PMDA Perspective: Recent Trends in the Regulation of Biopharmaceuticals

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Today’s CONTENTS

• Introduction
• New Regulatory Pathways
• Biosimilars
• Product life cycle and CMC
• Facilitate Development & International Cooperation
Introduction of PMDA

Pharmaceuticals and Medical Devices Agency (PMDA)

- an Incorporated Administrative Agency (IAA)

PMDA’s Safety Triangle

- Review: Reduction in risk
- Safety: Continuous risk mitigation efforts
- Relief: Relief measures for health damage caused by risk factors

Japanese citizens

Tokyo, JAPAN
Japan’s Performance on NDA Review

Reference: The impact of the changing regulatory environment on the approval of new medicines across six major authorities 2004-2013. CIRS (Centre for Innovation in Regulatory Science) R&D 55

http://cirsci.org/node/73
NEW REGULATORY PATHWAYS
Expedite review to accelerate patient access to innovative therapies
# Early Access schemes of ICH 3 parties

<table>
<thead>
<tr>
<th>US</th>
<th>EU</th>
<th>JAPAN</th>
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<tbody>
<tr>
<td>Priority Review</td>
<td>Priority review</td>
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<td>Accelerated approval for</td>
<td>Conditional MA</td>
<td>Approval for Oncology drug, Orphan drug</td>
</tr>
<tr>
<td>serious or life-threatening</td>
<td>MA under exceptional</td>
<td><strong>Conditional &amp; Time-limited approval for</strong></td>
</tr>
<tr>
<td>illnesses</td>
<td>circumstances</td>
<td><strong>regenerative medicine</strong></td>
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<td>Break through therapy</td>
<td>Pilot Project on Adaptive</td>
<td>Forerunner Review Assignment</td>
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<tr>
<td>&amp; Fast Track designation</td>
<td>Licensing</td>
<td></td>
</tr>
</tbody>
</table>

Various agencies have various approaches to accommodate patient access.
MHLW drew up a new strategy to lead the world in the practical application of innovative medical products in 2014.

Forerunner Review Assignment System (pilot project from May 2015)

**Forerunner Review Assignment System** is a system to put innovative medicines/medical devices/regenerative medicines originated from Japan into practice.

**Designation Criteria**

Medical products for diseases in dire need of innovative therapy and satisfies the following two conditions:

1. **Having developed firstly in Japan and anticipating an application for approvals** (desirable to have PMDA consultation from the beginning of R&D)
2. **Prominent effectiveness** (i.e. radical improvement compared to existing therapy), can be expected based on the data of mechanism of action from non-clinical study and early phase of clinical trials (phase I to II)
General Timeframe of Forerunner Review Assignment

【Standard】
Pharmaceutical affairs consultation for R&D strategy
Non clinical studies, Clinical studies
Clinical trials I/II
Consultation on Clinical trials
phase III study
Review
Reimbursement
Post Marketing

More than 50 drug applications for the assignment have come to MHLW/PMDA

【Forerunner】
Pharmaceutical affairs consultation for R&D strategy
Forerunner review assignment
Non clinical studies, Clinical studies
Clinical trials I/II
Consultation on Clinical trials
phase III study
Prior review (rolling submission)
Review
Reimbursement
Post Marketing

① Priority Consultations
② Prior-review
③ Priority Review
④ Review Partner System
⑤ Strengthening Post-Marketing Safety

※ In some cases, may accept phase III data during review

Practical application of Innovative medical products
The pilot project started in May 2015 for pharmaceuticals.

Nearly 60 applications were pre-screened by July.

The formal applications of 51 products/indications were filed by MHLW/PMDA in September.

Finally, 6 products were assigned for “Sakigake” on 27 October 2015.

The scheme for medical devices and regenerative products follow in the late 2015.

