致力法規科學，守護生命健康
Regulatory Science,Service for Life

我國參加國際醫藥法規協合組織（ICH）工作組的回顧與前瞻

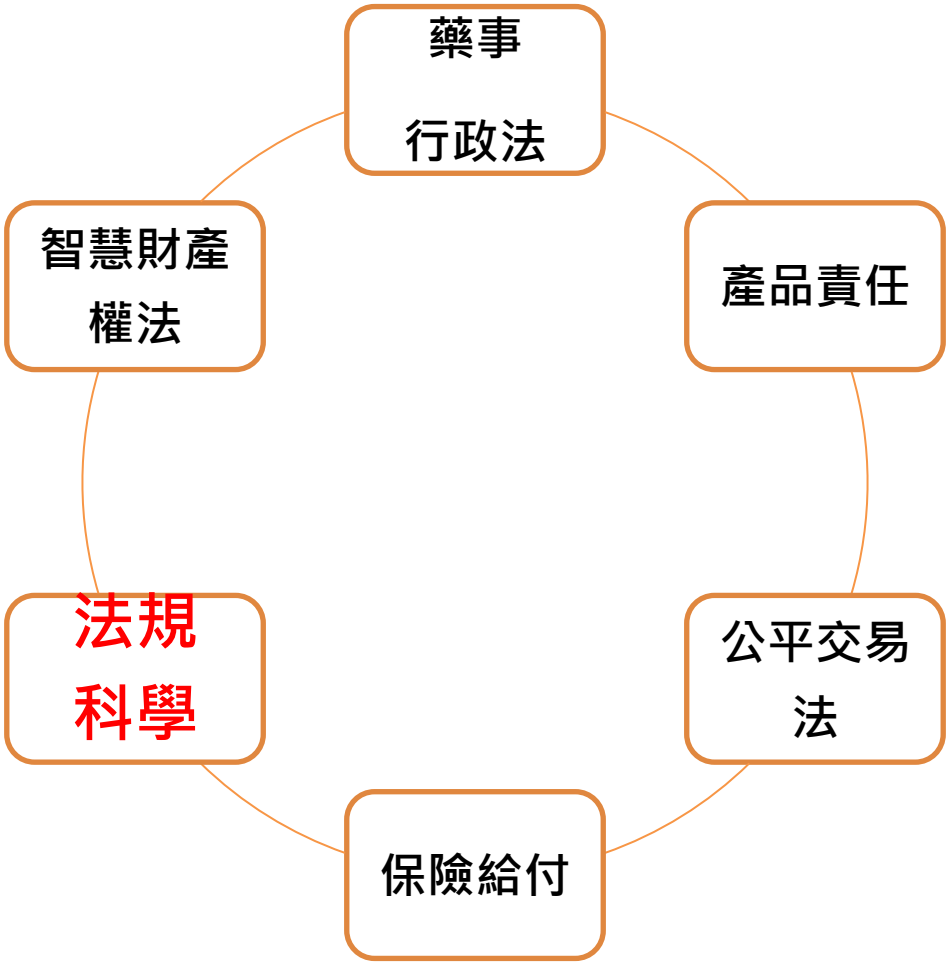
醫藥品查驗中心主任秘書
林首愈律師

財團法人醫藥品查驗中心
Center for Drug Evaluation,Taiwan

大綱

- 藥品技術性法規-法規科學
- 介紹國際醫藥法規協合組織(ICH)
- 我國參加ICH工作組經驗分享
- ICH 組織改造與未來展望

藥品相關法規



藥品法規科學

- **USFDA定義**

Regulatory Science is the science of developing new tools, standards, and approaches to assess the safety, efficacy, quality, and performance of all FDA-regulated products.

