厚生労働省 ひと、くらし、みらいのために Ministry of Health, Labour and Welfare

International Collaboration and Reliance

- Fight against COVID-19 -

MATSUKURA Yuji

Deputy Director,

Office of International Regulatory Affairs,

Pharmaceutical Safety and Environmental Health Bureau,

MHLW

Ministry of Health, Labour and Welfare of Japan

1

- **International Collaboration and Reliance in Pharmaceutical Regulations (ICH, PIC/S, ICMRA)**
- **Global Challenges & International Collaborations in the Fight against COVID-19**

International Collaboration and Reliance in Pharmaceutical Regulations

Significantly important than ever before

- ✓ Globalization of supply chain
- ✓ Emergence of new technologies
- ✓ Limited resources
- ✓ Response and Preparedness for pandemic (COVID-19 and the Next), etc...

To ensure fast and stable access to products which are effective, safe, quality-assured as well as affordable

ICH harmonisation for better health

PIC/S

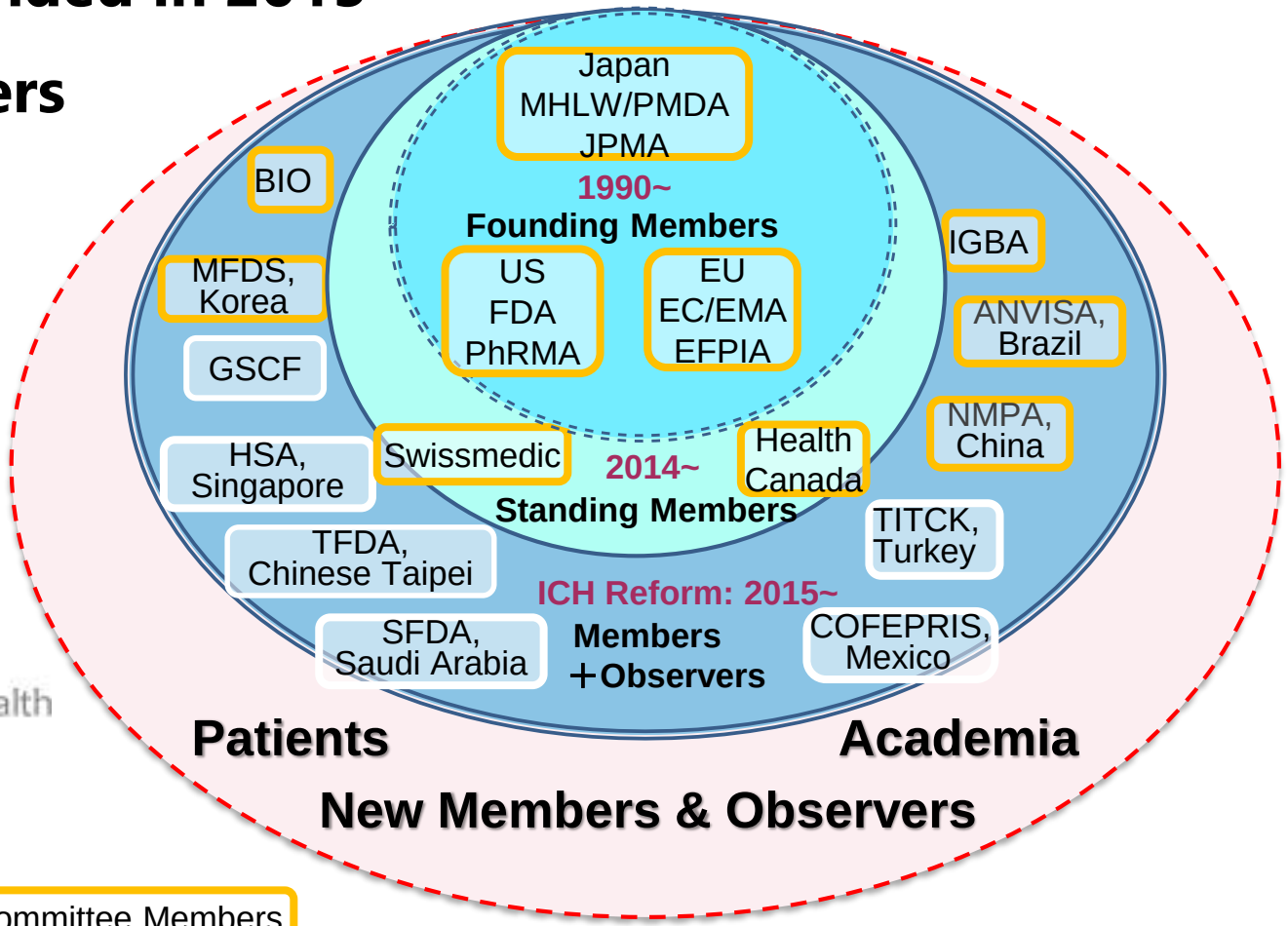
ICMRA International Coalition of Medicines Regulatory Authorities

etc.

