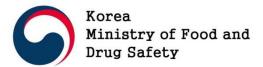
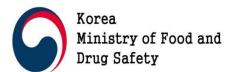
# Regulatory innovation for new tech-applied medical devices in Korea

2018. 7
Medical Device Policy Division in Korea MFDS





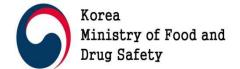
## Content

I. Special Act for Innovative Devices

**II**. In Vitro Diagnostic Device (IVD) Act

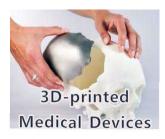
**Ⅲ.** Implementation of UDI System

**IV. New Guidelines of Innovative Devices** 





Scope of **Special Act for Innovative Devices** 

















Special Act for Innovative Devices Development of the draft
& Proposed enactment in Dec, 2017)



2 Main Features of the Special Act

#### □ Expedited Review Process

- Packaged support system
  - \* Pre-consultation, Guiding the approval pathway in the right direction, Special Task Force(TF) for innovative device review/approval process
- Modular review process\*: review of the submissions by each module
- \* 1) Design & development of products
- 2) Safety and performance

3) Clinical trials

4) Technical docs & clinical data

#### ☐ Customized Safety Management System

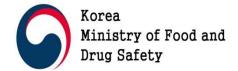
- Post-market Clinical Data Collection for innovative devices with reduction of premarket data collection
- Implementation of the negative list administration mode for modification of approval
- Establishment of QMS Principles for software



2 Main Features of the Special Act

#### ☐ Technical Support for Market Entry

- Technical support for clinical trials
- Capacity building for regulatory & technological expertise
- Promotion of international cooperative activities

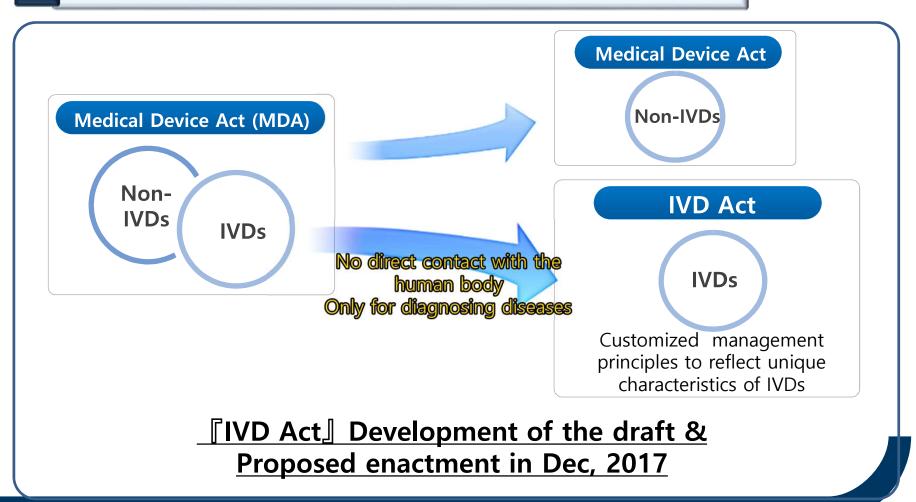


## II. In Vitro Diagnostic Device (IVD) Act



## **II**. In Vitro Diagnostic Device (IVD) Act

1 Background



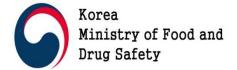


## II. In Vitro Diagnostic Device (IVD) Act

2 Main Features of **[IVD Act]** 

#### ☐ Clinical Lab Accreditation Program & Approval System for IVDs

- Allowing the use of advanced genetic testing equipment for research after receiving clinical lab accreditation
- Simplifying approval process by combining IVD reagents, equipment and software as one system for approval(since Aug, 2016)
- ☐ Simultaneous Review System for IVD Companion Diagnostic Devices (CDx)
- Allowing simultaneous approval for IVD CDx and drugs that are used with the device
- ☐ Improved Clinical Trial Regulations for IVDs
- Clinical trial approval, if approved by IRBs
- Allowing clinical trials in non-designated facilities
- Establishment of the IVD-specific GCP standards for IVD products