Based on this pilot, we will consider expansion of full “Sakigake” in the future.
### Assignment on 27 October 2015

<table>
<thead>
<tr>
<th>Product name</th>
<th>Expected indication</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>sirolimus</td>
<td>Vascular fibroma associated with <strong>tuberous sclerosis</strong></td>
<td>Novel Pharma (JP)</td>
</tr>
<tr>
<td>NS-065 / NCNP-01</td>
<td><strong>Duchenne muscular dystrophy (DMD)</strong></td>
<td>Nihon-Shinyaku (JP)</td>
</tr>
<tr>
<td>S-033188</td>
<td>Type A or B <strong>Influenza</strong></td>
<td>Shionogi Pharmaceuticals (JP)</td>
</tr>
<tr>
<td>BCX7353</td>
<td>Management of angioedema attacks of <strong>hereditary angioedema (HAE)</strong> patients</td>
<td>Integrated Development Associates (JP)</td>
</tr>
<tr>
<td>ASP2215</td>
<td>First relapse or treatment-resistant <strong>FLT3 gene mutation-positive myeloid leukemia</strong></td>
<td>Astellas Pharmaceuticals (JP)</td>
</tr>
<tr>
<td>Pembrolizumab (recombinant)</td>
<td>Unresectable advanced or recurrent <strong>Gastric cancer</strong></td>
<td>MSD (US)</td>
</tr>
</tbody>
</table>
Two acts regulating regenerative medicine & cell therapy

**MHLW process**

All **medical technologies** using processed cells which safety and efficacy have not yet been established

**The Act on the Safety of Regenerative Medicine**

**PMDA process**

Production and marketing of regenerative and cellular therapeutic **products** by firms

**The Act on Pharmaceuticals and Medical Devices (PMD Act)**

* Two laws will be enacted in November 2014

Commercial IND and product approval system
Regenerative Medical Products in the PMD Act

Former Pharmaceutical Affairs Law (PAL)

- Definition and independent chapter for Regenerative Medical Products
- Introduction of conditional/time limited approval system

PMD Act (Revised PAL)

- Additions for Regenerative Medical Products

- Definition and independent chapter for Regenerative Medical Products
- Introduction of conditional/time limited approval system
How to expedite R&D and review for cellular and tissue based product

• Designed for unmet needs under the present treatment: **limited number of patients** available for CT
• Difficult to conduct **controlled study** to demonstrate clinical benefit
• **Heterogeneity** of Quality affected by source materials

Would it take long time for CTs and review if regulator pursues the conventional drug guidelines too much?
Expedited approval system under PMD Act

< Drawback of traditional PAL approval system >
Long-term data collection and evaluation in clinical trials, due to the characteristics of cellular/tissue-based products, such as non-uniform quality reflecting individual heterogeneity of autologous donor patients.

[Traditional approval process]

- Clinical study
- Phased clinical trials (confirmation of efficacy and safety)
- Marketing authorization

[New scheme for regenerative medical products]

- Clinical study
- Clinical trials (likely to predict efficacy, confirming safety)
- Conditional term-limited authorization
- Marketing (Further confirmation of efficacy and safety)
- Re-application within a period (max. 7 yrs.)
- Marketing authorization or Revocation
- Marketing continues

Post-marketing safety measures must be taken, including prior informed consent of risk to patients.
Two authorized products under PAL

Autologous Culture Epidermis **JACE**

- Indication: serious burns treatment (limited to the burns of more than 30% of the body surface area)

Marketing authorization for medical device on 29 October 2007 (submission: 6 October 2004)

Autologous Cultured Cartilage **JACC**

- Indication: Relief of symptoms of traumatic cartilage defects and osteochondritis dissecans (exclude osteoarthritis) for knee joints. (limited to a defect area of over 4cm2 with no alternative therapy.)

Marketing authorization for medical device on 27 July 2012 (submission: 24 August 2009)

Ref. Japan Tissue Engineering Co., Ltd. (J-TEC), HP
Two of the new product approvals under the new regulation (Update)

- In September and in October 2014, two new product applications for marketing authorization were filed by PMDA.
- They were approved on 18 September 2015.

