

# ICH Overview

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# ICH Overview

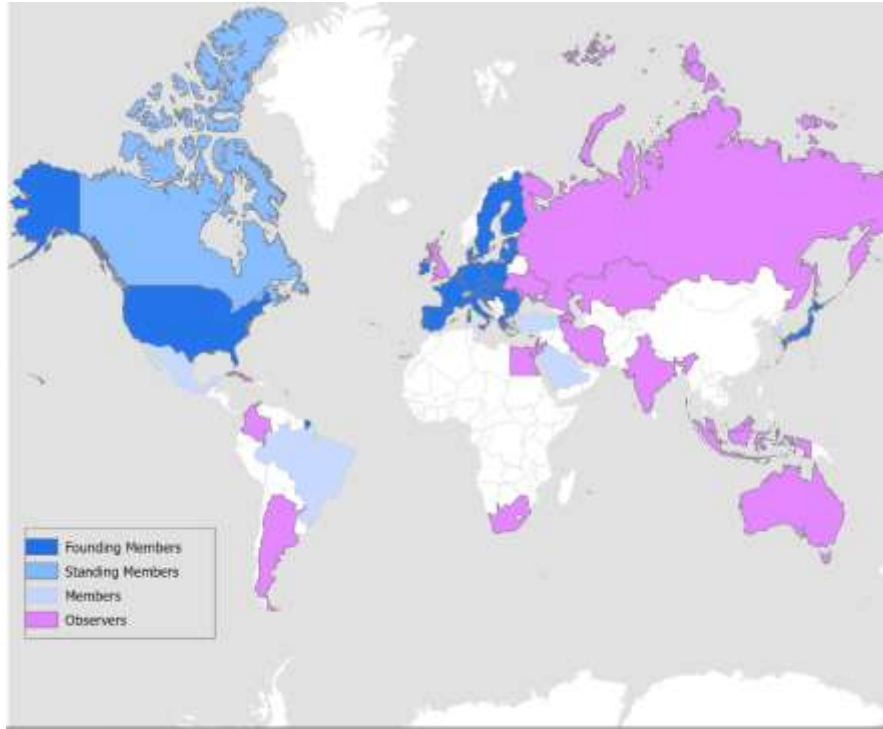
- The International Council for Harmonisation of Technical Requirements of Pharmaceuticals for Human Use (ICH) is a unique harmonization organisation involving regulators and the pharmaceutical industry.
- Launched in 1990 by the US, EU, and Japan. Canada, Swissmedic and WHO as observers.
- Well-defined objectives:
  - **To improve efficiency of new drug development and registration processes**
  - **To promote public health, prevent duplication of clinical trials in humans and minimize the use of animal testing without compromising safety and effectiveness**
- Accomplished through development of harmonized, technical guidelines and standards that are implemented by regulatory authorities.

# ICH Association

Reformed as a non-profit legal entity under Swiss Law in 2015 to promote public health through international harmonization that contributes to:

- Focus global pharmaceutical regulatory harmonization work in a single forum for constructive dialogue on scientific issues
- Promote more involvement from regulators around the world and wider inclusion of global industry sectors
- Continue to harmonize and streamline the global drug development process for the benefit of patients around the world
- Facilitate greater adoption of new and improved research and development approaches, common standards, and therapeutic advances
- Maintain efficient and well-managed operations

# ICH Members and Observers



Created on 29 April 2022 by FDA/OEM/G2S | Sources: FDA, Natural Earth, ESRI

## Members

### Founding Regulatory Members

- EC, Europe
- FDA, US
- MHLW/PMDA, Japan

### Founding Industry Members

- EFPIA
- PhRMA
- JPMA

### Standing Regulatory Members

- Health Canada, Canada
- Swissmedic, Switzerland

### Regulatory Members

- ANVISA, Brazil
- COFEPRIS, Mexico
- HSA, Singapore
- MFDS, Republic of Korea

- NMPA, China
- SFDA, Saudi Arabia
- TFDA, Chinese Taipei
- TITCK, Turkey

### Industry Members

- BIO
- Global Self-Care Federation
- IGBA

## Observers

### Standing Observers

- IFPMA
- WHO

### Legislative or Administrative Authorities

- AEC, Azerbaijan
- ANMAT, Argentina
- CDSCO, India
- CECMED, Cuba
- CPED, Israel
- EDA, Egypt
- Indonesian FDA, Indonesia
- INVIMA, Colombia
- JFDA, Jordan
- MHRA, UK

- MMDA, Moldova
- MOPH, Lebanon
- National Center, Kazakhstan
- NPRA, Malaysia
- NRA, Iran
- Roszdravnadzor, Russia
- SAHPRA, South Africa
- SCDMTE, Armenia
- SECMOH, Ukraine
- TGA, Australia

