores annually to the consumers/patients.

D. Price revision of Anti-cancer drugs based on Trade Margin Rationalization

National Pharmaceutical Pricing Authority capped the Trade Margin of all the non-scheduled formulations of select 42 Anti-Cancer drugs (**Annexure-I**), recommended by Expert Committee of Ministry of Health & Family Welfare, under the 'Trade margin Rationalization Approach' vide order SO 1041(E) dated 27th February 2019. The decision has been taken up as Pilot for Proof of Concept, under the laid down provision of paragraph 19 of DPCO, 2013, under extra-ordinary circumstances in public interest. As per the data received, total 526 brands (**Annexure – II**) of these medicines have shown reduction in MRP. The lists of revised MRPs have been uploaded on NPPA's website showing the reduction in MRP upto 90% of old MRP. Based on data submitted by manufacturers, it has been analyzed that there would

be ***annual saving of approx. Rs. 984 crores to the patients***. NPPA has issued necessary directions to State Drug Controllers and Superintendents of Hospitals / Medical Institutions to ensure compliance of the order issued so that the benefits under this measure be available to the patients.

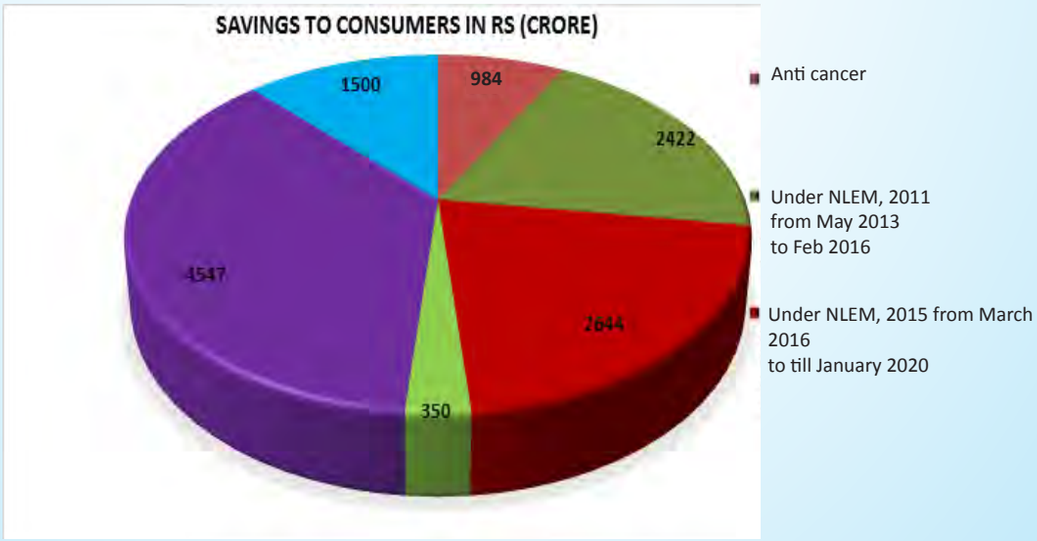
E. Savings to the consumers

The fixation of ceiling prices of scheduled formulations listed in NLEM 2015 (revised Schedule-I) has enabled savings of Rs. 2643.00 crore to the consumers in addition to the saving of Rs. 4,547 crores to consumers on account of price fixation coronary stents. Fixation of ceiling prices of scheduled formulations under Schedule-I of NLEM 2011 enabled savings of 2422.24 crore to the consumers. The para 19 price notifications resulted in savings of approximately Rs. 350 crore to the consumers. NPPA has also fixed the ceiling price of the Non-Scheduled Orthopedic Knee Implants has enabled savings of Rs. 1500 crore to the consumers A savings of Rs. 984 crores to the consumers is estimated through the trade margin rationalization of anti-cancer drugs. Thus, regulation of prices of medicines under DPCO 2013 by NPPA has resulted in net savings of approximately Rs. 12447 crores to the consumers (as on 17th December 2019).

F. Upward revision of ceiling price under para 19 of DPCO, 2013

Para 19 of DPCO, 2013 empowers the Government to revise the ceiling/ retail price of medicines under extra ordinary circumstances as it deems fit. Presently, the powers under para 19 of DPCO 2013 is entrusted with NPPA. NPPA has received applications for upward price revision under para 19 of DPCO, 2013 citing various reasons like increase in API cost, increase in cost of production exchange rates etc. resulting in unviability in sustainable production and marketing of the drugs. Based on the recommendation of SCAMHP, ceiling price of shortlisted **21 scheduled formulations of 12 medicines (http://www.nppaindia.nic.in/wp-content/uploads/2019/12/Notification_English_with-SO.pdf) were revised by allowing one-time price increase of 50% from the present** ceiling price in **public interest** as an exceptional measure by invoking para 19 of DPCO, 2013.

Graph-7(i)



* Total Savings per annum = Rs. 12,447 crore

7.3 MONITORING & ENFORCEMENT DIVISION

i. Monitoring Availability of Medicines

The Government is effectively monitoring the prices of scheduled as well as non-scheduled medicines under DPCO,2013 and takes action against companies found overcharging the consumers based on the references received from the State Drugs Controllers / individuals, samples purchased from the open market and reports from market based data and complaints reported through the grievance redressal websites, 'Pharma Jan Samadhan' and 'Centralized Public Grievance Redress and Monitoring System (CPGRAMS)'. The monitoring of increase in the price of formulations beyond the permissible limit is also done on the basis of data submitted by AIOCD (Pharmatrac Data) and individual complaints received.

Whenever companies are found selling scheduled formulations at prices higher than the price notified by NPPA, action is taken against such companies under the relevant provisions of DPCO 2013 and the overcharged amount, along with interest is levied on the company. Similar action is taken whenever companies are found selling non-scheduled formulation at a price which is 10% higher than the MRP of the preceding twelve months and Wholesale Price Index (WPI) violation for scheduled formulations.

Non-compliance with the notified ceiling prices in case of scheduled drug formulations or, in other words, the MRP breaching ceiling price plus applicable local taxes tantamount to overcharging the consumer. Such overcharged amounts are recovered from the pharmaceutical company along with interest thereon from the date of overcharging. Cases of companies not complying with the demand notices are referred to the District Collectors for recovery of overcharged amounts as arrears of land revenue and could also attract prosecution under the provisions of the Essential Commodities Act (ECAct), 1955.

NPPA monitors the availability of drugs, identify shortages, if any, and take remedial steps to make the drugs available to consumers. NPPA is carrying out this responsibility mainly through the State Drugs Controllers, NGOs and individuals. As and when the reports for shortages of particular drug(s), in any part of the country are received, the concerned company is asked to rush the stock to the affected areas and to make the drugs available. Power regarding monitoring of availability of non-scheduled formulation vest with Department of Pharmaceuticals.

ii. Monitoring of price movement of Medical Devices:

Para 20 of the DPCO, 2013 empowers the Government to monitor the Maximum Retail Prices (MRP) of all the drugs including the non-scheduled formulations & notified medical devices as drugs and ensure that no manufacturer increases the maximum retail price of a drug more than ten percent of maximum retail price during preceding twelve months and where the increase is beyond ten percent of maximum retail price, it shall reduce the same to the level of ten percent of maximum retail price for next twelve months. The manufacturer shall be liable to deposit the overcharged amount along with interest thereon from the date of increase in price in addition to the penalty.

There are twenty-four (24) medical devices which have been notified/regulated as Drugs by Ministry of Health & Family Welfare, Government of India. Out of the above, four (4) medical devices namely (i) Cardiac Stents (ii) Drug Eluting Stents (iii) Intra Uterine Devices (Cu-T) and (iv) Condoms are scheduled medical devices which have been included in the Schedule-I of the DPCO, 2013. Hence, these

four medical devices are under price control.

NPPA by exercising the power under Para 20 of the DPCO, 2013, collected MRP data from companies concerned for the remaining nineteen (19) non-scheduled medical devices, which are notified/ regulated as drugs, for monitoring price increases for the period from year 2014 to 2017 in the year 2017. The MRP data received for the years 2014 to 2017 for monitoring of price movements of aforesaid 19 medical devices (drugs) have been analyzed and a total **75 no. of Show Cause Notices (SCN) have** been issued for violation of Para 20 of the DPCO, 2013. So far, NPPA has initiated 26 no. of overcharging cases till December 2019 under Para 20 of the DPCO, 2013 where demand notices have been issued to Medical Devices companies **amounting to Rs. 185.32 crore. An amount of Rs. 35.66 crore has been recovered** from the errant companies till December 2019.

iii. Price Monitoring and Resource Units (PMRUs)

Under the Central Sector Scheme of NPPA, viz., 'Consumer Awareness, Publicity and Price Monitoring' (CAPPM), Price Monitoring and Resource Units (PMRUs) are the societies registered under the Societies Registration Act having its own Memorandum of Association/ Bye laws. The primary function of PMRUs is to assist NPPA in price monitoring, detection of violation of the provisions of DPCO, pricing compliance, ensuring availability of medicines and consumer awareness. They are also responsible for collection, compilation and analysis of market-based data of scheduled as well as non-scheduled formulations. Till now PMRUs have been set up ten States (Kerala, Gujarat, Odisha, Rajasthan, Punjab, Haryana, Tripura, Nagaland, Uttar Pradesh and Andhra Pradesh).

Following activities have been undertaken during the year 2019-20:

a. Seminar in Lucknow, Uttar Pradesh was organized on 08.04.2019 on the compliance of the provisions of DPCO, 2013 and reduction in prices of Anti-cancer drugs. The Seminar was attended by senior officers from the Government of Uttar Pradesh, representatives from government and private hospitals and field officers of State Health/ Drug Department.

b. A Workshop was organised in Delhi on 22.07.2019 which was attended by State Drug Controllers. The issues relating to setting up of PMRUs and other operational issues were elaborately discussed.

c. A meeting with the senior officers of Government of Rajasthan was taken by the Chairman on the functioning of PMRU Rajasthan was taken in Jaipur, Rajasthan

d. A Regional Seminar was organized in Kerala on 13.12.2019 on 'Availability, Accessibility and Affordability of Medicines for all'. Smt. K. K. Shailaja Teacher, Hon'ble Minister, Health & Family Welfare Department, Government of Kerala was the Chief Guest. The Seminar was attended by the senior officers from Government of Kerala, representatives from Kerala State Planning Board, KMSCL, KSDP, Kerala State Industrial Development Corporation Ltd., Food & Drugs Control Administration, Govt. of Gujarat, industry, consumer groups, field staff of State Drug/ Health Departments. Two of the beneficiaries of the government policies also shared their experiences.

The seminar was widely covered by local newspapers which include Times of India, Pharmabiz, Malayala Manorama and Mathrubhumi.

Inauguration of Regional Seminar on 'Availability, Accessibility and Affordability of Medicines for all' on 13.12.2019.

e. The contractual staff has been recruited in PMRUs of five States while the process is on in other PMRUs.

iv. Information, Education and Communication (IEC)

An IEC campaign has been launched for dissemination of information regarding various steps taken by NPPA for making medicines and medical devices affordable in the interest of public.

a. Display of **hoardings/ Bus Queue** Shelters conveying to the masses the reduction in the prices of Anti-Cancer medicines and savings in respect of other medicines in general. The message was also conveyed through LED Screens in Post Offices and Railway Stations in Delhi

b. A half-page Newspaper advertisement in newspapers conveying to the masses the reduction in the prices of Anti-Cancer medicines.

