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CURRENT REGULATORY REQUIRMENTS AND REGULATIONS FOR THE SUBMISSION OF ANDA IN INDIA COMPARISION WITH GERMANY

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ABSTRACT

Drug regulatory Authority is defined as an authority or a government body appointed by the Government to administer the granting of marketing Authorization for approval of pharmaceutical products and biologicals in a country. It is also called as Licensing authority or Marketing Authority. The Drug Regulatory authority in India is CDSCO under the Ministry of Health and Family Welfare (MOHFW). Since crucial to the development of new drugs. The task of determining whether research data support the safety, efficacy, and quality control of a new drug product to serve the public health falls on drug reviewers in regulatory bodies across the globe. Every nation has a regulatory body that is in charge of enforcing laws and norms and disseminating directives to control the marketing of pharmaceuticals. This article focuses on how drugs get approved in various nations like, Germany and India.

KEYWORDS: Regulatory requirements, CDSCO, BfArM, Drug approval, Clinical Trials, Generic.

INTRODUCTION

To safeguard the public's health and welfare, the government enforces numerous laws and regulations, making the pharmaceutical industry one of the most heavily regulated sectors. Thus, the goal of the pharmaceutical industry is to find and create a generic medication product that can be customized to satisfy the various needs of the market. India's pharmaceutical sector has grown at an impressive rate, which has helped the country's economy. Following the implementation of India's product patent policy, pharmaceutical businesses operating in India and overseas were required to investigate other markets. goals, acquisitions, and mergers are prioritized with the intention of breaking into new markets. To ensure consistent expansion in the upcoming decades, businesses have to concentrate on generic drug product.

Currently different countries have to follow different regulatory requirements for approval for new drugs. for marketing authorization application (MAA). A single regulatory approach is applicable to varies countries is almost a difficult task. their four it's necessary to have knowledge about regulatory requirement for MAA of each country.

GENERIC DRUG DEVELOPMENT

Formulators need to be well-versed in the precise regulatory requirements of every nation in which their drug is intended for submission before they may create a generic version of the product. The development of generic drug products follows a different methodology and strategy than that of innovative drug products that incorporate novel chemical entities. The maker of generic medication products is required to create a medication that exhibits the same levels of safety, therapeutic efficacy, and performance attributes as its name-brand equivalent.

To be therapeutically similar to the innovative drug product, the generic drug product must fulfill all required characteristics. This is a crucial element. A drug product that demonstrates both pharmaceutical and bioequivalence is said to be therapeutically similar. Table 1 lists the regulatory requirements for the development of generic medicine products in a few chosen nations. A comprehensive understanding of the product's projected market share, growth rate, and patent expiration dates, among other things, should be combined with well-researched statistics that primarily show market worth when deciding whether to move forward with the development of a generic drug product. Given the anticipated success of the new generic product, strategic planning for the time of its subsequent

introduction will be necessary. This planning must take into account the anticipated generic price as well as knowledge of predictable competitors, such as who they are and when they are expected.

A study conducted in 1984 by Hamrell R. Michael claims that "The Drug Price Competition and Patent Term Restoration Act" altered the regulatory landscape for generic pharmaceuticals. Following the expiration of the patent, this law permitted the approval of generic "me-too" versions of numerous approved medications. A responsibility to guarantee that Patients have prompt access to prompt, high-quality, safe, and effective medications.

Filling a Generic Drug Application

The agencies that oversee the pharmaceutical and medical devices industry are the European Medicines Agency (EMA), the Food and Drug Administration (FDA), the Therapeutic Goods Administration (TGA), the Medicines Control Council (MCC), Tanzania Food and Drugs Authority (TFDA), the Agência Nacional De Vigilância Sanitária (National Health Surveillance Agency) (ANVISA), the Department of Health (DOH), the Commonwealth Independent States (CIS), and the Gulf Co-Operation Council (GCC), Asia.