- GHC
- PANDRH
- SADC

### Int'l Pharmaceutical Industry Organizations

- APIC

### Int'l Orgs regulated by or affected by ICH guidelines

- Bill & Melinda Gates Foundation
- CIOIMS
- EDQM
- IPEC
- PIC/S
- USP

### Regional Harmonization Initiatives

- APEC
- ASEAN
- EAC

# ICH Products

- ~70 guidelines on technical requirements related to human drugs
- Electronic Standards for the Transfer of Regulatory Information (CTD/eCTD, ICSRs)
- Medical Dictionary for Regulatory Activities (MedDRA) -- standardized medical terminology to facilitate regulatory information sharing

# Major ICH Topic Areas

## Safety

- Carcinogenicity studies
- Genotoxicity studies
- Toxicokinetics and Pharmacokinetics
- Duration of chronic toxicity testing
- Reproductive toxicology
- Safety pharmacology studies
- Immunotoxicology studies
- Nonclinical evaluation for anticancer pharmaceuticals
- Photosafety evaluation
- Nonclinical pediatric safety

## Efficacy

- Clinical safety
- Clinical study reports
- Dose-response studies
- Good clinical practice
- Clinical trials
- Clinical evaluation by therapeutic category
- Clinical evaluation
- Pharmacogenomics

## Quality

- Stability
- Analytical validation
- Impurities
- Pharmacopoeias
- Specifications
- Good manufacturing practice
- Pharmaceutical development
- Quality risk management
- Pharmaceutical quality system
- Development and manufacture of drug substances

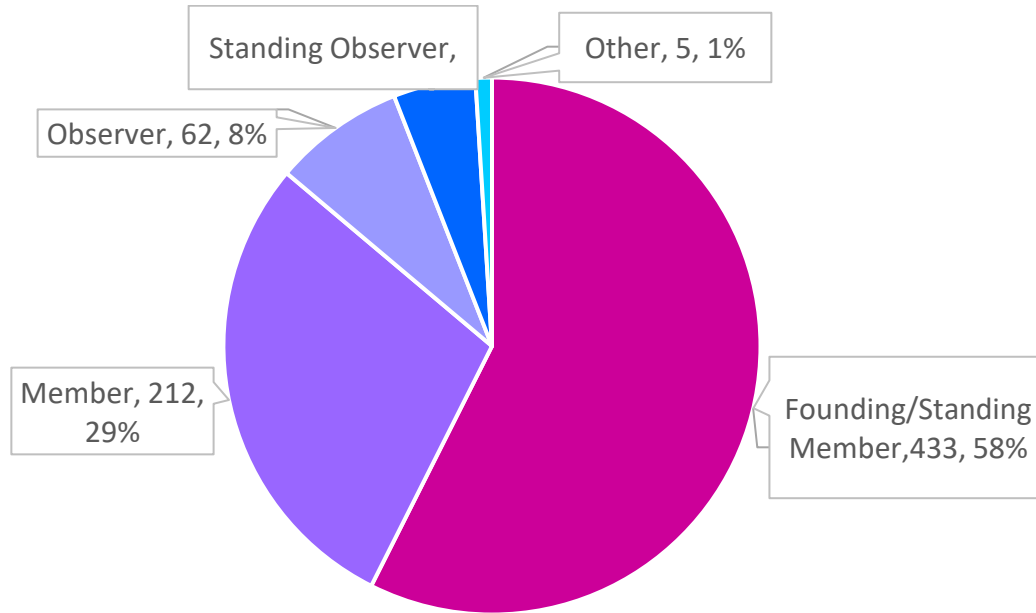
## Multidisciplinary

- MedDRA terminology
- Electronic standards
- Nonclinical safety studies
- CTD and eCTD
- Bioanalytical Method Validation
- Biopharmaceutics Classification System-based Biowaivers
- Data elements and standards for drug dictionaries
- Gene therapy
- Mutagenic impurities
- Drug Interaction Studies
- Bioequivalence for IR solid

