# COVID-19 vaccine Pharmacovigilance: TFDA's experiences

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#### **Outline**

- Actions against the COVID-19 Pandemic
- Accelerating COVID-19 Vaccine Development
- Safety Surveillance for COVID-19 Vaccines in Taiwan



### Actions against the COVID-19 Pandemic



#### **DRUG SUPPLY**

- Drug Supply
   Database
   Platform
- Guidelines



# SANITIZER PRODUCTS

- Maximize Production
- Restrict Exportation



#### **CLINICAL TRIALS**

- Protect Right and Safety of the participants
- Recruitment Registration Platform

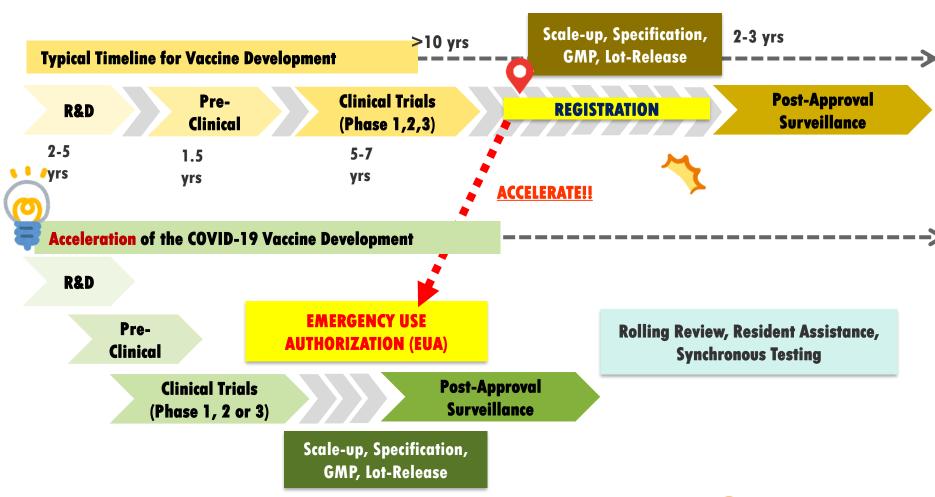


#### **DRUG DEVELOPMENT**

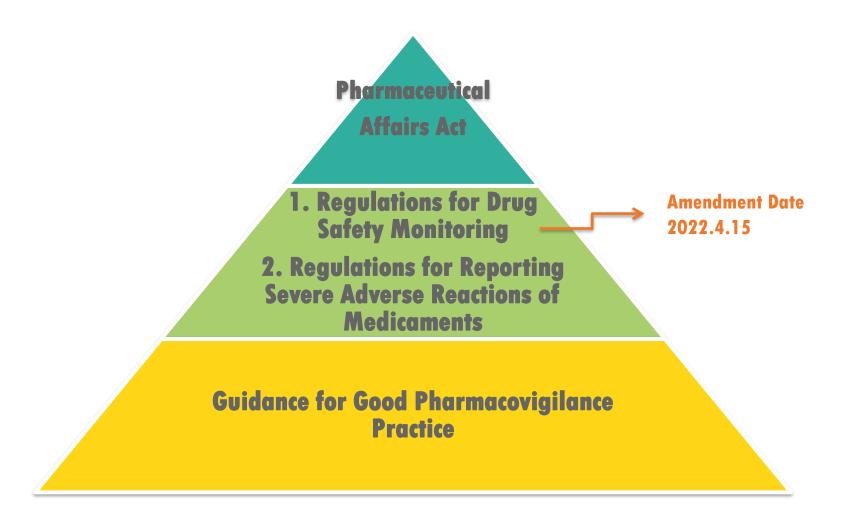
- EUA
- Consultation Team
- Rolling review
- Technical and Financial Support



### **Accelerating COVID-19 Vaccine Development**



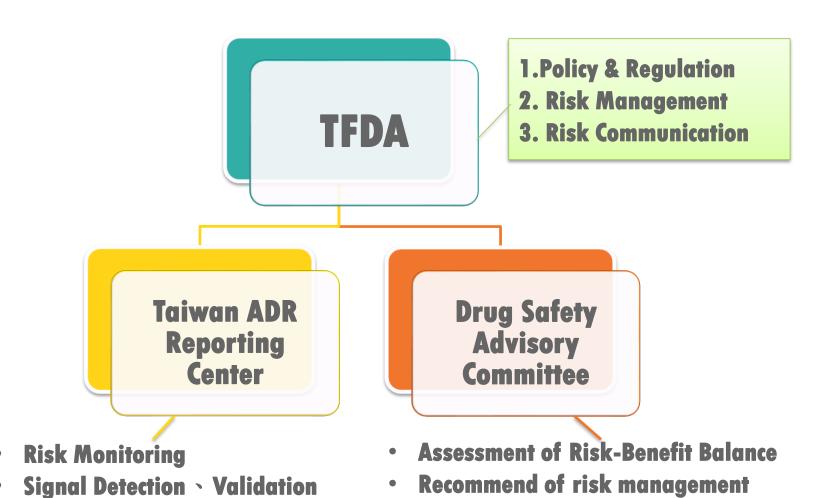
### Regulations of Pharmacovigilance in Taiwan



