



**MAKING QUALITY HEALTHCARE AFFORDABLE
THROUGH
DRUG DELIVERY SOLUTIONS
FOCUSING ON
PATIENT CONVENIENCE AND ADHERENCE**

www.zimlab.in



ZIM – An Innovative Drug Delivery Solution Provider

ZIM is a pharmaceutical company focused on providing innovative drug delivery solutions that improve convenience and adherence of drug treatment.

Its value propositions is its ability to provide a range of technology based drug delivery solutions and non-infringing proprietary manufacturing processes for development, manufacture and supply of innovative and differentiated generic pharmaceutical products to its customers globally.

ZIM acts as a research centric product development partner for its customers across several Pharmerging and RoW markets by providing a constant pipeline of therapy agnostic finished and semi finished pharmaceutical formulation products, using novel delivery solutions. It provides end to end support that includes:

- Product Development / Co- Development / Out-Licensing
- Country Specific Registration Dossiers
- Manufacturing and Supply
- Marketing Support

Creating Enduring Partnerships

By combining Innovative Drug Delivery Solutions



ORAL THIN FILMS



**SOLUBILITY AND STABILITY
ENHANCEMENT**



MODIFIED RELEASE



TASTE MASKING

with Flexibility of offerings



**PRE FORMULATIONS
INTERMEDIATES**



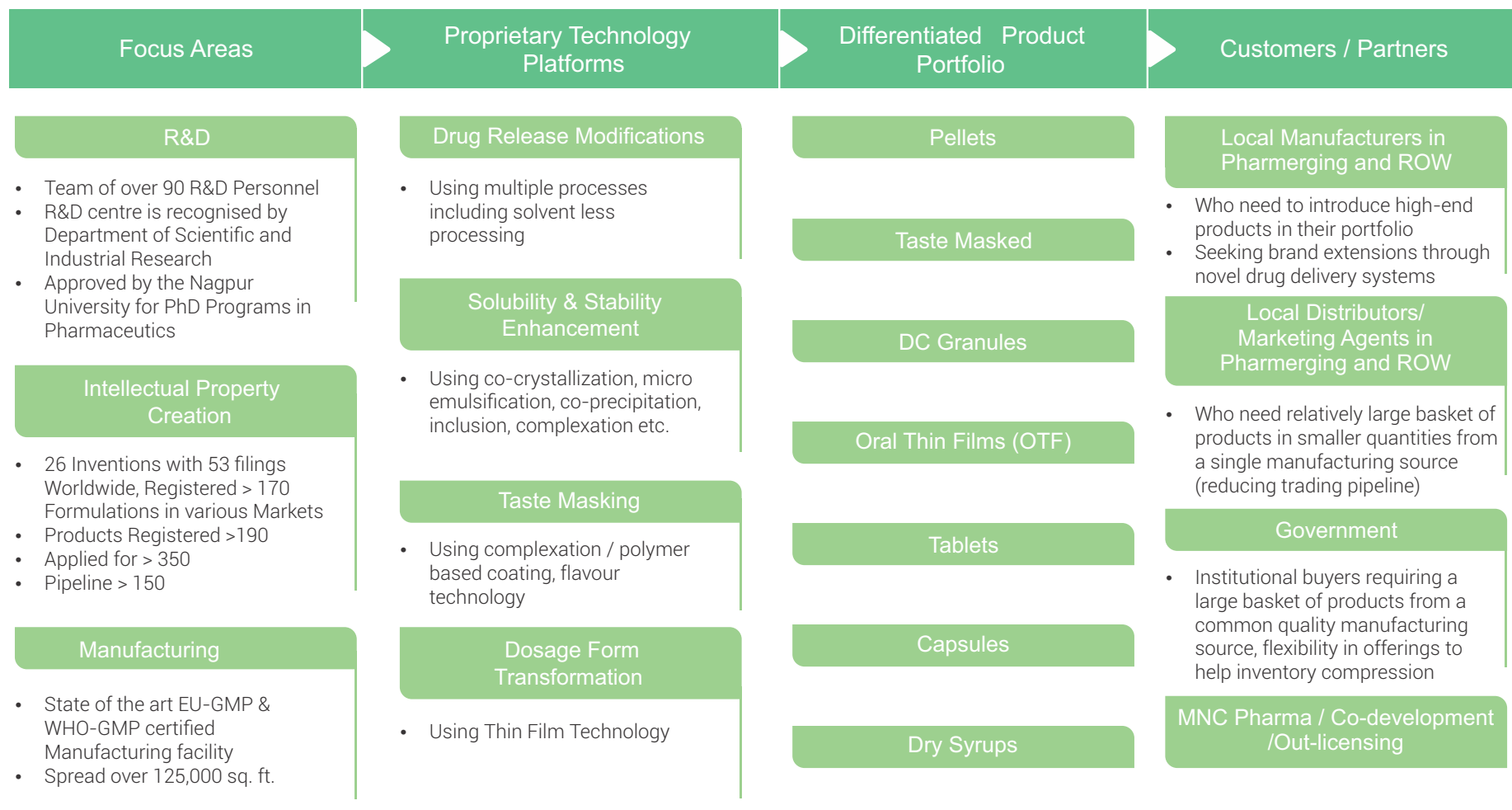
FINISHED FORMULATIONS



CO-DEVELOPMENT

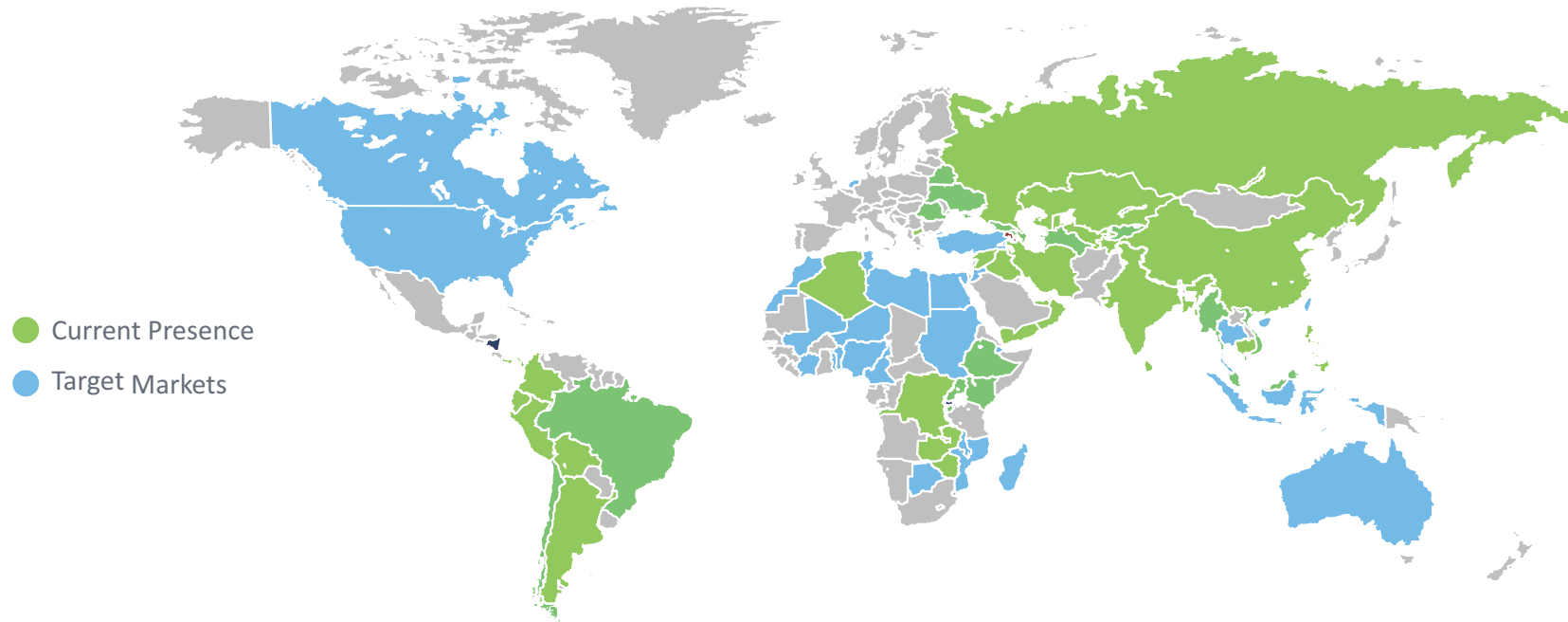
Bridging the technology gap

For Players in Tier III Pharmerging and RoW Markets

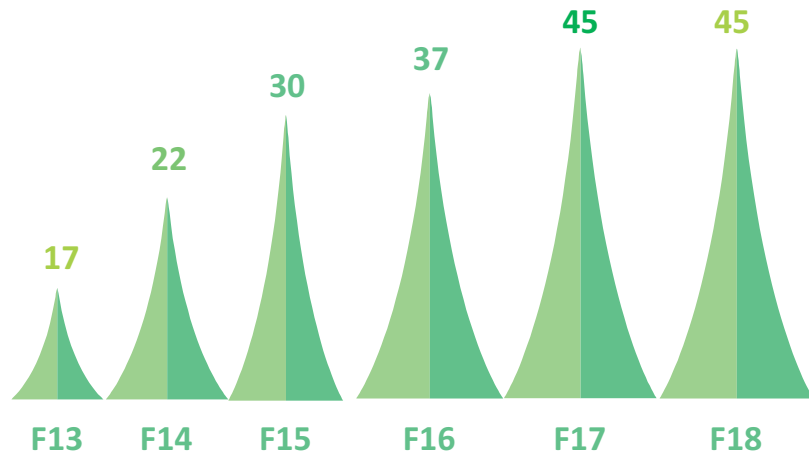


ZIM's partners value & cherish it's technological strength & operational flexibility

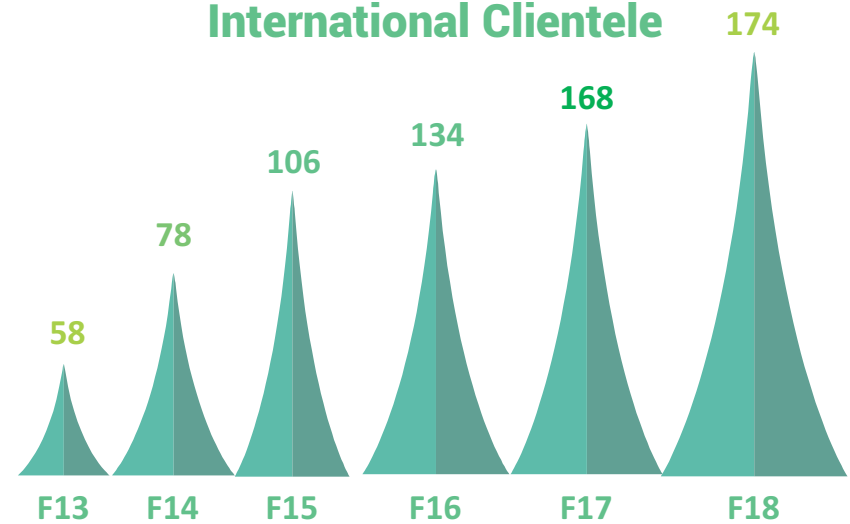
Diversified Customers in Key Target Markets