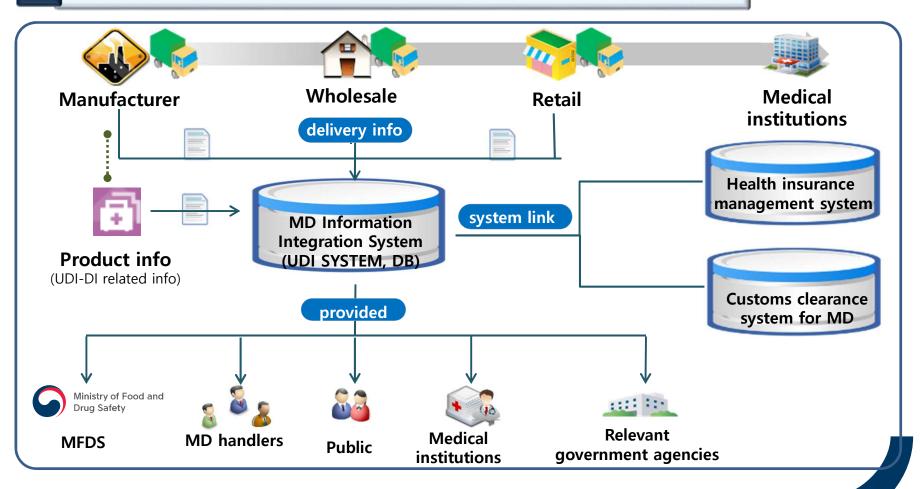


## **Ⅲ.** Implementation of UDI System



## **Ⅲ**. Unique Device Identification (UDI)

## 1 Overview of UDI System in Korea





### **III.** Unique Device Identification (UDI)

2 UDI System Implementation & Future Directions

#### ☐ Establishment of MD Information Integration Center(under MFDS)

- NIDS\* assigned to manage the UDI system
- → Analysis, process and provision of the collected data, based on UDI
- \* NIDS(National Institution of Medical Devices Safety Information) : an MFDS-affiliated public organization
- Development of related guidelines and reference literatures
- Help desk service on the UDI System

**□** Future Directions of UDI System

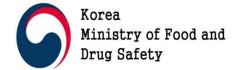
Requirements for UDI placement & UDI registration

Class 4

Class 3

Class 2

**All Classes** 



## IV. New Guidelines of Innovative Devices



## IV. New Guidelines on innovative Medical Devices

## 3D-printed Devices

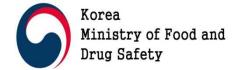
☐ Orthopedic Implants - 『Guideline on Review & Approval for 3D-printed Personalized Orthopedic Implantable Devices』(Oct, 2017)
□ Dental Implants
- "Guideline on Review & Approval for 3D-printed Personalized Dental Implantable Devices (Oct, 2017)
☐ Personalized Products(QMS Inspection)  - 『Guideline on 3D-printed Personalized Devices to be Prepared for QMS Inspection』(Dec,2017)
☐ Biodegradable Scaffold for Skin Regeneration - 『Guideline on 3D-printed Biodegradable Scaffold for Skin Regeneration』(Dec,2017)
☐ Biodegradable Scaffold for Revascularization - 『Guideline on 3D-printed Biodegradable Scaffold for Revascularization』(Dec,2017)



## IV. New Guidelines on innovative Medical Devices

2 Innovative Medical Devices

☐ Rehabilitation Robots
- 『Guideline on Review & Approval for Rehabilitation Robots』(Nov,2017)
☐ Big data
- 『Guideline on Review & Approval for Big Data & Al-applied Medical Devices 』(Nov,2017)
□ AI
- 『Guideline on Clinical Evaluation of Validity for Artificial Intelligence(AI) Medical Devices』('Dec,2017)
□ NGS
- 『 Guideline on Cancers, Genetic Disorders and Congenital Anomaly Test on Fetus
as per Testing Types of NGS Clinical Laboratories 』('Feb,2018)



## Thank you for your attention