



Pharmaceutical industry in Tunisia, challenges and perspectives

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Introduction

The pharmaceutical industry in Tunisia constitutes a dynamic market in perpetual growth capable of making our country a platform for the export of health products

Promising sector considered as a driver of economic and social development

The interest is based on strategic directions with an action plan aimed at promoting the country as an export hub and as an investment site

Introduction



Quality management systeme

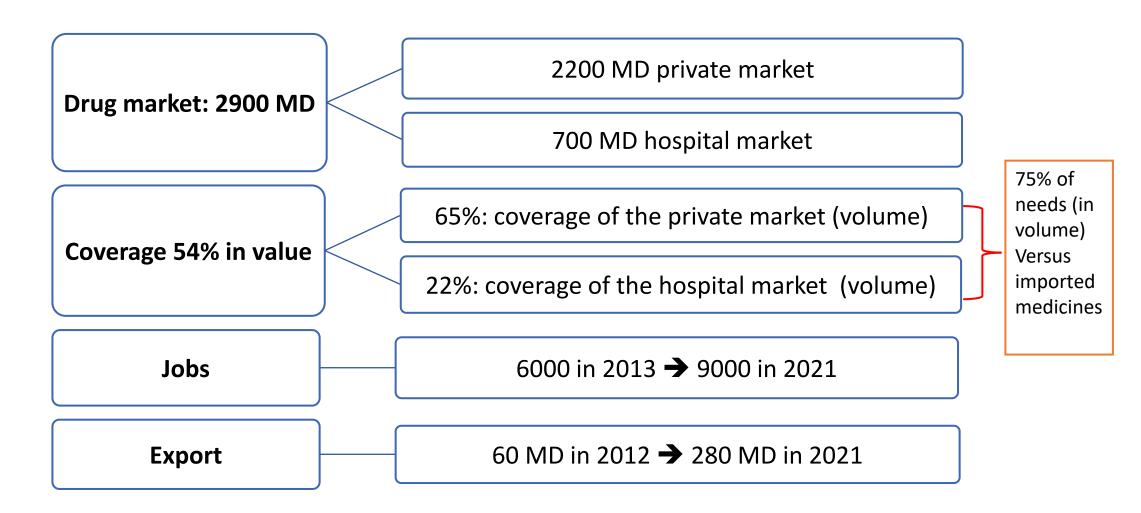
Objective: insure quality, safety and efficacy

Harmonization with ICH

Harmonization with the African Agency

Effective, stable and strong regulatory system

Pharmaceutical sector: high added and strategic value



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Export countries

Africa:

Ivory Coast, Senegal, Algeria, Libya, Mauritania, Morocco, Uganda, Sudan, Chad, Gabon, Mali, Congo, Burkina Faso, Cameroon, Rwanda, Benin, Djibouti, Madagascar, Niger, Guinea, Burundi...

• Asia:

UAE, Iraq, Jordan, Oman, Saudi Arabia, Lebanon...

• Europe:

France, Malta, Italy, Spain, Switzerland...



Africa Market (80 MD)

Laboratoires exporting to Africa:

Adwya - TERIAK - MEDIS - SAIPH - Berg Life Science – Cytopharm - Dar

Essaydaly- Dorcas – Galpharma – Ibn Al Baytar – Infomed Pharma – IPS said –

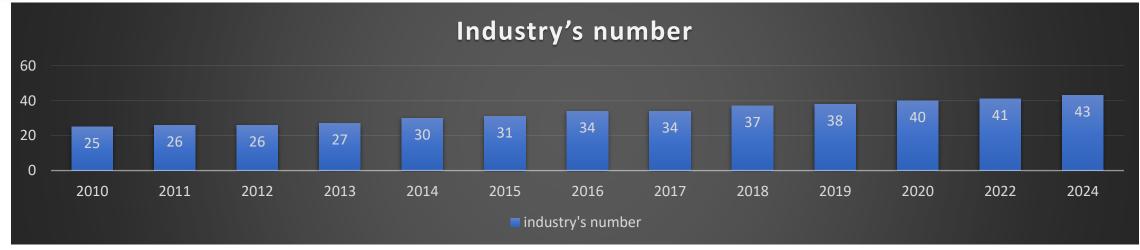
Medicef – Opalia Pharma – Pfeizer Tunisie – Pharmacare – Pierre Fabre

Médicament Production Tunisie – Sanofi Aventis Pharma Tunisie – SIPHAT –

Winthrop Pharma Tunisie.