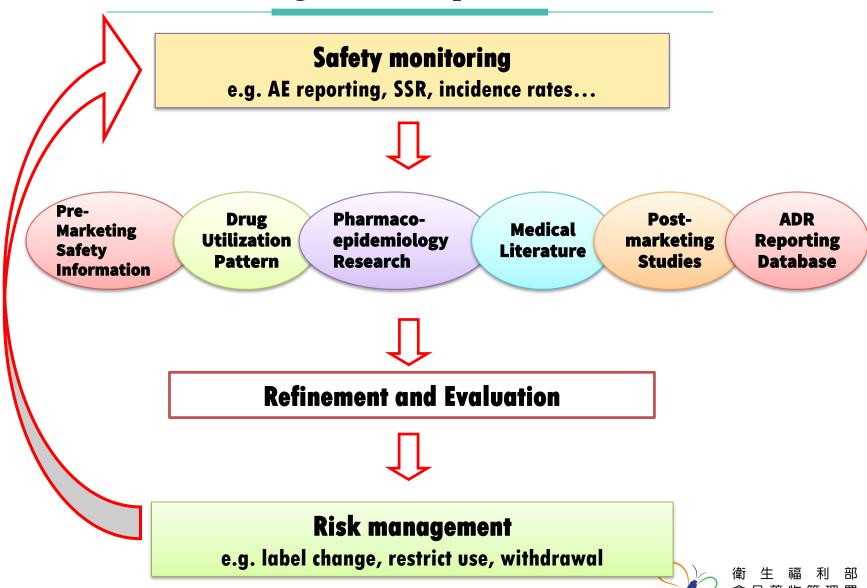


#### Organization for Pharmacovigilance

and Refinement



### Pharmacovigilance system in Taiwan



#### Strategies of Risk Management

Labeling change: boxed warning, precaution and warning Restriction of clinical use : Risk contraindication, revising indications, second line usage ... Implementation of risk management plan Withdrawal from market

#### **Safety Surveillance for COVID-19 Vaccines**

Summary Safety Report (SSR)
Applicants shall collect safety
information and regularly provide
it to TFDA.



Global Safety Information Monitoring

#### **AE** reports

Accept the event that a vaccines causes a severe adverse reaction from medical care institution.



Active Assessment of National Health Insurance Database

Local background incidence rate of Adverse Event of Special Interest (AESI)

Establishment local background incidence rate to compare the vaccines incidence rate.



#### **Summary Safety Report**

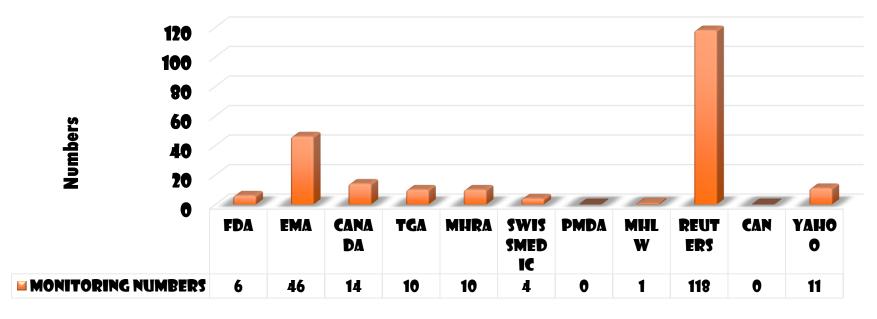
- Applicants shall collect the following safety information:
  - Update of global safety experience
  - Evaluation of benefit-risk balance about new or changed information.
- Up to 19 September 2022, TFDA reviewed 44 SSR reports from COVID-19 vaccines.



