



# **INCREASING USE OF REAL WORLD EVIDENCE: MALAYSIAN REGULATORY PERSPECTIVE**

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**CENTRE OF PRODUCT AND COSMETIC EVALUATION**

**NATIONAL PHARMACEUTICAL REGULATORY AGENCY (NPRA)**

**MINISTRY OF HEALTH MALAYSIA**

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The opinions expressed in this presentation are those of the presenter and do not necessarily reflect the views of the Government of Malaysia or the National Pharmaceutical Regulatory Agency (NPRA). The information presented is for educational and informational purposes only and should not be construed as legal or professional advice.

# OUTLINE

1

**Introduction to National Pharmaceutical Regulatory Agency (NPRA)**

2

**Definitions of Real World Data (RWD) & Real World Evidence (RWE)**

3

**Application of RWD/RWE in the Malaysian Regulatory Setting**

4

**Challenges of Using RWD/RWE in Malaysia**

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# CLOSER LOOK TO NATIONAL PHARMACEUTICAL REGULATORY AGENCY (NPRA)



NPRA is a government agency under the Pharmaceutical Services Programme, Ministry of Health Malaysia

Formerly known as National Pharmaceutical Control Bureau (NPCB), was set up in Oct 1978



Executing the regulatory requirements provided for in Sales of Drugs Act 1952 via Control of Drugs and Cosmetics Regulation 1984 (CDCR 1984)

## Scope of Service

- Regulation of pharmaceutical and traditional products through registration, licensing and surveillance activity
- Regulation of cosmetic products via notification



# NPRA'S COMMITMENT TO HEALTHCARE REGULATION : VISION, MISSION & OBJECTIVE

## VISION

To be an **internationally renowned regulatory authority** for medicinal products and cosmetics.



## MISSION

To **safeguard the nation's health** through **scientific excellence in the regulatory control** of medicinal products and cosmetics

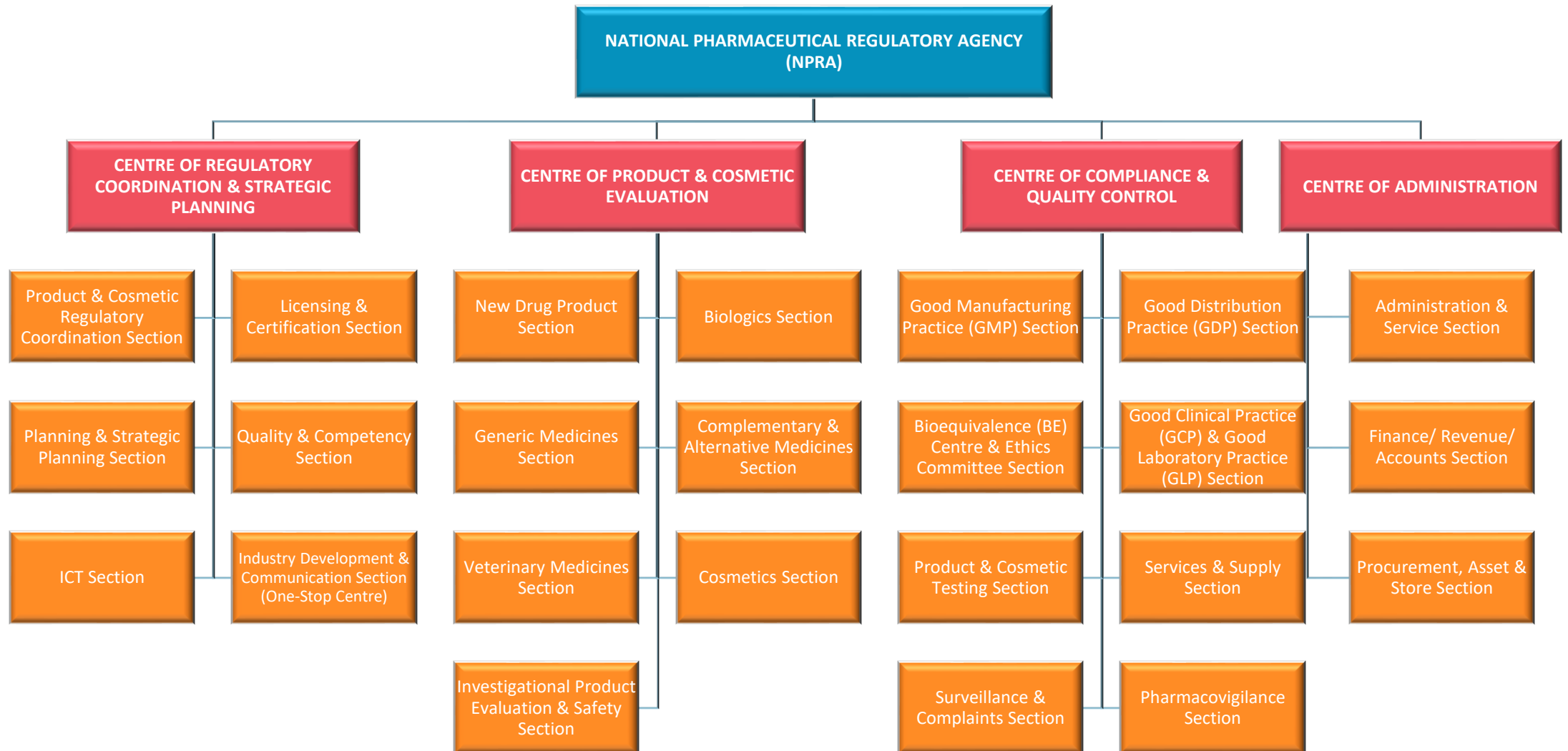


## OBJECTIVE

To ensure that **therapeutic substances approved for the local market are safe, effective and of quality** and also to ensure that **cosmetic products approved are safe and of quality**