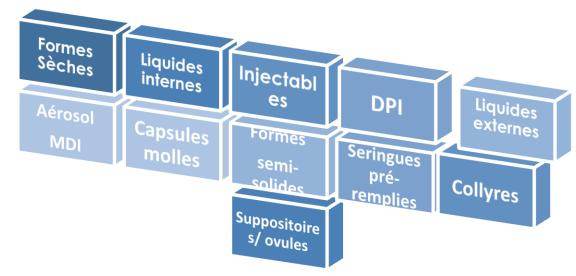


Eclectic industrial landscape



Evolution of the number of medicines industries in Tunisia, DPM

- Generics,
- Licensed originators
- Biosimilars
- Vaccins & serums



Foreign pharmaceutical industries established in Tunisia

• Partenariat joint-venture with SIPHAT:

Les laboratoires Pierre Fabre (France)

Les laboratoires Pfeizer (US)

High export potential especially for Africa.

• Tunisien laboratories manufacturing under licence (TERIAK, ADWYA, IPS, SIMED, SIPHAT, SAIPH...)

Pharmaceutical industries of subsidiaries established outside the country

• Les laboratoires TERIAK :

CINPHARM au Cameroun

Under licence with french laboratories : SERVIER, IPSEN et SANOFI (avec la possibilité d'exporter à partir de la Tunisie)

- Les laboratoires MEDIS :
- INTHA-MEDIS en Algérie
- MEDIS-Sénégal à Dakar
- MEDIS République tchèque
- Les laboratoires SAIPH :
- Saiph-Ivoire en Côte d'Ivoire « Projet de construction en cours / terrain 35 000 m² »



Strengths: Pharmaceutical Industry









Regulatory
framework: since the
1970s, covering all
aspects of drug
manufacturing,
registration, and
distribution:
http://www.dpm.tn/i
ndustrie/reglementati
on.

The geographical location of Tunisia and the airport and ground infrastructure

Qualified human potential: High-level executives as well as technicians graduated from the faculty of pharmacy, engineering schools, health schools, and biotechnology sciences

State encouragement:

A new legal framework that encourages investment: financial incentives + tax incentives:

http://www.tunisiein dustrie.nat.tn/fr/





Name Arabic
(Latin Africa) of Tunisia
until the 13th century

Investment promotion



Annexe 1 : Liste des secteurs prioritaires

- l'agriculture, la pêche, l'aquaculture, et les services liés
- les activités de première transformation des produits de l'agriculture et de la pêche
- Industries de nanotechnologie
- Industries de biotechnologie
- Textile et habillement
- Industries électroniques
- Plastique technique et produits composés
- Industries automobiles, aéronautiques, maritimes et ferroviaires, et composantes
- Industries pharmaceutiques et dispositifs médicaux
- Les centres de recherche et développement et de recherche clinique
- Industrie des équipements industriels
- Industries militaires
- Industries culturelles et créatives
- L'assemblage, la valorisation, la transformation et le traitement des déchets solides et liquides
- Les projets de protection et de valorisation des filières naturelles, de biodiversité et de lutte contre la désertification
- La production des énergies renouvelables
- Les technologies de la communication et de l'information
- Les services logistiques prêtés dans les zones logistiques
- Le tourisme : les projets d'hébergement et d'animation touristique réalisés dans le cadre du développement du tourisme culturel, écologique, de santé, du désert et le tourisme du golf
- ▶ Aths centres sportifs et de loisirs



National Regulatory Authority: Technical administration of the Ministry of Health