INDIA

The Central Drugs standard control organization (CDSCO), Is the main regulatory body of India for regulation of pharmaceutical, medical device and clinical trials.

CDSCO is the Central drug authority for discharging function assigned to the central government under the Drugs and Cosmetic act. Head office of CDSCO located in New Delhi.

Figure No. 1

The Indian parliament enacted the Drug and Cosmetic Act 1940 and Rules 1945 to control the import, production, distribution, and retailing of pharmaceuticals and cosmetics. Both the Drugs Controller General (India) [DCGI] office and the Central Drugs Standard Control Organization (CDSCO) were founded. The Drug and Cosmetics Rules 1945 were amended in 1988 by the Indian government by adding Schedule Y.

The requirements and guidelines for clinical trials are outlined in Schedule Y, which was updated in 2005 to put it into compliance with globally recognized protocol. The modifications include defining terms for Phase I–IV clinical trials and outlining sponsors' and investigators' roles precisely. In 2006, the clinical studies were further separated into two groups. Clinical trials fall within one group (category A).

Clinical can be conducted in other markets with competent and mature regulatory systems whereas the remaining ones fall in to another category (category B) other than A. Category A clinical studies are qualified for fast tracking in India and are expected to be authorized in eight weeks. These trials are approved in the United States, the United Kingdom, Switzerland, Australia, Canada, Germany, South Africa, Japan, and the European Union.

Category B clinical trials are approved in 16–18 weeks after being subjected to further scrutiny. In addition to the data pertaining to chemistry, production, control, and animal studies, an application for conducting clinical trials in India must be submitted to DCGI. It is also necessary to include the date of the informed consent paperwork, investigator brochures, and trial protocol. Organization for the Central Drug Standard Control Organization (CDSCO).

General Information Regarding CTD Submission In India

- CTD is the only data transfer format in CDSCO.
- Type of application: M & M
- If the Applicant has a license to manufacture bulk drugs provide a copy otherwise he or she can issue a permit from the authorized source regarding the supply of goods.
- Clear and accurate information should be provided.
- Text and tables must be clearly printed, the left margin should be kept large and prepared using the border.
- Posted document printed on both sides of the page, for Times New Roman text with 12 point font as well as table content and 9-10 point font text.
- Page numbers should be at document level and numbered in the order of the page.

- All pages include a different header or footer and if a section contains more than 1 document a specific table of contents may be included.
- Send 1 hard copy and 3 soft copies namely Compact Disc (CD) in Portable Document (PDF) format.
- Copy on paper: The sides and front of the file should include the applicant's company name, drug name, and delivery date and file number.
- Volumes should not be more than 3 inches in size, the CD should be marked using a marker pen with the applicant's company name, delivery date and drug name.
- The requester should keep a copy of the dose for further reference.
- During the various references from module 1 to another specify volume, page number and target identifier for the target text 2.
- Send the application to the office.
- Government of India Directory of Health and Family Welfare.
- Indian Council of Medical Research (ICMR) Ministry of Health and Family Welfare.
- Government of India Directory of Health and Family Welfare.
- Indian Council of Medical Research (ICMR).
- Ministry of Health and Family Welfare (MOHFW).

