



A professional institution
creating social values
and the future of the healthcare industry

Biohealth, the future growth engine

Major advanced countries such as the United States and Europe are making intensive investments at a governmental level towards research and development in biohealth. In Korea, the medical and pharmaceutical sectors have the most talented human resources in the nation, and the highest survival rates for major cancers in OECD prove its competence. Also, Korea has the world's best information & communications infrastructure, hospital systems, and medical data in addition to sophisticated production management capabilities and technologies. Such infrastructure enables the rapid growth of the Korean biohealth industry. Korea is the world's second largest biopharmaceutical manufacturing country, and exports of pharmaceuticals, medical devices, and cosmetics are also increasing. KHIDI will promote biohealth as one of the three new industries prioritized by the government together with system semiconductors and future cars, so that they can lead the future of Korea.

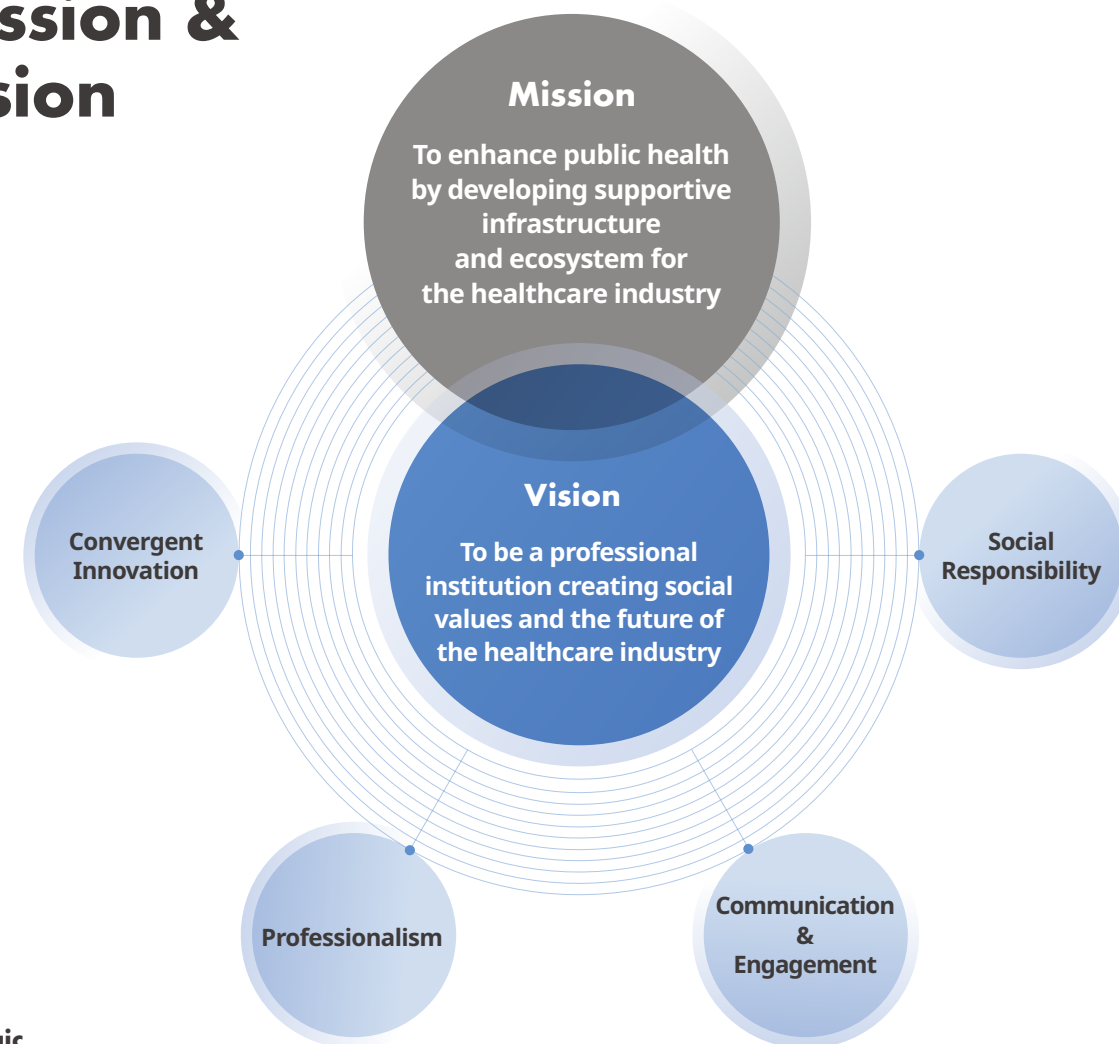
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Korea Health Industry Development Institute
will put forth its best effort to lead
in the continuous growth of the Biohealth Industry.



Mission & Vision



Strategic Objectives

Development of supportive infrastructure for the healthcare industry	Expansion of the healthcare industry's ecosystem for new innovative growth	Enhancement of the healthcare industry's global competitiveness	Establishment of a social value-based management system
Strategic Tasks <ul style="list-style-type: none"> Strengthen supportive infrastructure for healthcare R&D Establish the foundation for healthcare big data Provide tailored support to boost the healthcare industry 	<ul style="list-style-type: none"> Foster promising biohealth companies Facilitate a new growth industry that leads 4th Industrial Revolution Promote senior-friendly industry 	<ul style="list-style-type: none"> Raise global awareness on Korean healthcare Strengthen the global infrastructure of Korean healthcare Enhance support for the healthcare industry to enter the global market 	<ul style="list-style-type: none"> Realize management innovation and social value Reinforce management system for human resources based on professionalism Conduct ethical management to meet public expectation

KHIDI's Qualifications

KHIDI

Team Player

Great communicators who create social values through teamwork and enhance organization's reputation

Challenger

Great creatives who lead innovation of nation's healthcare industry and explore global market

