

# Medical Devices HTA in Korea

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## HTA system overview

| Flow of benefit decision in NHI | New health technology categories |                |      |
|---------------------------------|----------------------------------|----------------|------|
|                                 | Medical procedure                | Medical device | Drug |
| Approval in use                 | <b>Safety &amp; efficacy</b>     | NECA           | MFDS |
| ↓                               |                                  |                |      |
| Reimbursement assessment        | <b>Cost-effectiveness</b>        | HIRA           | HIRA |
| ↓                               |                                  |                |      |
| Pricing                         | <b>Affordability</b>             | HIRA           | NHIS |
| ↓                               |                                  |                |      |
| Final decision                  | <b>Final decision</b>            | MOHW           |      |

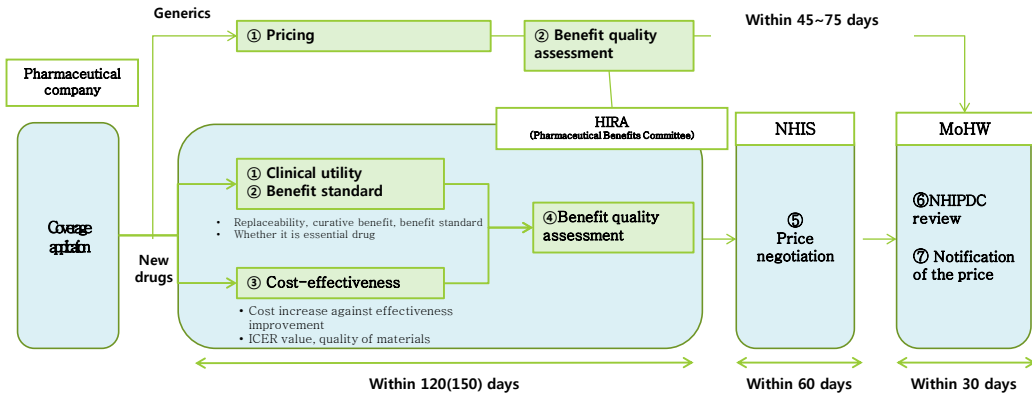
MOHW (Ministry of Health and Welfare), MFDS (Ministry of Food and Drug Safety), HIRA (Health Insurance Review & Assessment Service), NHIS (National Health Insurance Service), NECA (National Evidence-based Healthcare Collaborating Agency)

Jang J. HTA in Korea – focused on Drug and Reimbursement system, 2013. 10. 4



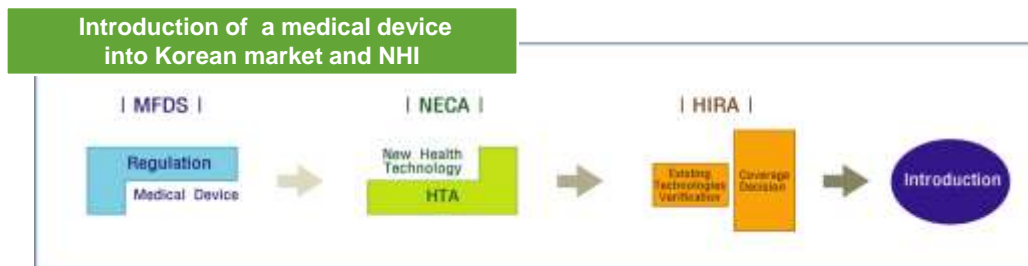
# Pharmaceuticals HTA 2006

- NHI introduced positive list system for the new drugs based on cost-effectiveness



# Medical devices HTA

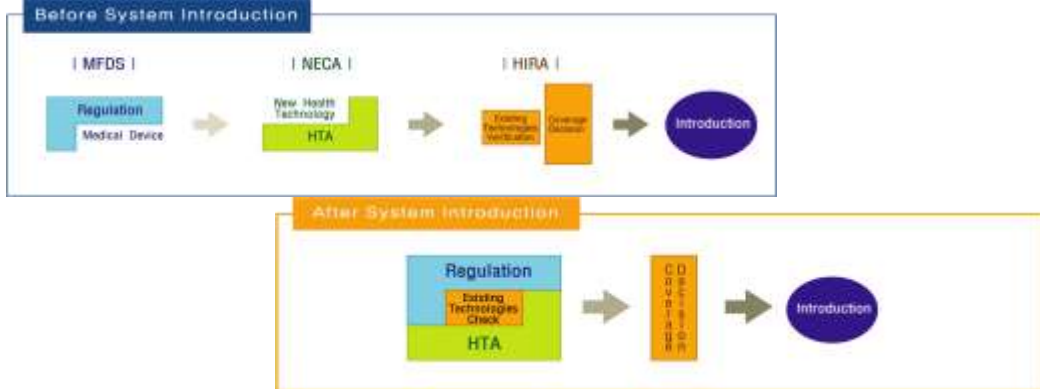
- Health Technology Assessment for new procedures with medical devices (2006)
  - Systematic review for safety and effectiveness of procedures (nHTA)



- MFDS : Ministry of Food and Drug Safety
- NECA : National Evidence-based Healthcare Collaborating Agency
- HIRA : Health Insurance Review & Assessment Service

# Medical devices HTA improvement

- Parallel process of approval, nHTA, and review for NHI coverage introduced in 2014
  - Improve patient accessibility to shorten the process



# Medical devices HTA improvement 2

- Conditional use of health technologies (2013)**
  - Government supports health interventions for safety and effectiveness evidence generation
  - Urgent need for rare and severe diseases without alternative treatments
  - Only in designated hospitals during prescribed time period

| Technology   | Period          |
|--|-----------------|
| Autologous Platelet Rich Plasma Application                    | 2014.10-2017.09 |
| Therapeutic Use of Autologous Peripheral Blood Stem Cell in MI | 2014.10-2017.09 |
| Pancreatic Cancer Irreversible electroporation                 | 2015.09-2018.08 |
| PET-CT for C-11-Methionine                                     | 2016.08-2019.07 |
| Autologous Platelet Rich Fluid to Vitreous body                | 2016.11-2019.10 |
| Smart PreP2 BMAC to Diabetic Critical Limb Ischemia            | 2018.01-2020.12 |
| Autologous Adipose-Derived Stem Cell Therapy                   | 2018.05-2021.04 |

## New policy for medical devices

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- **Fast tract for In Vitro Diagnostics**
  - nHTA exemption, and RWE
  - **Early dialogues from development stage with related agencies**
  - development stage: MFDS
  - nHTA: NECA
  - NHI coverage: HIRA
- **Real One-stop service system**
  - Unified service team: MFDS, NECA, and HIRA
  - Parallel process of regulatory review and nHTA
- **R&D support for evidence generation**

7

## Differences with Pharmaceutical HTA

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- **Less mature industry**
  - less experience preparing submission
  - lower quality evidence (historically, and ethically difficult)
- **Less obvious patent protection**
  - short life-cycle
  - frequent functional, minor improvements
- **Evidence fundamental**
  - pharmaceutical oriented researchers, experts
  - data insufficiency (weaker surveillance system)

8

## Challenges

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- New policies are focusing on non-invasive leading edge medical devices
- Guidelines for early dialogues need to be developed
- RWE generation supported by government and industry
- RWE generation needs stronger multidisciplinary approaches and experts of research methodology and data
- International cooperation for improving HTA capacity is important

# Thank You!!