# Risk based approaches in the Japan-GMP Regulation

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## **Agenda**

- 1. Overview of GMP inspectorates in Japan
- 2. Application of Risk Assessment: On-site or Desktop inspection
- 3. Application of Risk Based Approaches on GMP inspections
- 4. Application of Risk Management: In case of Recall
- 5. Future issues

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## **GMP** inspection authorities

MHLW



PMDA



47 Prefectures



Hokkaido, Aomori, Akita, Yamagata, Iwate, Miyagi, Fukushima, Tochigi, Gunma, Ibaraki, Saitama, Chiba, Tokyo, Kanagawa, Niigata, Nagano, Yamanashi, Shizuoka, Aichi, Gifu, Toyama, Ishikawa, Mie, Fukui, Shiga, Nara, Wakayama, Kyoto, Osaka, Hyogo, Tottori, Shimane, Okayama, Hiroshima, Yamaguchi, Tokushima, Kagawa, Kochi, Ehime, Fukuoka, Oita, Miyazaki, Saga, Nagasaki, Kumamoto, Kagoshima and Okinawa.

## **GMP** inspection authorities



#### **GMP Inspection Manual**

(manufacturing license, marketing license, marketing authorization, administrative order, pharmacovigilance, license withdrawal, seizure, penalty, etc.)

- Control inspectorates
- Ultimate responsibility

Delegate MHLW's authorities by Law/Ordinance



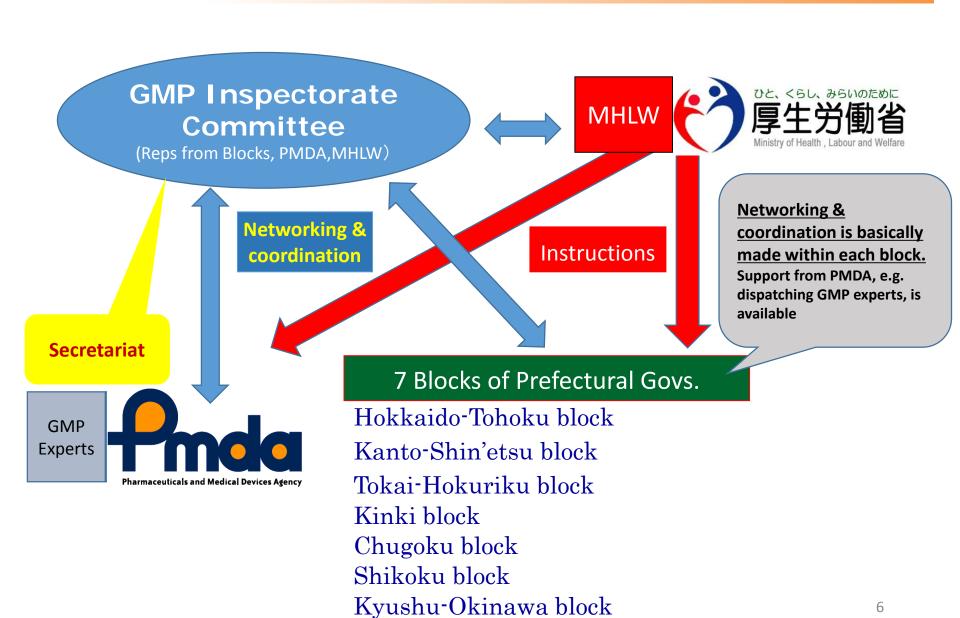
PMDA is partially vested with authorities of MHLW (assessment, GMP inspection, information gathering)



## Prefectures (47 Inspectorates)

Prefectures are delegated with part of MHLW's authorities for their administrative jurisdictions

## **GMP** inspectorate committee



## **Authorities of GMP inspection**

	Domestic Site	Foreign Site
New Drugs, Biological Products, Radio Pharmaceuticals	Pharmaceuticals and Medical Devices Agency	Pharmaceuticals and Medical Devices Agency
Other Drugs	47 Pref. Gov.	Pharmaceuticals and Medical Devices Agency