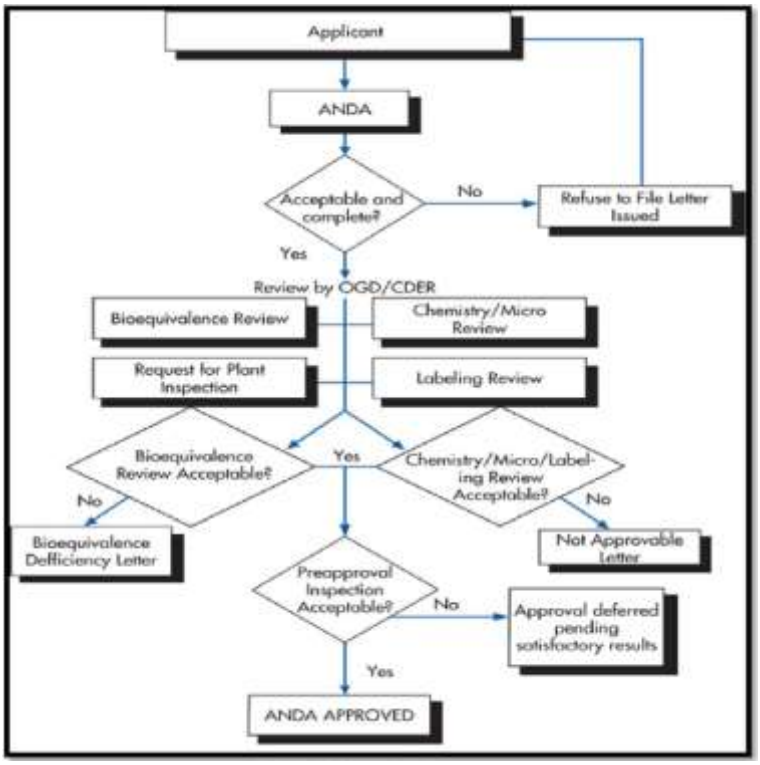

Figure No. 2

GERMANY

- Medicinal products are mainly regulated by the Drugs act (Arzeimittelgesetz) and the Facility Ordinance for Active ingredients of Pharmaceuticals (Arzeimittel–und Wirks to ffherstellungsverordung). Medicinal products for human use are subject to a Marketing Authorization from.
- The Federal institute For Drugs And Medical Device (Bundesinstitu fiir Arzneimittel-und-Medizinprodukte**) (**BfARm).
- The Federal agency For Sera and Vaccines (Paul-Ehrlich–Institut) (PEI), IF not covered by the European centralized procedure.

Bundesinstitut
für Arzneimittel
und Medizinprodukte

Figure No. 3

Figure No. 4

Main Areas of Responsibility BfArM

- The BfArM regulates medicinal products (other than blood and vaccination products) for use on humans.
- Authorising finished medicinal products (that is products that have been manufactured and marketed in packaging ready for distribution to consumers), including post marketing authorization.
- Controlling legal marketing of narcotic drugs and precursors (that is chemical substance used to manufacture drugs).
- Department 1 to 5; approval procedures.
- Department 6: scientific service.
- Department 7: phamacovigilance.

Main Areas of Responsibility of PEI

The PEI Authorises the marketing and control of.

- Immune biological drugs for human and veterinary use, in particular sera.
- Vaccines.
- Invitro diagnostics for the detection of specific pathogens.
- Allergens.
- Test sera and test antigens.
- Blood preparation.
- Bone marrow preparations.
- Xenogenetic cellular therapeutics.
- Genetically manufactured blood fractions.

THE REGULATORY REQUIREMENTS IN GERMANY

In Germany, the regulatory requirements for an ANDA are primarily governed by the EUROPEAN MEDICINE AGENCY (EMA) and the GERMAN MEDICINES ACT (AMG).

APPROVAL PROCESS

TECHNICAL DOCUMENTS REQUIRED FOR ANDA

EU Module 1: Administrative Information

1. Application form (AF)
2. Cover letter (CL)
3. Company information (address, contact details)
4. Product information (name, strength, dosage form)
5. Regulatory status (existing approvals, pending applications)

EU Module 2: Summary Documents

1. Expert reports (quality, non-clinical, clinical)
2. Summary of product characteristics (SMPC)
3. Labeling and package leaflet
4. Patient information leaflet

EU Module 3: Quality Documents

1. Drug substance information (DSI)
2. Drug product information (DPI)
3. Manufacturing process description (MPD)
4. Quality control and assurance reports (QCAR)
5. Stability studies (SS)
6. Certification of Analysis (CoA)
7. Site master File (SMF)
8. Validation reports (VR)

EU Module 4: Non-Clinical Documents

1. Toxicology studies (TSR)
2. Pharmacology studies (PSR)
3. Pharmacokinetics studies (PKSR)
4. Non-clinical overview (NCO)