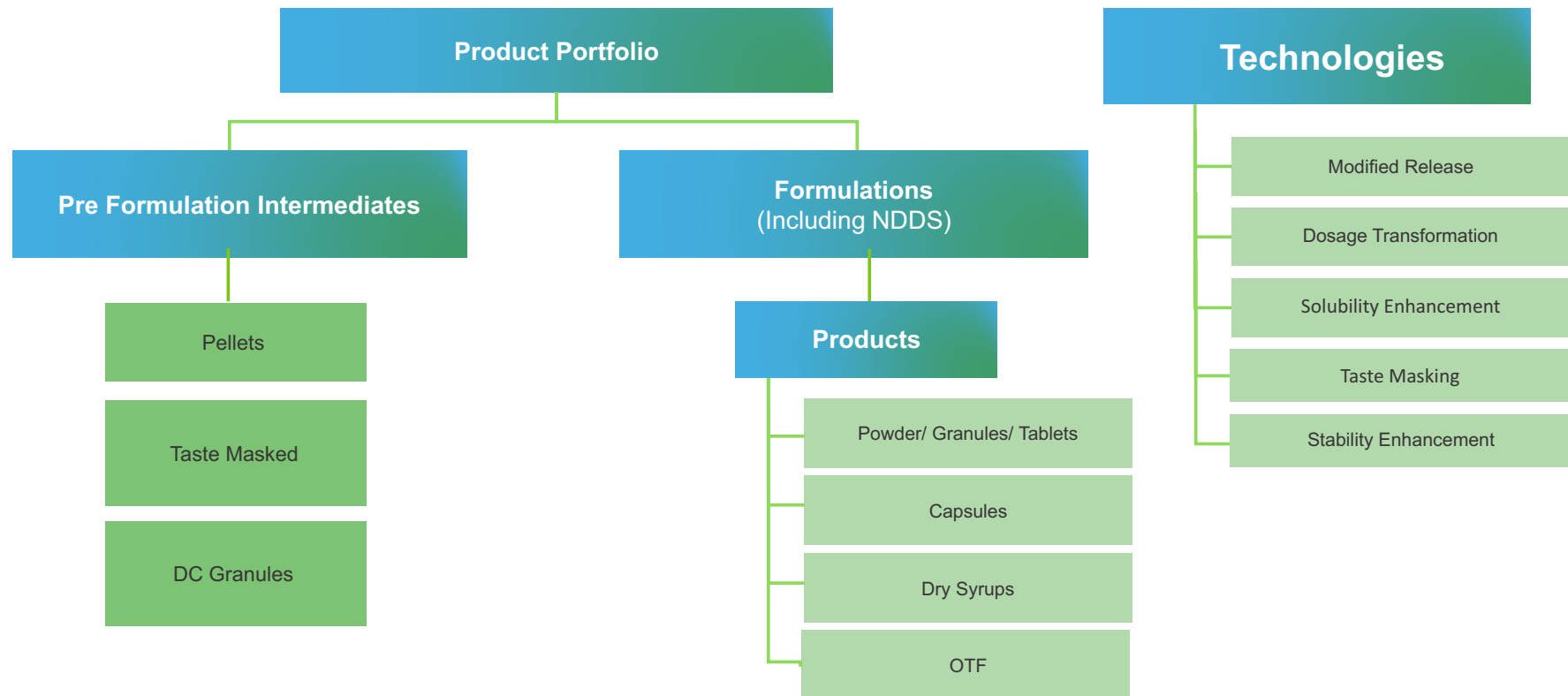
Countries Present



International Clientele



Product Distribution : Various Delivery Platforms



Therapy Agnostic Products - Multiple Delivery Platforms

Pelletization, Granulation for Compression / Filling & Oral Thins.



Pellets – In Different Release Patterns

- Pelletization, a niche technology, requires adoption of unique manufacturing process. Instead of the formulation being produced in powder form, the end product is in the form of fine micro granules, which are called pellets
- Pellets enable to control the timing of release of the dosage in the required quantities in the body since the formulation is in the form of pellets (which are administered in capsules)
- Sustained Release capsules are to be taken less than conventional dosage forms
- Dosage is released from the stomach in the body in the required proportion at the appropriate time of the day when it is required to be released, depending upon the typical disease that is to be cured
- Advantage is the convenience to the patient as he is not required to remember the timing for building up the required dosage in the human body

Taste Masking

- Taste-masking techniques are applied to mask or overcome the bitter or unpleasant taste of active pharmaceutical ingredients/drugs to achieve patient acceptability and compliance. Oral administration of bitter or unpleasant tasting drugs is often the biggest barrier for patient groups, such as paediatrics and geriatrics
- ZIM has mastered this technology to make it not only cost effective but also to taste mask bitter products including antibiotics without affecting their shelf life and maintaining their dissolution and bio-availability requirements



Directly Compressible (DC) Granules

- Dry and Wet granulation and direct compression are the two methods for preparation of tablets
- The prime advantage of direct compression over wet granulation is economic since the direct compression requires fewer unit operations. This means less equipment, lower power consumption, less space, less time and less labor leading to reduced production cost of tablets.
- Direct compression is more suitable for moisture and heat sensitive APIs, since it eliminates wetting and drying steps and increases the stability of active ingredients by reducing detrimental effects. Changes in dissolution profiles are less likely to occur in tablets made by direct compression on storage than in those made from granulations

ORAL THIN FILMS (OTF)

The new drug delivery system set to revolutionize the pharma industry.

Treatment-on-the-go !



- ZIM Oral Thin Film (OTF) Technology is patented as Thinoral® with about 19 applied product/process patents for oral films globally.
- Its rapidly dissolving, non-sticky films have a drug loading capacity as high as 100 mg of the active drug. The faster release profile alleviates solubility issues in poorly soluble drugs.
- Unlike orally disintegrating tablets that are manufactured using lyophilisation or low compression pressure, the Thinoral® strips are flexible and offer ease of storage and transportation.
- Thinoral® technology could also be used for delivery of drugs through sublingual and buccal absorption routes, showing improved bioavailability by avoiding first pass metabolism.
- ZIM has received 24 DCGI product approvals & is awaiting 14 in India and 13 product approvals overseas.



ZIM IS THE LEADER IN THE OTF SEGMENT IN INDIA WITH PLANS TO VENTURE INTO REGULATED MARKETS.

OTF BUSINESS GROWTH

- Several OTF products have already been out-licensed to major pharmaceutical companies. More are under discussion with key pharma players and also under own registration in several markets.
- ZIM has developed 19 products and commercialized 13 of them within 3 years. Technology developed is indigenous consisting of equipment design (manufacturing and testing) as well as formulation development resulting in a manufacturing system capable of high throughput commercial output of high quality oral films.

OTF - A Versatile Delivery Platform

Conversion of IM/SC Injectable Dosage forms into Sublingual Formulations



- Non invasive mode of administration
- Proprietary technology and non-infringing process
- Large molecules of proteins can be formulated.

Sublingual / Buccal Films



- More accuracy with absorption predictability as compared to sublingual tablets
- Improved bioavailability as first pass metabolism is avoided
- Proprietary technology and non-infringing process

Multilayer Films for Fixed Dose Combinations



- Suitable for Incompatible actives
- Actives with different release profiles can be formulated in one film
- Proprietary technology
- Can also be used for trans-mucosal films that require inert backing membranes

Oral Care Products



- An ideal form for treating local oral conditions when formulated for longer oral dwell time.
- Orodispersible films with anti-infective and antibacterial properties are already developed
- Mucoadhesive film technology platform is used for developing other oral care products
- Probiotic films under development for regeneration of microbial natural flora to be used as Supplement Therapy in dental care

Formulation Products Launched Using ZIM's OTF **ThinOral**[®] Technology



1 Product Launched



5 Products Launched



2 Products Launched



1 Product Launched



2 Products Launched



2 Products Launched



4 Products Launched



1 Product Launched

ZIM's OTF Technology Winner of Several Accolades



ZIM's Fast Dissolving OTF was awarded as the Best Innovation Development of a Solid Dosage Form for the year 2016 by India Pharmaceutical Association



Winner of "Excellence in R&D" Award in 5th Annual India Pharma Awards. Nov-2017

History and Background



1989 - 2000

- Leading supplier of pharmaceutical products to Government organizations through tenders from its WHO-GMP approved plant