Quality control of drugs and pharmaceuticals

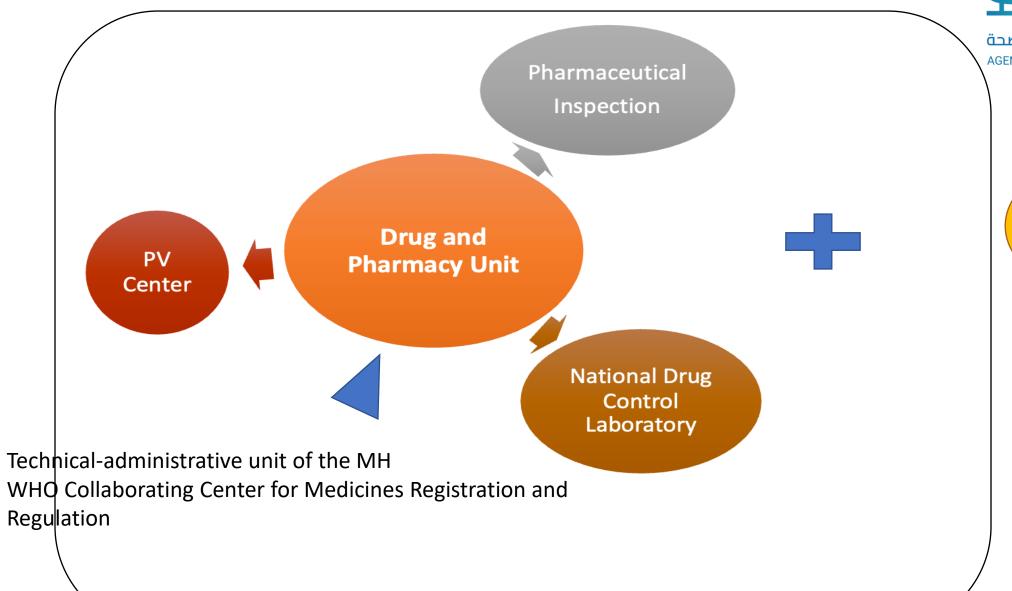


Monopoly of drugs import and supply of public structures



Pharmacovigilance, post-marketing follow-up Bioequivalence studies

National Regulatory Authority:





PRODUITS DE SANTÉ

Technical supervision of PCT

Missions of the DPM Decree n°2007-30017 of 27/11/2007

- 1. National Narcotics Bureau + Drug Addiction Commission
- 2. Technical Committee for Pharmaceutical Specialties (CTSP);
- 3. Specialized commissions for reviewing MMA application files (17,)
- 4. National Commission for Veterinary Medicine
- 5. National Commission for the Granting of Operating Authorizations for Establishments Manufacturing Medicines for Human Use
- 6. National Drug Advertising Control Commission
- 7. National Commission for the Promotion of Infant and Child Nutrition
- 8. Hemodialysis Filter Approval Commission
- 9. Medicines and Vaccines Observatory