Professional

Great thinkers who possess professional knowledge and problem - solving capabilities in healthcare industry through constant self-improvement

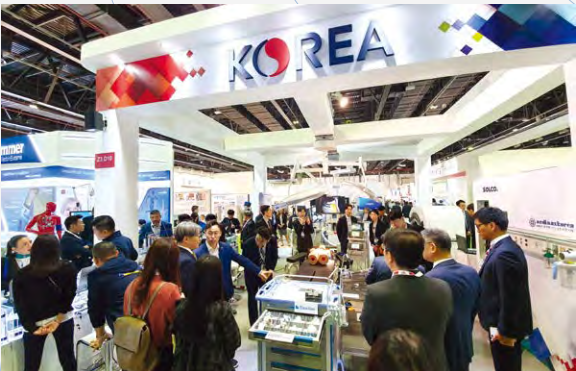
Talent management

- Mentoring and training program to help new employees adjust
- Reinforcement of professionalism by assigning employees to tasks with consideration for each individual's major, aptitude, and job objectives
- Identification of competent employees by operating a job posting program
- Fair promotions through an evaluation system based on abilities and performance
- Opportunities for overseas training to develop global competencies



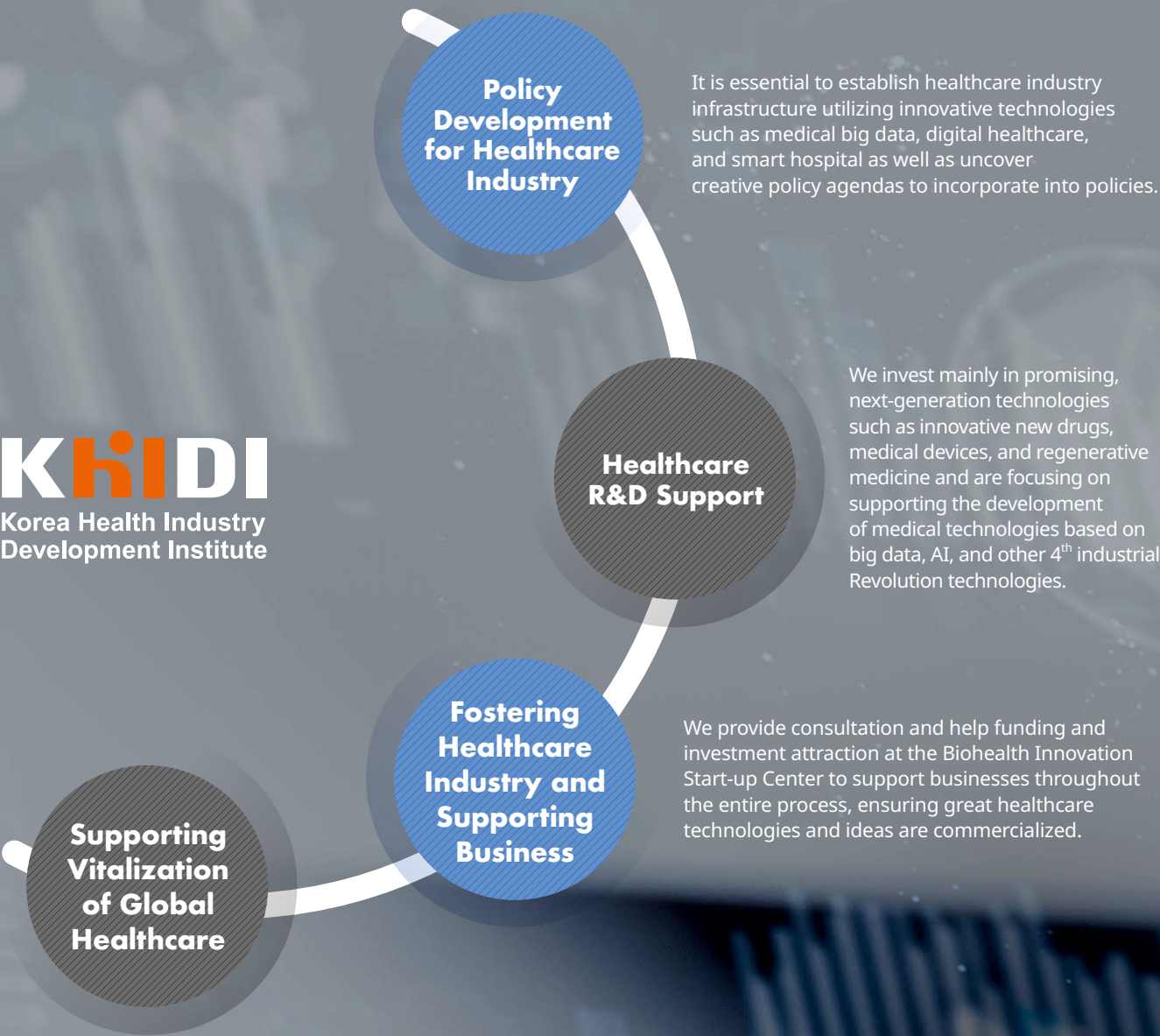
KHIDI

A professional institution creating
social values and the future of
the healthcare industry



Business Overview

We invest mainly in promising, next-generation technologies such as innovative new drugs, medical devices, and regenerative medicine and are focusing on supporting the development of medical technologies based on the 4th Industrial Revolution, such as big data and AI.



KHIDI supports medical institutions' entry into overseas markets and promotes the use of medical facilities by foreign patients to facilitate the provision of safe and high-quality healthcare services to foreigners.

Connect technology and people, add value to change

New change everyone dreams of begins with advanced technology. Change, which has value, brings about inspiration to many industries and technologies.

KHIDI quickly responds to changes in the healthcare business environment both at home and abroad by identifying innovative policy agendas and developing healthcare industry-related policies.