1. Bone marrow mesenchymal stem cells (MSCs) for GVHD (normal approval)
2. Skeletal myoblast sheet for serious heart failure due to ischemic heart disease (conditional and time-limited authorization – 5 years, conducting post-marketing efficacy studies)

Note: Figures quoted from the company press release docs
Quality concept of hCTPs

Bio-pharmaceuticals

- Source materials, process variability
- In-process control
- Characterization
- Specification

hCTPs

- Source materials, process variability
- In-process control
- Characterization
- Specification

- Difficult to cover every aspect of quality by specification
- Limited information can be obtained from characterization and specification
- Much more rely on in-process control to control quality
The following evaluations are needed:

Considering product qualification:

- **Toxicity test/assay** (including impact on life-sustaining function)
- **Tumorigenicity**
- **Manufacturing process derived impurities**

They are subject to Clinical Trial Notification review.
• Efficacy evaluation
  • JR-031-301 study (Phase II/III)
    • Primary Endpoint & Results
      • Durable Complete Response (≥ 28 days)
      • Response rate 48.0% (12/25, 95%CI 27.8-68.7)
      • Response rate of the JR-031-301 study was better than 21.6% (11/51), durable complete response of the grade-matched subgroup from 280 study placebo arm
    • Previous reports
      • ATG: 20.3% (16/79)
      • MMF: 15.4% (2/13例)

>> Full Approval
HeartSheet™
(Skeletal Myoblast Sheet)

• Efficacy evaluation
  • M-51073-21 (single arm – 7 cases)
    • LVEF (RI, CT, Echo)
    • Comprehensive clinical evaluation
      • Improvement of clinical symptoms
    • Survival (External control comparison)
      • Skeletal Myoblast Sheet: All subjects survived

>> Conditional and time-limited approval

• Post-marketing study for 5 years
  • Concurrent external control comparison
    • Endpoint: Survival
    • Skeletal Myoblast Sheet: 60 subjects
    • Control: 120 subjects
Challenges of Accelerated Process in general

- **Clinical study in post-marketing**: RCT may be difficult for confirmation in some cases (single arm study with pre-agreed threshold or observational case / control study) in the postmarketing settings.
  - Monitoring, collection and use of real-world data, post-authorisation, as a complement to RCT data (like Adaptive pathway of EU).

- **Reimbursement**: Question on consistency with regulatory approval and on acceptance of clinical data for HTA payers.

- **CMC and quality assurance**: Limited qualification in early stage and quality control under GMP/GCTP (validation, scalability, comparability).
CMC Considerations for Accelerated Programs

- Residual Risk
- Control Strategy

Knowledge

Post-Approval

Product Lifecycle

Approval

Standard program (QbD approach)

CMC Considerations for Accelerated Programs

Pharmaceuticals and Medical Devices Agency
Quality System Requirement for regenerative medical technologies / products, considering the characters of these products; such as raw materials that cannot be sterilized

- Quality Risk Management
- Manufacturing Control (Sterility assurance, Prevention of Cross-contamination..)
- Quality control (Verification / validation, Quality review)
- Facility requirement

It is necessary to consider whether the risk is manageable,
- not only from the facility point of view,
- but from the effects of the manufacturing operation, such as the evaluation of performance.
Perspective on how quality/safety of cellular and tissue-based products should be ensured -

- Tumorigenicity
  → Summary of discussion on tumorigenicity of cellular and tissue-based products derived from induced pluripotent stem cells was issued. (8/20/2013)*

- Requirements for CPF (Cell Processing Facilities), and others
  - Summary of discussion on Manufacturing and quality of cellular products during the early development in cell processing facilities (14 August 2015)
Biosimilars in Japan
Regulatory History and Status of Biosimilars

- Application Category for biosimilars
- Guideline
- Nomenclature rules

Q&A Q&A

Revision of Nomenclature rules


- Somatropin BS [Sandoz]
- Epoetin alfa BS [JCR]
- Filgrastim BS [F], [MOCHIDA]
- Filgrastim BS [NK], [TEVA]
- Filgrastim BS [Sandoz]
- Infliximab BS [NK], [CTH]
- Insulin glargine BS [Lilly]
Regulations for Biosimilars in Japan

• Guideline for the Quality, Safety and Efficacy Assurance of Follow-on Biologics (FOBs)*
  (PFSB/ELD Notification No. 0304007 / March 4, 2009)

  http://www.pmda.go.jp/english/service/pdf/notifications/PFSB-ELD-0304007.pdf (GL in English)

  *: “Follow-on Biologics” in this guideline is a synonym for “Biosimilars”.