EU Module 5: Clinical Documents

1. Bioequivalence studies (BSR)
2. Clinical trials (study protocols, reports)
3. Clinical overview (CO)
4. Summary of clinical efficacy and safety (SCES)

Additional Documents

1. Certificate of GMP compliance
2. Certificate of analysis (CoA)
3. Site master file (SMF)
4. Validation reports (manufacturing, analytical)

BfArM Specific Requirements

1. German language labeling and package leaflet
2. Specific requirements for bioequivalence studies
3. Additional documentation for certain dosage forms (e.g., injectables)
4. Declaration of compliance with EU GMP (DoC)
5. Proof of payment fees (PPF)
6. Declaration of compliance with German Pharmaceutical law (DoG)

EMA Guidelines

1. Guideline on the format and content of applications
2. Guideline on bioequivalence studies
3. Guideline on clinical trials

BfArM Guidelines

1. Guideline on the format and content of applications
2. Guideline on bioequivalence studies

Electronic Submission Requirements

1. Electronic Application Form (eAF)

2. Electronic Common Technical Document (eCTD)
3. PDF format for all documents.

PROCEDURE

Step 1: Pre-Submission
→ Check eligibility for ANDA
→ Consult with BfArM (optional)
→ Prepare application documents

Step 2: Submission
→ Submit application (EU Module 1-5)
→ Pay application fee (€10,000 - €50,000)

Step 3: Validation
→ BfArM validation (1-3 months)
→ Check completeness and accuracy
→ Request additional information (if needed)

Step 4: Scientific Evaluation
→ BfArM scientific evaluation (6-12 months)
→ Assess quality, safety, and efficacy
→ Request additional information (if needed)

Step 5: GMP Inspection
→ BfArM GMP inspection (manufacturing site)
→ Verify compliance with GMP guidelines

Step 6: Approval
→ BfArM approval (12-18 months)
→ Receive marketing authorization
→ Pay inspection fee (€5,000 - €20,000)

Step 7: Post-Approval
→ Pharmacovigilance and risk management
→ Periodic safety update reports (PSURs)
→ Renewal of approval (5-year cycle)

Decision Points
→ Withdrawal (if application is incomplete or inadequate)
→ Rejection (if application does not meet requirements)
→ Approval with conditions (if additional requirements needed)

Timeline and Fees
1. Submission to validation: 1-3 months
2. Validation to approval: 12-18 months
3. Accelerated review: 6-12 months (for certain categories)
4. Application fee: €10,000 - €50,000
5. Inspection fee: €5,000 - €20,000