We are also making much effort in fostering the healthcare industry and supporting businesses to expand capacity of the biopharmaceutical industry and promote the medical device industry, while also expanding R&D activities focused on public health and supporting medical technology development through proactive public healthcare R&D. Moreover, we are strengthening the global competitiveness of the medical healthcare industry through intergovernmental cooperation aimed at vitalizing international healthcare in addition to creating new jobs in the process. KHIDI is fortifying domestic and overseas healthcare industries' competitiveness with preemptive responses and innovative actions toward changes

Policy Development for Healthcare Industry

Preemptive responses are vital to respond to the rapid environmental changes in the domestic and overseas healthcare industry.

Therefore, it is essential to establish healthcare industry infrastructure utilizing innovative technologies such as medical big data, digital healthcare and smart hospital as well as uncover creative policy agendas to incorporate into policies.

The scale of Korea's healthcare industry

Pharmaceuticals

 **13th** in the world
17.9 billion USD

Medical devices

 **9th** in the world
6.5 billion USD

Cosmetics

 **8th** in the world
12.5 billion USD

Medical services

 **12th** in the world
125.9 billion USD

Development of innovative healthcare industry agendas and policy support



1st Healthcare Future Forum

2019 Healthcare Innovation Forum

With emergence 4th Industrial Revolution, the paradigm of healthcare industry is changing. Responding to the paradigm shift, it is necessary to lead healthcare industry into the next-generation. For this, we are exploring innovative agendas to support the established mid to long term polices set by the government.

Scope of activities

Development of innovative agendas related to the healthcare industry	Support for the development of mid/ long-term policy establishment related to the healthcare industry	Formation of social consensus toward policies supporting the healthcare industry	Policy support for the development of talents in the healthcare industry
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Analysis and policy development researches on the healthcare industry



We conduct researches to analyse healthcare industry and develop policies & strategies to enhance technical competitiveness, moreover, develop the way to improve social accessibility of health technologies.

Scope of activities

Researches on the health industry policies	Health industry analysis and future outlook	Legislation and regulation reviews	Domestic/international research collaboration
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Utilizing healthcare data and establishing the basis for vitalization



Designated as a special institution for coupling and utilizing pseudonymous healthcare data, KHIDI supports invigoration of healthcare data and establishes a basis for biohealth data vitalization, which forms the background of precision medicine.

Scope of activities

Operate a special institution for coupling of healthcare data	Operate a platform connected with public institutions' healthcare data	Establish a basis for vitalization of biohealth data	Establish and operate a dispersed network of multi healthcare institutions
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Promote evidence-based
digital healthcare



Government support for establishing research/evidence-based industry development policies such as regulations and systems to foster a Korean Digital New Deal within the domestic digital healthcare industry.

Scope of activities

Survey and research related to digital healthcare such as domestic/foreign legal systems, policies, and industry trends

Discover support projects for positive proof of digital healthcare products and services and support the development of evidence-based overall industry

Policy Development and
Support for future health



KHIDI supports policy development for healthcare service innovation, data creation regarding medical institution management analysis for enhancement of healthcare service, and consulting to establish medical institution and strategy development.

Scope of activities

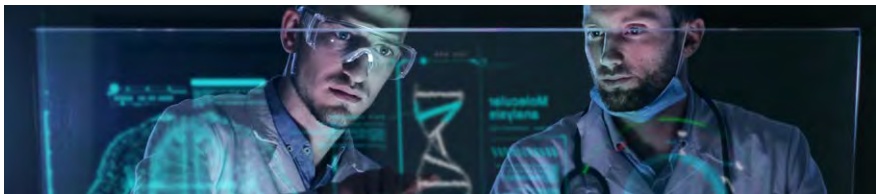
Consult strategy development for healthcare service innovation

Consult medical institution establishment and management

Operate a business in financial accounting standards for medical institution

Create data for medical institution management analysis

Fostering and Supporting
‘Smart Hospital’



KHIDI fosters Smart hospital, which is the core hospital for the realization of future smart healthcare. KHIDI also supports the development of a smart healthcare service model and organic connection & proliferation among medical institutions.

Scope of activities

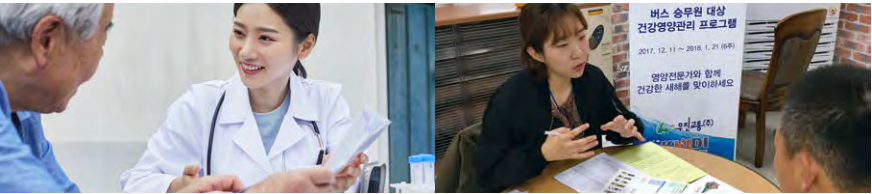
Analyze the trend of future health and develop policy agenda

Provide consulting for setting strategy for smart hospital establishment

Plan and operate smart hospital leading model development project

Verification research on the effect of smart hospital and proliferate the research outcome

Support for validation
of the health
management service



Support for vitalizing the market and building an innovation foundation of health management services for national public health and healthcare services enhancement.

Scope of activities

Development of policies for vitalizing the market and creating demand for health management services

Provision of customized statistics and trend analysis related to public health

Production and
provision of
healthcare statistics



We are building a statistical foundation for new industries to support establishing policies and strategies related to the healthcare industry as a future growth engine. We produce high-quality statistics through nationally approved statistical data and provide statistical information in a timely manner through fact-finding surveys and trend analysis while predicting future trends in the industry.