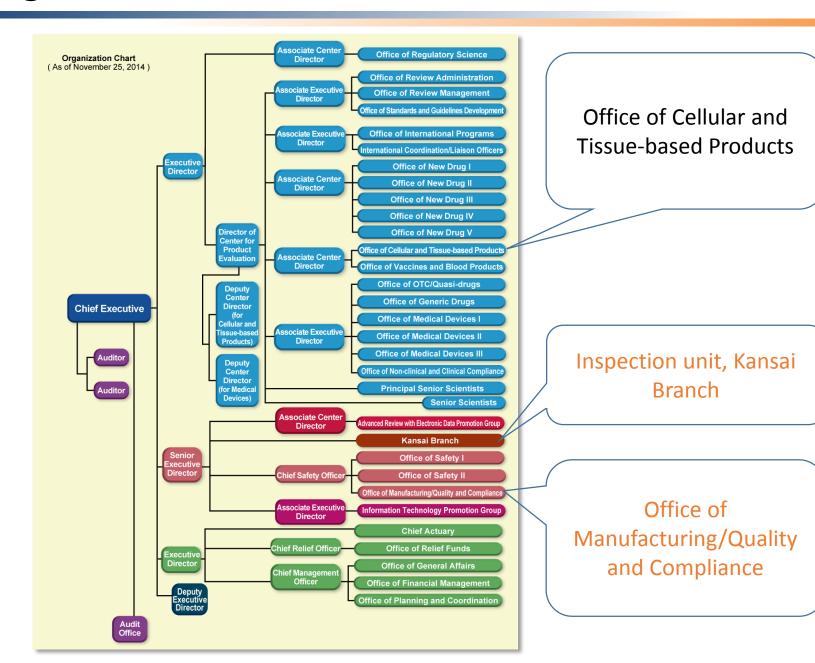
## **Activities of GMP inspectorate committee**

- 1. Harmonize Quality systems (Update of SOPs, Self inspection...)
- 1. Update GMP guidelines
- 2. Develop training programs for lead/senior inspectors
- 3. Share training tools (Mock inspection)
- 4. Share global information
- 5. Hold committee meetings 2-3 times/year
- 6. Discussions as necessary

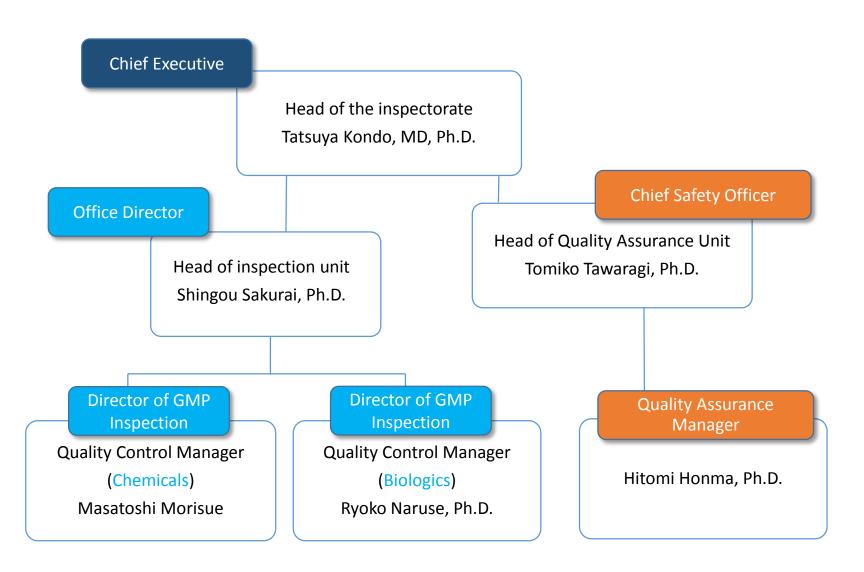


- Improving risk-based inspection methods and skills
- Promoting global competitive inspectors