藥品法規科學

- 藥品上市前查驗登記及上市後市場管理的技術性法規
- 內容主要關乎藥品的
  - 安全性
  - 有效性
  - 品質

我國藥品上市主管機關

- 衛生福利部食品藥物管理署(TFDA)為藥政主管機關，並核發上市許可證
- 醫藥品查驗中心(CDE)受委託執行藥品與醫療器材臨床試驗與藥物上市申請案之技術性資料評估
- 「我國」參與ICH 相關活動,包括
  - TFDA
  - CDE

ICH成立

- International Conference on Harmonisation of technical requirements for the registration of pharmaceuticals for human use
- 1990成立
- 6個發起成員
  - six Regional Harmonisation Initiatives (RHIs)
  - 美國,歐洲與日本三大製藥經濟體的法規單位與製藥協會

法規協合效益

- Promote Public Health
- Prevent unnecessary duplication of clinical trials
- Minimize the use of animal testing without compromising safety and effectiveness
- streamlining the regulatory assessment process for new drug applications
- reducing the development times and resources for drug development

ICH組織

- **Steering Committee(SC)**
  - USFDA/EMA/MHLW/PhRMA/EFPIA/JPMA/ Health Canada/Swissmedic
  - WHO(Observer)
  - IFPMA(non-voting)

- MedDRA Management Board
  - USFDA/EMA/MHLW/PhRMA/EFPIA/JPMA/ Health Canada/MHRA
  - WHO (Observer)
  - IFPMA(non-voting)

ICH組織(續)

- Globe Cooperation Group(GCG)
  - six Regional Harmonisation Initiatives (RHIs)
  - APEC、ASEAN、EAC、GCC、PANDRH及SADC
  - **eight Drug Regulatory Authorities/Department of Health (DRAs/DoH) : Chinese Taipei**、Australia、Korea、Singapore、China、Brasil 、Russia, India

- Working groups
  - Expert Working Group(EWG)
  - Implementation Working Group
  - Informal Working Group
  - Discussion Group

ICH會議

- 每半年（6月及11月）召開為期一週會議
- 美國、歐洲及日本三地輪流召開

ICH Guidelines

- **60 Guidelines** on technical requirements on:
  - ✓ **Q**uality -21Guidelines
  - ✓ **S**afety - 14Guidelines
  - ✓ **E**fficacy -20Guidelines
  - ✓ **M**ultidisciplinary - 5Guidelines
- Common Technical Document **(CTD & eCTD**)
- Medical dictionary for adverse event reporting and coding of clinical trial data (**MedDRA**)
- Consideration documents

Concept Paper

- The procedure is initiated with the endorsement by the Steering Committee of a **Concept Pape**r and Business Plan.
- An Expert Working Group with membership as specified by the Concept Paper is subsequently established.

Guideline5進程

Step 1	• Consensus Building – Technical document
Step 2	• 2a) Confirmation consensus on Technical Document • 2b) Adoption of draft Guideline by Regulatory Parties
Step3	• Regulatory consultation and discussion
Step4	• Adoption of the ICH harmonized tripartite Guideline
Step5	• Implementation

ICH E5

E5 Ethnic Factors

Code	Document Title	Previously coded
E5(R1)	**Ethnic Factors in the Acceptability of Foreign Clinical Data**	

Description : The tripartite harmonised ICH Guideline was finalised under *Step 4* in February 1998. This document addresses the intrinsic characteristics of the drug recipient and extrinsic characteristics associated with environment and culture that could affect the results of clinical studies carried out in regions and describes the concept of the "bridging study" that a new region may request to determine whether data from another region are applicable to its population.

Finalised Guideline: February 1998

E5(R1)

Implementation : *Step 5*

EU : Adopted by CPMP, March 1998, issued as CPMP/ICH/289/95

MHLW : Adopted August 1998, PMSB/ELD Notification No. 672, PMSB Notification No. 739

FDA : Published in the Federal Register, 10 June 1998, Vol. 63, No. 111, p. 31790

E5 Q&As (R1) Questions & Answers: Ethnic Factors in the Acceptability of Foreign Clinical Data