2001-2012

- Developed Pellets, Granules and Taste Masking Technology Platforms to change its focus to differentiated and higher margin products
- Ventured into international markets in Middle East and North Africa (MENA)
- Established 'Proof-of-Concept' for Oral Thin Films and Nano-technology



2012-2017

- Funding from Private Equity Investor; focus on higher margin businesses; reduce deemed export and low margin government business
- Upgraded its manufacturing facilities to EU-GMP standards; investment in team and processes Invested in separate WHO-GMP approved OTF facility and commercialize OTF products Entered into newer geographies like SEA, Latam, CIS and Africa and grew Sri Lanka, Bangladesh and MENA Focused on building a steady pipeline with dossier filings and own product registrations



2017 - Future

- Continued focus in its core PFI business – through new geographies, new customer relationships and new product pipeline for its business partners
- Growing its niche generic formulations business – through registration, marketing partnerships and continued launch of products in MENA, SE Asia, Latin America and CIS countries (as demonstrated in Sri Lanka).
 - Launch of OTF (prescription and OTC products) as an alternate drug delivery platform across RoW / Emerging Markets and Regulated Markets.
- Invest in R&D to develop a pipeline of products with focus on developed markets and enhance capacity and flexibility by appropriate capex
- Create new technology platform to enable robust and cost effective manufacturing
- of large molecules, customized and low volume production intelligent medicine etc. All target towards patient convenience & adherence

Manufacturing Infrastructure

3 state-of-the-art manufacturing units in one location in Nagpur

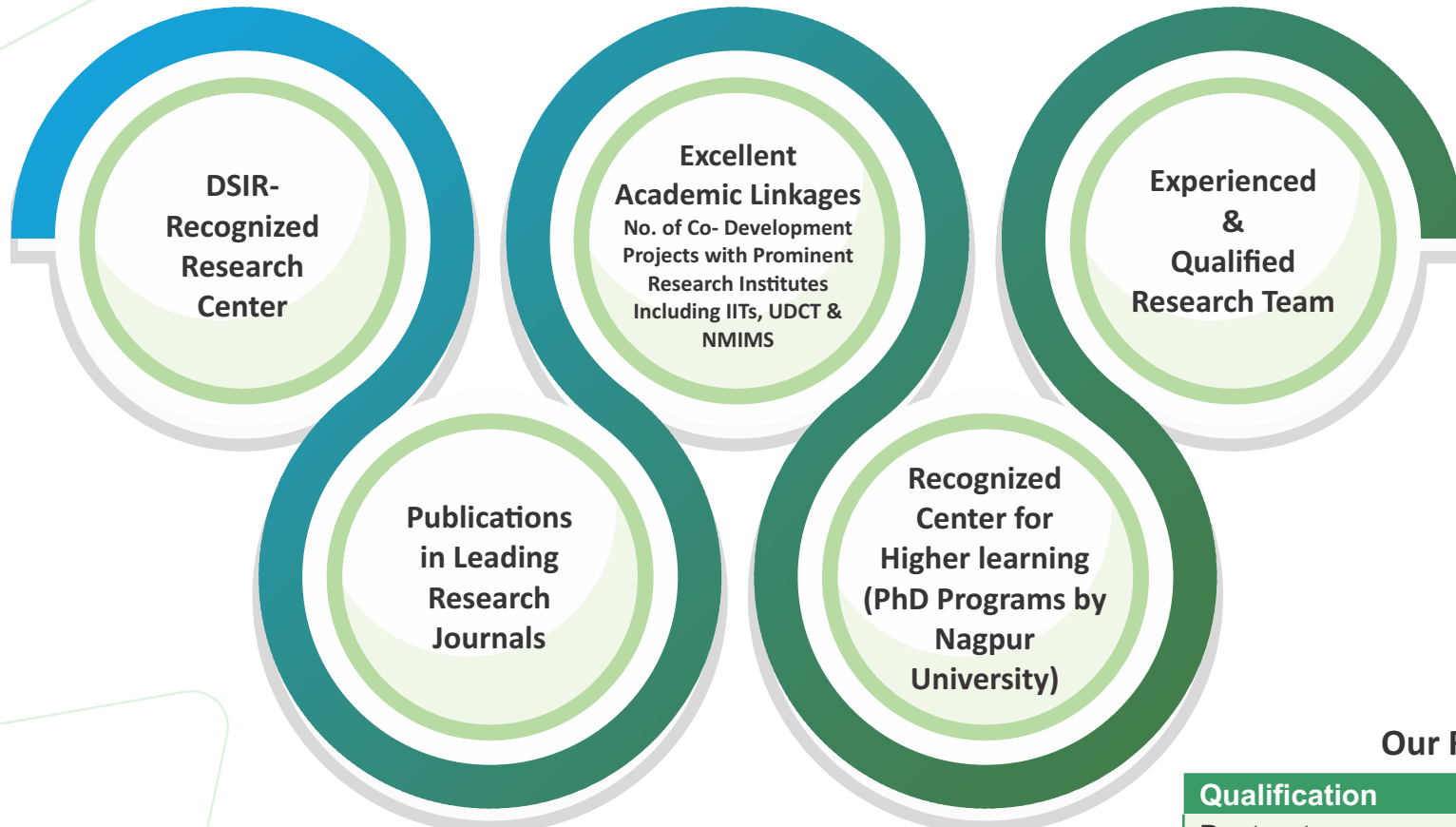
Solid Oral Dosage (General) Facility	
Manufacturing Capabilities	DC Granules, Tablets, Pellets, Capsules and Dry Syrup
Accreditations	EU-GMP, WHO-GMP, ISO 9001
Area	1,00,000 Sq. Ft
Began Operations	1989
Current Manpower	266

Solid Oral Dosage (Cephalosporin) Facility	
Manufacturing Capabilities	Tablets, Capsules, DC Granules
Accreditations	WHO-GMP, ISO 9001
Area	16,000 Sq. Ft
Began Operations	2011
Current Manpower	51



Oral Thin Film Facility	
Manufacturing Capabilities	OTF
Accreditations	WHO GMP, ISO 9001
Area	6,300 Sq. Ft
Began Operations	2014
Current Manpower	176

Reputed Research & Development Center with several recognitions



Our Research Team

Qualification	No.
Doctorate	5
Post Graduate	81
Graduate	22
Diploma	3
Total	111

R&D PATENTS

26 Inventions with 53 filings Worldwide, Registered > 190 Formulations in Various Markets

Patent Filings					
Dosage Form	Modified Release	Dosage Transformation	Solubility Enhancement	Taste Masking	Total
OTF	3	7	14	-	24
Pellets / Capsules	19	4	-	-	23
Suspensions	-	-	-	2	2
Tablets	2	2	-	-	4
Total	24	13	14	2	53

Formulation Registrations				
Dosage Form	Registered	Applied	Pipeline	Total
Capsules	35	80	36	151
OTF	14	96	58	168
Suspension	7	15	11	33
Tablets	139	177	53	369
Others (Gels, Liquids, Sachet)	3	0	1	4
Total	198	368	159	725

Experienced Leadership



Dr. Anwar Daud

Managing Director
(M.Pharm, PhD)

Technocrat Dr. Anwar Daud, M. Pharm, PhD. (Pharmaceutical Sciences), promoted ZIM in 1989.