National Regulatory Authority missions

Pharmaceutical industries

licencing and agreement of industries licencing of pharmacists

Human and Veterinary drugs

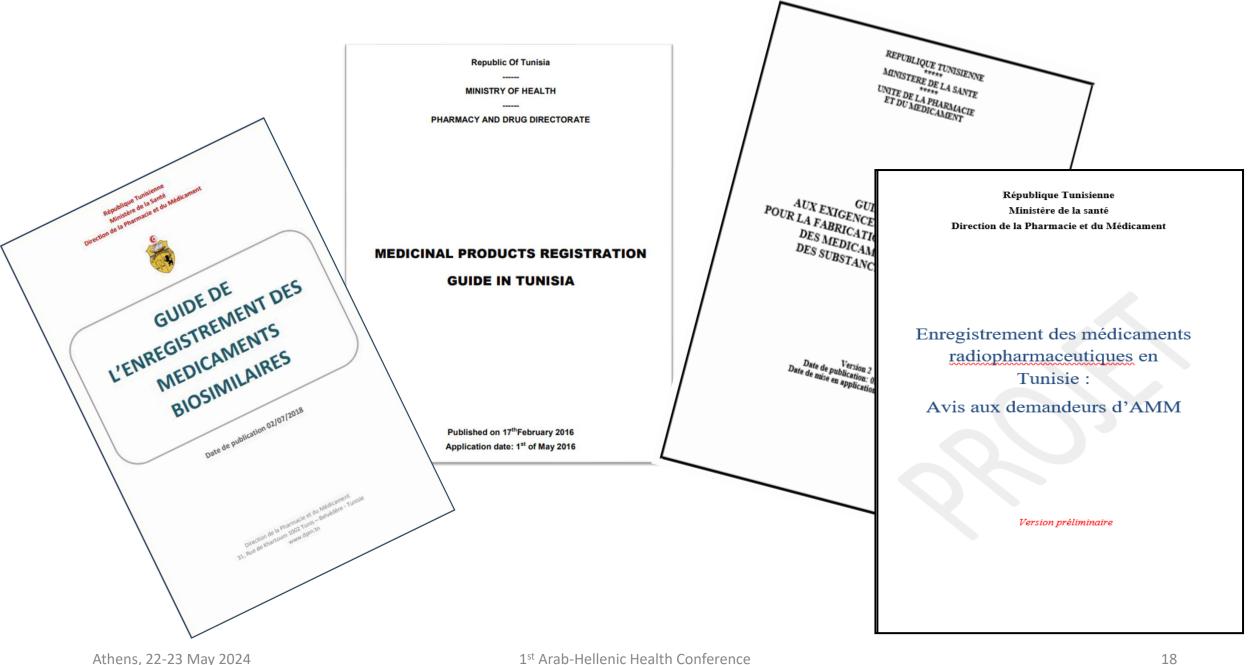
Registration
Clinical trials
Drug publicity
Autorisation of importation and exportation of drugs

Medical devices and Health Products (Food Supplements, Cosmetics, infant formulas)

Technical control of importation of medical device, cosmetics

Pharmacy and wholesalers distributors

- licencing and agreement of pharmacy
- Creation and transfert of pharmacy
- Agreements of Whosalers distributors



Towards a New Information System for the Drug Agency in Tunisia

Law No. 2023-2 of July 12, 2023, establishing the National Agency for Medicines and Health Products.

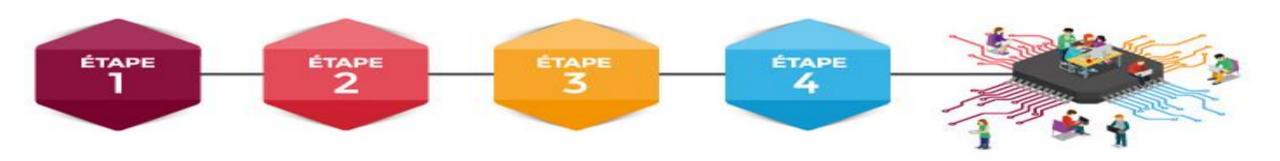
- Reducing the timeframes for obtaining MAs.
- Modernizing the registration process.
- RIMS of the drug agency =
- Ensuring transparency."

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Digitalization

e-CTD

KEY PROCESS STEPS FOR DIGITALIZATION







2- DIGITALIZATION PREPARATION



3- DEVELOPEMENT & ACQUISITION



4- DEPLOYMENT





- Assessment of Current Systems
- Process Optimization and Modeling
- Target Quality Document System
- Cost Estimation
- Specifications Document