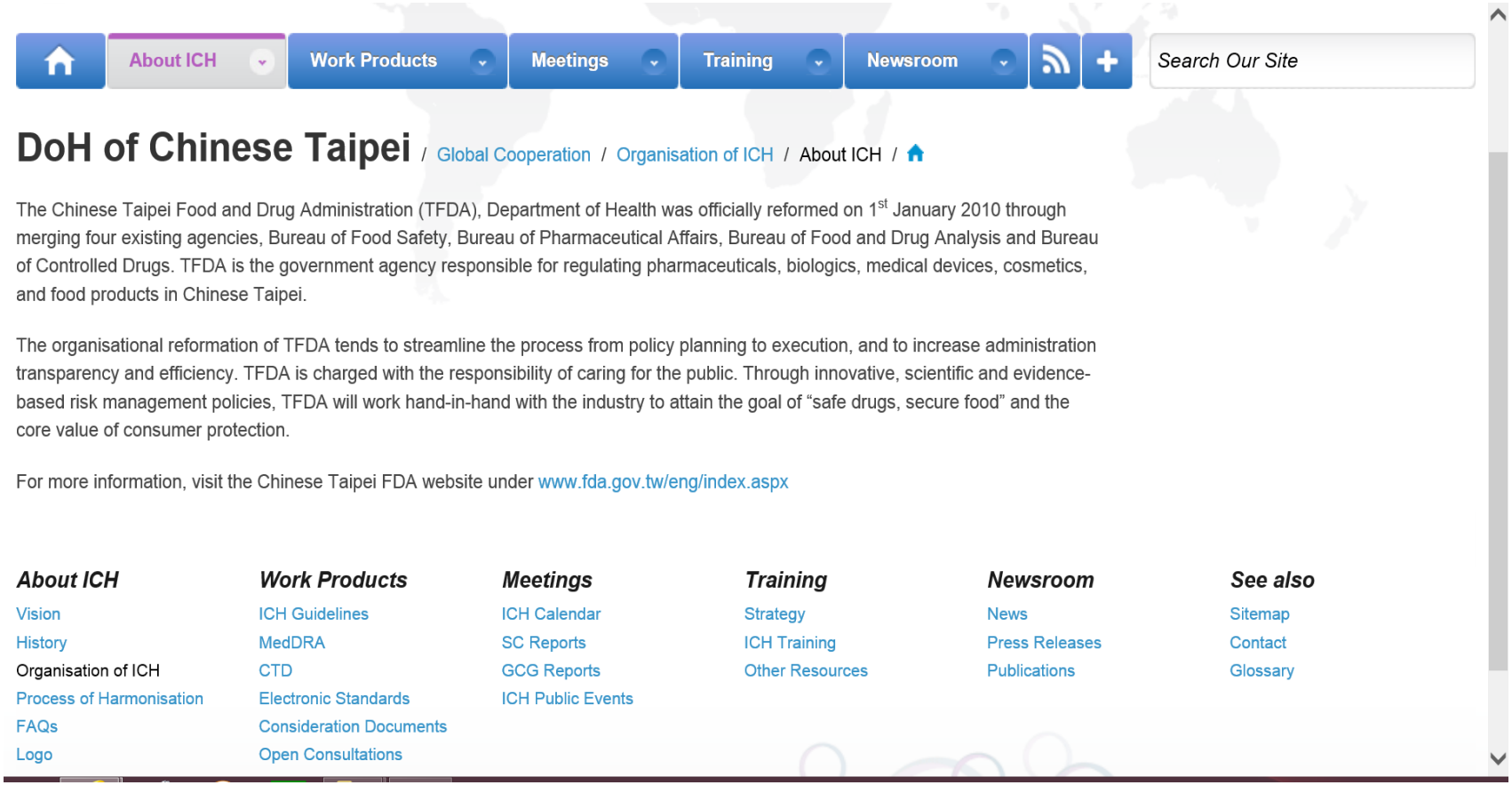
ICH Guidelines 效力

- ICH Guidelines代表SC成員的共識，各國法規單位需透過國內/區域法律程序加以落實
- ICH Guidelines補充各國/區域法規之不足
- state-of-the-art guidance
  - 藥政主管機關起技術法規參考
  - 藥廠研發藥品參考
- 影響力涵蓋ICH與非ICH國家/地區