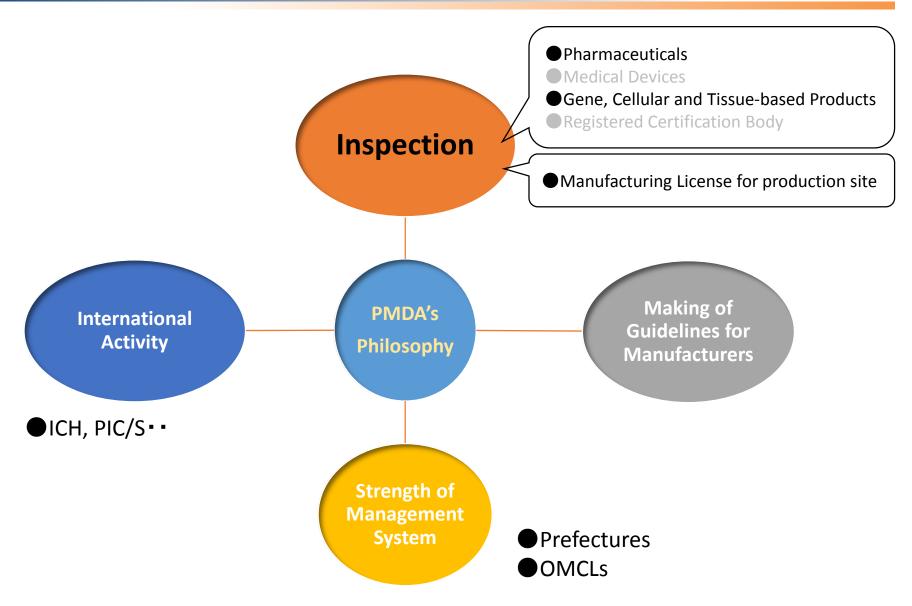
## Organization chart of PMDA



## Key personnel in our Quality System



#### Our activities



## **Number of GMP inspectors in PMDA**

## <u>Tokyo Head Office</u> (On-site and Desktop inspection)

- 2 Directors (Biological/Chemical)
- 8 Senior Inspectors
- 5 Lead Inspectors
- 5 Inspectors

## Kansai Branch (Osaka-city) (On-site inspection Only)

- 2 Senior Inspectors
- 2 Inspectors

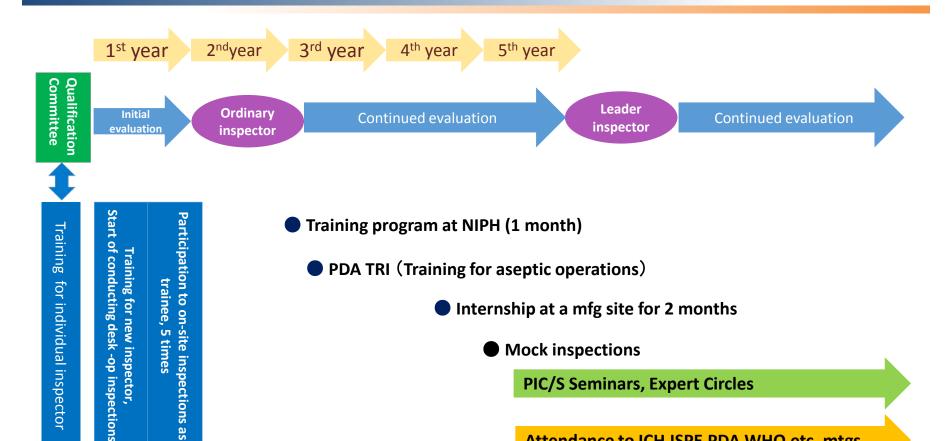
## 24 Inspectors

## Performance of inspection

• Total Number of Inspections conducted by PMDA (Domestic and Overseas )

	<u>Total</u>	(on-site)
• April 2011 - March 2012	2 1,283	(185)
• April 2012 - March 2013	1,593	(198)
• April 2013 - March 2014	1,415	(168)

## Qualification of inspectors



Technical training, 3 days X 4 times/year: eg. Lectured by outside experts,

doing group discussions and case-studies etc.

- Regular trainings on every Monday: Sharing inspectional observations etc.
- Paper exams at the end of every year: For maintaining qualified status.

Attendance to ICH, ISPE, PDA, WHO etc. mtgs

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## **On-site or Desktop inspection**



**Selection of Inspection Method** 



**Desktop** inspection

- ✓ Product
- ✓ Manufacturing Process
- ✓ Results of previous on-site inspections etc...