- Responsible for vision and overall growth strategy of ZIM. Since inception, He also leads the Research & Development function along with export business of the company.
- Prior to turning entrepreneur, He has worked in his professional capacity across several functions in mid size & large pharma companies
- Co-Inventor of 14 process patents
- Member, Ayurvedic Drug Standardization Committee constituted by Food & Drug Administration, Maharashtra State in 1997
- Member of All India Board of Pharmaceutical Education, constituted by the AICTE from August 1997–July 1999
- Felicitated by the Central Institute of Business Management Research & Development, Nagpur for showing leadership, entrepreneurship, and dedicated service to the region (2004)
- Honored for contribution to the pharmaceutical profession by Central India Pharmacy Promotion and Research Association (CIPPARA) – Awarded at the Hands of Shri Nitin Gadkari (2017)

Supported by a well qualified professional management team



Mr. Zulfiqar Kamal

Director - Finance
(B.Com, FCA)

- Mr. Zulfiqar Kamal is a chartered accountant and has been associated with the company for over 25 years.
- He is a co-promoter of ZIM.
- With his financial acumen and experience of more than three decades, he acts as the financial controller and also oversees finance, tax, audit and commercial operations of the company



Mr. Niraj Dhadiwal

Director – Business Development
(B.Pharm, DBM)

- Mr. Niraj Dhadiwal is a pharmacy graduate with a diploma in business management and has been with the company for nearly three decades.
- With his keen business acumen and technical knowledge, he has played a key role in entering new markets for ZIM and in development of the export-business of the company.
- In his current role as Director – Business Development, he looks after the business development and marketing functions of the company.



Mr. Prakash Sapkal

Director – Operations
(B.Pharm, MBA)

- Mr. Prakash Sapkal is a Pharmacy graduate with post-graduation in Business Administration and has been associated with the Company for 24 years.
- Starting his career as Assistant Chemist, he has over time handled key operations in various capacities and is currently responsible for Operations, OTF and new strategic initiatives of the Company
- He has also filed patents for the technology development of Oral Thin Films (OTF)

Growth Strategy

Co-development – particularly in OTF. Enter into product co-development and supply partnerships, with Original Product Manufacturers / Marketing Companies globally across delivery platforms and particularly for using Thinoral as alternate delivery platforms for extending product lifecycle, specific customer targeting etc.

Semi Finished Formulations: Continue its foray into emerging and developed markets for supply of semi-finished formulations which are already being developed and marketed in RoW markets.

Formulations: Initiate export of finished formulations through marketing partnerships in RoW markets – SE Asia, MENA, CIS, Africa and LATAM. Attempt would be to keep registration, marketing rights and brands directly or indirectly within ZIM's fold but not invest on "feet on street" and promotions.

Over The Counter Products and Private Institutional Business:

Make inroads into domestic institutional market (hospital / pharmacy chains) and products that can be sold over the internet including selected Over The Counter Pharmaceutical and Nutraceutical Products that show case company's technical expertise.

Enhance Capacity and Flexibility in Operations: Add small batch manufacturing (SBM) facilities for promoting the formulations business and supporting clients for various markets with small but high value order quantities and also for technology transfer from R&D.

Developing Products – Developed Markets: Invest in R&D infrastructure, team, process, systems, studies etc. that assist in the companies plans of registration and supply of differentiated generic products across developed markets.

Financial Information

Balance Sheets

Liabilities (In Rs Lacs)	FY 16	FY 17	FY 18
Networth	9,843	11,850	13,596
Borrowings	9,105	7,422	6,985
Other C. Liabilities and Pro.	6,667	6,635	9,163
Total	25,615	25,907	29,744

Assets (In Rs Lacs)	FY 16	FY 17	FY 18
Net Fixed Assets + WIP	9,358	9,021	9,771
Intangible Assets (Incl Under Development)	154	238	474
Current Assets	15,409	15,374	17,335
Loans & Advances (Incl Non Current Assets)	694	1,274	2,164
Total	25,615	25,907	29,744