Newspaper advertisement

c. Two **Radio jingles** on 'Reduction in prices of anti-cancer medicines' were aired in 20 states for 5 days.

v. Enforcement activities

To ensure that medicines are available to patients at the notified prices, NPPA works closely with State Drugs Controllers for enforcement activities. Samples of medicines are picked up from open market regularly and analyzed to monitor the price at which the medicines are sold to patients. Enforcement activities from 2010-11 to 2019-20 (till November, 2019) are given as under:

Table-7D

[Enforcement activities from 2010-11 to 2019-20 (till November, 2019)]

Year	No. of Samples Collected	Prima Facie Violations detected
2010-2011	553	225
2011-2012	559	156
2012-2013	626	165
2013-2014	993	389
2014-2015	3898 #	1020
2015-2016	2534 #	613
2016-2017	1817 #	930
2017-2018	2418 #	1032
2018-2019	1391#	324
2019-2020 (up to 30.11.2019)	774#	161

#Cases of Overcharging referred from State Drug Controllers are included under the 'Samples Collected'.

7. E-INITIATIVES

NPPA has also undertaken following e-initiatives for better disposal of grievances of general public:

i. Pharma Jan Samadhan (PJS)

The PJS was launched on 12thMarch, 2015. PJS is a web enabled system developed by the NPPA with the assistance of National Informatics Centre (NIC). PJS serves as a robust e-governance tool for protection of consumer interest through effective implementation of the Drugs (Prices Control) Order, 2013. The primary objective of PJS is to put in place a speedy and effective complaint redressal system with respect to availability of medicines, overpricing of medicines, sale of 'new drugs' without prior price approval (WPA) and refusal to supply or sell medicines. Complaints can be registered under PJS link available at the NPPAs website i.e. www.nppaindia.nic.in and also at the toll free number 1800111255.

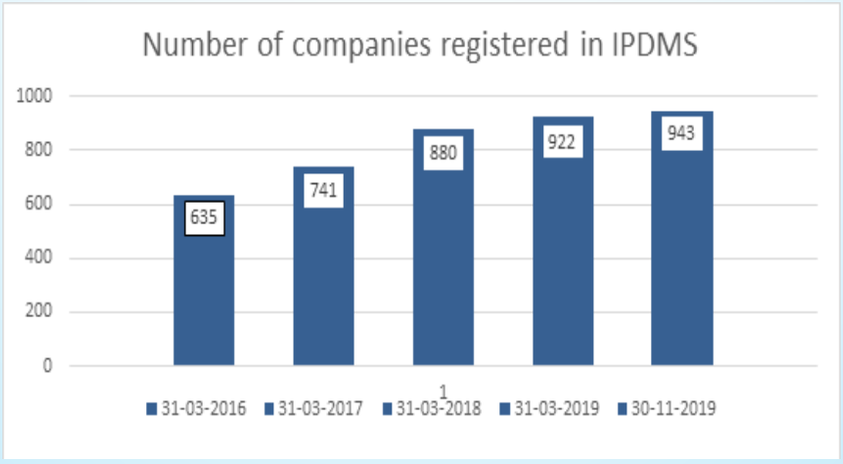
Any individual or consumer organization or stockiest / distributor / dealer / retailer or State Drug Controller can lodge complaints online to NPPA through PJS. Action on the complaint received through PJS with complete information is initiated within 48 hours by the NPPA.

ii. Pharma Data Bank (PDB) - Integrated Pharmaceutical Database Management System (IPDMS)

IPDMS was launched on 25thJune, 2015. IPDMS was developed by the NPPA in collaboration with the National Informatics Centre (NIC). This comprehensive online system provides a platform to the pharmaceutical manufacturer/ marketing/ importer/ distributor companies to file mandatory returns prescribed in Form II, Form III and Form V of DPCO, 2013. Application for price approval of 'new drug' in Form-I can also be filed through this portal.

IPDMS is expected to benefit industry, consumer and the regulator. It provides industry with a user friendly mechanism to comply with the mandatory requirement of filing returns; it will also help NPPA to monitor price compliance.943 pharma companies have registered themselves under IPDMS and 76764 Product registered till 30.11.2019. The growth in number of companies registered in IPDMS since 31.03.2019 till 30.11.2019 is as follows.

Graph-7(ii)



iii. Mobile Application 'Pharma Sahi Daam' and 'Search Medicine Price' utility

NPPA launched its mobile app on 29.08.2016 named as "Pharma SAHI DAM" for the benefit of the common people of India through which anybody can easily search the brand name, composition, ceiling price and MRP of the formulation. This app can be downloaded from Google play store free of cost for Android based mobile phones and from Appstore for IOS based mobile Phone (iphone). Ceiling Price of scheduled formulations may also be obtained by using the tool 'Search Medicine Price' available in the website of NPPA. The app or search medicine facility tool will facilitate consumers to verify whether medicines are being sold within the approved price range and also to detect any case of overpricing by pharmaceutical company/chemist. If there is any ceiling price violation, the buyer will be able to lodge a complaint against company/ chemist through Pharma Jan Samadhan (http://www.nppaindia.nic.in/redressal.html).

7.5 Plastic Waste Management

In pursuant to the Hon'ble PM's call on 15th August, 2019 to act towards focused Plastic Waste Management and effective ban of single use plastic, NPPA undertook the following activities:-

i) Shramdaan for about half an hour was given by 60 persons on 17.10.2019 at Patel Chowk for this cause.

Shramdaan by 60 persons on 17.10.2019 at Patel Chowk.

ii) Jute/cloth bags, have been distributed to employees as alternatives to single use plastics.

iii) T-shirts & Caps were distributed to employees as a awareness campaign against single use plastic.

iv) Separate Dustbins have been installed to collect plastic waste so that it can be collected-properly or further carrying to recycle location/disposal centers.

7.6 Recovery of overcharged amount:

NPPA has initiated about 2083 cases of overcharging as on 31st December, 2019. Amount of Rs. 960.38 Crore (Rs. 557.53 Crore under DPCO 1995 and Rs. 402.85 Crore under DPCO 2013) has

been recovered as on 31st December, 2019, from pharmaceutical companies. Action for recovery of the overcharged amount alongwith interest thereon is a continuous process. NPPA takes action as per the provisions of DPCO' 1995 / DPCO' 2013 read with Essential Commodities Act, 1955. The status of Overcharging cases since inception of NPPA, till 31.12.2019 under DPCO 1995 & DPCO 2013 are as under:-

Table-7E

(Status of Overcharging cases since inception of NPPA, till 31.12.2019 under DPCO 1995 & DPCO 2013)

S.No.	Particulars	DPCO, 1995	DPCO, 2013	Total
1	No. of cases	1327	756	2083
2	Overcharged amount demanded including interest (Rs. In Crore)	4999.27	1407.06	6406.33
3	Total amount realized (Rs. In Crore)	557.53	402.85	960.38
4	Amount outstanding (Rs. In Crore)	4441.74	1004.21	5445.95
5	Amount under litigation (Rs. In Crore)	3365.94	666.97	4032.91
6	Cases referred to collector & amount still to be recovered (Rs. In Crore)	339.80	115.81	455.61

7.7 Ease of Doing Business:

The following activities have been undertaken towards promoting Ease of Doing Business:

1. NPPA presently holds the Authority meeting and the meeting of the Multidisciplinary Committee of Experts on a regular basis to bring down pendency. Accordingly, the penndency of the new drugs applications and implementation of the review orders has come to a concurrent level.

2. To bring improved efficiency, quality and faster disposal, two pharmacoeconomics experts have been inducted in the Multidisciplinary Committee of Experts.

3. NPPA has encouraged R&D and innovation and implemented the recommendation of the Multidisciplinary Committee of experts regarding incremental innovation whereby upto 15% / 20% increase in the price is allowable to the innovative product based on certain criteria.

4. NPPA regularly conducts stakeholder consultation for obtaining its views towards ease of doing business. The stakeholders including Pharma association across the sector like indigenous manufacturer, foreign manufacturers, importers, MSME groups and the NGOs operating in the sector.

5. For transparency, NPPA uploads the decision of the minutes of the Authority meeting and the Multidisciplinary Committee meeting in its website. Further, NPPA uploads the draft working sheet of its ceiling/ retail price calculation for 10 days before approving and notifying the same.

6. AIOCD has been assigned the authority to collect data regarding medical devices. This shall create database across the country to be created for medical devices and enable batter regulation, monitoring and access.

Annexure-I

List of Medicines under Trade Margin Rationalisation

Sl. No.	Name of the Drug
1	Azacitidine
2	Bendamustine Hydrochloride
3	Bortezomib
4	Crizotinib
5	Cytarabine
6	Dasatinib
7	Decitabine
8	Doxorubicin HCl Pegylated Liposomal Injection
9	Enzalutamide
10	Epirubicin
11	Eribulin mesylate
12	Erlotinib HCl
13	Estramustine phosphate
14	Everolimus
15	Exemestane
16	Fulvestrant
17	Irinotecan HCl Trihydrate
18	Lapatanib
19	Leuprolide acetate depot for Inj.
20	Lomustine
21	Mitoxantrone
22	Nilotinib
23	Plerixafor
24	Carfilzomib
25	Cladribine
26	Triptorelin
27	Pomalidomide
28	Osimertinib
29	Pegasperagase
30	Regorafenib

31	Ribociclib
32	Clofarabine
33	Sunitinib
34	Olaparib
35	Olaratumab
36	Paclitaxel (Protein-bound particles)
37	Cabazitaxel
38	Bevacizumab
39	Lenalidomide
40	Pegfilgrastim
41	Mitomycin
42	Pemetrexed

Annexure-II

Consolidated list of Revised MRP of Non-Scheduled Anti-Cancer Medicines w.e.f. 08.03.2019

Sl. No	Drug	Strength & Dosage Form	Brand Name	Pack Size	Old MRP	Revised MRP
1	Azacitidine	100mg Injection	MDS Plus	Vial	8900.00	4,367.07
2	Azacitidine	100mg vial	AZALIVE 100MG per Vial	Vial	10044.08	5043.11
3	Azacitidine	100mg Injection	Azakem Inj	Vial	8740.00	4665
4	Azacitidine	100mg Inj. (Powder)	Mylotex 100mg	1 Vial	5150	4748.15
5	Azacitidine	100mg Injection	Azatend	Vial	7600.00	2980.05
6	Azacitidine	100 mg injection	HEMAZIDE INJ	50 ml Vial	8900.00	3840
7	Azacitidine	100mg Injection	Azacytin 100mg Injection	Vial	8995.00	5079.50
8	Azacitidine	100 mg Injection	ATSA	1X1	8,750.00	4514.00
9	Azacitidine	100mg inj	Azactiv	1,s	7800.00	2221
10	Azacitidine	100mg Injection	AZASHINE	Vial	9000.00	4068.00
11	Azacitidine	100mg Injection	Azadine	30ml	8900.00	3951.10
12	Azacitidine	100mg Injection	MYAZA	Vial	4950.00	3201.00
13	Azacitidine	100mg inj	Xpreza 100	1 Vial	7800	4283.17
14	Azacitidine	100mg 1 Vial	Azafab Inj.	Single dose Vial	4590	2978.5
15	Azacitidine	100 mg Injection	Azatirel	Vial	8900.00	4,265.60
16	Azacitidine	100mg Injection	AZAPLAST 100MG Inj	Vial	8500.00	3373.00
17	Azacitidine	100mg Injection	AZZURE INJECTION	Vial	9000.00	7701.56
18	Azacitidine	100 mg Injection	AZAFECT	Vial	7800	3900
19	Bendamustin Hcl	100 mg Injection	Kabimustin	Vial	7,900	2244.05