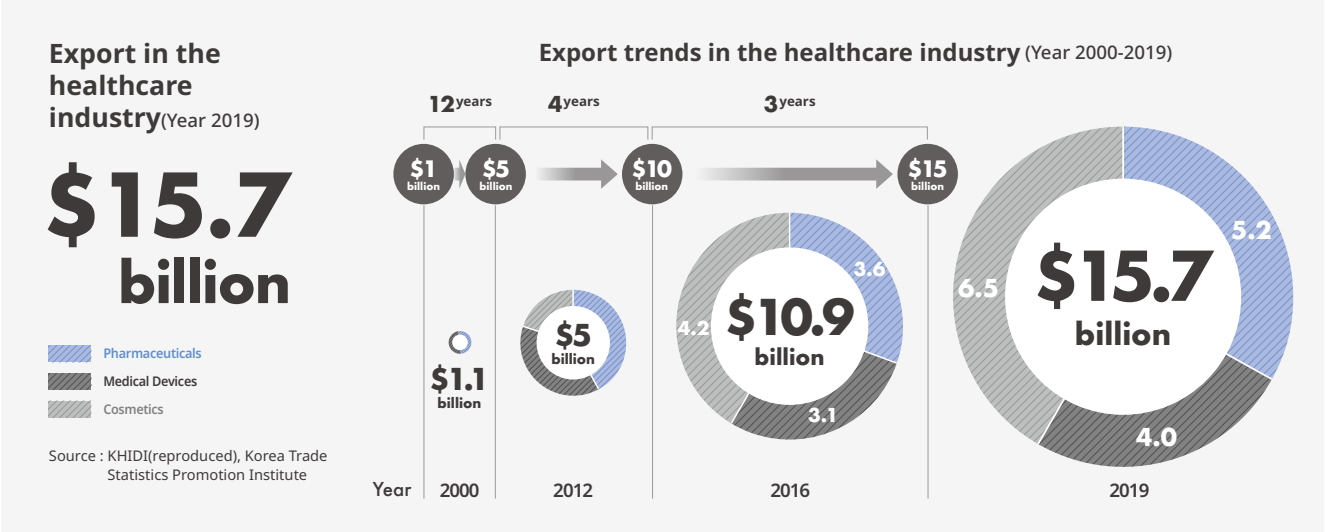
Scope of activities

Implementation of surveys and provision of nationally approved statistics on the healthcare industry

Fact-finding surveys and trend analysis on new healthcare industries

Monthly analysis of industry trends such as exports and employment

Providing statistical information through the Korea Health Industry Statistical Service (KHISS)



Healthcare R&D Support

KHIDI is an institution specializing in the planning·evaluation·management of domestic R&D projects related to healthcare.

We invest mainly in promising, next-generation technologies such as innovative new drugs, medical devices, and regenerative medicine and are focusing on supporting the development of medical technologies based on the 4th Industrial Revolution, such as big data and AI. We are also expanding R&D activities into areas to solve social issues such as contagious diseases, dementia, and mental health by reinforcing public investments.