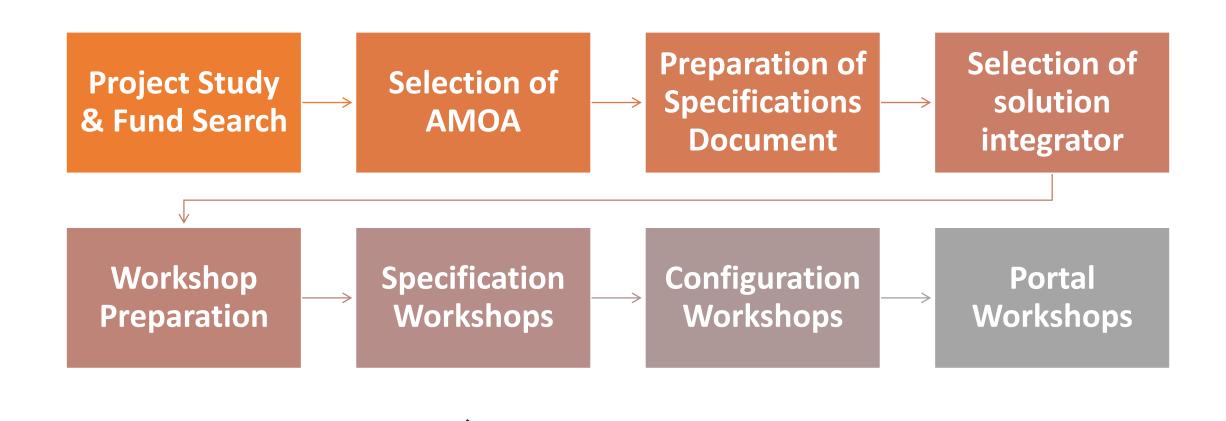






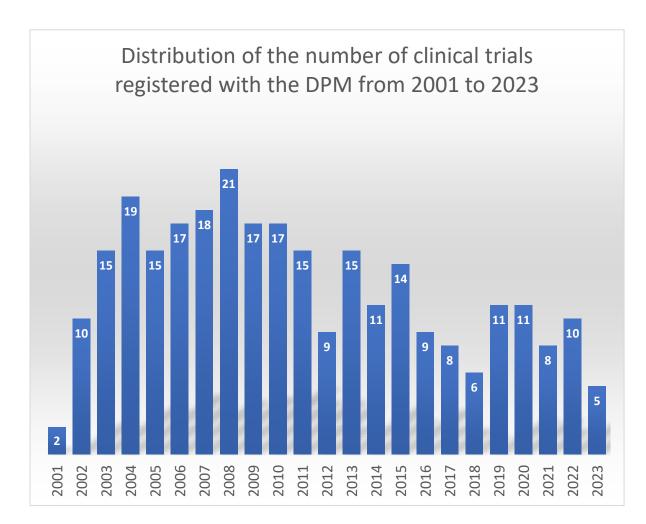


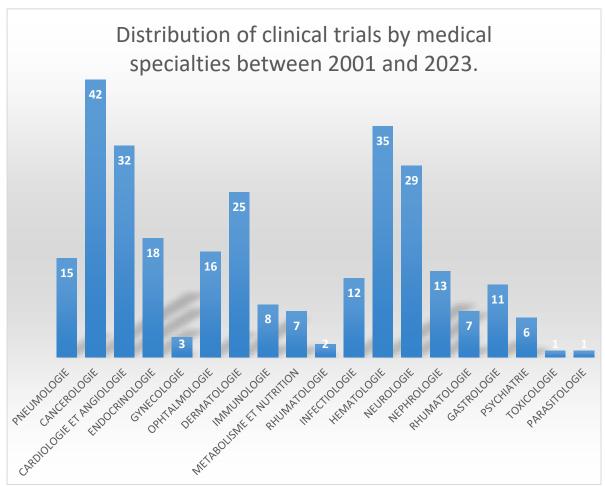
ROAD MAP OF E-CTD PROJECT



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Clinical trials in Tunisia









Attractiveness of Tunisia for the clinical trials

Factors
enhancing its
competitivenes
s in the MENA
region:

Regulatory context

Patient pool (presence of treatment-naïve patients)

Healthcare professionals' expertise

Infrastructure and environment"



Intellectual Property in Tunisia

Law No. 2000-84 of August 24, 2000, on Patents¹

TABLE OF CONTENTS

- The protection of inventions by patents is very old in Tunisia since 1888: the beylical decree of December 26, 1888
- Has been updated on August 24, 2000: The law N° 2000-84 on patents and its application decrees were published
- It is compatible with the requirements of the WTO Agreement and in particular the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