# Composition of ICH Working Groups



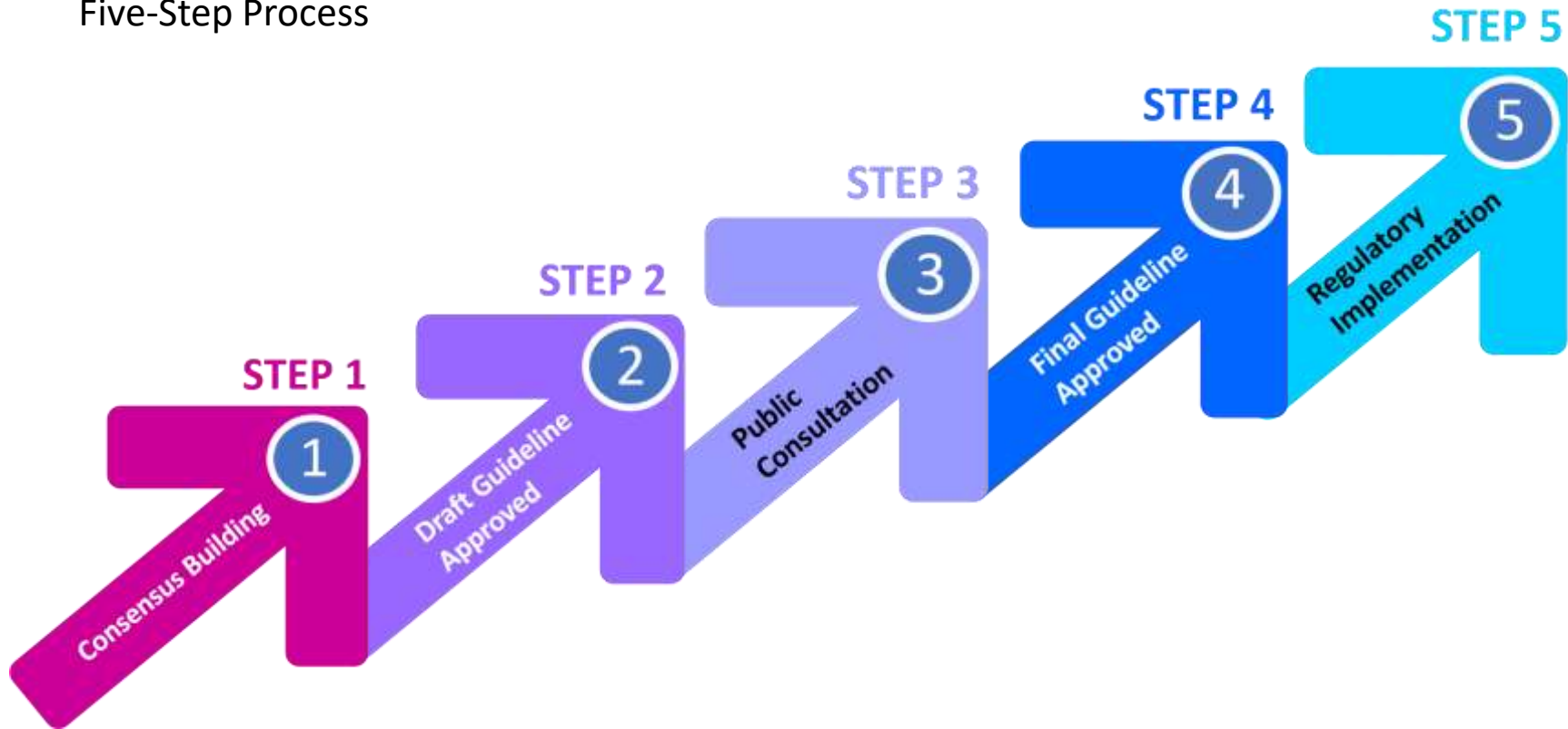
Over 700 experts in 34 working groups



# ICH Guideline Development



Five-Step Process





# ICH Training



## Guideline Training:

- ICH is working to ensure that high quality training is available based upon scientific and regulatory principles outlined in its guidelines.

## Efforts include:

- Development of a Training Library on the ICH website with access to all training materials including Step 4 working group presentations.
- Funding support for training programs organized by ICH regulatory members and observers.
- ICH Recognized Training Programs hosted by a variety of organizations, associations, regulatory authorities and academia. Offered in-person, virtually, and online. Information available on the ICH website.
- Online training materials development including some translations.