• Marketing Approval Application for FOBs
  (PFSB Notification 0304004 / March 4, 2009)

• Nonproprietary Name and Drug Name of FOBs
  (PFSB/ELD Notification No. 0214-1, Administrative Notice / February 14, 2013)

• Questions & Answers regarding Guideline

New supplement to the guideline will be published soon!
Data requirement of biosimilars in Japan

New biologics Application  
- CMC  
- Characterization, CQA, functional analysis  
- Pre-clinical study  
- Clinical study

Biosimilar Application  
- Original manufacturing  
- Biosimilarity / Comparability  
- + original testing  
- + Published information

Pharmaceuticals and Medical Devices Agency
Review Process of MAA for Biosimilars in Japan

1. Application
2. F2F meeting
3. Inquiry/Response
4. GMP audit
5. Review report
6. Approval
7. Minister of Health, Labour and Welfare
8. Report
9. Pharmaceutical Affairs and Food Sanitation Council
10. External experts
11. Expert discussion
<table>
<thead>
<tr>
<th>Drug name</th>
<th>Japanese Accepted Name (JAN)</th>
<th>Manufacturer</th>
<th>Reference product</th>
<th>Approved year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatropin BS S.C. Injection 5mg [SANDOZ] etc.*</td>
<td>Somatropin (genetical recombination)</td>
<td>SANDOZ</td>
<td>Genotropin (Somatropin) (Pfizer)</td>
<td>2009.5</td>
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<tr>
<td>Epoetin alfa BS Injection 750 syringe [JCR] etc.*</td>
<td>Epoetin Kappa (genetical recombination)</td>
<td>JCR Pharmaceuticals</td>
<td>Espo (Epoetin alfa) (Kyowa Hakko Kirin)</td>
<td>2010.1</td>
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<td>Filgrastim BS Injection 75µg syringe [F] / [MOCHIDA] etc.*</td>
<td>Filgrastim (genetical recombination) [Filgrastim Biosimilar 1]</td>
<td>Fuji Pharma / Mochida Pharmaceutical</td>
<td>Gran (Filgrastim) (Kyowa Hakko Kirin)</td>
<td>2012.11</td>
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<td>Filgrastim BS Injection 75µg syringe [NK] / [TEVA] etc.*</td>
<td>Filgrastim (genetical recombination) [Filgrastim Biosimilar 2]</td>
<td>NIPPON KAYAKU / Teva Pharma Japan</td>
<td>Gran (Filgrastim) (Kyowa Hakko Kirin)</td>
<td>2013.2</td>
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<tr>
<td>Filgrastim BS Injection 75µg syringe [SANDOZ] etc.*</td>
<td>Filgrastim (genetical recombination) [Filgrastim Biosimilar 3]</td>
<td>SANDOZ</td>
<td>Gran (Filgrastim) (Kyowa Hakko Kirin)</td>
<td>2014.3</td>
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<td>Infliximab BS I.V. infusion 100mg [NK] / [CTH]</td>
<td>Infliximab (genetical recombination) [Infliximab Biosimilar 1]</td>
<td>NIPPON KAYAKU / Celltrion</td>
<td>Remicade (Infliximab) (Mitsubishi Tanabe Pharma)</td>
<td>2014.7</td>
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<td>Insulin glargine BS Injection [Lilly] etc.*</td>
<td>Insulin glargine (genetical recombination) [Insulin glargine Biosimilar 1]</td>
<td>Eli Lilly Japan</td>
<td>Lantus (Insulin glargine) (Sanofi)</td>
<td>2014.12</td>
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</table>

*: etc. means different presentations.
Number of Consultation for Biosimilars

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>No. of consultations</th>
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<tr>
<td>2006</td>
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<td>2011</td>
<td>25</td>
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<td>2012</td>
<td>15</td>
</tr>
<tr>
<td>2013</td>
<td>20</td>
</tr>
<tr>
<td>2014</td>
<td>25</td>
</tr>
</tbody>
</table>

Based on date of application (from April 1 to March 31)
Product type of consultations

