Regulatory Updates on Medical Devices in Republic of Korea

Ministry of Food and Drug Safety

16 Feb 2023

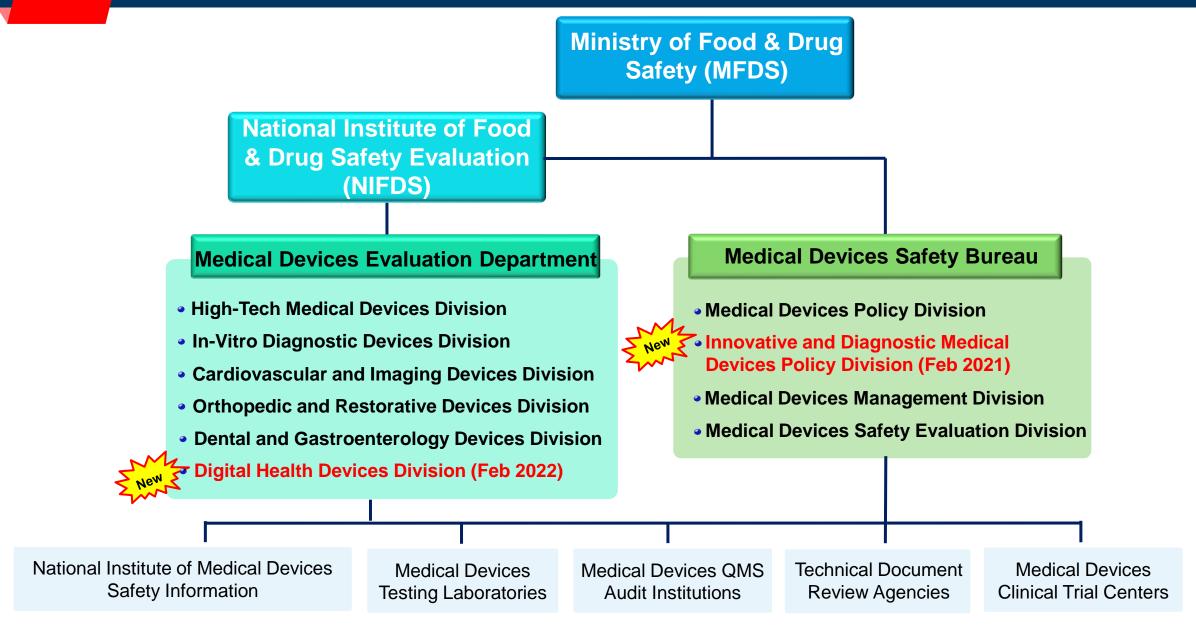




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I. Introduction of MFDS Organization



II. Medical Devices Regulation

Global Leader in Bio & Digital Health

Lessen regulatory barriers to digital health devices to ensure global competitivenesS

Develop proactive regulatory framework for fostering new business based on safety

- 1. Provide Customized Regulatory Framework for Digital Health Devices
- 2. Improve Quality Management for IVDDs

3. Increase Reliability of Quality Management

II-1. Provide Customized Regulatory Framework for Digital Health Devices

Regulation

- Act on Nurturing Medical Devices Industry and Supporting Innovative Medical Devices
- Introduced a streamlined review process for change approval for SaMDs designated as Innovative Devices (May 2020)
- Introduced a negative regulatory system for change approval of SaMDs (July 2022)
- Plan to enact "Act on Digital Medicine Products" to lay a foundation of Total Product Life Cycle (From 2023)

Division

• Launched a dedicated division for DH called "Digital Health Devices Division" (Feb 2022)

- Guidance on Clinical Trial Design for Insomnia, Alcohol, Nicotine Addiction (2021)
- Guidance on Clinical Trial Design for Depressive and Panic Disorder (2022)
- Guidance on Considerations and Examples for Cybersecurity in Medical Devices (Revised in 2022)
- Guidance on Review and Approval of U-Health Care Medical Devices (Revised in 2022)
- Guidance on Clinical Trial Design for ADHD and Eating Disorder (From 2023)

II-1. Approved Digital Health Devices and Guidances

Review & Approval

- Machine Learning-Enabled Medical Devices: 153
- Mobile App Medical Devices: 120
- U-Health Care Medical Devices: 101
- AR/VR Medical Devices: 10
- Clinical Trials Design for DTx: 31
- Cybersecurity review: 2,136
- DTx(Insomnia): 1 (Feb. 14, 2023)

Guidances

- Machine Learning-Enabled Medical Devices: 10
- Cybersecurity: 3
- SaMD: 5
- Digital Therapeutics (DTx): 6

Digital Therapeutics (DTx) Bring about Wider Treatment Options and Improved Convenience

 Korea's First 'Digital Therapeutic' Approved for Insomnia Symptom Improvement -

II-2. Improve Quality Management for IVDDs

Regulation

- Implement "Act on In Vitro Diagnostic Medical Devices" to ensure safety management of IVDs (May 2020)
- Established a regulatory review and approval process of IVDDs for COVID-19 (July 2022)
 - Provide usability review criteria of IVD self-tests based on IEC 62366
- Lay a foundation to establish a government-initiated center for performance evaluation of IVDDs (From 2023)
- ✓ Implementation of EU IVDR: Reference Laboratories countries testing the performance of Class D IVDDs in pre and post market led by European countries

- Guidance on Review and Approval of IVDDs for COVID-19 (Revised on July 2022)
- Guideline for Al based Digital Pathology Software (for Breast Cancer) (Dec 2022)
- Guidance on Scientific & Systematic Evaluation Criteria including Biomarker for Early Detection of Cancers (From 2023)

II-2. Approved IVDDs and Guidances

Approval

- Approved COVID-19 Products
- ✓ Molecular Diagnostic Tests: 52
- ✓ Antigen Diagnostic Tests : 45
- ✓ Antigen Home Use Tests : 15
- ✓ Serological Tests: 24
- Al-Based Digital Pathology Softwares: 2

- Guidances for COVID 19, Monkey Pox, etc
 - for Novel Infectious Diseases: 4
- Guidances for Al-Based Digital Pathology : 2
- Guidances for high-technology including NGS: 4

II-3. Increase Reliability of Quality Management

Regulation

- Introduced the latest international standard on GMP (ISO 13485:2016) in 2019
 & provide technical support for quality management for manufacturing companies (All year round)
- Support quality management for SaMD across TPLC (Since 2022)
- Diversify educational program for nurturing GMP reviewers and their expertise based on their careers and specialty (From 2023)
- Plan to join the membership of MDSAP (From 2023)

- Guidance on How to Prepare MDSAP (based on actual audit case of defibrillator) (Nov 2022)
- Guidance on Introduction to Usability of GMP in Medical Devices (for cardiovascular image analysis software, etc) (Oct 2022)



Thank you!