Mission of Taiwan FDA

Protect
Assure Quality, Safety, Efficacy of Medicinal Products

Promote
Facilitate the Development of Innovative Medicine and Speed Drug Accessibility
Life Cycle Management

Pre-Market Approval
- GLP
- GCP
- Registration
- Consultation
- IRB
- SUSAR Reporting
- Insurance

Post-Market Control
- Lot release
- Supplement (post-licensure changes, i.e., new indication or facility...)
- GDP
- GPvP
- GPP
- ADR & Product Defect Reporting
- Drug injury relief
- RMP
- PICS/GMP

GLP: Good Laboratory Practice
GCP: Good Clinical Practice
IRB: Institutional Review Board
SUSAR: Suspected Unexpected Serious Adverse Reactions
GMP: Good Manufacturing Practice
ADR: Adverse Drug/Device Reaction
GPvP: Good Pharmacovigilance Practices
GDP: Good Distribution Practice
GVP: Good Vigilance Practice
GPP: Good Pharmacy Practice
RMP: Risk management plan

ICH - Based Regulations

Medical Care Needs/Basic Research
Product Development
Pre-clinical Studies
IND Clinical Trial
NDA Market licensing
Production
Postmarket Surveillance
Advancing Regulations for innovation

- Cellular and Gene Therapy Products Act
- Medical Devices Act

Ongoing new strategies

Enhancing Accessibility of Medical products

Innovative Medical Products

Enhancing Review Efficiency

- Promote Good Registration Management in APEC
- Implement New Measures: i.e. Refuse to File, Rolling Review breakthrough, etc.

- Trace and Track system; GDP
- Simplify review for ICF approval
- Precision Medicine and LDT
<table>
<thead>
<tr>
<th><strong>Drugs</strong></th>
<th><strong>Medical Devices</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Guidance【2017】</strong></td>
<td><strong>Guidance【2018】</strong></td>
</tr>
<tr>
<td>• Summary for BA/BE guidance (revision)【2/15】</td>
<td>• Announced Guidance for the Management of Additive Manufactured (3D Printing) Medical Devices【1/12】</td>
</tr>
<tr>
<td>• Regulatory consultation guidance (revision)【3/3】</td>
<td>• Initiated the draft of regulatory guidance for Molecular Testing, Industrial Laboratory Testing, and Service Management of Precision Medicine (LDTs)【under development】</td>
</tr>
<tr>
<td><strong>Rules【2017-2018】</strong></td>
<td>• Initiated the draft of medical device cybersecurity guidance【under development】</td>
</tr>
<tr>
<td>• Announce drug items to be traced and reported【2017/4/20, 2018/2/8, up to 30 items】</td>
<td><strong>Rules【2018】</strong></td>
</tr>
<tr>
<td>• Breakthrough Therapy Designation【2/12】</td>
<td>• Announced the list of recognized standards for 2018 and the list of withdrawn or revised standards that were previously recognized【5/29】</td>
</tr>
<tr>
<td>• Announce the revision list of essential drugs【6/19】</td>
<td><strong>Law【2017】</strong></td>
</tr>
<tr>
<td>• Refuse-to-File check list【6/19】</td>
<td>• Submitted the draft for Medical Devices Act to Legislative Yuan【12/15】</td>
</tr>
<tr>
<td>• Notification on Regulations for Registration of Medicinal Products (revision)【8/6】</td>
<td><strong>Law【2018】</strong></td>
</tr>
<tr>
<td>• Regulations for inspection and Examination of Imported Medicaments (revision)【8/22】</td>
<td>• Announce Data exclusivity and patent linkage in PAA【1/31】</td>
</tr>
<tr>
<td>• The list of orphan drug items (revision)【9/7】</td>
<td><strong>Law【2018】</strong></td>
</tr>
<tr>
<td>• Regulations for Patent Linkage of Drugs【Draft 9/11】</td>
<td><strong>Law【2018】</strong></td>
</tr>
<tr>
<td><strong>Law【2018】</strong></td>
<td>• Announced Data exclusivity and patent linkage in PAA【1/31】</td>
</tr>
</tbody>
</table>
Establishing Medical Devices Act

2014
Set statutory framework

2015
Complete initial draft

2016
Announce revised draft and communicate with the Legislative Yuan and industry

2017-2018
Promote legislative process

Future
Establish the Medical Devices Act to be internationally harmonized and meet domestic needs
Regulation of Cell Therapy Products in Taiwan

**Pre-marketing**

- **Product Development**
  - Consultation 2011.08.02

- **IND Clinical trials**
  - Guidance on Donor Eligibility Determination 2015.10.02
  - Guidance on Investigational Cell Therapy Products 2014.09.17

- **NDA Market licensing**
  - Guidance on Cell Therapy Products Application 2015.07.13
  - Guidance on Good Tissue Practice (GTP) 2002.12.13

**Post-marketing**

- Marketing
- Production

- **Regenerative Medicinal Products Derivatives Act (draft)** 2017.7.26
Regulatory Framework of Regenerative Medicine

**Regenerative Medical Practice**
- This category is initiated by medical institutions for the customized therapy regulated under the Medical Care Act.
- The regulatory authority is *Department of Medical Affairs*, MOHW.