ICH成功因素

- Effective management and administration
- Joint participation of regulators and industry
- Science based and consensus driven
- Frequent, concurrent meetings of SC and Working Groups that are outcomes based
- Commitment of all parties to implement harmonised Guidelines
- Well-defined process and procedures

我國為GCC成員


About ICH
Work Products
Meetings
Training
Newsroom
Search Our Site
DoH of Chinese Taipei / Global Cooperation / Organisation of ICH / About ICH /
The Chinese Taipei Food and Drug Administration (TFDA), Department of Health was officially reformed on 1st January 2010 through merging four existing agencies, Bureau of Food Safety, Bureau of Pharmaceutical Affairs, Bureau of Food and Drug Analysis and Bureau of Controlled Drugs. TFDA is the government agency responsible for regulating pharmaceuticals, biologics, medical devices, cosmetics, and food products in Chinese Taipei.
The organisational reformation of TFDA tends to streamline the process from policy planning to execution, and to increase administration transparency and efficiency. TFDA is charged with the responsibility of caring for the public. Through innovative, scientific and evidence-based risk management policies, TFDA will work hand-in-hand with the industry to attain the goal of "safe drugs, secure food" and the core value of consumer protection.
For more information, visit the Chinese Taipei FDA website under www.fda.gov.tw/eng/index.aspx
About ICH
Vision
History
Organisation of ICH
Process of Harmonisation
FAQs
Logo
Work Products
ICH Guidelines
MedDRA
CTD
Electronic Standards
Consideration Documents
Open Consultations
Meetings
ICH Calendar
SC Reports
GCG Reports
ICH Public Events
Training
Strategy
ICH Training
Other Resources
Newsroom
News
Press Releases
Publications
See also
Sitemap
Contact
Glossary

參與ICH工作組紀實

- 2003 ICH-GCG：
  - 衛生署藥政處及CDE代表以APEC代表身份出席
- 2008 ICH-GCG：
  - 以Chinese Taipei名稱衛生署受邀擔任ICH-GCG成員
- 2010 EWG
  - DOH/DRA指派CDE技術專家參加EWG
- 2015 EWG
  - CDE參加12個EWG

CDE積極參與EWG

名稱	主 題
S3A	Q&As on Note for Guidance on Toxicokinetics: The Assessment of Systemic Exposure
S5	Detection of Toxicity to Reproduction for Medicinal Products & Toxicity to Male Fertility
S9	Nonclinical Evaluation for Anticancer Pharmaceuticals
Q3C	Impurities: Guideline for Residual Solvents
Q3D	Elemental Impurities
Q12	Technical and Regulatory Considerations for Pharmaceutical Product Lifecycle Management
E6	Addendum for ICH E6: Guideline for Good Clinical Practice
E9	Addendum to Statistical Principles for Clinical Trials on Choosing Appropriate Estimands and Defining Sensitivity Analyses in Clinical Trials
E14	Revision of ICH E14 Q&As (R2)
E17	General principle on planning/designing Multi-Regional Clinical Trials
M4E	Enhancing the Format and Structure of Benefit-Risk Information
M7	Assessment and Control of DNA Reactive (Mutagenic)Impurities in Pharmaceuticals to Limit Potential Carcinogenic Risk