FY17 & FY18 Figures are as per Ind AS

Profit & Loss Statements

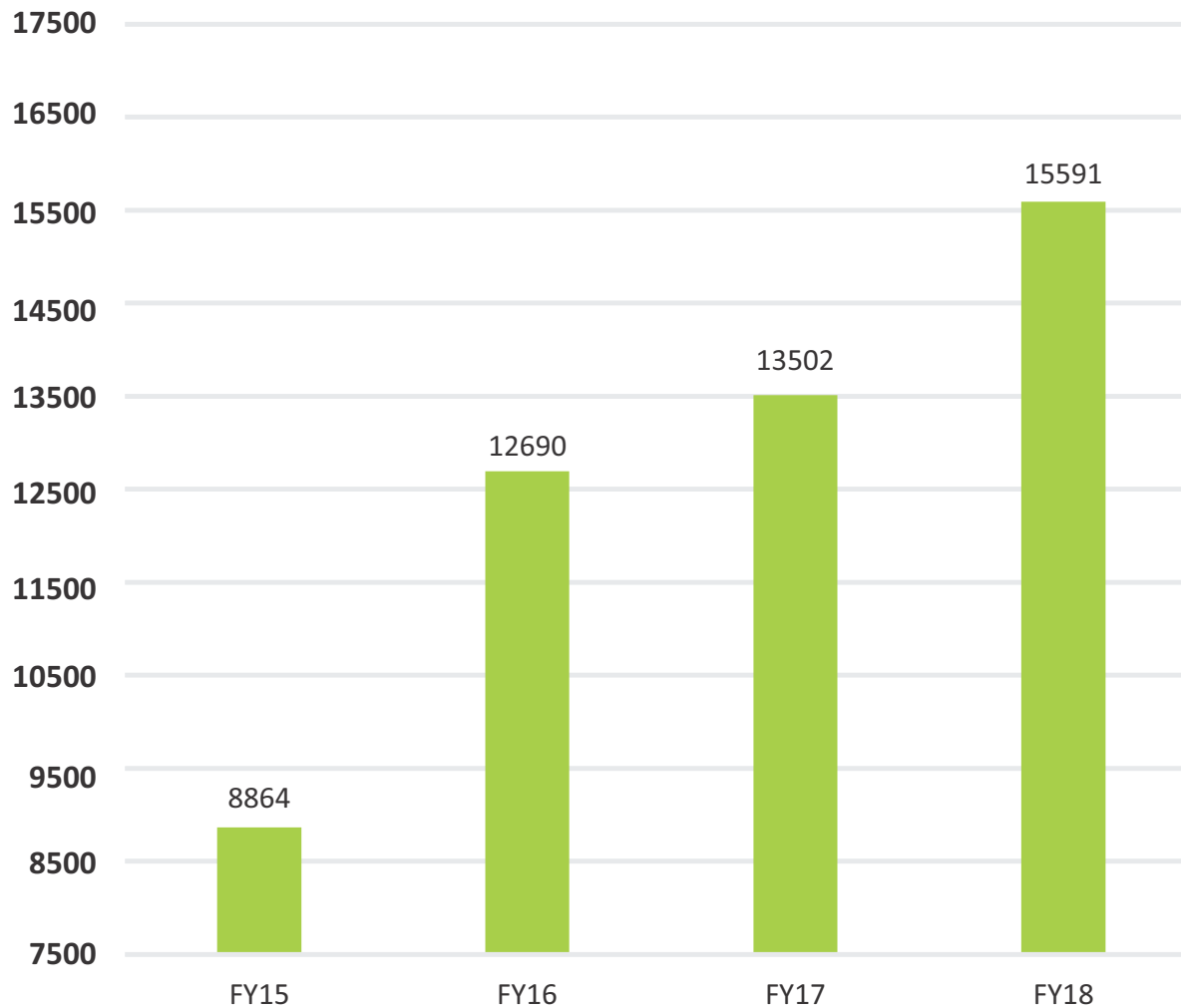
In Rs Lacs	FY 16	FY 17	FY 18
Revenue	27,219	23,987	27,532
Operating Costs	23,406	19,625	22,981
EBITDAR	3,813	4,362	4,551
R & D Expenses	498	720	813
EBITDA	3,315	3,642	3,738
EBIT	2,439	2,740	2,759
Pre Provision and Pre Tax Profits	1,074	1,758	1,825
Profit After Tax*	515	1,845	1,816

*Including Adjustment of Provision and Deferred Tax

Ratios

%	FY 16	FY 17	FY 18
EBITDAR %	14.0%	18.2%	16.5%
EBITDA %	12.2%	15.2%	13.6%
EBIT%	9.0%	11.4%	10.0%
Pre Provision and Pre Tax Profits	3.9%	7.3%	6.6%
Profit After Tax	1.9%	7.7%	6.6%
RoAE	5.3%	17.0%	14.3%
Gearing	92.5%	62.6%	51.4%

Exports Growth (In Rs Lacs)



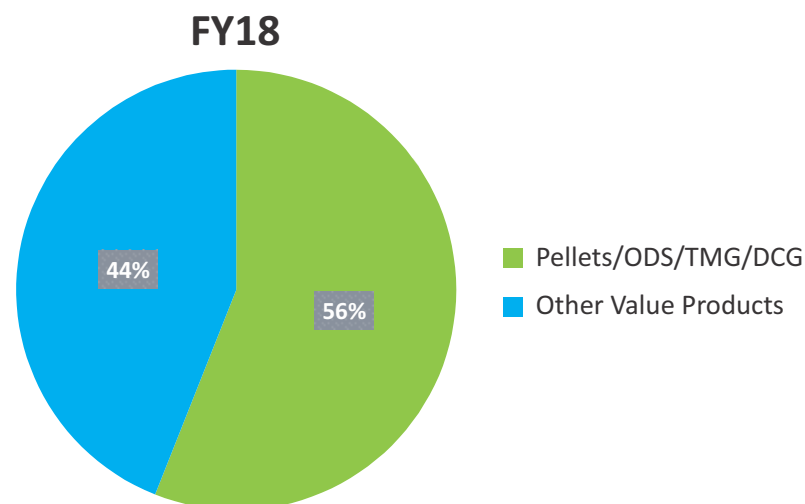
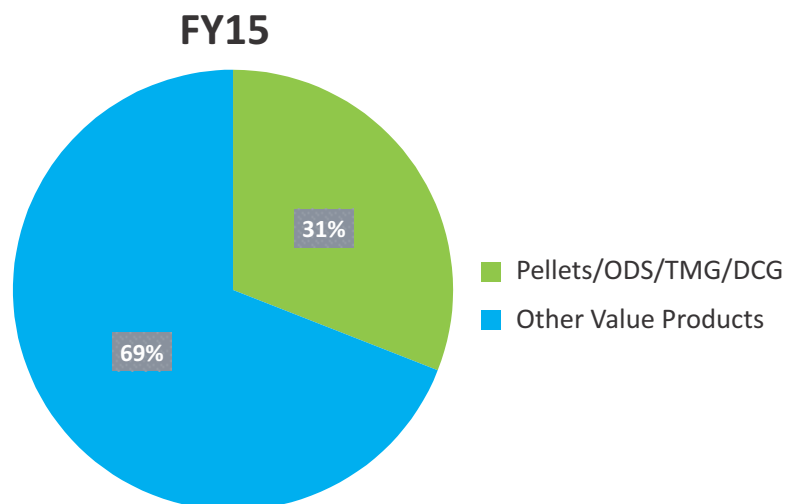
Business Mix % : FY 2015