		Articles
Chapter I:	Patentable Inventions	1 - 6
Chapter II:	Right to the Patent	
Section 1:	General Provisions	7 - 8
Section 2:	Inventions of Salaried Employees	9 - 18
Chapter III:	The Patent Application	19
Section 1:	Filing of the Application	20 - 28
Section 2:	Examination of the Application	29 - 31
Section 3:	Withdrawal of the Application	32
Chapter IV:	Grant of the Patent	33 - 38
Chapter V:	Appeals	39 - 45
Chapter VI:	Rights and Obligations Under the Patent	
Section 1:	Rights Under the Patent	46 - 50
Section 2:	Obligations Under the Patent	51 - 53
Chapter VII:	Renunciation, Invalidity and Forfeiture	
Section 1:	Renunciation	54
Section 2:	Invalidity	55 - 59
Section 3:	Forfeiture	60 - 61
Chapter VIII:	Transfer, Assignment and Seizure of Rights	62
Chapter IX:	Contractual Licenses	63 - 68
Chapter X:	Compulsory Licenses	69 - 77
Chapter XI:	Ex Officio Licences	78 - 81
Chapter XII:	Infringement and Sanctions	82 - 90
Chapter XIII:	Border Measures	91 - 99

Miscellaneous Provisions.....

100 - 10

Chapter XIV:

Intellectual Property in Tunisia









- Tunisia is member of the World Intellectual Property
 Organization (WIPO) and signatory to several international
 conventions on intellectual property:
 - WIPO Patent Cooperation Treaty;
 - Madrid Protocol for the International Registration of Marks;
 - Paris Convention for the Protection of Industrial Property and Trademarks;
 - UNCTAD Agreement on the Protection of Patents and Trademarks;
 - Agreement with the EU that allows automatic patent protection in Tunisia for European patent applications through the European Patent Organization.

Vaccine supply

Pasteur institute of Tunis:

Manufacture of vaccines and serums

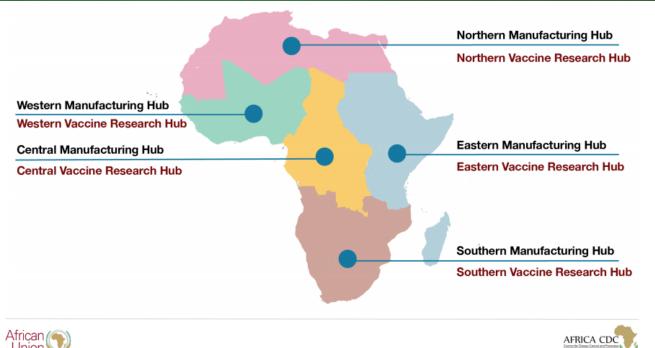
- ✓ Intradermal BCG
- ✓ Immun BCG
- ✓ SAV antiviperin serum
- ✓ SAS antiscorpionic
- ✓ SAR antirabic

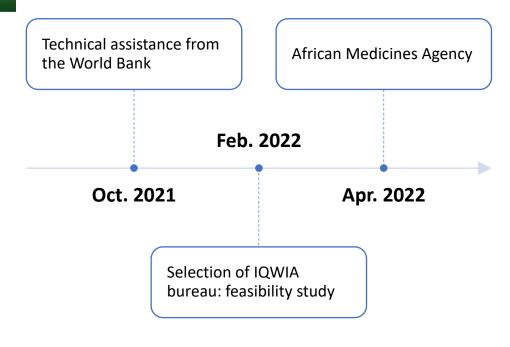


Opportunity: vaccin manufacturing

Tunisia has expressed its interest in joining the North African Hub for vaccine manufacturing and has received support from the World Bank."

AFRICA UNION'S GOALS | REGIONAL VACCINE RESEARCH AND MANUFACTURING HUBS





African Union

Challenges: Preparing the prerequisites."





REGULATORY AUTHORITY: LEVEL 3 MATURITY ACCORDING TO THE WHO'S GLOBAL BENCHMARKING TOOL (GBT).

ECONOMIC DIPLOMACY.

Ready for the challenge

Tunisian quality pharmaceutical industry (mRNA vaccines and drugs)