ICH大會上說明參採狀況

May 14, 2015
ICH SC GC, Fukuoka

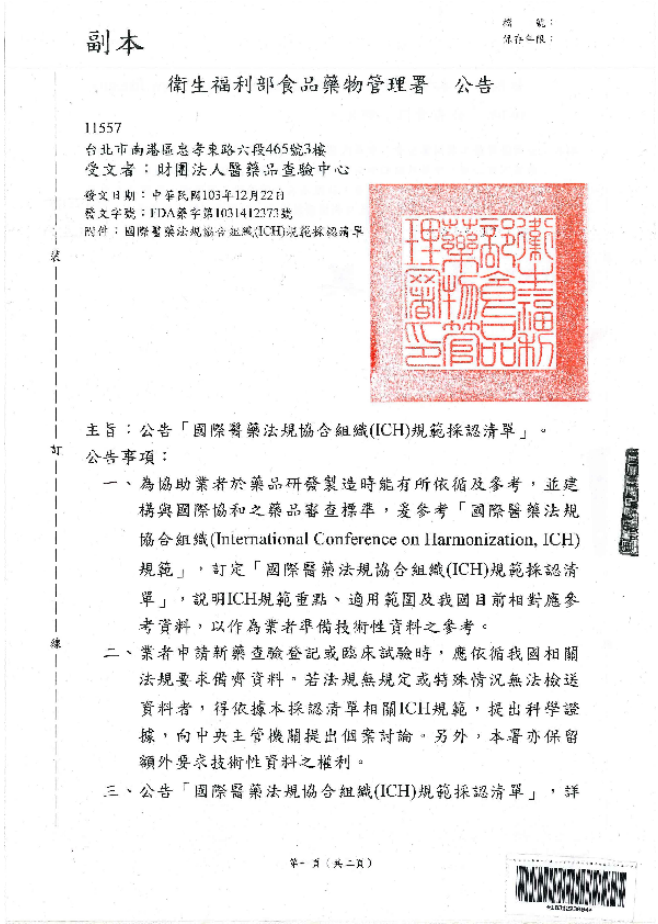
Implementation Status of ICH Guidelines in Chinese Taipei

Chinese Taipei adopts and recognizes all ICH Guidelines. Although Chinese Taipei FDA (TFDA) didn't translate all ICH Guidelines, we issued official announcements to the public, in which all ICH guidelines are adopted by TFDA in review of medicinal products in Chinese Taipei. The principles of ICH Guidelines are applied and accepted in the NDA/BLA, ANDA, API, BSE, IND review process, GCP and GMP inspection.

Chinese Taipei has formally announced review guidelines according to the ICH Guidelines to facilitate implementation. The above guidelines are as follows:

- ICH E5: Ethnic Factors in the Acceptability of Foreign Clinical Data
- ICH E6, E2A: Guideline for Good Clinical Practice in Conducting Clinical trials

TFDA公告ICH規範採認清單



副本

衛生福利部食品藥物管理署　公告

11557
台北市南港區忠孝東路六段465號3樓
受文者：財團法人醫藥品查驗中心
發文日期：中華民國103年12月22日
發文字號：TFDA藥字第1031412373號
附件：國際醫藥法規協合組織(ICH)規範採認清單

主旨：公告「國際醫藥法規協合組織(ICH)規範採認清單」。
公告事項：
一、為協助業者於藥品研發製造時能有所依循及參考，並建構與國際協和之藥品審查標準，爰參考「國際醫藥法規協合組織(International Conference on Harmonization, ICH)規範」，訂定「國際醫藥法規協合組織(ICH)規範採認清單」，說明ICH規範重點、適用範圍及我國目前相對應參考資料，以作為業者準備技術性資料之參考。
二、業者申請新藥查驗登記或臨床試驗時，應依循我國相關法規要求備齊資料。若法規無規定或特殊情況無法檢送資料者，得依據本採認清單相關ICH規範，提出科學證據，向中央主管機關提出個案討論。另外，本署亦保留額外要求技術性資料之權利。
三、公告「國際醫藥法規協合組織(ICH)規範採認清單」，詳

第 1 頁（共二頁）

TFDA103年12月22日藥字第1031412373公告

為協助業者於藥品研發製造時能有所依循及參考，並建構與國際協和之藥品審查標準，爰參考ICH規範，訂定「國際醫藥法規協合組織(ICH)規範採認清單」，說明ICH規範重點，適用範圍及我國目前相對應參考資料，以作為業者準備技術性資料之參考。

國際醫藥法規協合組織(ICH)規範採認清單

2014年12月22日

一、為協助業者於藥品研發製造時能有所依循及參考，並建構與國際協和之藥品審查標準，爰參考「國際醫藥法規協合組織(International Conference on Harmonization, ICH)規範」，訂定「國際醫藥法規協合組織(ICH)規範採認清單」，說明ICH規範重點、適用範圍及我國目前相對應參考資料，以作為業者準備技術性資料之參考。