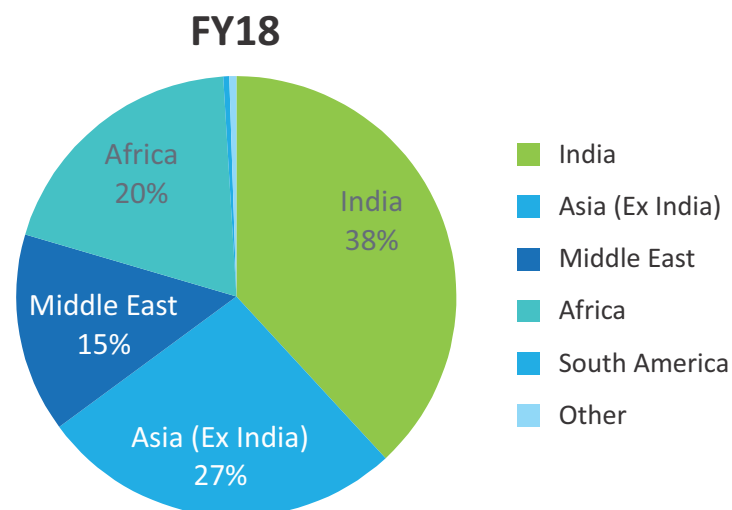
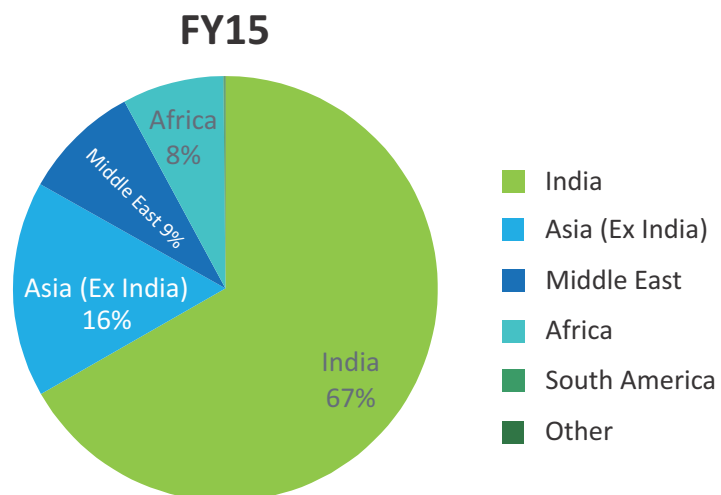
Business Mix % : FY 2018



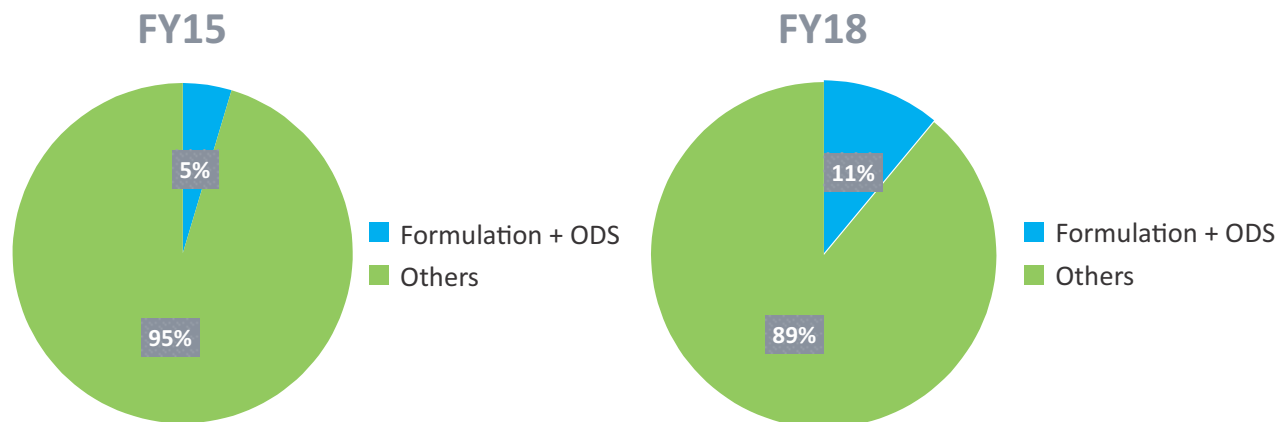
Business Mix : Value Added Products (%)



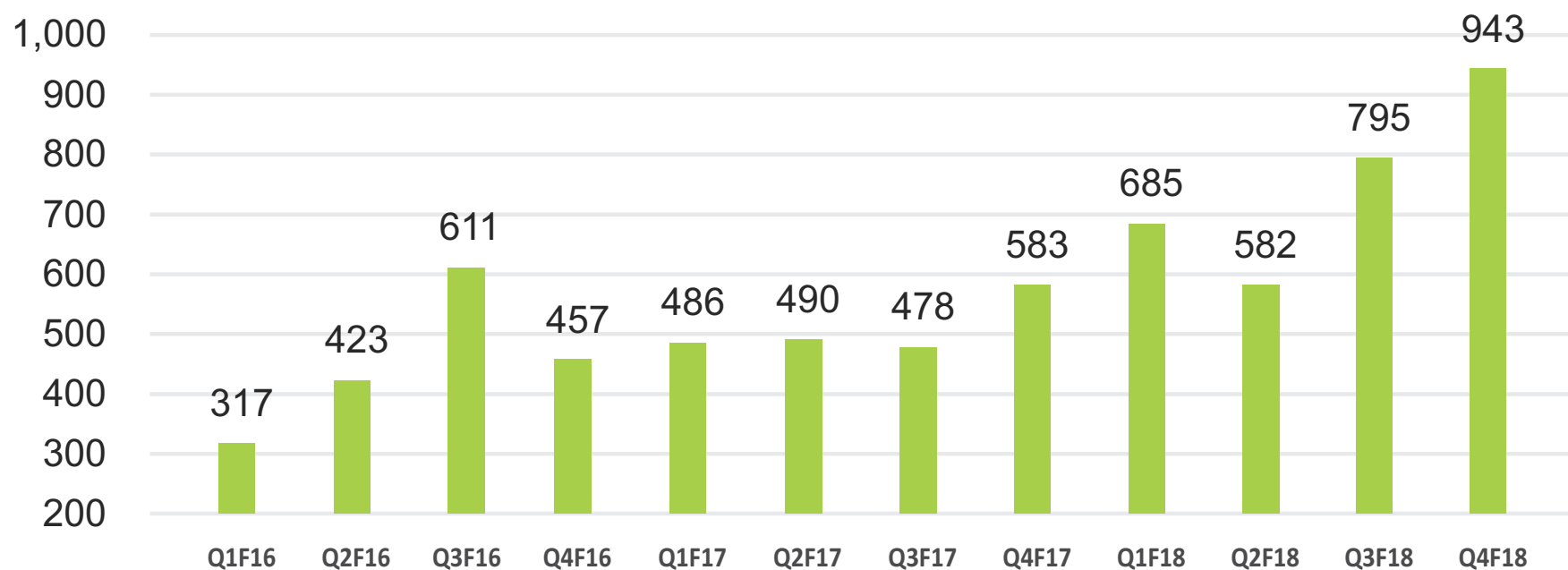
Business Mix: Per Geography (%)