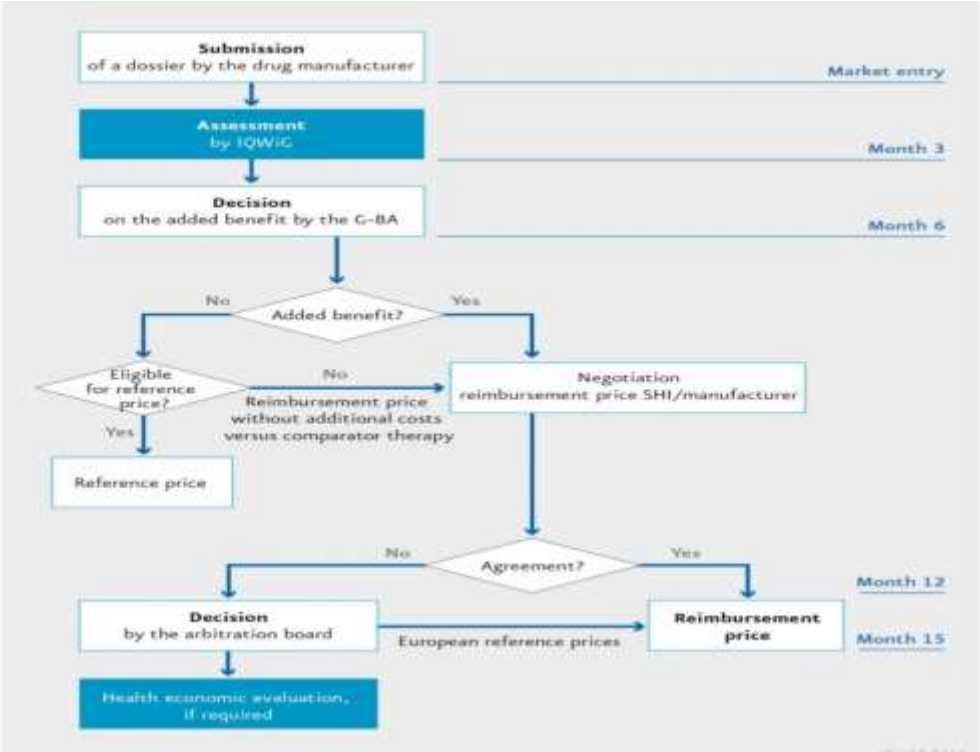

Figure No. 5

COMPARISION OF REGULATORY REQUIREMENTS OF ANDA IN INDIA WITH: GERMANY

SL.NO	REQUIREMENTS	INDIA	GERMANY
1	Regulatory Authority	CDSCO (Central Drugs Standard Control Organization)	Federal institute for Drugs and Medical Devices (BfArM) And PEI
2	Application Submission	Submit application to CDSCO	Submit application to BfArM OR PEI
3	Data Requirements	Extensive data is Required	More reliance on reference gencies

4	Application Requirements	Bioequivalence studies, stability studies, Manufacturing Process, comparative dissolution profile, CoPP	Bioequivalence studies, Stability studies, comparative dissolution profile, CoPP, GMP Certification, Additional requirements for dosage forms
5	Submission Format	e-CTD (electronic common technical document)	e-CTD, EU specific requirements
6	Review Process	6-12 months, Fast track pproval for certain categoryesf	210 days for approval, 60 days for Decentralized procedure for simultaneous submission in multiple EU Countries
7	Post Approval	BA\BE studies, monitoring regular inspections, Adverse event reporting	GMP inspections , Regular monitoring of safety updates, Pharmacovigilance
8	Import License	Required	Not Required
9	Documentation	English, Hindi	German English
10	Clinical Trails	Not mandatory	Not Mandatory, but recommendable
11	Post –Marketing Surveillance	Mandated but less stringent ;periodic safety updates is Required	Strong post marketing surveillance systems in place ;rigorous monitoring
12	Patent Protection	No patent protection for Generic drugs	Patent protection for 8-10 years
13	Market Exclusivity	No market exclusivity	Market exclusivity for 8-10 years

CONCLUSION

While both India and Germany have well-established regulatory frameworks for ANDA, there are differences in requirements, approval timelines, and market dynamics. India's faster approval process and large domestic market make it an attractive destination for generic drug manufacturers. Germany, with its stringent regulatory requirements and high market potential, offers opportunities for companies seeking to enter the European market.

The conclusion of an analysis comparing the Abbreviated New Drug Application (ANDA) processes in India and Germany reveals distinct approaches influenced by regulatory frameworks, market dynamics, and healthcare needs.

In India, the ANDA pathway is characterized by a focus on generic drug production, fostering rapid entry into the market. The regulatory environment is designed to support affordability and accessibility, often resulting in a quicker approval process compared to more developed markets.

In contrast, Germany's approach emphasizes stringent quality and safety standards, aligning with its robust healthcare system. The approval process is generally more rigorous, ensuring that generics meet high efficacy and safety benchmarks before market entry.

Ultimately, while India prioritizes speed and cost-effectiveness to enhance accessibility, Germany emphasizes comprehensive regulatory oversight to maintain public health standards. This comparison highlights the balance between innovation, affordability, and safety in global pharmaceutical market.

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