20	Bendamustin Hcl	100 mg Injection	Bendashil	Vial	9,000	2727.27
21	Bendamustin Hcl	100 mg Injection	CytoBendoma Inj	Vial	7,200	2014
22	Bendamustin HCL	100mg Inj.	Adben-100	Single dose vial	8000	4001
23	Bendamustin Hcl	100mg Powder	Ribomustin	1 Vial	11000	5500
24	Bendamustin Hcl	100 mg inj	Bendit 100	1 Vial	6950	3643.35
25	Bendamustin Hcl	100 mg Injection	THERMUSTIN	10 MG/VIAL	6400	1,700
26	Bendamustin Hcl+ Mannitol	100+170 mg Vial	Lymphtor 100	1	8572.20	4051.8
27	Bendamustine	100mg Injection	GENMUS	Vial	7200.00	2214.52
28	Bendamustine	100mg Injection	Bizisa	Vial	7000.00	2561.49
29	Bendamustine	100mg Single Dose Vial	Bendamax	Per vial	7542.00	2267
30	Bendamustine	100mg Injection	LEUBEN	Vial	8200.00	1811.00
31	Bendamustine	100mg Injection	Benzz	Vial	7848.00	4007.36
32	Bendamustine	180mg Injection	Benzz	Vial	5000.00	4776.89
33	Bendamustine	45mg Injection	Benzz	Vial	1250.00	1194.56
34	Bendamustine	100mg Injection	Maxtorin Injection 100mg (Inj.)	20ml*1	11144.70	9503.18
35	Bendamustine	100 mg Injection	BIMODE	1X1	7,683.00	1951.00
36	Bendamustine	100 mg Injection	ZUMUSTIN	Vial	8,121.75	2,028.00
37	Bendamustine Hydrochloride	100mg Injection	Purplz Injection 1's	Vial	7830.00	3981.00
38	Bendamustine Hydrochloride	100mg Injection (1vial*1)	Bemustin	Sinle use Vial	6950	2684
39	Bendamustine Hydrochloride	100mg Injection	NEOMUSTIN INJ	Vial	7304.66	2666.00
40	Bevacizumab	100mg/ 4 ml Injection	Vegfxta	Vial	28500	13026.09
41	Bevacizumab	100 mg Injection	Advamab 100 inj	4ml	28800	11802
42	Bevacizumab	400 mg Injection	Advamab 400 inj	16 ml	40000	37998
43	Bevacizumab	100 mg Inj	KRABEVA 100 MG	4 ML VIAL	26376	12214.14
44	Bevacizumab	400 mg Inj	KRABEVA 400 MG	16 ML VAIAL	39990	35777.44
45	Bevacizumab	100mg/4ml Injection	Bryxta	Vial	27000.00	16059.00
46	Bevacizumab	100mg/4ml Injection	Zybev	Vial	27000.00	17470.43
47	Bevacizumab	400mg/16ml Injection	Bryxta	Vial	48999.00	43369.40
48	Bevacizumab	100 mg Injection	BEVAREST	1X1	28,500.00	13223.00
49	Bevacizumab	100mg Injection	CIZUMAB	Vial	31200.00	11838.00
50	Bevacizumab	400mg Injection	CIZUMAB	Vial	52000.00	43859.00
51	Bevacizumab	100mg Injection	Bevatas	Vial	25990.00	9500.00
52	Bevacizumab	400mg Injection	Bevatas	Vial	39995.00	36061.64

53	Bevacizumab	100mg Injection	Bevazza Inj.	4ML Vial	24181.00	18247
54	Bevacizumab	400mg Injection	Bevazza Inj.	16 ML Vial	43,900	38915
55	Bevacizumab	100mg Injection	ABEVMY	Vial	24000.00	13451.00
56	Bevacizumab	400mg Injection	ABEVMY	Vial	39990.00	35120.00
57	Bevacizumab	100 mg Injection	Bevacirel	Vial	31196.55	12,356.89
58	Bevacizumab	400 mg Injection	Bevacirel	Vial	49990.00	38,856.34
59	Bortezomib	3.5 mg Injection	Bortiad	Vial	17140.00	4,001.20
60	Bortezomib	2.5mg Injection	TEZOMIB	Vial	12420.00	2346.72
61	Bortezomib	3.5mg Injection	TEZOMIB	Vial	12600.00	4446.07
62	Bortezomib	2.5mg Injection	Proteoz	Vial	18133.50	3415.14
63	Bortezomib	2.5 mg injection	BORTECAD 2.5 MG INJ	Vial	12,929	3180
64	Bortezomib	2.5mg Injection	Brorviz	Vial	12929.03	4522.23
65	Bortezomib	3.5mg Injection	Brorviz	Vial	12499.00	6245.39
66	Bortezomib	3.5 mg Powder	Velcad	1 Vial	60360	54350
67	Bortezomib	1 mg Powder	Velcad	1 Vial	19850	18060
68	Bortezomib	3.5 mg inj	Bortenat 3.5	1 Vial	13900	4140.68
69	Bortezomib	3.5 mg Injection	Brortezomib	Vial	14000.00	3,678.93
70	Bortezomib	3.5 mg Injection	BORTETHER 3.5	3.5 MG/VIAL	15000	4215.91
71	Bortezomib	3.5mg Injection	Zortemib	Vial	13500.00	6057.82
72	Cabazitaxel	60mg Injection	Z-TEXEL	Vial	54000.00	12689.97
73	Cabazitaxel	60mg Inj.	Arbaz	Single dose vial	48000	12552.4
74	Cabazitaxel	60mg Injection	Cabaxan	Vial	11999.00	11041.92
75	Cabazitaxel	60 mg Inj.	Procabazi	1,s	20000	11100
76	Cabazitaxel	60 mg inj	Kabanat 60/1.5	1 Vial	19990	12020.7
77	Cabazitaxel	60 mg Injection	CABAZITHER 60	6 ML/VIAL	54000	19272.29
78	Carfilzomib	60mg Injection	Kyprolis 60mg	Vial	49500	47325.00
79	Carfilzomib	60 mg inj	Carfilnat 60	1 Vial	9990	9990
80	Cladribine	10 mg/ 10 ml Injection	Cladrim	Vial	17721	11994.06
81	Clofarabine	20mg Injection	BDCLOR	Vial	16200.00	10227.40
82	Clofarabine	20mg Injection	Cfara	Vial	15000.00	14503.90
83	Clofarabine	20mg Injection	Farabine	Vial	15000.00	11119.55
84	Cloforabine	20mg inj	Colymph	1,s	15,000	13800
85	Crizotinib	250mg Capsules	Crizalk 250mg 60's Caps(-capsule)	6 Capsule*10	106698.00	106270.25
86	Crizotinib	200mg Capsules	Crizalk 200mg 60's Caps(-capsule)	6 Capsule*10	106698.00	100177.53
87	Cytarabine	100mg/1ml Injection	Cytarine	Vial	195.79	89.94
88	Cytarabine	100mg Injection	Biobin	Vial	288.70	50.74
89	Cytarabine	100mg Single Dose Vial	Cytramax	Per vial	167.00	98
90	Cytarabine	100mg Injection	Arasid	ml	195.79	117.85

91	Cytarabine	100 MG/1ML Injection	CYTANEON 100 MG./1ML.	100 MG/1ML. VIAL	91.5	45.73
92	Cytarabine	100 mg/5ml. Injection	CYTANEON 100 MG./5ML.	100 MG/5ML. VIAL	99	77.76
93	Decitabine	50mg Injection	D-NIB	Vial	7992.00	3563.14
94	Decitabine	50mg Injection	Xalibo(Injection)	Vial	8100.00	5187.00
95	Decitabine	50mg inj	Deczuba	1,s	7800	3401
96	Decitabine	50mg Injection	Decitas	50mg	8501.00	4250.50
97	Decitabine	30mg Injection	Decitas	Vial	5900.00	3562.52
98	Decitabine	50 mg Powder	Dacogen IV	1 Vial	80000	61430
99	Decitabine	50 mg inj	Natdecita 50	1 Vial	7800	5097.71
100	Decitabine	50mg Injection	DECITEX 50 MG INJECTION	Vial	7973.05	6229.39
101	Decitabine	30mg Injection	DECITEX 30 MG INJECTION	Vial	5980.00	5546.43
102	Doxarubicin Hcl	2 mg Peg Liposomal Con. For soln	Caelyx	1 Vial	49427	48850
103	Doxorubicin	20mg Injection	Nudoxa	Vial	9650.00	4353.04
104	Doxorubicin	50mg Injection	Nudoxa	Vial	20490.00	12000.00
105	Doxorubicin	20mg Injection	Tadro	Vial	7290.00	2977.30
106	Doxorubicin	50mg Injection	Tadro	Vial	14147.00	8435.64
107	Doxorubicin	20mg Injection	Pegadria	10ml	7848.00	2879.50
108	Doxorubicin	50mg Injection	Pegadria	25ml	20056.00	7827.52
109	Doxorubicin (Liposomal)	20mg Injection	LIPODOX 20 MG INJECTION 10 ML	10ml	8040.00	3893.95
110	Doxorubicin (Liposomal)	50mg Injection	LIPODOX 50 MG INJECTION 25 ML	25ml	18400.00	11797.26
111	Doxorubicin HCL	2mg Injection	ONCODEX	Vial	9350	3166.97
112	Doxorubicin HCL	50mg Injection	DOXOREX 50	Vial	943.60	262.10
113	Doxorubicin HCL	10mg Injection	DOXOREX 10	Vial	188.71	128.86
114	Doxorubicin Hcl Peg liposomal	2 mg Injection	Liposol inj	10 ml	7600	4635
115	Doxorubicin Hcl Peg liposomal	20 mg inj	Natdox LP 20/10	1 Vial	7200	3282.65
116	Doxorubicin HCL Pegylated Liposomal Injection	20mg Injection	LIPOPEG INJJECTION	Vial	7000.00	3395.00
117	Doxorubicin hydrochloride	2 mg injection	CADRIA l INJ.	Vial	8500	6766
118	Enzalutamide	40mg Capsule	Xtandi	112’s	335635	3,35,635.00
119	Enzalutamide	40mg Capsule	Azel Capsules	28	27500.00	18081.00
120	Enzalutamide	40 mg capsule	ENZUTA	28 C	27,500.00	20059.00
121	Enzalutamide	40mg capsule	Glenza	28	27500	18600
122	Enzalutamide	40mg Capsule	Enzamide	28’s	27500.00	20298.72
123	Enzalutamide	40mg Capsule	Encrpc	28’s	27500.00	20298.72

124	Enzalutamide	40mg Capsule	BDENZA	28's	27501.75	17983.91
125	Epirubicin	50 mg Injection	Appeos 50	Vial	2850	1200
126	Epirubicin	10 mg Injection	Appeos 10	Vial	650	338
127	Epirubicin	100 mg Injection	EPIFECT	Vial	4800	2525
128	Epirubicin	10 mg Injection	Shilepi	Vial	700	372
129	Epirubicin	50 mg Injection	EPIFECT	Vial	2380	1530
130	Epirubicin	10 mg Injection	EPIFECT	Vial	480	330
131	Epirubicin	50 mg Injection	Relirubicin 50	Vial	2395	1817
132	Epirubicin	10 mg Injection	Relirubicin 10	Vial	565	429
133	Epirubicin	50 mg inj	Epribenz	1 Vial	2500	1935.5
134	Epirubicin	10 mg inj	Epribenz	1 Vial	600	540
135	Epirubicin	10 mg Injection	Alrubicin 10 Inj	Vial	573	320
136	Epirubicin	50 mg Injection	Alrubicin 50 Inj	Vial	2210	1182
137	Epirubicin	100 mg Injection	Alrubicin 100 Inj	Vial	4290	2314
138	Epirubicin	150 mg Injection	Alrubicin 150 Inj	Vial	6480	2903
139	Epirubicin	10mg Injection	INNORUBICIN	Vial	522.00	255.37
140	Epirubicin	50mg Injection	INNORUBICIN	Vial	2290.00	931.83
141	Epirubicin	50mg Inj.	Adricin 50	Single dose vial	3200.00	1370.48
142	Epirubicin	10mg Inj.	Adricin 10	Single dose vial	950.00	339.64
143	Epirubicin	50mg Injection	Biorubin	Vial	3551.30	900.85
144	Epirubicin	50mg Injection	Epixtra	Vial	3079.90	1036.56
145	Epirubicin	10mg Injection	Biorubin	Vial	723.40	264.15
146	Epirubicin	10mg Injection	Epixtra	Vial	735.60	448.32
147	Epirubicin	10mg Single Dose Vial	Epiget	1 Vial	2250.00	1530
148	Epirubicin	50mg Single Dose Vial	Epiget	Per vial	495.00	412
149	Epirubicin	50mg Injection	EPITERO	Vial	2000.00	978.00
150	Epirubicin	50mg Injection	Epitaz	25ml	2235.00	1573.80
151	Epirubicin	100mg Injection	Epitaz	50ml	4360.00	2890.49
152	Epirubicin	10mg Injection	Epitaz	5ml	600.00	454.12
153	Epirubicin	50 MG/ VIAL Injection	EPINEON-50	50 MG VIAL	1080	637.63
154	Epirubicin	10 MG/ VIAL Injection	EPINEON-10	10 mg VIAL	268	169.77
155	Epirubicin	50mg Injection	Farmorubicin RTU 50mg/25ml Injection (injection)	25ml*1	3813.70	3589.82
156	Epirubicin	50mg Injection	Farmorubicin RD 50mg Injection (injection)	25ml*1	3318.42	3250.95
157	Epirubicin	10mg Injection	Farmorubicin RTU 10mg/5ml Injection (injection)	5ml*1	805.20	799.34