# UNDERSTANDING THE FUNCTIONS OF NPRA THROUGH ITS ORGANISATION CHART



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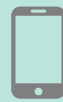
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# DEFINITIONS OF REAL WORLD DATA (RWD) & REAL WORLD EVIDENCE (RWE)

## REAL WORLD DATA (RWD)

Data relating to patient health status and/or the delivery of health routinely collected from a variety of sources<sup>1</sup>



Electronic health records

Claims and billing systems

Product and disease registries

Patient-generated data

Data gathered from other sources, such as mobile devices

## REAL WORLD EVIDENCE (RWE)

Clinical evidence regarding the usage and potential benefits or risks of a medical product derived from analysis of RWD<sup>1</sup>

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# APPLICATION OF RWD/RWE IN THE MALAYSIAN REGULATORY SETTING

1

## **Post-market safety surveillance**

RWD of adverse events are routinely collected to monitor safety of registered drugs in post-market setting

2

## **Pre-market efficacy assessment**

RWE has been accepted as supplemental evidence to clinical trials to support regulatory approval of new drugs

3

## **Change of approved product label**

RWE generated via post-authorization studies imposed as conditions for registration provides additional evidence to support post-approval changes/variations

# RWD/RWE IN POST-MARKET SAFETY SURVEILLANCE

## COLLECT

Adverse drug reactions (ADR) and adverse events following immunization (AEFI) reports are collected

## ANALYSE

Pharmacovigilance database is analysed to detect new safety signals/triggers

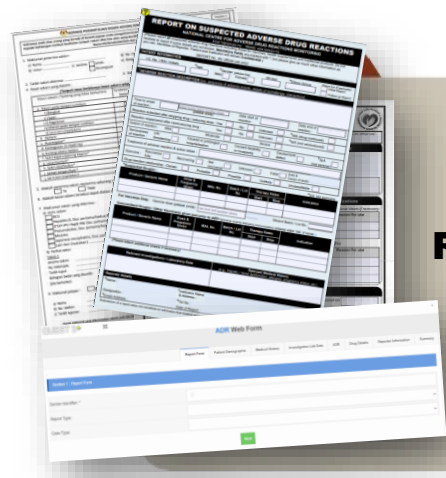
## VALIDATE & ASSESS

Identified signals will go through validation process and assessment to confirm drug-event relationship

## ACT

Regulatory actions (e.g. directives to update Package Insert) or administrative actions (e.g. communication of risk to HCP/ public via Safety Alerts or Bulletins) are taken accordingly

# OVERVIEW TO NPRA ADR/AEFI REPORTING SYSTEM



**REPORTERS :**



**Healthcare professionals**



**Pharmaceutical companies**



**Consumers**



**Consumers via MySejahtera App**

*report*  
*AEFIs*



**National ADR Monitoring Centre NPRA**

**Feedback given to reporters/ registration holders**

**Review ADR/AEFI reports**

**Follow-up for further information if required/ INVESTIGATIONS (Investigation Team)**

**Causality assessment**

**Feedback on reporting statistics and quality**

**Data entry into Malaysian database**

**Indexing and Data Extraction**

**Regulatory action & Policy implementation**

**Drug Control Authority (DCA)**

*recommendations*

**MADRAC meeting**

*submission*



**WHO International Database**

# USING RWE TO SUPPORT DRUG REGISTRATION / POST-APPROVAL CHANGE

## DRUG REGISTRATION



- NPRA accepts RWE to supplement clinical trial for new drug approval
  - As historical control for single arm trial (e.g. rare diseases, oncology)
  - Prior approval by at least one of the Drug Control Authority (DCA) reference agencies is required

## POST-APPROVAL CHANGE



- RWE from post-authorization studies imposed as part of the conditions for registration provides additional evidence to support post-approval change
- NPRA accepts RWE to support expansion of use in certain populations excluded from RCTs (e.g. children, pregnant women)
  - Prior approval by at least one of the DCA reference agencies is required

# EXAMPLES OF RWE-SUPPORTED APPROVAL IN NPRA

Product	Indication	Source of RWD
Capmatinib	Metastatic NSCLC whose tumours have a mutation that leads to mesenchymal-epithelial transition (MET) exon 14 skipping	Non-interventional medical record review of patients with NSCLC harbouring MET exon 14 skipping mutation treated in oncology centres (as external benchmark or natural history study)
Inactivated SARS-CoV-2 vaccine (CoronaVac)	Active immunisation to prevent COVID-19 caused by SARS-CoV-2 virus, in individuals 5 years of age and older.	Observational study of the effectiveness of an inactivated SARS-CoV-2 vaccine in children and adolescents (as supportive efficacy study)

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# CHALLENGES OF USING RWD/RWE IN MALAYSIA



RWE generated from foreign data  
may not be representative of local  
populations



Limited  
accessibility to  
data



Local regulatory framework  
for RWE has yet to be  
developed

# WAY FORWARD

Encourage data-sharing by promoting collaboration among stakeholders



Develop local regulatory framework for RWE

**THANK YOU**