**Regenerative Medicinal Products**
- This category is initiated by industries for the treatment of diseases regulated under the Pharmaceutical Affairs Act.
- The regulatory authority is *Division of Medicinal Products*, TFDA.

**Combination Products (medical device)**
- If devices are used in combination with cells, it can be regulated as medical devices by the mode of action.
- The regulatory authority is *Division of Medical Device and Cosmetics*, TFDA.

- **Cell Therapy**
- **Gene Therapy**
- **Tissue Engineering**
Regenerative Medicinal Products Derivatives Act (draft)

Content
16 Articles

Regenerative Medicinal Products Derivatives Act (draft)

Definition
Donor Eligibility
Registration
Inform Consent
Conditional Approval
Pharmacovigilance
Manufacturing
Trace & Track
Distribution
Penalty
Review Process for Clinical Trial (IND) Applications

A standard review process: 30 calendar days

Aug 10th 2017
- Streamline first-in-human IND Review Process
- Refine IND Amendment Management based on degree of changes

Hospital, Sponsor, CRO

TFDA

Integrated Medicinal Products Review Office (iMPRO)

Administrative

Technical Section

Pharm

Assessment Report

Consult with AC experts if needed

Hospital, Sponsor, CRO

Advisory Committee

Ethnic/Ethical concern, Cell/Gene Therapy, etc.
Enhance IND Review Efficacy-Fast Tract Review for Pharmaceutical Product

Review Tracks for IND

- Standard Review
- Fast Track

Applicable for:
1. IND with the Same US FDA-Approved IND Number (July, 2004)
2. Multinational multicenter trials simultaneously conducted in one of the 10 medically advanced countries; Taiwan’s medical center hospital also involved (Aug, 2010)

Not applicable: first-in-human
Enhance IND Review Efficacy - Expedited Review for Cell/Gene Therapy

Review Tracks for IND

Standard Review
150-day

Expedited Review
30-day

Reduced review time of 4/5

Applicable for (Aug, 2017):
1. MRCT conducted in one of the medically advanced countries & non-FIH study
2. Same lab production for investigator-initiated trial but not for pivotal study
Strategies to encourage Multi-Regional Clinical Trials (MRCT) and Early Phase Trials in Taiwan

- Get sufficient Asian/Taiwanese Data
- ★ Earlier access to innovative therapies
- Accelerate IND review efficiency
- Strengthen consultation system
- Relaxation of CPP requirement for NDA
- Consolidate regulatory and CT environment
- 10% drug price addition with local data
Expedited Program of NDA

NDA review track

Regular
- Standard Review (360 days)
- Abbreviated Review (180 days)

Unmet medical need
- AA applicable
- Priority Review (240 days)
- Priority + Abbreviated

*Abbreviated Review: NCE + US FDA, EMA, MHLW approved (2 out of 3)
*AA: Accelerated approval (AA): Surrogate endpoint CT accepted
Enhancement of Review Efficiency

- Consultation and Rolling Review (2016)
- Breaking Through Destination (2018.2.12)

Review process and Timeline (2016)
Review time for non-NCE NDA (2016)
Refuse-to-File (2016), Check list (2018.6.19)
Pre-NDA meeting (2016)
Points to consider for all types of NDAs (2017)
On-line submission platform (2017)

Quality, Efficiency, Consistency, Transparency, Clarity, Predictability
Points to Consider for NDAs

- NCE/Biologics
- New indication
- New route of administration
- New dosage forms
E platform for Review & Submission

- Systemic Database
- Quick Searching
- Paperless
- Review Efficiency

License Extension (pilot)

Post-marketing change; Registration for NDA, API (pilot)

Implementation
**Track-and-Trace System**

**LAW**
1. Pharmaceutical Affairs Act article 6-1
2. Regulations Governing the Trace and Track System for Medicinal Products

**Announce drug items to be tracked and traced**
1. First three priority categories, Plasma-derived medicinal products, Vaccine and Botulinum toxin【2017.7.1】
2. Additional 20 items 【2018.1.1】
3. Additional 30 items 【2018.7.1】

**Expected benefits**
1. To avoid counterfeit medicine entering supply chain under co-operation with GDP.
2. To commence drug recalls in a speedy manner when adverse drug events happen.