158	Epirubicin	50mg Powder to Injection	EPIDOX-50	Vial	3954.33	1171.36
159	Epirubicin	10mg Powder to Injection	EPIDOX-10	Vial	941.35	355.74
160	Epirubicin	100 mg Injection	EPITHER 100	100 MG/VIAL	4500	1212.31
161	Epirubicin	50mg Injection	Zepirubin	Vial	2600.00	2025.60
162	Epirubicin	100mg Injection	Zepirubin	Vial	4800.00	3526.06
163	Epirubicin	10mg Injection	Zepirubin	Vial	640.00	577.67
164	epirubicin	10mg Injection	epichlor	Vial	561	276.8
165	epirubicin	50mg Injection	epichlor	Vial	2662	960
166	Epirubicin	50 mg injection	CADRUBIN 50 MG	Vial	3300	1568
167	Epirubicin	10 mg injection	CADRUBIN 10 MG	Vial	1030	569
168	Epirubicin	50 mg Injection	EPICURE	1X1	2,390.00	1113.00
169	Epirubicin	100 mg Injection	EPICURE	1X1	4,132.00	2229.00
170	Epirubicin	10 mg Injection	EPICURE	1X1	478.00	333.00
171	Epirubicin	50mg inj	Epithra	1,s	2270	971
172	Epirubicin	100mg inj	Epithra	1,s	4277	1916
173	Epirubicin	10mg inj	Epithra	1,s	551	230
174	Epirubicin	10mg Injection	ERUBIN 10MG(Injection)	Vial	500.00	258.00
175	Epirubicin	50mg Injection	ERUBIN 50MG(Injection)	Vial	2000.00	597.00
176	Epirubicin	50 mg Injection	ZUVICIN	Vial	2,392.00	1,298.00
177	Epirubicin	100 mg Injection	ZUVICIN	Vial	4,130.00	2,335.00
178	Epirubicin	10 mg Injection	ZUVICIN	Vial	526.00	405.00
179	Eribulin Mysylate	0.44 mg/ml Parentral Prepration	Halaven	1 Vial	32860.00	31885
180	Erlotinib	100 tablet	Erlot	30	19800	7775
181	Erlotinib	150 tablet	Erlot	30	25000	13190
182	Erlotinib	100mg Tablet	BIRLOTIB	10's	6666.00	800.00
183	Erlotinib	150mg Tablet	BIRLOTIB	10's	9999.00	891.79
184	Erlotinib	150mg Tablet	Zycev	30's	13078.10	3330.00
185	Erlotinib	100mg Tablet	Zycev	30's	10880.10	2860.30
186	Erlotinib	150mg Tablet	Tyrokinin 250mg	10	5580.00	2918.00
187	Erlotinib	150mg tablet	Erlotiva	bottle of 10 tabs	4143	2251
188	Erlotinib	100mg tablet	Erlotiva	bottle of 10 tabs	2250.00	1004
189	Erlotinib	150mg Tablet	ERLOTERO	30's	9900.00	3990.00
190	Erlotinib	150mg Tablet	ERLOMY	30 Tabs	11900.00	6106.00
191	Erlotinib	100mg Tablet	ERLOMY	30 Tabs	9990.00	6490.00
192	Erlotinib	100mg Tablet	Erlotaz	10	6600	1840
193	Erlotinib	150mg Tablet	Erlotaz	10	8800	2400
194	Erlotinib	100 mg Tablet	Erlotad	10's	7500.00	1,638.89

195	Erlotinib	100mg tablet	Erlotad 100	1*10 tab	7500.00	1164.27
196	Erlotinib	150mg tablet	Erlotad 150	1*10 tab	11000.00	2996.1
197	Erlotinib	150mg Tablet	ERLOCIP	30 Tabs	10989	7479
198	Erlotinib	100mg Tablet	ERLOCIP	30 Tabs	7326	4690.24
199	Erlotinib	150mg Tablet	Erleva	30	9688.65	5280
200	Erlotinib	100mg Tablet	Erleva	30	6392.51	3222
201	Erlotinib	150mg Tablet	Erlotib	10's	6666.00	2975.24
202	Erlotinib	150 mg Tablet	Esrlonat 150	30	11900	9353.24
203	Erlotinib	100 mg Tablet	Esrlonat 100	30	9990	4348.61
204	Erlotinib	150 MG/TAB Tablet	ERLIB	1 Tablet	270	112.67
205	Erlotinib	150 mg Tablet	ERTINIB	30 T	16500.00	6,400.00
206	Erlotinib	100 mg Tablet	ERTINIB	30 T	10500.00	4,679.11
207	Erlotinib	100mg Tablet	LORTNIB 100MG (Tablet)	10	7900.00	1026.00
208	Erlotinib	150mg Tablet	LORTNIB 150MG (Tablet)	10	11159.85	1535.00
209	Erlotinib	100 mg Tablet	ERLOTED 100		15000	2878.85
210	Erlotinib	150 mg Tablet	ERLOTED 150		18000	3598.56
211	Erlotinib	150 mg Tablet	ERTINIB	10 T	8,550.00	2,080.00
212	Erlotinib	150 mg Tablet	ERTINIB	30 T	9,500.00	4,469.00
213	Erlotinib	150mg Tab	Erlonon	10	6200.00	3721.12
214	Erlotinib	100mg Tab	Erlonon	10	5000.00	2640.79
215	Erlotinib Hcl	150mg Injection	Erloshil	10	10000	2848.93
216	Erlotinib Hcl	50mg Injection	Shilepi	Vial	2800	1425
217	Erlotinib Hcl	100mg tab	Erlokinase 100	30	16650	10827
218	Erlotinib Hcl	100mg Injection	Erlotin 100	Vial	2600	2440
219	Erlotinib Hcl	150mg Tab	Erlotin 150	10	3900	3664
220	Estramustin Phosphate	140 mg Cap	xtrant 140	100	14650	7773.15
221	Estramustine Phosphate	140mg Capsule	ESTRAMIN	30 Caps	4263.00	3573.96
222	Everolimus	10mg Tablet	EVERBLISS	10's	29700.00	10178.77
223	Everolimus	5mg Tablet	EVERBLISS	10's	18999.00	5947.96
224	Everolimus	0.5 mg Tab	ADVACAN 0.5	10	1595.7	825.59
225	Everolimus	10 mg Tab	EVERTOR 10 MG	10	32603.6	14690.87
226	Everolimus	5 mg Tab	EVERTOR 5 MG	10	21735.6	9644.9
227	Everolimus	0.25 mg Tab	ADVACAN 0.25	10	797.8	439.97
228	Everolimus	10mg Tablet	ROLIMUS	10 Tabs	12839.67	9,000.00
229	Everolimus	5mg Tablet	ROLIMUS	10 Tabs	7133.15	5,250.00
230	Everolimus	10mg Tablet	Volantis 10s tablet 10mg	10	20020.00	9837.50
231	Everolimus	5mg Tablet	Volantis 10s tablet 5mg	10	10010.00	6438.50
232	Everolimus	10mg Tablet	Evermil	10	15000	6835
233	Everolimus	5mg Tablet	Evermil	10	10000	5168
234	Everolimus	10 mg Tablet	Afinitor	10	53400	19882.43

235	Everolimus	0.5 mg Tablet	Certican	10	1840	1615
236	Everolimus	0.25 mg Tablet	Certican	10	920	789
237	Everolimus	0.75 mg Tablet	Certican	10	2760	2320
238	Everolimus	0.50mg Tablets	EverGraf 0.50	1*10 tabs	1392.5	1298.35
239	Everolimus	0.25mg Tablets	EverGraf0.25	1*10 tabs	696.25	579
240	Everolimus	0.25mg Tablets	Lanolimus 0.25 mg	10	726	406
241	Everolimus	0.50mg Tablets	Lanolimus 0.5 mg	10	1452	739
242	Everolimus	0.5 Tablet	Evercon 0.5	10	1450	823
243	Everolimus	0.25 Tablet	Evercon 0.25	10	725	426
244	Exemestane	25mg 10 tabs	Exeget	strips of 10 tabs	850	511
245	Exemestane	25 mg Tablet	xtrant 25	30	1290	1059.96
246	Exemestane	25mg Tablets	Aromasin 25mg Tablet	15 nos*1	5284.40	4867.77
247	Fulvestrant	250 PFS	Fulvidax	2 PFS	40000	28200
248	Fulvestrant	250 mg Injection	Fulvetraz Inj	5 ml PFS	25200	15798
249	Fulvestrant	250 mg Injection	Fulvetraz Inj (twin pack0	2x5 ml PFS	41400	32303
250	Fulvestrant	250mg PFS	V-STRANT	2's	41400.00	23500.47
251	Fulvestrant	250 mg Inj	FASNORM	1ML VIAL	24727.5	15054.45
252	Fulvestrant	250 mg injection	FUVESTROL INJ	5 ml PFS	22000	13511
253	Fulvestrant	250mg Single Dose Vial	Faslomax	Per vial	18500	12521
254	Fulvestrant	250mg Injection	Strantas	5ml	20000.00	13300.08
255	Fulvestrant	250 mg inj	Fulvent 250	1 Vial	18000	12229.66
256	Fulvestrant	250mg Injection	FULVESER	5ml	21000.00	7920.99
257	Fulvestrant	250 mg Injection	FULVETHER 250	5 ML/VIAL	17500	15232.3
258	Fulvestrant	5ml Injection	Fistent	PFS	24500.00	16,516.95
259	Fulvestrant	250 mg Injection	FULVIRA	2x5ml.	44,000.00	21342.00
260	Fulvestrant	250 mg Injection	FULVIRA	1x5ml.	22,000.00	11109.00
261	Fulvestrant	250mg inj	Fulviglen	1,s	20700	11365
262	Irinocetan	100mg Injection	Campto 100mg/5ml (injection)	5ml*1	22651.20	18151.11
263	Irinocetan	40mg Injection	Campto 40mg/2ml (injection)	2ml*1	9059.60	7628.31
264	Irinotecan	40 mg / 2ml Injection	Irinotel	Vial	2174.92	421.14
265	Irinotecan	100mg/1ml Injection	Irinotel	Vial	4658.68	948.29
266	Irinotecan	100mg Injection	IRITERO	Vial	4100.00	1000.00
267	Irinotecan	40mg Injection	IRITERO	Vial	1800.00	617.00
268	Irinotecan	40mg Injection	Zinotecan	Vial	1800.00	1576.48
269	Irinotecan	100mg Injection	Zinotecan	Vial	2200.00	2160.65
270	Irinotecan	20mg Injection	Irnocam 100Inj	Vial	4084.00	1566.00
271	Irinotecan	20mg Injection	Irnocam 40Inj	Vial	1825.50	777.50
272	Irinotecan	100 mg Injection	IMTUS	1X1	4,610.00	1267.00