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編號	採認ICH規範			說明	適用範圍	發佈年份	我國目前相對應參考資料
Quality							
1	Q1 Stability	Q1A(R2)	Stability Testing of New Drug Substances and Products	新成分原料藥及製劑之安定性試驗	新成分原料藥及製劑	2003	「藥品安定性試驗基準」 (衛署藥字第87041838號) (衛署藥字第0940310335號)
2		Q1B	Stability Testing: Photostability Testing of New Drug Substances and Products	新成分原料藥及製劑之光安定性試驗	新成分原料藥及製劑	1996	
3		Q1C	Stability Testing for New Dosage Forms	新劑型之安定性試驗(補充Q1A)	新劑型	1996	
4		Q1D	Bracketing and Matrixing Designs for Stability Testing of New Drug Substances and Products	籃狀及矩陣試驗設計執行新成分原料藥及製劑安定性試驗	新成分原料藥及製劑	2002	
5		Q1E	Evaluation of Stability Data	安定性試驗評估	新成分及其他藥品查驗登記安定性試驗結果評估	2003	
6	Q2 Analytical Validation	Q2(R1)	Validation of Analytical Procedures: Text and Methodology	分析確效作業方法	原料藥及製劑分析確效	2005	「分析確效作業指導手冊」 (行政院衛生署中華民國89年6月)
7	Q3 Impurities	Q3A(R2)	Impurities in New Drug Substances	新藥原料藥之不純物	新藥原料藥	2006	–
8		Q3B(R2)	Impurities in New Drug Products	新藥製劑之不純物	新藥製劑	2006	–
9		Q3C(R5)	Impurities: Residual Solvents	不純物:殘留溶劑	原料藥、賦型劑及製劑	2011	–
10		Q3D	Elemental Impurities (draft)	金屬或少量元素之不純物	新藥製劑	2013	–
11	Q4 Pharmacopoeias	Q4	Pharmacopoeias	藥典	–	–	「中華藥典」
12		Q4A	Pharmacopoeial Harmonization	藥典協和			
13		Q4B	Evaluation and Recommendation of Pharmacopoeial Texts for Use in the International Conference on Harmonisation Regions	ICH Q4B Expert Working Group(EWG)制定藥典專章之過程及規定			
14		Q4B ANNEX 1(R1)	Evaluation and Recommendation of Residue on Ignition/Sulphated Ash General Chapter	熾灼殘渣與殘留灰分			
15		Q4B ANNEX 2(R1)	Evaluation and Recommendation of Test for Extractable Volume of Parenteral Preparations General Chapter	注射劑可抽取容量試驗			

採認清單的效力

- 業者申請新藥查驗登記或臨床試驗時，應依循我國相關法規要求備齊資料。若法規無規定或特殊情況無法檢送資料者，得依據本採認清單相關ICH規範，提出科學證據，向中央主管機關提出個案討論。另外，本署亦保留額外要求技術性資料之權利。

我國公告實施CTD格式

- 101年7月24日署授食字第1011405725號公告分階段實施以CTD格式送件
  - 新成分新藥查驗登記自101年11月1日起
  - 原料藥查驗登記自102年7月1日起
  - 新成分以外新藥查驗登記、學名藥查驗登記103年7月1日起

以E5銜接性試驗切入GCG的經驗

- ICH E5 – 銜接性試驗規範

- 2001我國成為推行銜接性試驗的指標國，成功引起ICH組織的重視，2003成為APEC區域代表

參與ICH工作組效益

有於我國藥品技術法規與國際接軌

- 掌握最新法規科學發展
- 吸引輸入新藥來台
- 有利我國產業進入國際市場
- 國際合作與溝通平台
- 引入教育訓練資源

ICH組織改造

- 2015於日本福岡召開的ICH會議，update on ICH reforms
- focus on
  - Governance and transparency
  - International outreach
  - Funding
  - Legal entity

感謝聆聽

財團法人醫藥品查驗中心
Center for Drug Evaluation,Taiwan