Major achievements of healthcare R&D support

New drug development

 **30** cases

Medical device development

 **213** cases

International technology transfer

 **79** cases

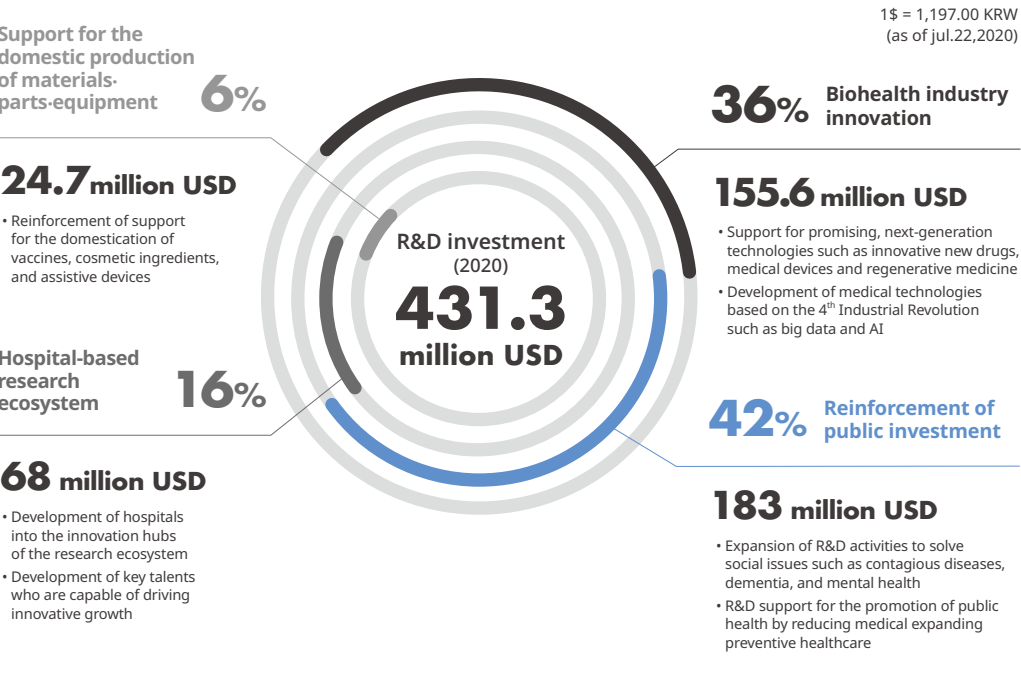
Clinical trial

 **679** cases

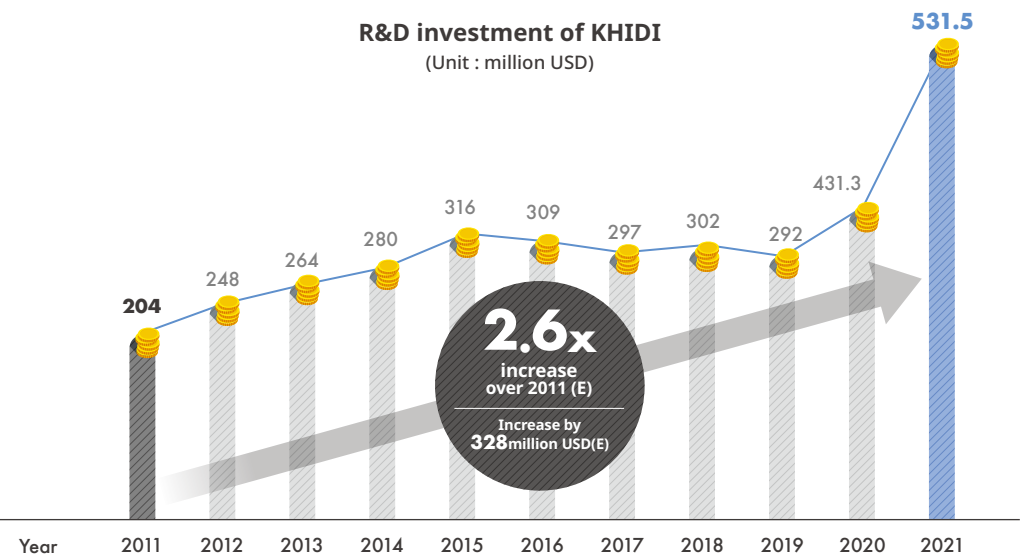
R&D process

R&D project Planning	Proposal Selection	Proposal Management	Performance Management
Survey analysis	Confirmation of implementation plan and announcement	Inspection & management of progress	Survey on output utilization
Policy direction setting	Establishment of an evaluation plan	Final evaluation	Performance analysis
Project planning	Evaluation of proposal selection	Settlement of research expenses	Technology transfer and commercialization
Procurement of R&D budget	Signing of agreement		Project evaluation

Major R&D projects in priority areas



Status of healthcare R&D support in the last 10 Years



Major
achievements

New drug
development
30 cases

Medical
device
development
213 cases

International
technology
transfer
79 cases

New drug
development

30
cases

16 new drugs, 4 immune vaccines,
6 biopharmaceuticals, 4 natural drugs

- **KANARB** (new medication for high blood pressure) : the first drug in Korea to achieve 100 million USD in exports
- Development of **SUPECT** : the first Asian drug for leukemia treatment
- Development of **XCOPRI** : a new innovative drug for the treatment of partial-onset seizure epilepsy in adults



KANARB



SUPECT



XCOPRI

Medical device
development

213
cases

- First in the world to develop L'DISQ Navigable percutaneous disc decompression device for treating herniated disc tissue without surgery (grade 3 medical device*)
- First in the world to develop **Hi3-1**, multiplex diagnostics for the detection of high-risk group viruses (grade 4 medical device)
- Development of **NOVOSIS**, injection-type bone graft material complex (grade 4 medical device)

*There are four grades for medical devices. It is harder to develop and gain permits for higher grade due to higher risk.



L'DISQ



Hi3-1



NOVOSIS

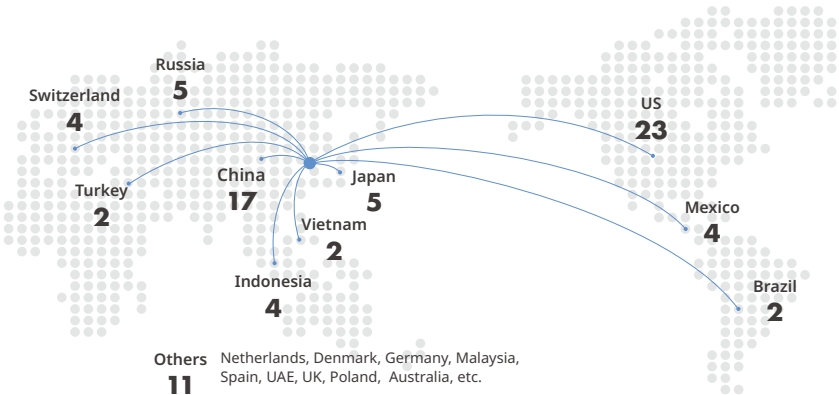
International
pharmaceutical
technology transfer

* USD 1\$ = 1,197.00 KRW
(as of Jul. 22, 2020)

- **910 million USD* royalty**(equal to 1.10 trillion KRW) for oral **targeted anticancer drug** between Hanmi Pharmaceutical - Genentech (US) (2016)
- **560 million USD royalty**(equal to 670 billion KRW) for **cancer immunotherapy** between Genexine - I-Mab Biopharma (China) (2017)
- **1.26 billion USD royalty**(equal to 1.50 trillion KRW) for **lung cancer treatment drug** between Yuhan - Janssen (US) (2018)
- **530 million USD royalty**(equal to 630 billion KRW) for **an anti-epileptic drug** between SK Biopharmaceuticals - Arvelle Therapeutics (Switzerland) (2019)
- **3.84 billion USD royalty**(equal to 4,600 billion KRW) for **source technology of hypodermic injection** between Alteogen - overseas pharmaceutical company (2020)

International
Technology
transfer cases

79
cases



Journals and
patents

Journal and patent
application/
registration(Year 2018)