- mAbs & Fc-fusion proteins, 33 (65%)
- Hormones, 2
- ESAs, 4
- Insulins (incl. analogues), 5
- G-CSFs, 4
- FSHs, 2
- Enzymes, 1

Based on date of application
As of February 28, 2014

Modified from
Trend of Clinical Trial Consultation

Based on date of application (from April 1 to March 31)

- **Foreign Clinical Trial**: Trials that do not include Japanese
- **Global Clinical Trial**: Trials that include Japanese

### No. of Clinical Trial Consultations

- **2006**: 0
- **2007**: 5
- **2008**: 10
- **2009**: 15
- **2010**: 20
- **2011**: 12
- **2012**: 14
- **2013**: 15

### % of Clinical Trial containing Foreign/Global Clinical Trial

- **2006**: 0%
- **2007**: 2%
- **2008**: 7%
- **2009**: 3%
- **2010**: 50%
- **2011**: 87%
- **2012**: 100%
- **2013**: 100%
Topics for Biosimilar Development

• **Reference product**
  - *A sponsor can use non-Japan sourced reference product?*

• **Comparative assessment of quality attributes**
  - *Statistical approach is mandatory?*

• **The extent of toxicity studies**
  - *Repeat-dose toxicity study is always required for biosimilar development?*

• **Design of comparative efficacy studies**
  - *Population*
  - *95%CI vs. 90%CI*
  - *Risk ratio vs. Risk difference*

• **Etc.**
Can a sponsor use non-Japan sourced reference product in comparability exercise?

**Guideline:** The reference product (RP) should be already approved in Japan.

- PMDA thinks the sponsor should confirm the comparability to the RP which is approved (and used by healthcare providers and patients) in Japan.
Can a sponsor use non-Japan sourced reference product in comparability exercise?

- If a sponsor needs to use non Japan-sourced RP in comparability exercise, it is required to explain that the non-Japan sourced RP is the representative of the Japan sourced RP by analytical assays and publicly available information.
Is toxicity study (repeat-dose toxicity study) required for biosimilar development?

• Basically, a sponsor should evaluate the non-clinical safety of biosimilar candidate itself prior to entering into clinical studies, in accordance with ICH S6 (R1).

• However, in cases where there is no concern on non-clinical safety based on characterization studies, physiochemical and \textit{in vitro} comparative assays, \textit{in vivo} toxicity studies may be not required.

• These approach should be on a case-by-case basis. PMDA recommends to use our consultations.
What should a sponsor consider when designing the efficacy trials?

- PMDA thinks a sponsor should choose appropriately sensitive population, (surrogate) endpoint to detect differences between biosimilar and the reference product.

- Comparability margin should be pre-specify and justified based on both clinical and statistical grounds.

- In principle, the study design should follow the approved indication, dosage and administration of the reference product. *(Overview of comments on guideline (2009) No.96)*

- It is required to confirm the equivalence to the reference product, rather than showing the non-inferiority to the reference product. *(Q&A (2010) No.14)*
Is Japanese clinical data required for biosimilar development?

• Yes!!

<Clinical data package (Examples)>

• PMDA strongly recommends to use our consultations.

Pharmaceuticals and Medical Devices Agency

Pharmaceuticals and Medical Devices Agency

: Japanese population  : Non-Japanese population
### Examples of Clinical Data package

| PK equivalence | Clinical Pharmacology Study (Japanese)  
|                |   - RA patients (104) |
| PD equivalence | Foreign Clinical Pharmacology Study  
|                |   - Healthy volunteers (80)  
|                |   - PD marker: glucose infusion rate |
| Phase III      | Foreign Phase III Study  
|                |   - RA patients (602)  
|                |   - Endpoint: ACR20% improvement (30w.) |
|                | Multi-regional CT (incl. 100 Japanese)  
|                |   (for reference)  
|                |   - Type 1 DM patients (535)  
|                |   - Endpoint: HbA1c |