**E-reporting system** (upload drug information, e.g. name, lot, shelf life)

- Manufacturer
- Supplier
- Dealer
- Hospital, clinic and pharmacies
Collaboration Between TFDA and Malaysia NPRA

Training on Regulatory Control on Phytomedicine in Taiwan

Bilateral Meeting between TFDA and NPRA in Malaysia
Collaboration Between TFDA and Malaysia NPRA

- Holding professional visits and activities as workshops/conferences
- Technical cooperation
- Holding periodical working meetings
- Information exchange
- Experience sharing on implementation of policies or regulations
TFDA has officially became one of the ICH pharmaceutical Regulatory Members at ICH assembly in June, 2018

International Council for Harmonization (ICH) guidelines has been recognized as the review standards globally

Taiwan’s pharmaceutical regulations in alignment with international standards.

Not only boost the developments of Taiwan’s pharmaceutical industries, but promote the well-beings of people.

TFDA would continue to actively participate in the ICH related events to continually to construct a regulatory environment that complies with the industries to fully implement about the guidelines.
Taiwan-ASEAN Drug Regulatory Symposium

2018 Taiwan-ASEAN Drug Regulatory Symposium
Regulation on Biologics, Biosimilars and Vaccines
2018/9/5 @ 台大集思会议中心 国际会议厅

Biologics, Vaccine, Biosimilar

Thailand
Malaysia
Philippine
Vietnam
Myanmar
2018 APEC GRM CoE Workshop

Target Audience:
(1) Senior regulators with at least 3 years of hands-on experience in the management of regulatory reviews
(2) Industry managers with at least 3 years of hands-on experience in the management of regulatory submissions

Program Overview:
(1) On-line and self-paced learning to develop knowledge base in advance of in-person training
(2) In person training: 3 days with plenary sessions for all attendees and parallel sessions for regulators and industry based professionals. In person training is designed with lectures, group discussions and applied case studies

Travel & Accommodation:
Funding for travel eligible economies may be available for regulators.

CoE Hosting Institutions:
- Taiwan FDA
- RAPS Taiwan Chapter

Contact Information:
- RAPS Taiwan Chapter Secretariat
  Email: GRMCoE@gmail.com

Date: September 26 to September 28, 2018
City, Economy: Taipei, Chinese Taipei
Collaboration with Japan
Progress for the Pharmaceutical Working Group

- **New Drug**
  - Review points sharing/comparison
  - Short-term personnel training
  - Review cooperation

- **GBO (Generic/BE/OTC)**
  - New Drug-GBO WG Meeting of Taiwan and Japan: Regulatory update for New drug application and BE studies 【2018.5.8】

- **Information sharing**
  - Information Sharing model established
  - Direct contact of post-marketing surveillance information

---

**Avoiding duplicated review / inspection**

- Confidential agreement (CA)
- Case sharing & personnel exchange
- Joint-review
Progress for the QMS Working Group of Medical Devices

**2018**
- Monitored audit for SGS Japan
- MoC will be signed in November
- Start of Phase III after signing of MoC

**2017**
- EoL was modified to MoC format
- MoC was confirmed by relevant authorities

**2016**
- Start of Phase II for QMS Working Plan (Road Map), and monitored audit for SGS Japan, PMDA, TUV Rheinland and BSI Japan
- Revising of QMS Working Plan (Road Map) and confirmation of EoL

**2015**
- 3rd Joint Conference of Japan and Taiwan on medical product regulation and QMS Working Plan was proposed
- Start of Phase I for QMS Working Plan (Road Map)

**2014**
- Establishment of QMS WG
- 2nd Joint Conference of Japan and Taiwan on medical product regulation
Collaboration with Japan
Progress of Product Registration Working Group for Medical Devices

Work Items & Outcome in 2018

- Taiwan and Japan have collaborated in preparing two separate Q&As for each other as proposed by the industries in 2017. The Q&As will be published for the benefit of stakeholders.

- Sharing challenges faced by both sides and exchanging review experience on cutting-edge technology, such as 3D printing of medical devices, will improve reviewer capabilities.
Future Prospects

To Enhance International, Regional and Cross-strait Regulatory Collaboration

To Establish Training Programs and Scientific Workshop
~ GTP, GMP, and Specificity of cell production process, animal model, clinical trial design

To Improve Consultation Mechanism

To accomplish legislation of the Act
~ To establish category and define the regenerative medicine, cell therapy product, gene therapy product, tissue engineering product

To continue establishing specific guidance
~ Risk management and long-term traceability system

Better Products Better Life

Regulatory support and accelerate development of cell therapy products
~ Incentives for small and medium sized enterprises
Thank You