ICH

The International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use

- ✓ **Established in 1990**
- ✓ **Reformed and Expanded in 2015**
- ✓ **Currently 19 members and 35 observers**



ICH
harmonisation for better health

Management Committee Members

ICH

The International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use

ICH has developed more than 70 guidelines in Quality, Safety, Efficacy and Multidisciplinary areas, which form the basis of internationally harmonized regulations.

Recent notable activities

- ✓ **GCP renovation (E6(R3))** *step 1*
- ✓ **Post-Approval Change Management Protocol [PACMP](Q12)** *step 5*
- ✓ **Continuous manufacturing (Q13)** *step 3*
- ✓ **Real world data (M14)** *Informal WG has been established* etc…

Recent trend and challenges

- ✓ **Digital Transformation** [Clinical trials, etc.]
- ✓ **Stakeholders involvement, especially patients**
- ✓ **Quality related topics** [Lifecycle management, continuous manufacturing, etc.] etc…

PIC/S

The Pharmaceutical Inspection Convention and Pharmaceutical Inspection Co-operation Scheme

- ✓ **Established in 1995, as an extension to the Pharmaceutical Inspection Convention (PIC) of 1970.**
- ✓ **Currently 54 participating authorities**

PIC/S aims to **increase mutual confidence in the field of GMP** through by;

- Harmonized GMP standards
- Training to inspectors
- Quality systems of inspectorates
- Co-operation and networking among competent authorities and international organizations. [ex. inspection reports sharing] etc...

- ✓ **MHLW/PMDA joined in 2014**
- ✓ **MHLW/PMDA hosted in 2019;**
  - **The 48th PIC/S Committee Meeting**
  - **PIC/S Seminar (Training for GMP inspectors)**

- International Collaboration and Reliance in Pharmaceutical Regulations (ICH, PIC/S, ICMRA)
- **Global Challenges & International Collaborations in the Fight against COVID-19**

Global Challenges & International Collaborations in the Fight against COVID-19

Challenge: Next Generation Vaccines

- ✓ **Developing modified and new vaccines** is necessary, in the face of SARS-CoV-2 VOC and the global shortage of vaccines.
- ✓ Placebo-controlled clinical trials with clinical endpoint efficacy are becoming difficult. **Alternative designs and endpoints are necessary**. A well-coordinated and convergent global response is important.

ICMRA COVID-19 Vaccine development: Future steps Workshop (24 June 2021)

Co-chaired by PMDA

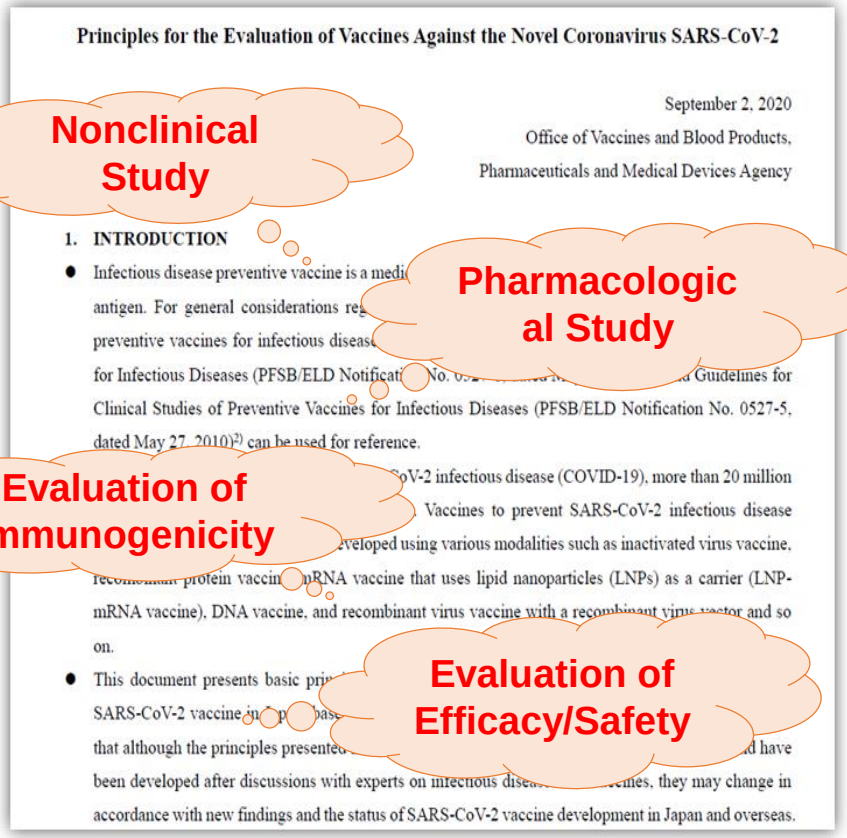
https://www.icmra.info/drupal/covid-19/24june2021

ICMRA
International Coalition of Medicines Regulatory Authorities

- ➢ ICMRA WS reached consensus that **immunogenicity bridging studies may be needed**, if an assessment of effectiveness of second generation COVID-19 vaccines in clinical endpoint efficacy studies are no longer feasible.
- ➢ These could be designed as **non-inferiority immunogenicity studies if the comparator vaccine has demonstrated high efficacy in clinical diseases endpoint efficacy trials** and/or **superiority designs if the comparator vaccine has demonstrated modest efficacy**.