273	Irinotecan	40 mg Injection	IMTUS	1X1	1,969.00	322.00
274	Irinotecan	100 MG/ 5 ML Injection	INTENSIC	100 MG/5 ML. VIAL	850	517.82
275	Irinotecan	40 MG/ 2mL Injection	INTENSIC	40 MG/2 ML. VIAL	486	472.78
276	Lapatanib	250mg Tablet	Abnib Tablet 30mg	30	12990.00	8403.76
277	Lapatanib	250 mg Tablet	LAPATEM	30 T	11,000.00	6745.00
278	Lapatanib	250 mg Tablet	LAPATEM	120 T	29,500.00	28384.00
279	Lapatanib	250mg Tablet	LapaHope	30	10000	8750
280	Lapatanib	250mg Tablet	HERTAB	150's	32995.00	28160.00
281	Lapatanib	250mg Tablet	HERTAB	30's	6995.00	5950.00
282	Lapatanib	250mg Tablet	Lupidoc Tab	30 Tabs	11952	10305
283	Lapatanib	250mg Tablet	HERLAPSA	30 Tabs	9750.00	8057.00
284	Lapatanib	250 mg Tablet	Herduo 250	150	29900	29900
285	Lapatanib	250 mg Tablet	Herduo 250	30	6000	6000
286	Lenalidomide	10mg Injection	Lindishil	10	3000	863.55
287	Lenalidomide	5mg Capsule	Kabilen	30's bottel	6594	2838.75
288	Lenalidomide	25mg Capsule	Kabilen	30's bottel	19782	8666.67
289	Lenalidomide	10mg Capsule	Kabilen	30's bottel	9781	4593.2
290	Lenalidomide	10mg Capsule	Lenofect	10	2800	1320
291	Lenalidomide	5mg Capsule	Lenofect	10	1400	700
292	Lenalidomide	25 mg Capsule	Lindishil	10	6000	3040
293	Lenalidomide	25mg Capsule	Lenofect	10	7000	3890
294	Lenalidomide	10mg Caps	Adlinod-10	1*10 caps	2660	1852.76
295	Lenalidomide	25mg Caps	Adlinod-25	1*10 caps	6650.00	3680
296	Lenalidomide	10mg Capsule	LENMID	10 Caps	2051.79	998.61
297	Lenalidomide	25mg Capsule	LENMID	10 Caps	4409.02	2,796.72
298	Lenalidomide	5mg Capsule	LENMID	10 Caps	1024.1	795.73
299	Lenalidomide	10mg Capsule	Lenangio 10	10	2821.70	1013.00
300	Lenalidomide	25mg Capsule	Lenangio 25	10	7400.00	2759.00
301	Lenalidomide	5mg Capsule	Lenangio 5	10	1410.80	632.00
302	Lenalidomide	25mg Capsule	LENDOMY	30 Caps	18000.00	7700.00
303	Lenalidomide	10mg Capsule	LENDOMY	30 Caps	9000.00	3408.00
304	Lenalidomide	5mg Capsule	LENDOMY	30 Caps	4400.00	1887.00
305	Lenalidomide	25 mg Cap	Lenalid 25mg	30	18360	9296.85
306	Lenalidomide	15 mg Cap	Lenalid 15mg	30	12240	6294.85
307	Lenalidomide	10 mg Cap	Lenalid 10 mg	30	8976	4516.18
308	Lenalidomide	5 mg Cap	Lenalid 5mg	30	4386	2196.8
309	Lenalidomide	10mg Capsules	Lenomust-10	1*30 Capsule	8700	2454.25
310	Lenalidomide	25mg Capsules	Lenomust-25	1*30 Capsule	18000	4601.95
311	Lenalidomide	25 mg Capsule	Relidomide	28's	16000.00	6,400.00

312	Lenalidomide	10 mg Capsule	Relidomide	28's	7500.00	4,080.00
313	Lenalidomide	5 mg Capsule	Relidomide	28's	4000.00	1,259.00
314	Lenalidomide	25 mg Capsule	LENATED 25		6000	3862.45
315	Lenalidomine	25mg Capsule	Laviat	10's	4800.00	2447.32
316	Lenalidomine	10mg Capsule	Laviat	10's	2400.00	1220.12
317	Lenalidomine	5mg Capsule	Laviat	10's	1200.00	734.65
318	Lenalidomine	10mg Capsule	Lenome	10's	3815.00	1691.13
319	Lenalidomine	25mg Capsule	Lenome	10's	6540.00	3040.93
320	Lenalidomine	5mg Capsule	Lenome	10's	2180.00	948.87
321	Leuprolide	11.25 mg Injection	Leuprosta Depot 11.25 mg	Depot	11250	8877
322	Leuprolide	22.5 mg Injection	Leuprosta Depot 22.5 mg	Depot	19980	16812
323	Leuprolide	11.25mg Injection	BDSURE	Vial	11250.00	7661.99
324	Leuprolide	22.5mg Injection	BDSURE	Vial	21000.00	12698.43
325	Leuprolide	3.75mg Injection	BDSURE	Vial	4500.00	2537.19
326	Leuprolide	3.75mg Injection	Luprorin Depot	1 Vial + 1Am-poule	4634.00	2351.12
327	Leuprolide	22.5mg Injection	Leupo	22.5mg	21000.00	16893.51
328	Leuprolide	4mg Injection	Luprorin	4mg/4ml	560.00	478.58
329	Leuprolide	22.5mg Injection	Luprotas	22.5mg	21000.00	16893.51
330	Leuprolide	11.25mg Injection	Leupo	11.25mg	11500.00	10167.27
331	Leuprolide	11.25mg Injection	Luprotas	11.25mg	11500.00	10167.27
332	Leuprolide	3.75 mg Injection	Leuprorel	Vial	4400.00	2,224.20
333	Leuprolide	22.5 mg Injection	ELIGARD DEPOT	1X1	24,000.00	22650.00
334	Leuprolide	45 mg Injection	ELIGARD DEPOT	1X1	38,350.00	36357.00
335	Leuprolide Acetate	22.50 mg Injection	Leprol	Vial	18700	12620
336	Leuprolide Acetate	11.25 mg Injection	Leprol	Vial	11500	9330
337	Leuprolide Acetate	3.75mg Inj. (Powder)	Luprodex 3.75mg Depot	2ml-vial	4095	2257.07
338	Leuprolide Acetate	22.5mg Inj. (Powder)	Luprodex 22.5mg	2ml-vial	20100	12552.85
339	Leuprolide Acetate	11.25mg Inj. (Pow-der)	Luprodex 3M(11.25mg)	2ml-vial	11,576	7500
340	Leuprolide Acetate	11.25mg Inj. (Pow-der)	Luprodex 11.25mg depot	2ml-vial	11576.00	7339.71
341	Leuprolide Acetate	4mg Multidose Vial	Luprodex MD 4mg	4ml	510	439.17
342	Leuprolide acetate	3.75 mg Injection	MATERNA	1X1	4,395.00	2203.00
343	Leuprolide Acetate	22.5mg Inj	Glerelin	1's	19990	12210

344	Leuprolide Acetate	3.75mg Injection	EUROLIDE-DEPOT	Vial	5072.76	1772.10
345	Leuprolide Acetate	4mg Injection	EUROLIDE	4ml	795.96	527.92
346	Leuprolide Acetate	1mg Injection	EUROLIDE	0.5ml	304.37	196.45
347	Leuprolide Acetate	3.75mg Injection	Leuprogon Depot	Vial	3990	2650
348	Leuprolide Acetate	1 mg/ml inj	Luprofact	1 x 4 ml Vial	727	566.25
349	Leuprolide Acetate	1mg/0.5 ml inj	Luprofact	1x0.5 ml V	233.5	155.5
350	Leuprolide Acetate Depot for Inj.	11.25mg Injection	LUPRIDE 11.25 MG INJEC-TION	Vial	11500.00	10137.88
351	Leuprolide Acetate Depot for Inj.	22.50mg Injection	LUPRIDE 22.50 MG INJEC-TION	Vial	18700.00	17466.04
352	Leuprolide Acetate Depot for Inj.	3.75mg Injection	LUPRIDE 3.75 MG INJEC-TION	Vial	4200.00	3917.36
353	Leuprolide Ace-tate for Inj.	3.75mg Vial	Endorelin Inj.	1	4250	2778.22
354	Leuprolide de-pot Inj.	3.75mg Single Dose Vial	Prolimax	Per vial	4646	2349
355	Linalidomide	10mg 10caps	Lenaget	bottle of 10 caps	3293	1451
356	Linalidomide	5mg 10caps	Lenaget	bottle of 10 caps	1476	805
357	Lomustin	40 mg Capsule	Es -Tine	10’s	1,150	870
358	Lomustin	40 mg Capsule	LOMOOTHER 40		900	599.76
359	Mitomycin	40mg Injection	Mitomycin C	Vial	2879.40	2245.69
360	Mitomycin	10mg Injection	Mitomycin C	Vial	556.60	491.69
361	Mitomycin	2mg Injection	Mitomycin C	Vial	216.20	172.23
362	Mitomycin	10 mg/Vial Injection	MITO-10	10MG. LYO VIAL	529	472.34
363	Mitomycin	40 mg/Vial Injection	MITO-40	40 MG LYO. VIAL	2140	1,924.00
364	Mitomycin	2 mg/vial Injection	MITO-2	2 MG. LYO VIAL	168	164.56
365	Mitoxantrone	20 MG/ 10ML Injec-tion	NITROL	20 MG/10ML VIAL	433	427.17
366	Nilotinib	200 cap	Tasigna	4	8768	8507.57
367	Paclitaxel	100 mg Injection	AB-Pacli	Vial	12160.00	6,563.58
368	Paclitaxel	100mg Injection	Taxonab	Vial	14058.70	6739.83
369	Paclitaxel	100mg Injection	Petaxel	Vial	13056.48	5946.24

370	Paclitaxel	260 mg injection	PACLICAD 260MG INJ	50 ml Vial	10182.03	2775
371	Paclitaxel	100mg Injection (100mg/vial)	PacliAll	Single use vial	12697.74	5242.9
372	Paclitaxel	6mg Injection 43.4ml*1	PacliTrust 260	Single dose Vial	9000	1781.6
373	Paclitaxel	100mg Vial	Nab Tortaxel	1	12737.40	7918.2
374	Paclitaxel	260mg Injection	DUTAXEL	Vial	8800.00	1203.28
375	Paclitaxel	100mg Injection	DUTAXEL	Vial	3917.90	508.72
376	Paclitaxel	30mg Injection	DUTAXEL 30	Vial	1173.03	423.01
377	Paclitaxel (albumin based)	100 Injection	Paclimin	Vial	12440	6410
378	Paclitaxel (Protein bound particle)	100 mg Injection	NAB-Altaxel 100 Inj	Vial	10530	5392
379	Paclitaxel (Protein bound particle)	100mg Injection	NABPAC 100 MG (Injection)	Vial	12333.00	4628.00
380	Paclitaxel (Protein Bound particles)	100mg vial	NANOPACLI 100MG	Vial	11957.22	7256.63
381	Paclitaxel (Proteinbound particle	100mg Injection	NAB PACLITERO	Vial	10900.00	4622.00
382	Paclitaxel (Proteinbound particle	100mg Injection	NABTOXOL	Vial	11543.00	6418.00
383	Paclitaxel IP 100, Humen albumin IP	100 mg injection	PACLICAD N INJ	50 ml Vial	12169.5	5138
384	Paclitaxel Nanoparticle	100mg Injection	PACLITAX	Vial	13172.5	6803.88
385	Peg L Asperginase Inj	750/IU injection	LAGIPEG INJECTION	5 ml Vial	43378.43	34560
386	Peg L-Asparaginase	5ml Injection	PEG L-ASPATERO	Vial	43370.00	25536.00
387	Peg liposomal doxorubicin	50 mg/25 ml Injection	Peg Adrim	Vial	20883.9	8255.93
388	Peg liposomal doxorubicin	20 mg/10 ml Injection	Peg Adrim	Vial	8353.56	3632.7
389	Peg liposomal doxorubicin	20 mg Injection	Adrisom	Vial	7500	4780
390	Peg r-humen G-CSF	6mg inj	Glenstim	1,s	11997	3665
391	Peg-Asparaginase	750IU Inj.	Peg-Lasgen	Single dose vial	59990	29448.83
392	Pegasperagase	3750IU Injection	Asviia	Vial	24990.00	20383.71

