

U.S. Food and Drug Administration  
Office of International Programs



**Towards Excellence  
in Quality**

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# Disclaimer

- *Views expressed in this presentation are those of the speaker and not, necessarily, of the U.S. Food and Drug Administration.*



# The Indian Pharmaceutical Industry\*

- The 8<sup>th</sup> largest globally and continues to have one of the highest growth rates
- Projected to grow to be the 3<sup>rd</sup> largest by 2030
- Driving accessibility and affordability of drugs in India and globally

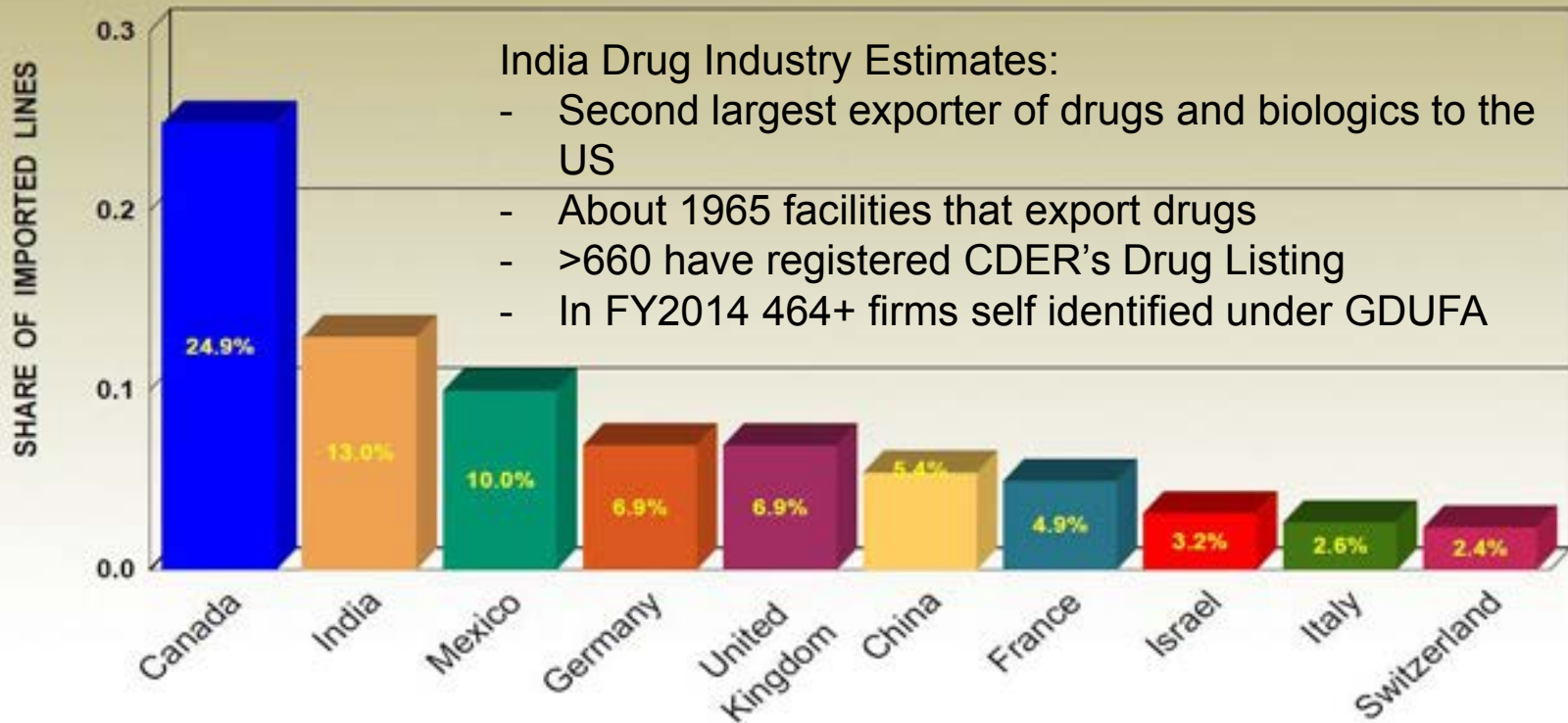
\* As per IPA Secretary General Dilip Shah's presentation on January 1, 2016



# Fiscal Year:2014 - Import Lines

## Top 10 Countries for U.S. Drugs and Biologics Import Fiscal Year: 2014

**India Ranks 2** in Imported Lines



### India Drug Industry Estimates:

- Second largest exporter of drugs and biologics to the US
- About 1965 facilities that export drugs
- >660 have registered CDER's Drug Listing
- In FY2014 464+ firms self identified under GDUFA



# U.S. FDA India Office - Priorities

- Conduct inspections – upon which regulatory decisions are made
  - Drug and medical product facilities that export such products from India to the U.S., to determine quality, safety, and efficacy
  - Clinical trials to determine data integrity
  
- Enhance relationships and collaborations with the Government of India (GOI) for strengthening regulatory systems in the area of drugs and medical products and food areas – for building confidence and quality standards
  
- Enhance relationships and collaborations with Industry and Stakeholders – for developing and maintaining quality standards, enhancing cGMP compliance, and thereby enhance public health



# Current Good Manufacturing Practices

## cGMP Standards are minimal:

- The cGMP requirements are basic requirements
- The “c” in cGMP stands for "current." Companies can use up to date validated technologies and innovative systems to comply with the regulations and to enhance quality through continuous improvement.
- cGMP allows each manufacturer to decide how to best implement the necessary controls by using scientifically sound design, processing methods, and testing procedures.



# Data Integrity

## Data Integrity is just that – data integrity:

- Involves the accurate collection, recording, processing, analyzing, reporting, storage and retrieval of data.
- Must involve a life cycle approach from the beginning to the end – to facilitate mapping the entire process and enable detection of steps where problems occur.
- Must not be subjected to bias.



# Factors that contribute to Quality

- Rules must be known and as clear and simple as possible
- Improve coordination and promote instant sharing of information
- Employ smarter controls - it is not about more or fewer controls
- Develop strategies and tools for rewarding quality and compliance





# Recurring issues affecting Quality

- Written procedures – lacking; inadequate; not-followed
- Records – lacking, inadequate, inaccurate, fabricated
- cGMPs – lacking, inadequate, not followed
- Product contamination
- Sterile products lacking assurance of sterility

## Data integrity issues

How does this serve patients and/or the public?

Can't we do better?



# Unique Challenges to Quality

- Disparities between big and small firms
- Supply chain complexities
- Disparities in manufacturing products for domestic use versus those for exports
- Lack of robust regulatory systems



# Some Common Quality Pitfalls

- Inadequate infrastructure
- Inadequately trained staff
- Lack of adequate supervision
- Restrictive timelines
- Reprisals for negative results or outcomes



# How to Overcome Challenges

- Develop a sustainable culture of quality and compliance
- Enhance training for all staff
- Reward compliance
- Encourage open communication
- Trust but verify



# Evolving Pharmaceutical Landscape

- Use of electronic systems to monitor compliance
- Use of IT tools for sharing information
- Meaningful and customer-friendly regulatory systems
- Competition from other sources



# Evolving Pharmaceutical Landscape

- Global markets demand alignment of standards
- Use of newer technology and treatment tools including the development of innovative new molecular entities, nanotechnology based therapies, biosimilar products, pharmacogenomics treatments, etc.
- Addressing emerging public health needs as per the known risk/benefit ratio