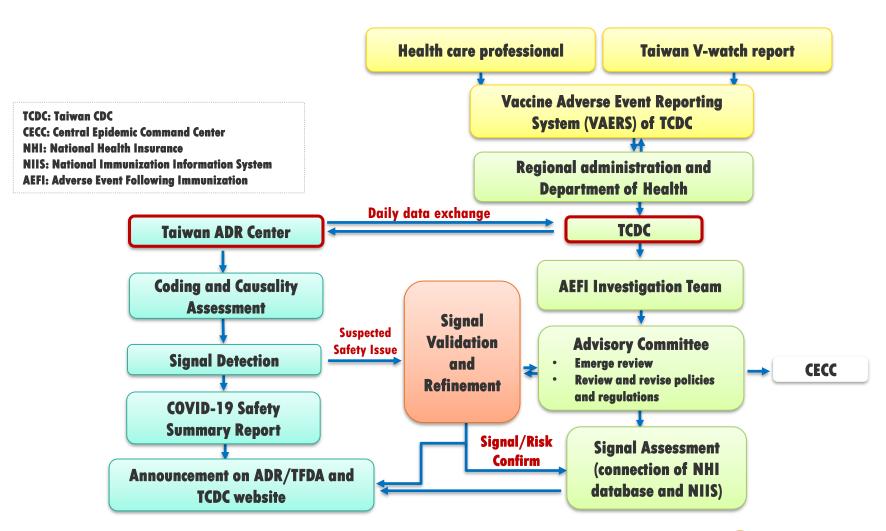


### **Global Safety Information Monitoring**

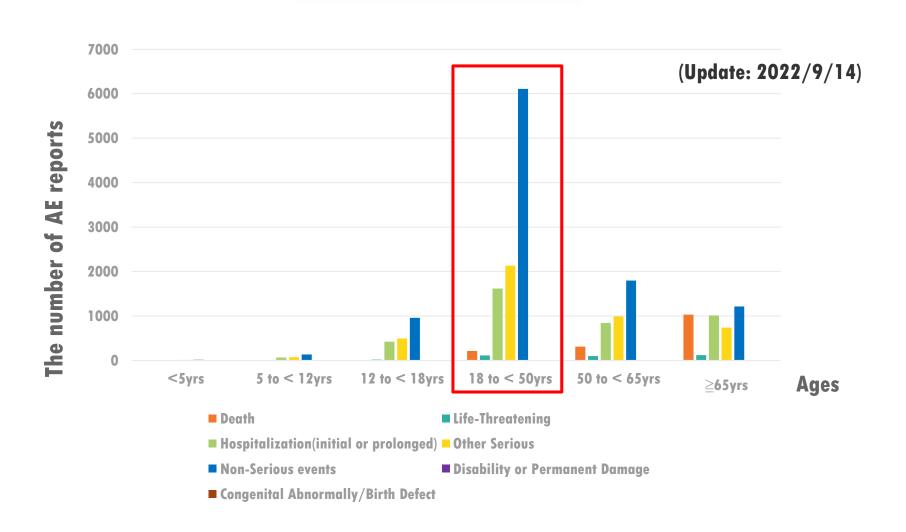
- > Actively Monitor Global Safety Information and news daily.
- If there is a suspect safety signal, we will deliver risk communication letter and start drug safety re-evaluation.
- 220 alerts in 2021



#### AE reporting system of the COVID-19 vaccines



#### AE reports of COVID-19 vaccines in Taiwan by ages



### The most concern of AESI reports in Taiwan(1)

(Update: 2022/9/14)

AESI	Reports cases	
Anaphylaxis	49	
Arrhythmia	57	
Acute myocardial infarction	300	
Myocarditis/Pericarditis	418	
Cerebrovascular stroke	724	
Facial palsy	233	
Seizure/Convulsion	68	
Transverse myelitis	4	
Acute disseminated encephalomyelitis	9	
Guillain — Barre ´Syndrome	36	
Neuromyelitis optica	6	
Myelitis	6	
Encephalitis	12	

AESI	Reports cases
Aseptic meningitis	5
Optic neuritis	15
Acute pancreatitis	11
Acute kidney injury	10
Acute liver injury	23
Erythema multiforme	18
Vasculitis	27
Rhabdomyolysis	18
Arthritis	9
Spontaneous abortion	15
Stillbirth	15
Preterm birth	4
Idiopathic thrombocytopenic purpura	75

### The most concern of AESI reports in Taiwan(2)

(Update: 2022/9/14)

AESI	Reports cases
Thrombosis with thrombocytopenia syndrome	63
Capillary leak syndrome	1
Multisystem inflammatory syndrome in children	1
Retinal vein occlusion	25
Retinal artery occlusion	10
Retinal vascular occlusion	5
Deep vein thrombosis	122
Pulmonary embolism	145
Cerebral venous sinus thrombosis	31
other thrombotic disorder	52

#### Incidence rate of AESI

- Establishment local background incidence rate to compare the vaccines incidence rate.
- Using National Health Insurance Database, including Ambulatory Care **Expenditures by Visits, National Health Insurance Registry for** Beneficiaries, Cause Of Death Data etc...
- Up to 6 September 2022, TFDA analyzes 28 AESIs.

AESI			
Anaphylaxis	Transverse myelitis	Optic neuritis	
Arrhythmia	Acute disseminated encephalomyelitis	Acute pancreatitis	
Acute myocardial infarction	Guillain-Barre´Syndrome	Acute kidney injury	
Myocarditis/Pericarditis	Neuromyelitis optica	Acute liver injury	
Cerebrovascular stroke	Myelitis	Erythema multiforme	
Facial palsy	Encephalitis	Vasculitis	
Seizure	Aseptic meningitis	••••	



#### **COVID-19 vaccines information release**



#### **Updated version**

- PI of COVID-19 Vaccine which is received EUA
- Amends the safety information including warnings and precaution, post-marketing experience



#### **Weekly announcement**

 Provides adverse event cumulative case reports and safety profile in domestic



#### **Major events**

- Issues an EUA for specific brand COVID-19 Vaccine
- Launches clarification
   regarding misinformation
   and fake news



### Overall Safety of COVID-19 Vaccines in Taiwan

- Based on the current vaccine safety data, TFDA doesn't find any new safety issues and should require immediate action.
- > TFDA will continue to conduct safety signal detection for vaccine adverse event reports to actively implement the drug safety monitoring mechanism to ensure the safety of COVID-19 vaccines.



## Thank you for your attention





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