393	Pegfilgrastim	0.06mg PFS	Imupeg Injection (Pref-filled Syringes)	PFS	12023.06	6984.45
394	Pegfilgrastim	6mg Injection	Pegstim	Vial	12078.00	3592.93
395	Pegfilgrastim	6mg Injection	Pegstim	Vial	5500.00	3894.46
396	Pegfilgrastim	6mg Injection	Pegheal	Vial	10990.00	3420.34
397	Pegfilgrastim	6mg Injection	CIPLASTIM	Vial	12000	6,399.99
398	Pegfilgrastim	6mg Injection	Peg-grafeel 6mg	1	10790.00	3010.00
399	Pegfilgrastim	6 mg Injection	PEGEX	1X1	9,340.00	3455.00
400	Pegfilgrastim	6 mg Injection	PEGEX	Vial	9,340.00	3,455.00
401	Pegfilgrastim	6 mg Injection	PEGLAST	Vial	10,870.00	6,400.00
402	Pegfilgrastim	6mg Injection	Pegasta	0.6ml	11227.00	2958.93
403	Pegfilgrastim	6mg Injection	Neupeg	ml	18530.00	6849.99
404	Pegfilgrastim	6mg Injection	Pegasta	0.6ml	3900.00	2958.93
405	Pegfilgrastim	6mg Injection	LUPIFII-P	Vial	8930	4172
406	Pegfilgrastim	6 mg/ 0.6 ml. PFS Injection	PEGNEON	6 MG/0.6 ML. PFS	7200	2,882.30
407	Pegfilgrastim	6 mg Injection	Pegreligrast	Vial	12000.00	2,919.14
408	Pegfilgrastim	6mg Injection	PEG FRASTIM(Injection)	PFS	14500.00	4016.00
409	Pegfilgrastim	6 mg prefilled sy-ringe	Fillif-peg	1	10352.60	7086.4
410	Pegfilgrastim	6 mg Injection	PEGLAST	Vial	10,870.00	6,400.00
411	PEG-FILGRASTIM	6mg Injection	PEG XPHIL 6MG(0.6ml) INJECTION	0.6ml	11000.00	6334.13
412	Pegfilgrastin	6mg Injection 6mg/0.6ml	Peg Trust	Single use vial	13233	4992.1
413	Pegylated Doxo-rubicin	20mg Injection	PEGDOXRUB	Vial	5400.00	3248.60
414	Pegylated Lipo-somal Doxoru-bicin	2 mg Injection	RUBILONG	Vial	9,898.00	3,918.00
415	Pegylated Lipo-somal Doxoru-bicin Hydrochlo-ride	10 ml Injection	PIGLIT	1X1	8,353.00	3158.00
416	Pemetrexed	500 mg inj	Benzpee	1 Vial	8100	4289
417	Pemetrexed	100 mg inj	Benzpee	1 Vial	2100	1024
418	Pemetrexed	100mg Injection	PEMETREX	Vial	3600.00	914.45
419	Pemetrexed	500mg Injection	PEMETREX	Vial	19440.00	2543.83
420	Pemetrexed	500mg Injection	Pempro	Vial	18000.00	3224.76
421	Pemetrexed	100mg Injection	Pempro	Vial	5500.00	936.79
422	Pemetrexed	500 mg injection	PEMECAD 500MG	Vial	19255.27	4349
423	Pemetrexed	100 mg injection	PEMECAD 100 MG	Vial	6080.61	1909
424	Pemetrexed	500mg Injection	PEMETA	Vial	21450	4071.7
425	Pemetrexed	100mg Injection	PEMETA	Vial	4950	862.78

426	Pemetrexed	500mg Injection	Pemgem 500mg inj	500mg	21215.00	5123.50
427	Pemetrexed	100mg Injection	Pemgem 100mg inj	100mg	5373.00	1378.50
428	Pemetrexed	500 mg Injection	PEMCURE	1X1	16,500.00	3431.00
429	Pemetrexed	100 mg Injection	PEMCURE	1X1	3,800.00	1034.00
430	Pemetrexed	500mg Inj	Pexotra	1's	8000	4690
431	Pemetrexed	100mg Inj	Pexotra	1's	2000	1050
432	Pemetrexed	500mg Single Dose Vial	Giopem	Per vial	13125	4074
433	Pemetrexed	100mg Single Dose Vial	Giopem	Per vial	2990	1606
434	Pemetrexed	500mg Injection	PEMETERO	Vial	13200.00	2673.00
435	Pemetrexed	100mg Injection	PEMETERO	Vial	2750.00	1014.00
436	Pemetrexed	500mg Injection	Pemmet	Vial	19075.00	5467.60
437	Pemetrexed	100mg Injection	Pemmet	Vial	5450.00	1344.18
438	Pemetrexed	500mg Injection	MY TREX	Vial	12000.00	2691.00
439	Pemetrexed	100mg Injection	MY TREX	Vial	4500.00	957.00
440	Pemetrexed	500 mg/ vial Injection	PEMEPLAST-500	500 MG/5ML. VIAL	4299	2,506.02
441	Pemetrexed	100 mg /vial Injection	PEMEPLAST-100	100 MG/VIAL	904	634.53
442	Pemetrexed	100mg Injection	Pexe trust 100	Single use vial (100mg*1)	5150	740.75
443	Pemetrexed	500mg Injection	Pexe trust 500	Single use vial (500mg*1)	20394	2745.2
444	Pemetrexed	500mg Powder to Injection	PEMAXAM-500	Vial	13200.00	2259.95
445	Pemetrexed	100mg Powder to Injection	PEMAXAM-100	Vial	3080.00	801.84
446	Pemetrexed	500mg Injection	PEXITAZ 500 MG INJECTION	Vial	12785.05	7115.23
447	Pemetrexed	100mg Injection	PEXITAZ 100 MG INJECTION	Vial	2516.75	1339.88
448	Pemetrexed	500mg Vial	Pemotide 500	1	21403.00	5346.8
449	Pemetrexed	100mg Vial	Pemotide 100	1	5268.40	2140.9
450	Pemetrexed	500mg Injection	Antifol	Vial	8500.00	3905.17
451	Pemetrexed	100mg Injection	Antifol	Vial	2300.00	936.29
452	Pemetrexed	100mg Injection	pemxcel	Vial	7700	800
453	pemetrexed	500mg Injection	pemxcel	Vial	22000	2880
454	Pemetrexed	500mg Injection	Pemestar 500	Vial	25400	2509
455	Pemetrexed	100 mg Tab	Pemestar 100	10	5950	856
456	Pemetrexed	500mg Injection	Pemshil	Vial	20000	3270.59
457	Pemetrexed	100 mg / 10 ml Injection	Kabipem	Vial	5786	1049.15
458	Pemetrexed	100mg Injection	Pemelive 100	Vial	6350	1200

459	Pemetrexed	500mg / 50 ml Injection	Kabipem	Vial	23144.94	5054.46
460	Pemetrexed	100 mg Injection	Pemshil	Vial	5000	1204
461	Pemetrexed	500mg Injection	Pemelive 500	Vial	19750	4800
462	Pemetrexed	500 Injection	Pamifect	Vial	21000	6870
463	Pemetrexed	100 Injection	Pamifect	Vial	5500	2480
464	Pemetrexed	500 mg Injection	Relitrexed	Vial	20900.00	5,461.33
465	Pemetrexed	100 mg Injection	Relitrexed	Vial	5500.00	1,272.46
466	Pemetrexed	500 mg Injection	ZUPEMED	Vial	14,900.00	4,246.00
467	Pemetrexed	100 mg Injection	ZUPEMED	Vial	4,550.00	960.00
468	Pemetrexed 100mg	100mg Inj.	Adpem 100	Single dose vial	5350	1014
469	Pemetrexed 500mg	500mg Inj.	Adpem 500	Single dose vial	19500	4416
470	Pemetrexed Disodium	100 mg inj	Es-Peme	1 Vial	6500	860
471	Pemetrexed Disodium	500mg inj	Es-Peme	1 Vial	17000	3730
472	Pemetrexed Disodium	100 mg Injection	Pemeetron 100 inj	Vial	5400	1817
473	Pemetrexed Disodium	500mg Injection	Pemeetron 500 inj	Vial	22200	5778
474	Pemetrexed Disodium	100mg Injection	Alimta 100mg	Vial	19451	6000
475	Pemetrexed Disodium	500mg Injection	Alimta 500mg	Vial	81026	30000
476	Pemetrexed Disodium	500mg inj	Pemnat 500	1 Vial	14850	2442.46
477	Pemetrexed Disodium	100 mg inj	Pemnat 100	1 Vial	3675	916.8
478	Pemetrexed Disodium	100 mg Injection	PEMETED 100	100 MG/VIAL	5500	956.42
479	Pemetrexed Disodium	500mg Injection	PEMETED 500	500 MG/VIAL	19780	3838.46
480	Pemetrexed Disodium 100mg+mannitol 106mg(Per Vial)	100mg Injection	PEMEXAR (Injection)	100 Vial	5000.00	1141.00
481	Pemetrexed Disodium 500mg+mannitol 500mg(Per Vial)	500mg Injection	PEMEXAR (Injection)	500 Vial	19000.00	4249.00
482	Plerixafor	24 mg Inj	IRANSEZE	1 VIAL	75000	45685.99
483	Plerixafor	20mg Injection	Stemfor	20mg	39950.00	33222.97
484	Plerixafor	24 mg Injection	PLERIXA	1.2 ML/VIAL	45000	28561.37