SCI(E)
journals
2,233 cases

Patent
application
993 cases

Patent
registration
616 cases

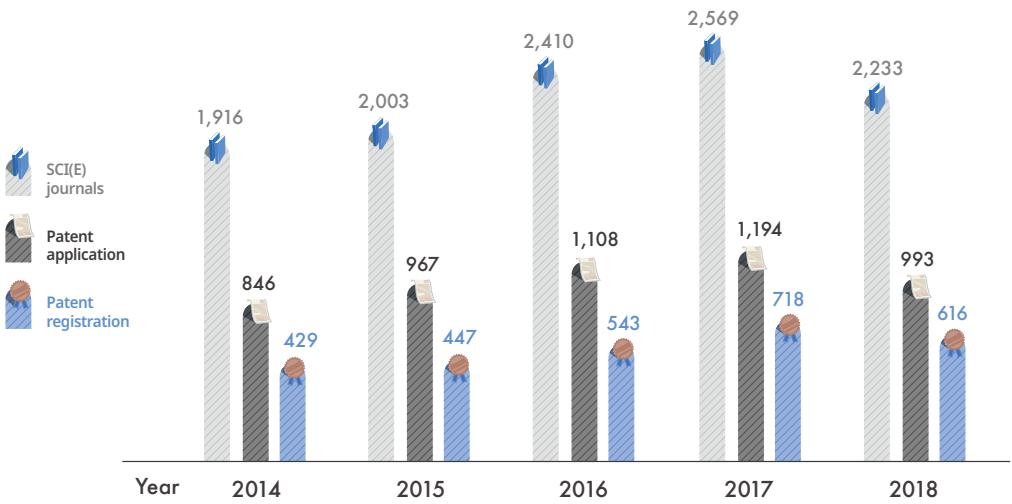
Clinical trials

Number of clinical
trials(Year 2018)

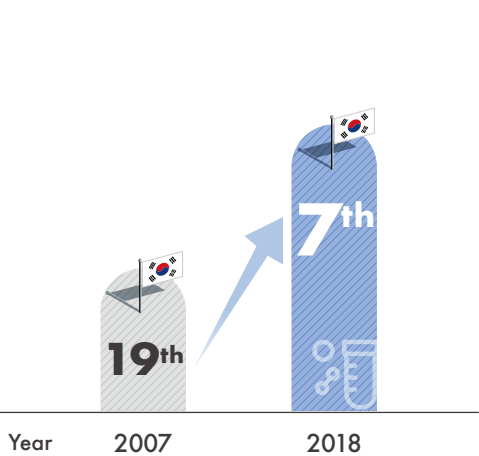
Domestic
clinical trial
393 cases

Multistate
clinical trial
286 cases

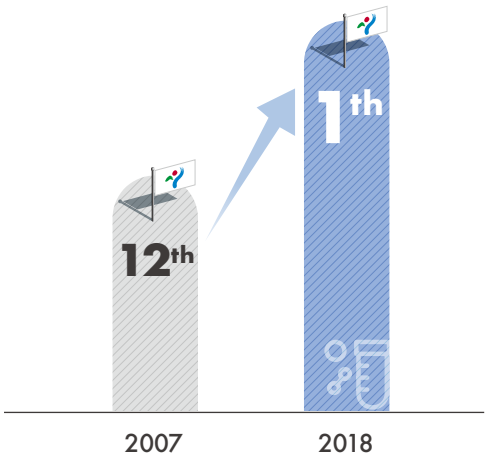
Journal and patent achievements (Unit : no. of cases)



Country ranking for clinical trials



Seoul City ranking for clinical trials



Fostering Healthcare Industry and Supporting Business

We provide services from consultation, funding, and investment attraction at the Biohealth Innovation Start-up Center to support businesses throughout the entire process, ensuring great healthcare technologies and ideas are commercialized.

Our goal is to support global business expansion by strengthening the capacity of Korea's pharmaceutical industry, foster the medical device industry by implementing the Medical Device Industry Act, and facilitate the commercialization of innovative medical devices.

Foreign visitors (staff of bio companies)
exploring the BIO KOREA 2019

Achievements of healthcare industry promotion programs

Total revenue of healthcare
start-ups supported by KHIDI
(Year 2019)



34.2
billion won

Certified innovative
pharmaceutical companies ;
Total number of companies and
amount of government funding
(including R&D and program support, tax benefits,
and price incentives/Year2018)



45 companies
747.2 billion won

Total revenue of Korea medical
device manufacturers with
governmental support based on
user evaluation (Year 2018 to 2020
accumulated)



45 companies
45.2 billion won

Support for transfer of biohealth technology and vitalization of start-ups



BIO KOREA 2019 visitors(left) and buyers at the business meeting(right)

For successful commercialization of promising Korean biotechnologies, we operate a healthcare TLO and technology trade markets. Startups are also provided with office space at the Biohealth Innovation Start-up Center, consultation on patent, technology valuation, and assistance in prototype production, all of which can help their growth.

Scope of activities

Support for successful commercialization by discovering excellent technology and assisting technology transfer	Operation of BIO KOREA and other platforms for technology trade	Provision of office space for business incubation and operation	Operation of support programs to boost growth of start up companies
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Support for Korea's leap forward to become a global biopharmaceutical powerhouse



Innovative pharmaceutical company
CEOs' round-table meeting Business meeting with Russian healthcare delegation
(Year 2019)

We have carried out development and support policies including the innovative pharmaceutical company certification system under the Pharmaceutical Industry Promotion Act in order to foster the growth of the domestic biopharmaceutical industry into a core industry that contributes to the national economy. We are at the forefront of creating the foundation for an industrial ecosystem that helps Korean companies' global expansion and capacity building.

Scope of activities

Execution of comprehensive programs to foster and support the pharmaceutical industry and establishment of implementation plans	Certification of innovative pharmaceutical companies	Offering of training opportunities to nurture professionals
Facilitation of global expansion of pharmaceutical companies throughout the entire process	Provision of consultation on overseas expansion and marketing for pharmaceutical companies	

Support for
the development of
the medical device industry



AI-based medical image processing
(photo provided via Vuno)

Korean Medical Devices Showroom at 2020 Arab Health

We support the enactment and implementation of government policies including the Act on the Development of the Medical Device Industry and Support for Innovative Medical Devices. We are leading the effort of laying the foundation for an industrial ecosystem to help Korea's medical device businesses to build competitiveness and enter into overseas markets.