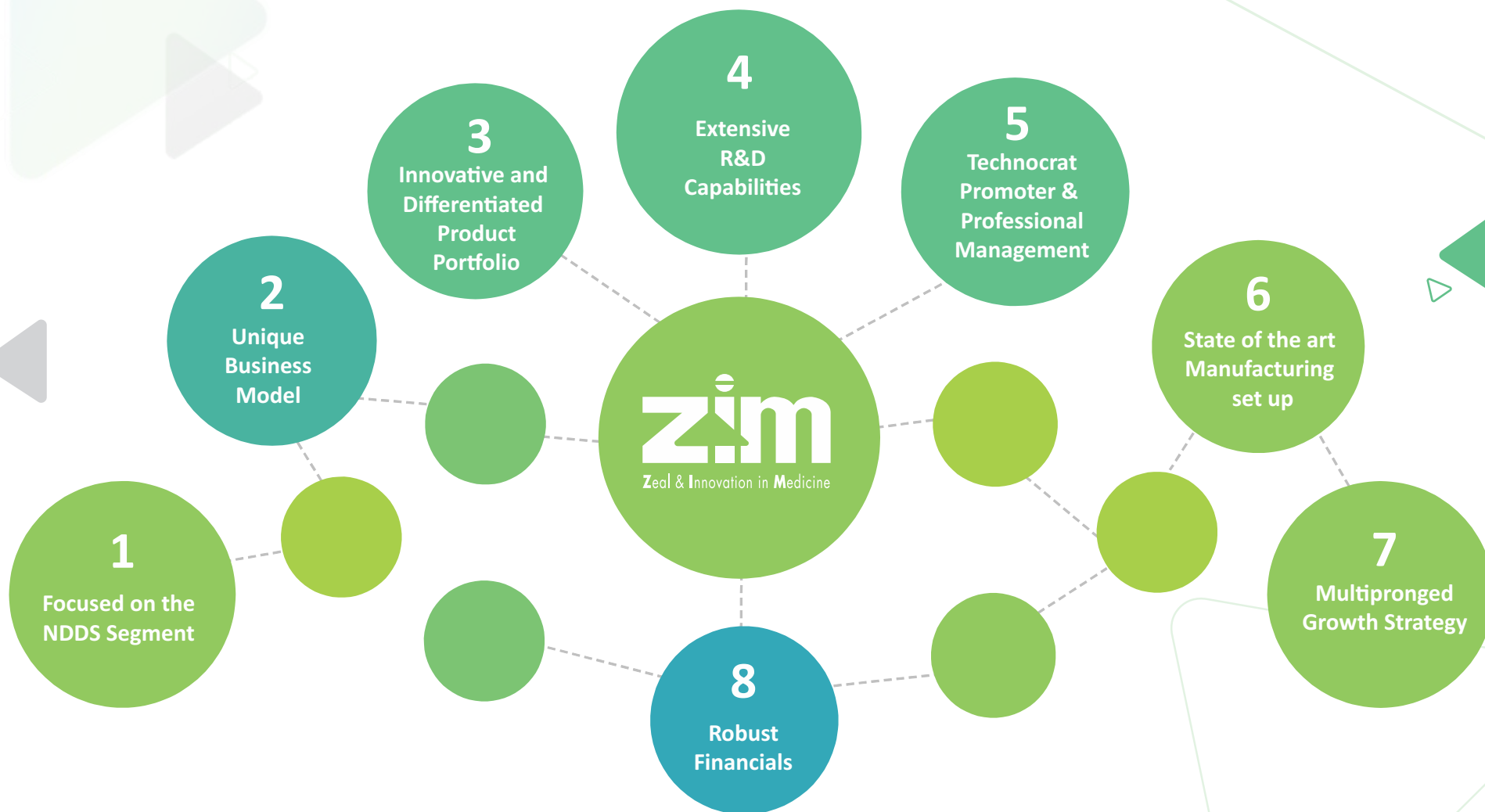
Export Formulation & ODS business Mix (%)

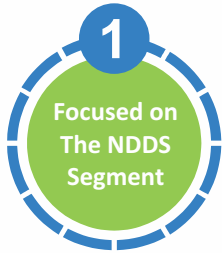


Growth in Export Formulations and ODS Business (QoQ) : Rs. Lacs



Summary





Focused on The NDDS Segment

Over time ZIM has created a Long Term Sustainable Advantage by focussing on Novel Drug Delivery Solutions (NDDS) segment through continuous innovation and development of non-infringing technology platforms and supply of high quality products at competitive prices



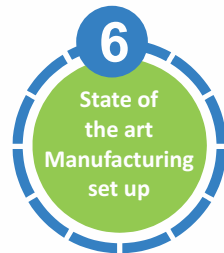
Technocrat Promoter & Professional Management

The Company is led by an experienced technocrat who is supported by a well qualified professional management team



Unique Business Model

Its Unique Business Model helps its customers to bridge the "Technology Gap" created by competing MNC pharma Co's, resulting in long term dependence on ZIM for their pipeline and supplies. Besides developing and supply of products, it also provides extensive technical, registration and marketing support to its customers.



State of the art Manufacturing set up

It has three manufacturing blocks (General, Cephalosporin and OTF). Its General block is EU-GMP and WHO-GMP approved. Its Cephalosporin and OTF blocks are WHO-GMP approved. Amongst few companies in India to receive WHO-GMP approval for its OTF facility



Innovative and Differentiated Product Portfolio

It supplies a wide range of solid dosage differentiated products across various therapeutic segments. It is a pioneer in the OTF technology in India and focussed on growing this platform in partnership with marketing companies and product originators



Multi pronged Growth Strategy

ZIM's multipronged growth strategy comprises of (a) developing new technology platforms and differentiated generic products for itself and under license arrangement (b) manufacturing and supply of finished and semi-finished formulations for RoW and emerging markets (c) development of the Thin Film as an alternate delivery platform across all markets



Extensive R&D Capabilities

The Company has a state of the art R&D centre with a Team of over 90 R&D Professionals. It is now setting up a new R&D centre with team, equipment and capabilities targeted for the developed markets



Robust Financials

Combining exciting innovation in its core areas with sound financial practices. The company has been consistently improving its EBIDTA margin in last few years on account of continued focus on high margin business. De-risking overall business by increasing its geographical foot-print along with its product and technology portfolio.



ZIM LABORATORIES LIMITED

REGISTERED OFFICE

📍 Ground Floor, Sadoday Gyan,
Nelson Square, Chhindwara Road,
Nagpur - 440013, India.

☎ +91 712 2588 070

MANUFACTURING FACILITY

📍 B-21/22, MIDC Area,
Kalmeshwar - 441 501,
Dist. Nagpur, India

☎ +91 711 8271 370 | +91 711 8271 990

✉ info@zimlab.in 🌐 www.zimlab.in