485	Pomalidomide	4mg Capsule	POMAHOPE 4MG	21	21000.00	17955.74
486	Pomalidomide	2mg Capsule	POMAHOPE 2MG	21	10000.00	7916.21
487	Pomalidomide	1mg Capsule	POMAHOPE 1MG	21	5500.00	3680.02
488	Pomalidomide	3mg Capsule	POMAHOPE 3MG	21	16000.00	15199.99
489	Pomalidomide	4mg Capsule	Pomiat	21's	20000.00	14868.00
490	Pomalidomide	2mg Capsule	Pomiat	21's	10000.00	8800.00
491	Pomalidomide	1mg Capsule	Pomiat	21's	5000.00	4640.00
492	Pomalidomide	4mg Capsule	POMALONG	21 Caps	20000	12,000.00
493	Pomalidomide	1mg Capsule	POMALONG	21 Caps	5000	3,000.00
494	Pomalidomide	4mg Capsule	Pomired 4mg capsule	21	21000.00	16021.00
495	Pomalidomide	2mg Capsule	Pomired 2mg capsule	21	10500.00	10371.50
496	Pomalidomide	4mg capsule	Pomacel	21 Cap	20000	14200
497	Pomalidomide	2 mg capsule	Pomacel	21 Cap	10000	8100
498	Pomalidomide	3mg capsule	Pomacel	21 Cap	15000	11650
499	Pomalidomide	1 mg capsule	Pomacel	21 Cap	5000	3600
500	Pomalidomide	4mg Capsule	IBIPOLID 4	21 CAP	20000	14400
501	Pomalidomide	2 mg Capsule	IBIPOLID 2	21 CAP	10000	9219.28
502	Pomalidomide	1 mg Capsule	IBIPOLID 1	21 CAP	5000	4176
503	Pomalidomide	4mg Capsule	Pomyelo	21's	20000.00	15805.22
504	Pomalidomide	2mg Capsule	Pomyelo	21's	10000.00	9047.77
505	Pomalidomide	1mg Capsule	Pomyelo	21's	5000.00	4586.70
506	Pomalidomide	2mg Capsules	Pomavia	21 Capsules in bottle	9980	5748
507	Pomalidomide	4mg Capsules	Pomavia	21 Capsules in bottle	21880	16432
508	Pomalidomide	4mg Capsule	MYHB	21 Caps	20000.00	14201.00
509	Pomalidomide	2mg Capsule	MYHB	21 Caps	10000.00	7497.00
510	Pomalidomide	1mg Capsule	MYHB	21 Caps	5000.00	3590.00
511	Pomalidomide	4 mg Cap	Pomalid 4	21	20000	15946.24
512	Pomalidomide	2 mg Cap	Pomalid 2	21	10000	8190.21
513	Pomalidomide	1 mg Cap	Pomalid 1	21	5000	4219.68
514	Pomalidomine	4mg Capsule	POMIDE	21's	19740.00	16567.00
515	Pomalidomine	2mg Capsule	POMIDE	21's	9975.00	7572.00
516	Pomalidomine	1mg Capsule	POMIDE	21's	5040.00	3084.00
517	Regorafenib	40 mg tab	Nublexa	28 tab	59294	36965
518	Regorafenib	40 mg Tablet	Resihance	28's	42385.10	42194.57
519	Sunitinib	25 mg Capsules	Sutent 25mg Capsules (Capsules)	7 Capsules*1	30501.71	29204.51
520	Sunitinib	12.5 mg Capsules	Sutent 12.5mg Capsules (Capsules)	7 Capsules*1	15250.52	14786.42
521	Triptorelin	11.25 mg Injection	Pamorelin LA 11.25	1	20055.00	17876.50
522	Triptorelin	22.5 mg Injection	Pamorelin LA 22.5	Vial	38000.00	36409.00

523	Triptorelin	3.75 mg Injection	Pamorelin LA 3.75	Vial	8137.50	7506.00
524	Triptorelin Acetate Injection	3.75 mg Injectable	Decapeptyl Depot	1	7259.85	6231.17
525	Triptorelin Acetate Injection	0.1 mg/ml Injectable	Decapeptyl 0.1mg	7	2454.76	2361.62
526	Triptorelin Acetate Injection	0.1 mg/ml Injectable	Gonapeptyl	10	10145.00	9581.10

CHAPTER 8

IMPLEMENTATION OF RAJBHASHA

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IMPLEMENTATION OF RAJBHASHA

Use of Hindi in official work

Every possible effort was made for implementation of the various provisions of the Official Language Policy of the Union of India including those of Official Languages Act, 1963 as well as Official Languages (Use for Official Purposes of the Union) Rules, 1976 and orders issued thereunder. All the documents mentioned in Sub Section (3) of Section 3 of the Official Languages Act, 1963 were issued bilingually i.e. in Hindi as well as in English. Letters received in Hindi and representations etc. signed in Hindi were replied in Hindi as per provisions of the Rule 5 and Rule 7(2) of the Official Languages (Use for Official Purposes of the Union) Rules, 1976 (as amended in 1987).

Official Language Implementation Committee

Department is having Official Language Implementation Committee working under the Chairmanship of the Joint Secretary to periodically review the progressive use of Hindi in the official work and suggest the suitable measures to increase the use of Hindi in the official work. Its meetings were held on regular intervals and implementation status of the various targets set in the Annual Programme for transaction of the official work of the Union in Hindi for the year 2019-20 issued by the Department of Official Language, Ministry of Home Affairs was reviewed.

Hindi Prayog Protsahan Pakhwara, 2019

Hindi Prayog Protsahan Pakhwara was observed in the Department from 16th to 30th September, 2019 with the objective to encourage the officers and employees of the Department to progressively increase the use of Hindi in their official work and also to help the Department to create an atmosphere conducive to use of Hindi.

In addition to the message issued by the Secretary (Pharma) requesting, inter-alia, all the officers/employees to make a commitment to use of Hindi, various Hindi competitions were held during the Pakhwara in which officers/ officials participated in unprecedented numbers and made this programme successful. Winners were awarded with cash prizes.

Review of the status of use of Hindi in the offices under the Department

Periodical review of the use of Hindi in the offices under the Department was made through the quarterly reports on progressive use of Hindi received from them in compliance with the targets set in the Annual Programme for use of Hindi for the year 2018-19. Moreover, during this year, to achieve the prescribed target (inspection of at least 25% offices) in the Annual Official Language Programme 2018-19, the successful inspection of three subordinate offices of Department of Pharmaceuticals was carried out.

Conduct of Hindi Workshop

To help the officers/employees of the Department of Pharmaceuticals to work in official languages in official work and to encourage to use official language Hindi, a Hindi workshop on the subject

'Hindi Typing on Computer' was organised on 15.04.2019. Two more Hindi Workshops on "Official Language Rules and Hindi Quarterly Progress Report" and "Official Language Act/Rules and Hindi Quarterly Progress Report" were organised on 29.07.2019 and 13.11.2019 respectively.

CHAPTER 9

CITIZEN CENTRIC GOVERNANCE

CHAPTER 9

CITIZEN CENTRIC GOVERNANCE

9.1 Our Vision:

To promote Indian pharma as the global leader for quality medicines and to ensure availability, accessibility and affordability of drugs and medical devices in the country.

9.2 Our Mission:

- investment for Make in India in pharma sector
- Make in India in critical APIs and medical devices
- industry expansion, skilling, R&D and innovation
- stable and effective price regulation and
- generic medicines by expanding Janaushadhi scheme

9.3 Our Clients

- Citizens of India
- Pharmaceutical Industry including Micro, Small and Medium Enterprises
- Pharmaceutical companies seeking relief under DPCOs
- NPPA/ CPSUs/NIPERs

9.4 Our Commitment

We are committed to provide impartial, sympathetic and prompt services to the public in matters relating to the pharmaceutical industry.

Our commitment is to take prompt steps to provide quick redressal of the grievances of our personnel and public at large.

Our commitment is to formulate policies and initiate consultations with all Industry Associations/stakeholders and to amend them whenever so required.

9.5 Our Services

We formulate and implement policies relating to drugs and pharmaceuticals, dyestuff and dye intermediates.

9.6 Our Activities

The key activities of the Department:

1. Ensure availability of drugs at reasonable prices as per provisions of the Drugs (Prices Control) Order, 2013

2. Ensure proper functioning of the Central Pharma Undertakings in control of the Department.

3. Project Based Support and Revival Schemes for CPSUs

4. Ensure proper management of M Pharma and Ph.D. programs in NIPERs

5. Develop Human Resources, Infrastructure for Pharma R&D and Industry including Public-Private-Partnerships (PPP)

6. Formulate Scheme/ Project for promoting Pharma Brand India

7. Formulate Scheme/ Project for promoting environmentally sustainable development of Pharmaceutical Industry

8. Formulation of Annual Plan, Budget and Monitoring of Budget Expenditure

The Citizen Charter of the Department has been placed on the website of the Department.

9.7 Right to Information Act 2005

As per the provisions of the RTI Act, 2005, all the relevant information relating to Department of Pharmaceuticals has been made available on the web site in a manner, which is easily accessible and comprehensible to the public.

Central Public Information Officers and Appellate Authorities have been nominated in the department to provide information to the public.

9.8 CPGRAMS (Centralized Public Grievances Redress and Monitoring System)

Public Grievances received offline and through CPGRAMS are monitored and disposed on regular basis.

CHAPTER 10

INFORMATION AND COMMUNICATION TECHNOLOGY

Chapter 10

Information and Communication Technology

Under Digital India program, Department of Pharmaceuticals has taken initiatives towards adoption of E-Governance to deliver information and services online. This has led to benefits in terms of transparency, easy accessibility of services, improvement of internal processes and decision support system.

An IT based Computer Centre, set up by National Informatics Centre (NIC) is operational in the Department and is equipped with latest Client machines for providing various IT related services to the Department. NIC is delivering valuable key services like Technical consultancy, Networking, application development and implementation, Internet & E-Mail, database management and Training. With NIC's presence and expertise, Department has been active in steering following IT/E-governance initiatives. In order to enhance the delivery and security, web applications are migrated to cloud environment.

Local Area Network (LAN):

All workplaces in the department are connected to Local Area Network (LAN) which is already IPv6 compliant and is managed by the National Informatics Centre (NIC) to provide round the clock facilities for E-mail, intranet / internet and database access operations. The IPv6 compliant ICT hardware is available to all officers/ divisions/ sections for use at their desktops.

Website and Social Media

Bilingual Web Site of department http://pharmaceuticals.gov.in is hosted on NIC cloud to ensure security and maximum reach of information to the citizens. The website is developed by NIC using content management framework and is GIGW compliant. It provides details of organizational set up of the department, its functions, subordinate offices, policies, publications and statistical data/information on functional parameters. Standardization testing and Quality Certificate (STQC) certification is completed.

Social media has enormous potential to reach people. To improve the quality of Government decision, policy making and create awareness, Department has created Facebook and Twitter accounts. Information regarding the conferences and Seminars launched by Minister, MoS, Secretary and other officers of Department is posted on it promptly. Various posts to create awareness regarding various activities and decisions taken by the Department are posted on Facebook and twitter pages of the Department.

Video Conferencing:

Video Conferencing (VC) facility is operative for Secretary and Joint Secretaries of the Department. PSUs and NIPERs have also installed the Video Conferencing facility. VC facility enables Department to interact with PSUs and NIPERs frequently to monitor their performance and communicate the decisions. Pragati meeting, Monitoring tool of PM office, is conducted every month and Hon'ble PM interacts with all Secretaries and State CS to address issues which are long pending through Video Conferencing. Video Conferencing facility is also utilized for interacting with foreign delegates.

Work Flow Automation

Another initiative taken by the Department towards Digital India is to implement automation of workflow inside the Department. E-office is a standard product presently consists of e-File, e-Tour, Knowledge Management System (KMS), Personnel Information Management System (PIMS), Collaboration & Messaging Service (CAMS) and is aimed at increasing the usage of work flow and rule based file routing, quick search and retrieval of files and office orders, digital signatures for authentication, forms and reporting components. e-Office has been implemented to reduce duplicity of work and to increase transparency and efficiency.

e-Governance:

Taking advantage of latest ICT enabled tools, Department of Pharmaceuticals with the support of NIC has taken initiatives towards adoption of best practices. Various applications have been developed and implemented by NIC to strengthen monitoring and decision making and high availability of right information at right time.

- Aadhaar enabled Biometrics Attendance System (AEBAS) - Biometrics Attendance System records attendance of all employees (Permanent and Casual) of the Department. Various reports are generated for monitoring of attendance.

- SPARROW- Smart Performance Appraisal Report Recording online Window (SPARROW) application which allows online submission of APAR of IAS and CSS cadre officers is implemented successfully.

- Visitor Management System – e-Visitor System is a web based solution for Visitor Management. This facilitates citizens for online registration of requests for their visit and approval is given to authenticated visitors and gate pass is issued.