Scope of activities

Execution of comprehensive programs to foster and support the medical device industry and establishment of implementation plans	Certification of innovative medical device manufacturers and operation of classification and designation programs for innovative medical device	Enhancement of reliability in new domestic products and promotion of Korean medical device use
Assistance for medical device companies with the entire process of global expansion	Operation of One-Stop Service Center for medical device industry	

Support for the development
of the beauty &
cosmetics industry



K-Beauty pop-up store in Vietnam(left) and local visitors looking at Korean products(right)

We are striving to enhance K-beauty brands' competitiveness and promote exports by discovering policy tasks to foster the cosmetics industry's leap forward as a 'G3 cosmetic export country', and by developing and expanding sales channels for domestic small and medium-sized cosmetics companies to enter overseas markets.

Scope of activities

Policy planning for the beauty & cosmetics industry and promotion of the industry	Support for K-beauty brands' entering into global markets	Operational support for overseas sales/promotion spaces and pop-up booths overseas
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Support for the development
of senior-friendly industries



2020 YOLD(Young Old) Innovation Forum

Exhibition Hall for Senior-friendly products

In order to actively respond to population aging and to improve the quality of life of the elderly as well as to contribute to sound economic growth, we are promoting policies to foster and support senior-friendly industries under the Framework Act on Low Birth Rate in Aging Society and Senior-Friendly Industry Promotion Act.

Scope of activities

Policy planning to foster senior-friendly industries	Operation of a designation system for excellent senior-friendly products	Customized consultation and market entry support for senior-friendly companies
Production of statistics on senior-friendly industries	Development of human resources specialized in senior-friendly industries	Support for development of senior-friendly technologies such as smart care



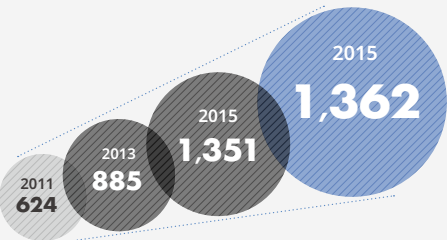
K·BIC
Biohealth Innovation
Start-up Center

Facilitating
commercialization of
biohealth technology
throughout its life-cycle



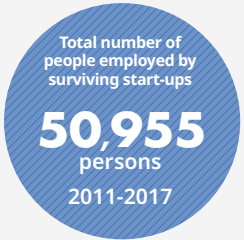
The healthcare industry is truly a field that is capable of continually increasing **new start-ups*** and **employment****. It is most important to create a cyclic ecosystem where R&D achievements lead to start-ups, which in turn lead to job creation.

* Number of start-ups by year



** Total number of people
employed by surviving start-ups
in the recent seven years
(Year 2011-2017)

as of Dec. 2018, Result of 2019 Survey on
Start-ups in the Healthcare Industry



As part of an effort to boost start-ups and vitalize ecosystems, the **Biohealth Innovation Start-up Center** opened its doors in 2018. The Center has project managers dedicated to discovering promising ideas and technologies to provide life-cycle support from professional consultation to technology valuation, investment attraction, and setting-up of sales channels.

Supporting Vitalization of Global Healthcare

KHIDI supports to protect rights and interests of foreign patients and promotes the convenience of medical use in Korea so that the patients can receive safe and high-quality medical and healthcare services. Through intergovernmental cooperation, KHIDI enhances the international competitiveness of nation's healthcare industry and contributes to the industry a high added value with job creation.

Key Results of Global Healthcare Promotion

Overseas expansion of
Korean medical institutions
(Year 2016-September 2020)

 **20** countries
89 cases

No. of foreign patients
(Year 2009-2019)

 **7.09**
million persons

Invited foreign medical
practitioners for training
(Year 2007-September 2020)

 **32** countries
864 persons

Worldwide recognition of Korean medical services

No. of foreign
patients
(Year 2009-2019)

7.09
million persons

No. of countries
where foreign
patients came from
(Year 2009-2019)

199
countries

Overseas expansion
of Korean medical
institutions
(since 2016 when reporting
system was established)

Accumulated
no. of cases
(Year 2016-
September 2020)

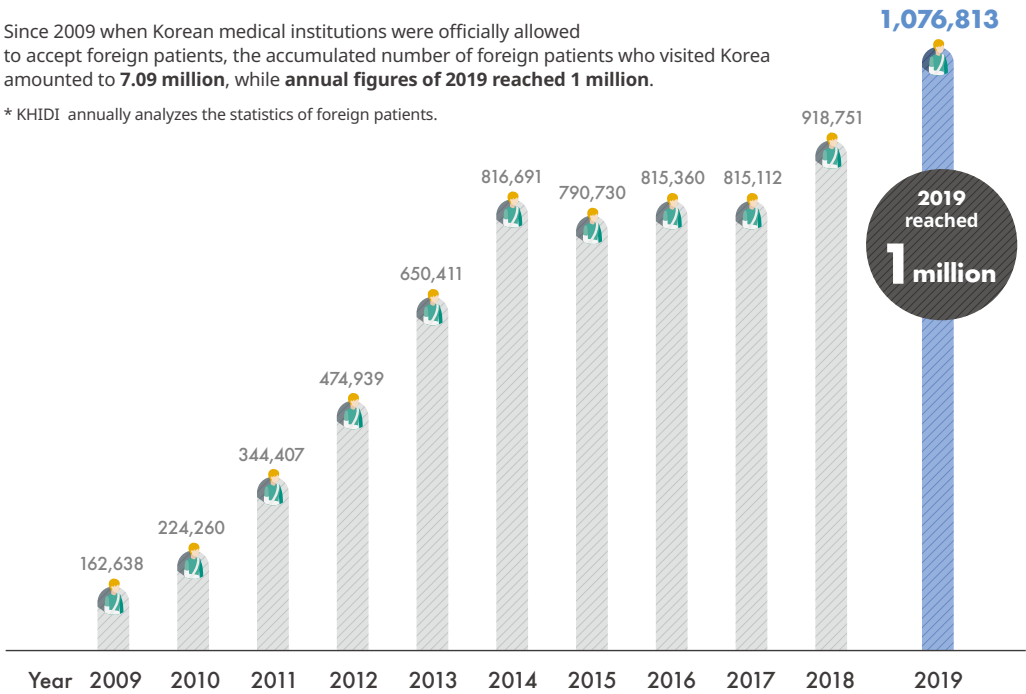
20 countries
89 cases

MEDICAL KOREA
Where your days
begin again

The total number of medical treatments for foreign patients per year

Since 2009 when Korean medical institutions were officially allowed to accept foreign patients, the accumulated number of foreign patients who visited Korea amounted to **7.09 million**, while **annual figures of 2019 reached 1 million**.