## Risk-based decision making cycle

#### Risk assessment:

- Product characteristics
- Process characteristics
- Dosage form
- Inspection history by other authorities
- Inspection report from PIC/S members
- Recall history

Data base: PMDA inspection history



#### **Decision:**

On-site or Desktop

#### **Update:**

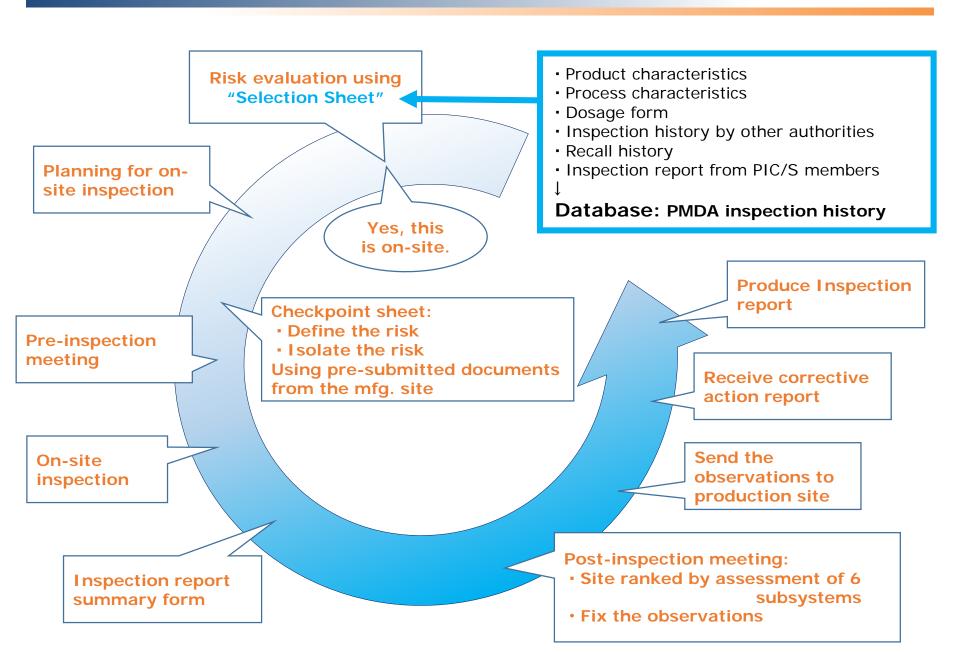
Internal database

### Inspection:

Ranking based upon assessment of 6 subsystems: S, A, B, C and D

- 1) Quality systems
- 2) Facilities & equipment
- 3) Materials control
- 4) Production control
- Packaging & labelling; and
- 6) Quality control.

## **Events for on-site inspection**



## **Agenda**

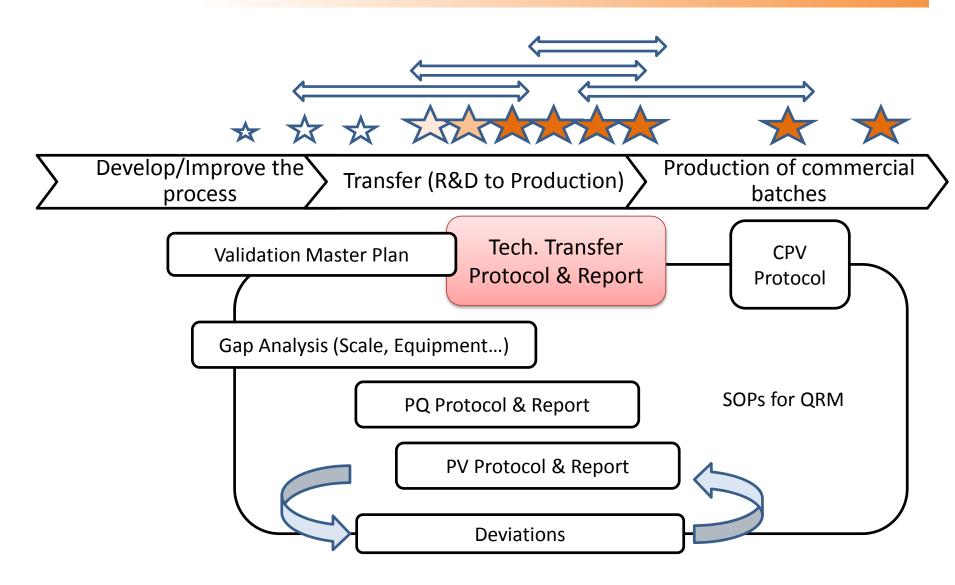
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## MHLW's policy:

The GMP inspectorates should enforce the GMP regulations on a risk basis in principle.