**Infliximab BS I.V. infusion 100mg [NK] / [CTH]**

**Insulin glargine BS Injection [Lilly] etc.**
Biosimilar Naming Rule

**Japanese Accepted Name (JAN)**

```plaintext
### (genetical recombination) [XXX Biosimilar 1 (2, 3, …)]
```

- JAN given in accordance with PFSB Notification No.0331001/ March 31 2006.
- Non-glycosylated protein can use the same JAN as the RP.
- JAN of the RF excluded “genetical recombination”
- Identifier
- Order

**Examples:**

- Epoetin Kappa (genetical recombination) [Epoetin Alfa Biosimilar 1]
- Filgrastim (genetical recombination) [Filgrastim Biosimilar 1]
- Filgrastim (genetical recombination) [Filgrastim Biosimilar 2]
- Filgrastim (genetical recombination) [Filgrastim Biosimilar 3]
### Example of Indication extrapolation (Infliximab)

- **Infliximab BS**

<table>
<thead>
<tr>
<th>Indications</th>
<th>R.P.</th>
<th>Biosimilar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rheumatoid arthritis (incl. prevention of structural joint damage)</td>
<td>✓</td>
<td>Original ✓</td>
</tr>
<tr>
<td>Crohn’s disease</td>
<td>✓</td>
<td>Original ✓</td>
</tr>
<tr>
<td>Ulcerative colitis</td>
<td>✓</td>
<td>Original ✓</td>
</tr>
<tr>
<td>Intractable uveoretinitis in Behcet's disease</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Psoriasis vulgaris, Arthropathic psoriasis, Pustular psoriasis, Psoriatic erythroderma</td>
<td>✓</td>
<td>Additional ✓</td>
</tr>
<tr>
<td>Ankylosing spondylitis</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

**Comparative study**

R.P.: Reference product
Guideline:
if the efficacy of biosimilar have been demonstrated to be comparable to the reference product in one of the indications and the comparable pharmacological effects is also expected in other indication(s), it may be possible to extrapolate from one indication to other indication(s) of the reference product.

• PMDA thinks the following should be also considered to justify the extrapolation;
  • the comprehensive physicochemical assays and biological assays \textit{(in vitro} pharmacological assay)
Product life cycle and CMC
Overall picture of CMC activities through the product life cycle

Product Quality Review

Commercial Production

Process Validation

Knowledge → Quality Improvement

Post-approval change

Development

Report of Research and Development

Technical Transfer

Cycle that connects development and commercial production
## (Example) Post-Approval Change Reporting Categories

<table>
<thead>
<tr>
<th>Risk of Changes</th>
<th>Japan</th>
<th>US</th>
<th>EU</th>
</tr>
</thead>
</table>
| Higher          | Partial Change Application  
(Approval needed before implementing change) | Prior approval supplement (PAS) | Type II variation |
| Moderate        | Minor change Notification  
(within 30 days after implementation/ shipping) | Changes Being Effected (CBE), 30 days | Type IB variation |
| Lower           | Annual Report | Changes Being Effected (CBE) | Type IA\textsubscript{IN} variation |
|                 |        |     | Type IA variation |
Current Proposed Q12 Outline

- Introduction
- Scope
- Desired State
- Relationship to other ICH Guidelines
- Q12 Guiding Principles
- Overview of Product Lifecycle Management
- Pharmaceutical Quality System and Change Management
- Knowledge Management
- Established Conditions
- Post Approval Change Management Protocols
- Lifecycle Strategy – general considerations
- Relationship between Assessment and Inspection
- Examples of Changes
- Annex 1: Glossary
- Annex 2: References to Lifecycle Management in other ICH Guidelines
- Annex 3: Location and examples of Established Conditions
(Japan) Relationship between Application Form (AF) and CTD Documents

Module 1 (AF)

Module 2 (QOS)

Module 3

Approved Matters

Major review document

Extracted

Summarized
Japan’s Science-based Effective/Efficient/Flexible Quality Regulation

Module 1(AF)

Module 2 (QOS)

Module 3

Legally binding

Not-Changeable without regulatory procedures (PCA/MCN*)

Changeable without regulatory procedures (PCA/MCN*)

*; PCA: Partial Change Application (for major changes) MCN: Minor Change Notification (for minor changes)
A robust PQS is a prerequisite as all changes are managed in a company’s PQS.
ICH Q12 has started its journey.