- Legal Information Management & Briefing System (LIMBS) – LIMBS is a web based portal developed by Department of Legal Affairs, Ministry of Law & Justice for monitoring and handling of various court cases of Government. Cases pertaining to High Court and Tribunals are being uploaded by the concerned departments. It facilitates officials to generate useful reports.

- Online RTI-MIS – To dispose of and monitor RTI applications efficiently, Department has taken initiative to use Online RTI-MIS. Necessary training was imparted to concerned officials/staff to implement RTI-MIS successfully.

- Centralized Public Grievance Redress Monitoring System (CPGRAMS): CPGRAMS is implemented in the Department and all the attached offices to address Public grievances received online with minimum delay.

- E-publishing of Tenders – E-publishing of tenders is implemented by uploading tenders on Central Public Procurement Portal. It has improved the accessibility of tenders.

- Electronic-Human Resource Management System (e-HRMS) is a web based Hu-

man Resource Management System. E-HRMS, the web portal https://ehrms.gov.in/ is implemented in the Department of Pharmaceuticals. Data of all the employees are uploaded. Modules of Service Book Detail, Leave and LTC are operational.

- https://supremo.nic.in/ is web portal being maintained by the Department of Personnel and Training (DOPT), Government of India. This is single user platform related to employees of Government of India. Information of the personnel under Appointment Committee of the Cabinet (ACC) are being uploaded onto the website.

To enhance e-Governance further following initiatives have been taken up.

- Development of software for grant – in - aid under Plan Scheme "Pharmaceutical Promotion and Development Scheme (PPDS)". The objective of PPDS is promotion and development of Pharmaceutical sector by extending financial support for conduct of seminars, conferences, exhibitions, mounting delegations from India to other countries for promotion of exports as well as investments, conducting studies/ consultancies, for facilitating growth, exports as well as critical issues affecting Pharma Sector. The software is integrated with Darpan of Niti Aayog and applications for getting assistance under the scheme are being received online.

- National Institutes of Pharmaceutical Education & Research (NIPERs) are situated at Ahmedabad, Guwahati, Hajipur, Hyderabad, Kolkata, Raebareli, and Mohali. NIPER MIS http://nipermis.pharmaceuticals.gov.in/ has been developed and hosted on NIC cloud to monitor different activities of the institutes. Next Version of the MIS is developed and is under the process of implementation.

- DBT MIS portal http://dbt.pharmaceuticals.gov.in is hosted on the NIC cloud for two schemes of the Department of Pharmaceuticals – Scholarship to students under NIPER and Pardhan Mantri Bhartiya Jan Aushadhi Pariyojana (PMBJP). This portal disseminates the information about beneficiaries and transactions. This portal validates the beneficiary's details from Aadhar and transaction details are shared with DBT Bharat.

- Dashboard of the Department is developed and under implementation.

- Stationery MIS (http://10.21.81.76/store) is the MIS of the Stationery items for the Department of Pharmaceuticals. Here employees can request for the stationery items. Dealing hand accepts the request and after approval of the Administration, employees can receive the items. Stock of the stationery items is being maintained and issued through this portal dynamically. Next Version of this software is under development.

- **E-registry of all Dak:** The Department has started e-diarising of all dak/receipts in the Department for the purpose of database and e-monitoring. All papers received in the Department including all official e-mails are diarised electronically in the Central Registry of the Department. Periodical reports of pending papers are generated and monitored.

CHAPTER 11

ANNEXURES

Annexure – I [A]	List of PSUs and Other Organizations
Annexure – I [B]	Address and Name of various Organizations & PSUs
Annexure – I [C]	List of Responsibility Centers and Subordinate Organizations
Annexure – II	Organizational Chart of NPPA

CHAPTER 11

ANNEXURES

ANNEXURE I [A]

List of Public Sector Undertakings

1 Indian Drugs & Pharmaceuticals Ltd, Dundahera Industrial Complex, Dundahera, Gurgaon, Haryana.

2 Hindustan Antibiotics Ltd, Pimpri, Pune, Maharahstra.

3 Karnataka Antibiotics & Pharmaceuticals Limited, Bangalore-560010.

4 Bengal Chemicals & Pharmaceuticals Ltd, Kolkata, West Bengal.

5 Rajasthan Drugs and Pharmaceuticals Limited. Road NO.12, V.K.I. Area, Jai pur-302013.

OTHER ORGANISATIONS

1. Bengal Immunity Limited, Kolkata, West Bengal.

2. Smith Stanistreet Pharmaceuticals Ltd. Kolkata, West Bengal.

ANNEXURE I [B]

Address and Names of Head of various Organization & PSUs under the Department of Pharmaceuticals: -

Table-11A

(Contact address of 5 PSUs)

Sl. No.	Address and Organization	Name	Designation
1.	Indian Drugs & Pharmaceuticals Limited (IDPL), Gurgaon	Shri Navdeep Rinwa	Chairperson & Managing Director
2.	Hindustan Antibiotics Limited (HAL), Pune-411010	Ms. Nirja Saraf	Managing Director
3.	Karnataka Antibiotics & Pharmaceuticals Limited (KALP), Banglore-700013	Mr. Sunil Kumar Kaimal	Managing Director
4.	Bengal Chemicals & Pharmaceuticals Limited (BCPL), Kolkata-700013	Shri P.M. Chandraiah	Managing Director
5.	Rajasthan Drugs & Pharmaceuticals Limited (RDPL), Road No. 12 V.K.I Area Jaipur-302013	Shri Navdeep Rinwa	Managing Director (Additional Charge)

ANNEXURE I [C]

List of Responsibility Centers and Subordinate Organizations

S.no.	Name of Directors	Official Number	Email	Mobile Number	Address
1	Dr. SJS Flora (Director) Additional Charge	0172-2214690 0172-2214697	director@niper.ac.in	9425482305	SAS Nagar, NIPER Mohali, Punjab - 160062
2	Dr. Kiran Kalia, (Director)	079-66745555	kirankalia@gmail.com	9714618573	Palaj Opp. Air Force Station Head Quarter, Gandhinagar-382355, Gujarat.
3	Dr. Shashi Bala Singh (Director)	040-23073741	director.niperhyd@gov.indirector@niperhyd.ac.in	9999297992	NIPER, Hyderabad IDPL Township, Balangar, Hyderabad-500007
4	Dr. Gayathri V. Patil	0612-2631565	patilgayathri@yahoo.co.in	8600376332	E.P.I.P. Campus, Industrial Area, Hajipur-844102, Bihar
5	Dr.V. Ravichandiran, (Director)	033-24995803 033-23200086	vishnuvardhr@gmail.comdirector@niperkolkata.edu.in	9443963481	Indian Institute of Chemical Biology (IICB, under CSIR), Mentor Institute for NIPER-Kolkata Chunilala Bhawan, 168, Maniktala main road, Kolkata-700054, West Bangal
6	Dr. USN Murty (Director)	0361-2132751	murtyusn@gmail.com murty_usn@yahoo.com	9127060998	C/o NITS-Mirza Santipur, Parlli Part, NH-37 Mirza, Kamrup, Assam - 781 125
7	Dr. SJS Flora (Director)	0535-2700851	sjsflora@hotmail.com	9425482305	Bijnor-Sisendi Road, Sarojini Nagar, Near CRPF Base Camp, Luknow (UP) - 226002

ANNEXURE-II

Chairman NPPA

Member Secretary

Advisor

Admn. Division	Mon.& Enf. Division-III	Overcharging-I	Pricing	Overcharging-II	Legal
1. Establishment matters 2. General Admn. 3. Cash/Budget 4. Coordination 5. R & I Section 6. Vigilance 7. Work related to Parliament Committees 8. Consolidation and compilation of Parliament questions/ reply/ matters. 9. ISO Audit 10. Any other subjects not listed elsewhere. 11. All MP/VIP references and their coordination. 12. Updation of NPPA's website.	1. Enforcing and implementation of the prices of NLEM formulations fixed by NPPA. 2. Monitoring of the price movement of non-NLEM formulations based on monthly reports of IMS and action thereof, if found more than 10%. 3. Processing of SDCs reports received in respect of non-implementation of the prices of NLEM formulations and other DPCO related matters. 4. Complaints received from individuals, NGOs, institutes related to pricing/ marketing at prices higher than the price fixed by NPPA or price increase more than 10%. 5. Sending reports to Overcharging Division for recovery of overcharged amount. 6. Sending reports to Pricing Division to fix the prices in respect of NLEM formulations, if price is not fixed. 7. Interaction/ correspondence with State Drugs Controllers in the matter related to enforcement of DPCO provisions. 8. Shortage and availability of NLEM and non-NLEM formulations 9. Policy matter related to new DPCO. 10. Generation of Monthly Report based on IMS Data. 11. Price List collection & examination 12. Storage & Preservance of IMS Data and providing inputs to the concerned Divisions of NPPA. 13. Old cases relating to Bulk Drugs 14. Production & Import Data of Bulk Drugs & Formulations 15. Related Parliament Questions/matters. 16. RTI work 17. Work relating to RFD	1. All overcharging cases/ files w.e.f. 01.01.2008 onwards under DPCO 1995, and related work. 2. Issue notice to the companies for overcharging and subsequent follow up. 3. Issue show cause notice, working out the overcharged amount and raise demand for recovery of the overcharged amount. 4. Recovery of overcharged amount under DPCO, 1995. 5. Grant personal hearing and pass speaking/ reasoned order whenever needed. 6. Examination of other issues related to overcharging under DPCO, 1995 for recovery of the overcharged amount. 7. Providing input to Legal Division for court cases. 8. Related Parliament Questions/matters.	1. Fixation/Revision of prices of NLEM formulations. 2. Working out factors/ norms related to pricing formula given in DPCO, 2013 and its revision from time to time 3. Collection of market based data for fixation of prices of NLEM formulations for which IMS data is not available. 4. Annual revision of prices of NLEM formulations based on WPI on or after 1st April, every year. 5. Annual revision of prices whenever there is a change in market structure in respect of NLEM formulations 6. Price fixation/ revision of non-NLEM formulations wherever considered necessary. 7. Notification of prices in the official Gazatte and maintaining the price data of NLEM formulations 8. Annual exercise in respect of market structure/number of NLEM manufacturers for each NLEM formulations 9. Coordination work related to Authority Meetings - Agenda/ Minutes 10 All overcharging cases/files for the period upto 31.12.2004 under DPCO 1995 & 1987 and related work 11. Related Parliament Questions/ matters.	1. All overcharging cases/files for the period from 2005 to 2007 under DPCO 1995; DPCO 2013 and related work 2. Issue notice to the companies for overcharging and subsequent follow up. 3. Issue show cause notice, working out the overcharged amount and raise demand for recovery of the overcharged amount. 4. Recovery of overcharged amount under DPCO, 1995. 5. Grant personal hearing and pass speaking/ reasoned order whenever needed. 6. Examination of other issues related to overcharging under DPCO, 1995 for recovery of the overcharged amount. 7. Examination of other issues related to overcharging under DPCO 1995 and 2013 for recovery of the overcharged amount. 8. Providing input to Legal Division for court cases. 9. All Plan Schemes of NPPA. 10. Related Parliament Questions/matters.	1. Court cases under DPCO, 1987 and 1995 2. Court cases under DPCO, 2013 3. Advice to other Divisions of NPPA related to interpretation and applications of various provisions of DPCO. 4. Legal matters related to establishment matters / NPPA's accomodation 5. NPPA's working guidelines/ procedures etc. 6. Launching prosecution against the defaulting companies for violation of the provisions of DPCO. 7. Related Parliament Questions/ matters.

सत्यमेव जयते

Government of India
Ministry of Chemicals & Fertilizers
DEPARTMENT OF PHARMACEUTICALS