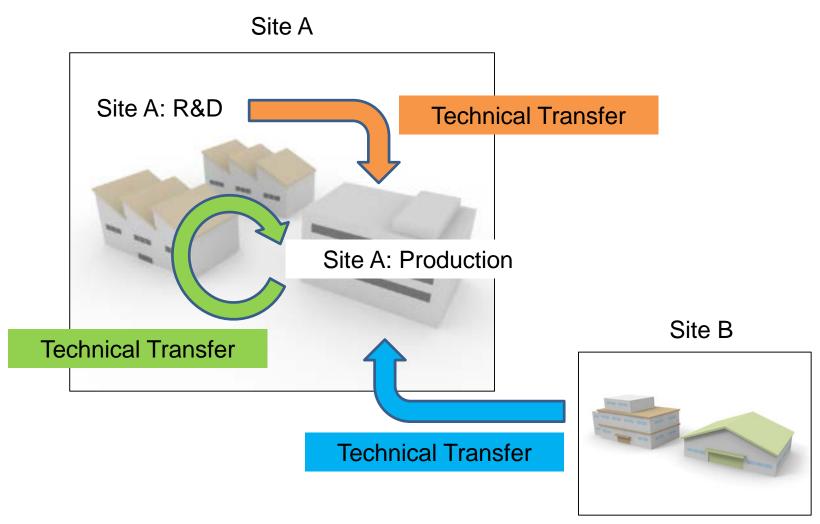
- 1. GMP requirements stipulated in the legislations should be enforced according to the risk.
- 2. Manufacturers are allowed to apply any manufacturing practices that are not explicitly stipulated in the legislations, however, scientifically sound to achieve equivalent or better quality and/or risk management than the methods defined in the legislations.

#### Case 1: Which documents should we check?



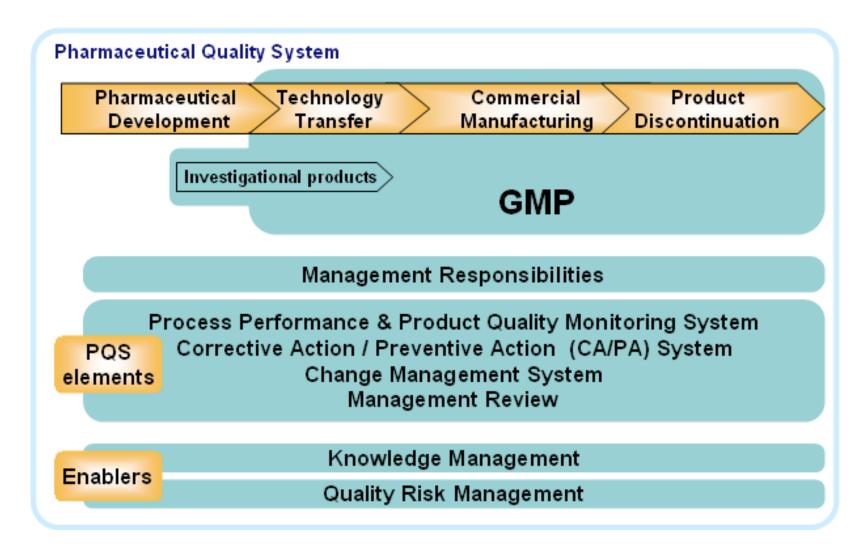
Inspectors should select documents based on risks.