# ICH Governance

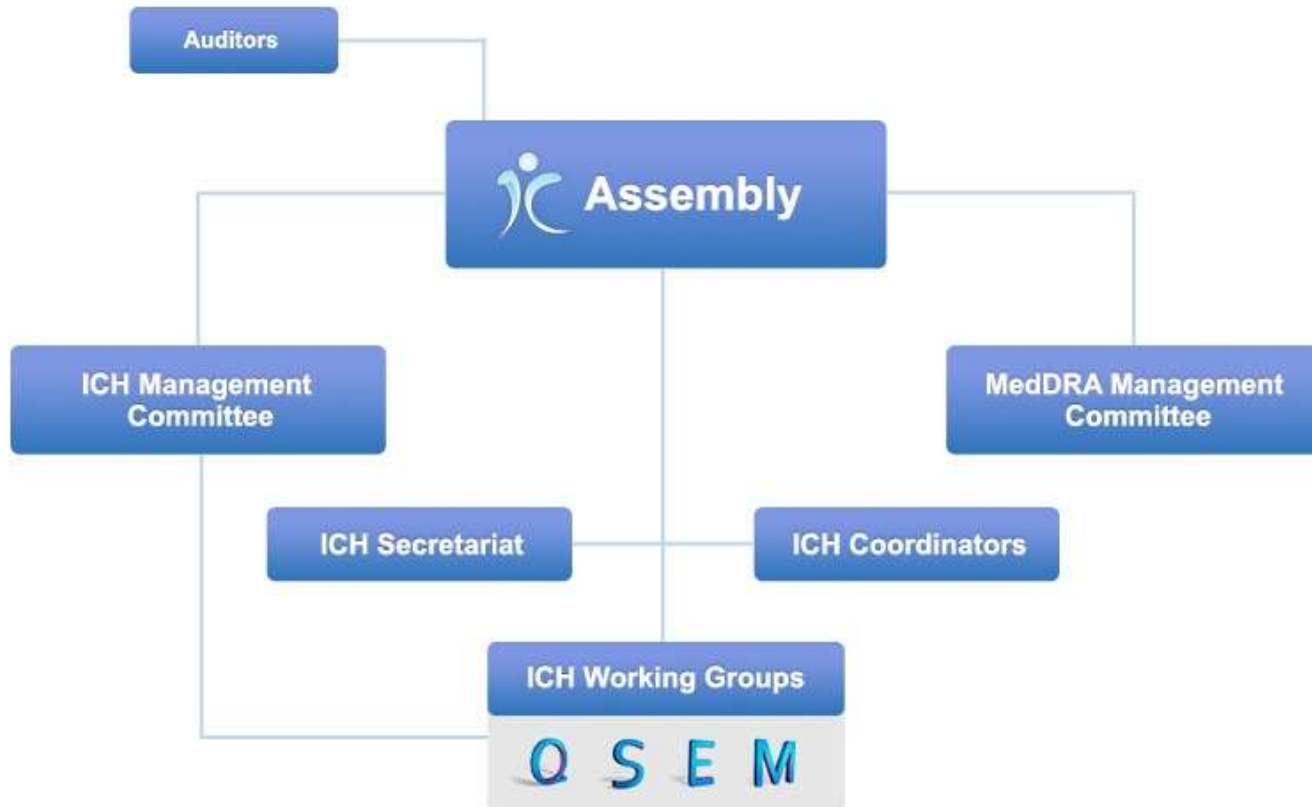
## Assembly

- The overarching body, comprised of all ICH Members and Observers, that makes decisions regarding the Articles of Association and its rules and procedures, admission of new members, election of Management Committee representatives, adoption of ICH guidelines, etc.

## Management Committee

- Oversees operational aspects on behalf of all members of the Association, including administrative and financial matters and oversight of WG operations.
- Financial responsibilities include preparation of the ICH budget and, during a transition period, ensure funding of ICH operations.
- Includes Permanent and Standing Members, and Elected Members

# ICH Governance



# Eligibility Criteria: Regulators

## Recognized Authority

- Has a legal personality
- Responsible for regulation of pharmaceuticals for human use

## Engagement in the ICH Process

- Past regular attendance in at least 3 ICH meetings during the previous 2 consecutive years
- Past appointment of experts in at least 2 working groups

## Application of ICH Guidelines

At minimum, implemented the following guidelines:

- Q1: Stability Testing
- Q7: Good Manufacturing Practices for Active Pharmaceutical Ingredients
- E6: Good Clinical Practice



# Eligibility Criteria: Industry

## Recognized Authority

- Has a legal personality
- Represents members from several countries in at least three continents
- Organization or its members regulated by ICH guidelines

## Engagement in the ICH Process

- Has participated in ICH as an observer
- Past regular attendance in ICH meetings
- Past appointment of experts in 2+ working groups

# Summary



## ICH:

- Draws on expertise of regulators and industry to achieve international harmonization of technical guidelines to enhance public health
- Uses a transparent, science- and consensus-based process for guideline development including opportunities for public comment
- Includes commitment of regulators to implement guidelines
- Has expanded global participation and engagement through recent reforms

# ICH Topics: Launching Soon



## Guidelines:

- Structured Product Quality
- Q1: Stability Testing – Targeted revisions and additional issues in the ICH Q1 series /Q5C
- Q6: New Quality Topic on Specifications
- General Considerations for Model Informed Drug Development