It may contain regulatory challenges (e.g. “Established Conditions”, PACMP).

However, by overcoming these challenges, ICH Q12 will promote innovation and continual improvement, and strengthen quality assurance and reliable supply of product.
International Cooperation & Collaboration
Proactively contribute to the international regulatory harmonization and cooperation by disseminating Japan’s knowledge on regulations (regulatory science) to the world.

⇒ Aim to resolve the global drug/device lag and contribute to global health
⇒ Revitalize the pharmaceutical and medical device industries

International Regulatory Harmonization Strategy setting out the mid–long term vision and priority of its measures
The primary responsibility of the Pharmaceuticals and Medical Devices Agency (PMDA) is to provide a reliable regulatory environment that enables quicker access to more effective and safer medical products including pharmaceuticals, medical devices, and cellular and tissue-based products for the people of Japan. Regulatory science forms the basis of PMDA’s activities. As the development, manufacture, and distribution of products are becoming increasingly globalized, PMDA must increase its efforts to cooperate closely with foreign regulatory authorities, as well as industry and academia, in order to meaningfully contribute to the health and healthy life expectancy of the people in Japan and globally.

In view of the above-mentioned situation as well as the Regulatory Strategy Initiative set forth by the Ministry of Health, Labour and Welfare (MHLW) in June 2015, PMDA has established the following strategic plan on international activities that will be conducted in the period defined in the 3rd Mid-term Plan (FY 2014–2017). PMDA will strive to implement the strategy to maximize the health benefits to Japan and the world, by effective scientific knowledge, electronic information, and by other means.
VISION 1: To contribute to the world through regulatory innovation

VISION 2: To maximize the common health benefits to other countries/regions

VISION 3: To share the wisdom with other countries/regions
Strategy 1: Taking the lead, and disseminating the information around the globe

1) Provide consultations, conduct product reviews, and implement safety measures that matches top global standards by utilizing innovative technology

   Establish the “Regulatory Science Center”
   (MIHARI Project, Advanced Review / Consultation System, etc)

2) Proactively publicize globally the knowledge and experience of PMDA as a regulatory authority that contributes to improvement of the health of the people in Japan by managing products throughout their lifecycles, from consultations and product review to implementation of post-approval safety measures and provision of relief services

Strategy 2: Promotion of international regulatory harmonization and global cooperation

1) Expediting the global utilization of the Japanese Pharmacopoeia (JP)
2) Strengthening the communication with overseas regulatory authorities
Strategy 3: Increase efficiency of inspections that may lead to future international work-sharing
1) Streamline international collaboration in GXP/QMS inspections

Strategy 4: Contribution to international regulatory harmonization activities
1) Proactively propose to create guidelines, etc. leading to common health benefit
   (FY2015: ICMRA Vice Chair, ICH/IMDRF Chair country, APEC Co-Chair, OECD/GLP Vice Chair)

Strategy 5: Provision of information and training programs that are essential for building regulatory capacity in partner countries
1) Launch of “Asian Training Center for Pharmaceuticals and Medical Devices Regulatory Affairs” and other programs
   (strengthen training seminars for drugs and medical devices, and conduct on-site trainings for Asian countries)
2) Interact with Asian and other countries to enhance mutual understanding and cooperation
Asian Training Center

Conduct training courses in partner countries

Expand training courses in Japan

Pharmaceuticals and Medical Devices Agency
Work-sharing for efficiency (Strategy2, 3)
• MOU between the Chinese SFDA (present CFDA) and the Japanese MHLW, under which PMDA supports cooperative activities
• ** MOU concluded between Interchange Association and East Asia Relations Commission, but is being implemented through cooperation of related organizations.
Sharing of Information, Experience and Knowledge is Valuable!!
Swift approvals of innovative products

Convey Japanese technology to the world

Cooperate with all agencies in the world

Swift relief for occurred health damage

Contribute to the world’s medicine

Safety

Review

Japanese citizens

Relief

Regulatory Science

PMDA for the world

-To create society to receive the essential forefront medicines-
Thank You for your attention!

Thanks to my colleagues of Office of Cellular and Tissue-based Products

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