#### Case 2: Which documents should we check?



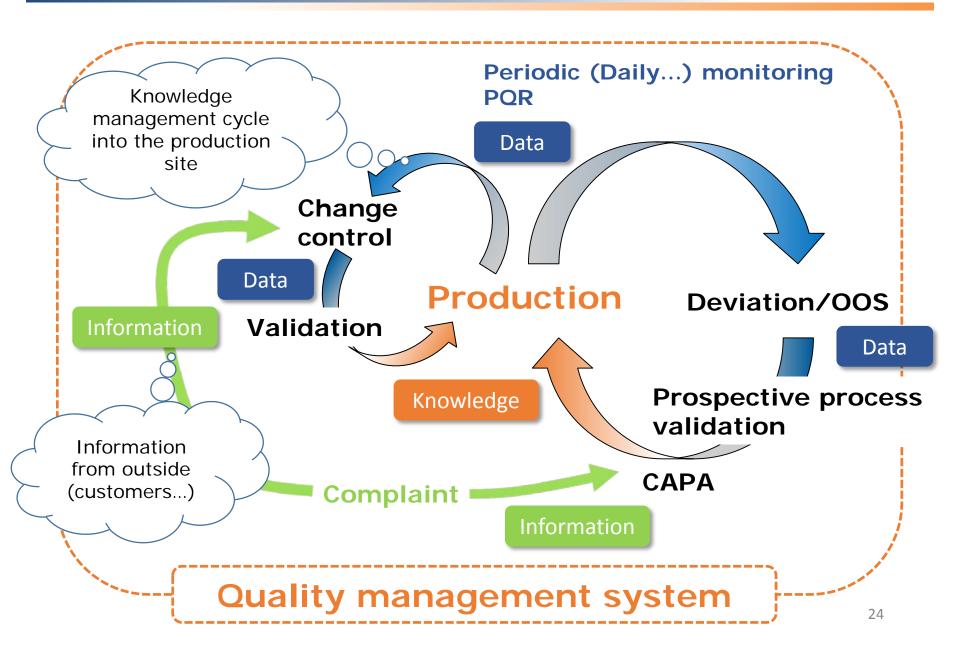
Inspectors should select documents based on risks.

## Pharmaceutical Quality System - ICHQ10



Reference: ICH Training Materials for Q8/Q9/Q10

## Knowledge management cycle



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## Guiding principles for drug recall in Japan (1)

#### Concept of decision making: Recall

- 1. Efficacy and safety: When the drug is of any concern about safety, shows insufficient efficacy, or is unjustifiable on safety, the drug should be recalled.
- 2. Compliance: When the drug is non-compliance with the approval conditions or other legislation requirements, the drug should be recalled.
- 3. Foreign substances (according to its type and dosage form of the drug): The type of foreign substances: i.e. intrinsic substances(e.g. glass fibers); extrinsic substances (e.g. wood chips); or biological substances (e.g. hair, worm etc.) should be considered. When any aseptic drug is contaminated with extrinsic or biological foreign substances, the drug should be recalled. In case any non-aseptic drug is contaminated with biological foreign substances, the drug should be recalled.

Reference. MHLW: [Recall of drugs, medical devices etc.] (in Japanese). *Iyakuhatsu* No.237, 8 Mar. 2000, amended by *Yakushokuhatsu* No.0730008 in 2003, No.0528004 in 2004, No.0331021 in 2005 and No.0322-3 in 2011.

## Guiding principles for drug recall in Japan (2)

#### Concept of decision making: Recall

1. Unless all the following conditions are met, the quality defects should be regarded as affecting all lots.

A: The cause of the quality defects and relevant processes are identified.

B: Appropriate actions have been taken to prevent recurrence of the quality defects and no problem is detected on the GMP.

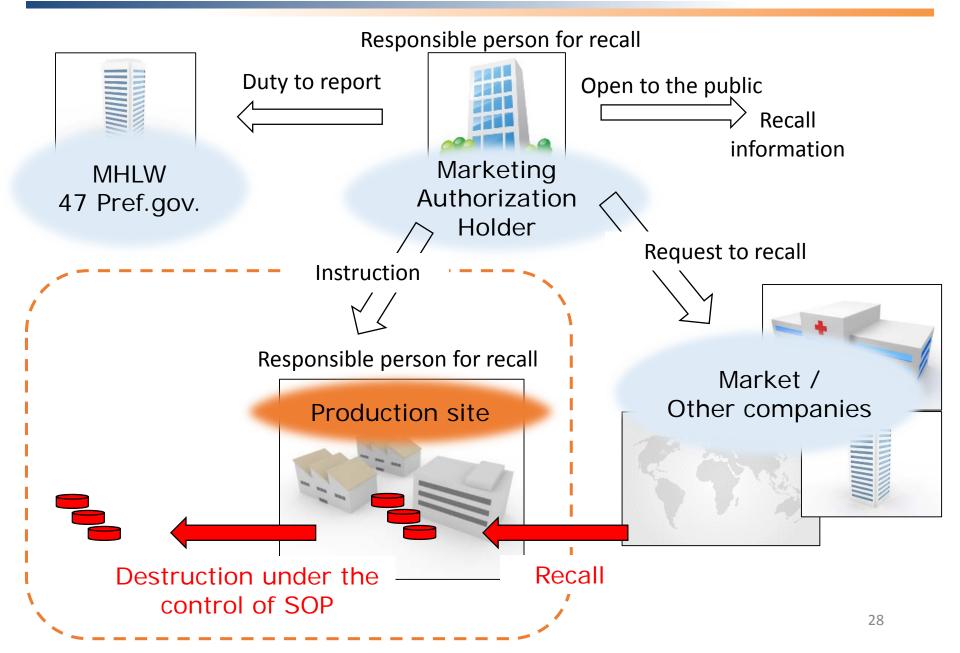
C: There are no abnormalities in quality of the retention samples.