✓ **The consensus of the ICMRA workshop has been reflected into the Japanese Guidance for the Evaluation of COVID-19 Vaccines.**

Principles for the Evaluation of Vaccines Against the Novel Coronavirus SARS-CoV-2 (PMDA)



Principles for the Evaluation of Vaccines Against the Novel Coronavirus SARS-CoV-2

September 2, 2020
Office of Vaccines and Blood Products,
Pharmaceuticals and Medical Devices Agency

1. INTRODUCTION

- Infectious disease preventive vaccine is a medi
antigen. For general considerations re
preventive vaccines for infectious diseas
for Infectious Diseases (PFSB/ELD Notificati No. 0
Guidelines for Clinical Studies of Preventive Vaccines for Infectious Diseases (PFSB/ELD Notification No. 0527-5, dated May 27, 2010)[2] can be used for reference.
oV-2 infectious disease (COVID-19), more than 20 million
Vaccines to prevent SARS-CoV-2 infectious disease
eveloped using various modalities such as inactivated virus vaccine, recombinant protein vaccin mRNA vaccine that uses lipid nanoparticles (LNPs) as a carrier (LNP-mRNA vaccine), DNA vaccine, and recombinant virus vaccine with a recombinant virus vector and so on.
- This document presents basic pri
SARS-CoV-2 vaccine in
that although the principles presented
d have been developed after discussions with experts on infectious dise
cines, they may change in accordance with new findings and the status of SARS-CoV-2 vaccine development in Japan and overseas.

Nonclinical Study

Pharmacologic al Study

Evaluation of Immunogenicity

Evaluation of Efficacy/Safety

https://www.pmda.go.jp/english/about-pmda/0002.html

Published initially in Sep 2020
- Appendix 1, added in Apr 2021
- Appendix 2, added in Jun 2021
- **Appendix 3, added in Oct 2021**
  (English version is under preparation)

Principles for the evaluation of vaccines based on immunogenicity

Global Challenges & International Collaborations in the Fight against COVID-19

Challenge: Rapid Increase of Manufacturing Capacity

- ✓ The global shortage of vaccines and therapeutics, as well as the unprecedented stress by COVID-19 pandemic on the global drug supply chain including non-COVID-19 related products.
- ✓ Regulators and manufacturers need to **rapidly increase manufacturing capacity** for production of COVID-19 therapeutics and vaccines to meet global demand, **without compromising product quality**.

ICMRA-Industry Virtual Workshop on Enabling Manufacturing Capacity in the COVID-19 Pandemic (July 7-8, 2021)

https://www.icmra.info/drupal/sites/default/files/2021-10/covid-19_manufacturing_capacity_ws_report.pdf

The WS provided an opportunity for **an exchange of views between regulators and the pharmaceutical industry on the regulatory flexibilities** introduced to enhance the manufacturing capacity of COVID-19 products.

- ➢ **Key enablers and bottlenecks** limiting the use of regulatory flexibilities, in addition to the most effective mechanisms that enabled increased manufacturing capacity, were identified.
- ➢ **Opportunities for further collaboration, alignment, or harmonization** to enable a more efficient and effective global regulatory approach to enabling increased manufacturing capacity were also identified.

Global Challenges & International Collaborations in the Fight against COVID-19

✓ **Other ongoing activities in ICMRA** (Not limited to below)

- **COVID-19 Vaccine Pharmacovigilance Network**
- **Regulatory Agilities, Flexibilities and Sustainability**
  - Report on regulatory flexibilities/agilities
    https://www.icmra.info/drupal/sites/default/files/2021-12/Regulatory_Flexibilities_during_COVID-19_Report.pdf
- **Digital transformation of GCP and GMP inspections**
  - Reflection paper on remote inspections
    https://www.icmra.info/drupal/sites/default/files/2021-12/remote_inspections_reflection_paper.pdf
- **Clinical Trials Working Group**
- **Publication of ICMRA statements**

✓ **<u>Further international collaborations are expected during and beyond the pandemic, and possibly towards a new normal.</u>**

厚生労働省 ひと、くらし、みらいのために Ministry of Health, Labour and Welfare

Thank you for your attention !!

Ministry of Health, Labour and Welfare of Japan