D: No problem is detected on the GQP that affects product quality.

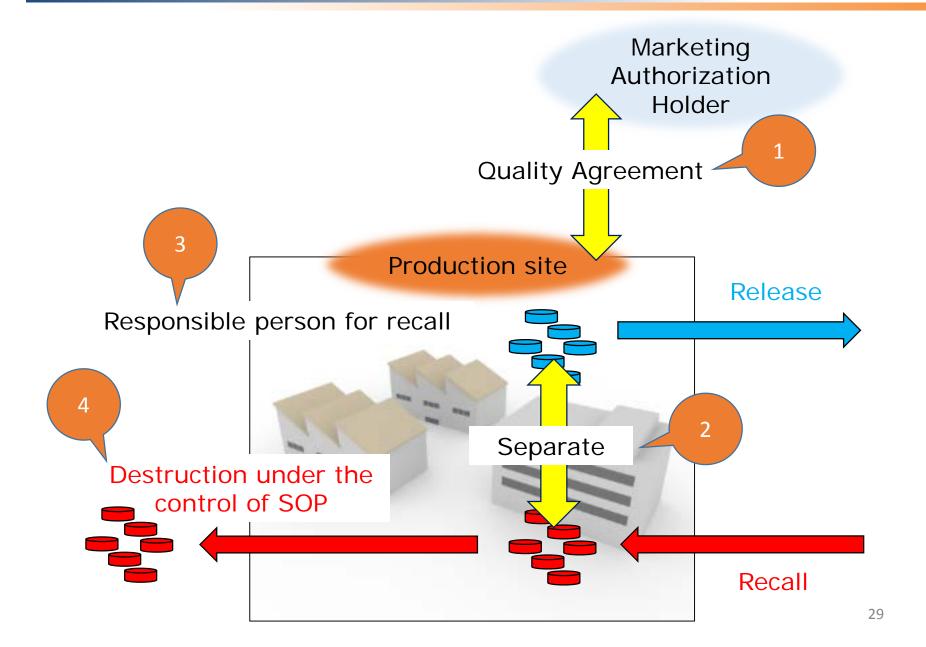
2. Even though it has been once determined the quality defects do not affect all lots, however, the defects have been indeed detected in two or more settings, the drug should be recalled in light of incidence of the defects.

Reference. PFSB-DG, MHLW: [Recall of drugs, medical devices etc.] (in Japanese). Iyakuhatsu No.237, 8 Mar. 2000, amended by Yakushokuhatsu No.0730008 in 2003, No.0528004 in 2004, No.0331021 in 2005 and No.0322-3 in 2011.

#### Recall



## Check point in GMP inspection



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#### **Future issues**

- 1. Development of cooperation scheme among stakeholders (mutual benefit)
- 2. Understanding of different GMP regulations in each country
- 3. Training of Inspectors (Holding PIC/S Expert Circle Meeting, Continuous participation in PIC/S Expert Circle Meeting, Seminar, revision working team of PIC/S Guidances, IWG(Inspection Working Group) at EMA)
- 4. PIC/S accession will be effective for exchanges of information between authorities
- 5. Expansion of MRA scope between Japan and EU
- 6. ICH, other activities

## Thank you for your attention.