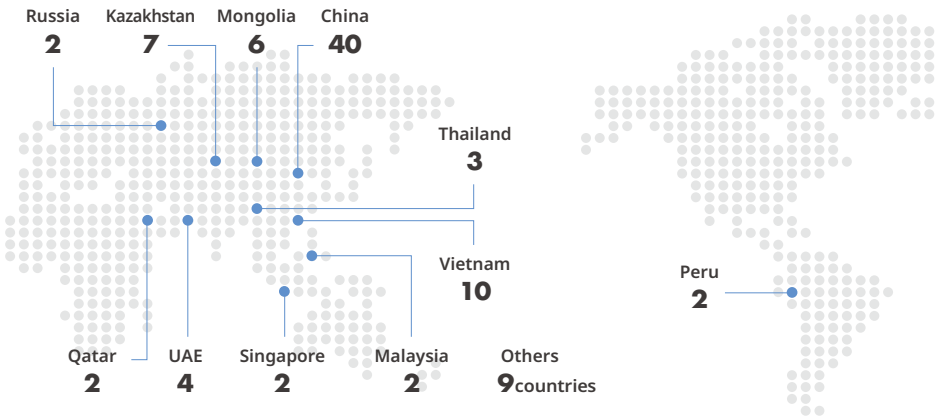
* KHIDI annually analyzes the statistics of foreign patients.



Overseas expansion of Korean medical institutions (Unit : no. of cases)



Overseas expansion of Korean medical institutions by countries (Unit : no. of cases)





Announcement of 'MEDICAL KOREA' brand

Signed Renewal Contract for consignment management of Seoul National University Hospital - UAE Sheikh Khalifa Specialist Hospital

Satisfaction level of
foreign patients



90.5
points

→

91
points

2018*

2019

* Satisfaction survey on Korean medicine and medical tourism conducted on foreign patients who received treatment at Korean medical institutions.

Creation of a convenient
and safe healing
environment for Korean
medical services



Medical consultant service
(photo provided by SNU Gangnam center)

Foreign patient getting consultation
at MEDICAL KOREA Inforamtion Center

• Provision of online/offline information on medical services, tourism, and wellness to
foster convenient use of Korean medical services

- Various information on topics such as medical institutions, medical technology, and wellness is provided on www.visitmedickorea.com in 5 languages (English, Chinese, Japanese, Russian, Arabic)

- Operation of **MEDICAL KOREA Information Center** (Incheon International Airport and Myeongdong, Seoul)

*Multilingual consultation and information provided on medical service use, beauty-cosmetic tax return, and connection to the medical translator

• Provision of policy support and implementation of medical institutions evaluation and certification program to protect foreign patient's rights and interest, to create a safe medical environment, and to provide high-quality medical services.

- We provide information on reporting procedures for illegal brokers and consultation/information in case of medical disputes between foreign patients and medical institutions. If needed, we also support connecting with the Korea Medical Dispute Mediation and Arbitration Agency or the Korea Consumer Agency.

- The Korean government operates an accreditation program (KAHF) that evaluates and designates selected medical institutions with state-of-art international medical service standards.

Global CSR and creation
of shared values by Korean
medical institutions



Korean Medical Charity Program Event

Celebration for Returning Home of
the Medical Charity Program Patient

- We disseminates a value of international contributions by focusing on core competencies and resources of the public and private medical institutions to realize the core value of medical care through co-prosperity beyond competition in the global healthcare market.

Complimentary Medical
Treatment via Medical
Charity Program

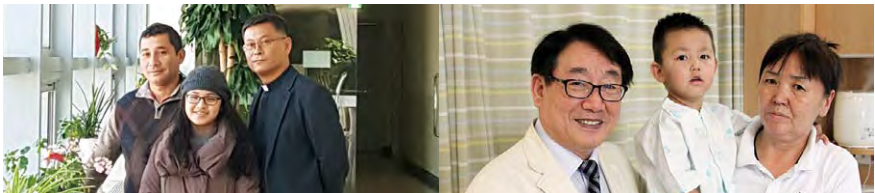
(Year 2011-2019)



26 countries
404 persons

Medical Charity Program

Implementation of 'Korean Medical Charity Program,' which invites foreign patients with lack of access to healthcare services and provides necessary treatment they are unable to receive elsewhere - 404 patients from 26 countries received complimentary medical treatment via Korea Medical Charity Program from 2011 to 2019.



Medical Charity Program(Peru)

Medical Charity Program(Mongolia)

Medical KOREA ACADEMY

'MEDICAL KOREA ACADEMY' provides opportunities for outstanding foreign medical practitioners to get professional training from Korean medical institutions

- **Observation Course** (Medical Korea Academy-Global, Korea-Mongolia, Korea-Russia) : completed by 703 persons from 32 countries
- **Clinical Training Course** (Middle Eastern Physician & Dentist) : completed by 161 persons from 4 countries (Saudi Arabia, Kuwait, Bahrain, Oman)
- **Initiating the Online Training Program** (MKA e-class) is available to prepare for the post-COVID era

No. of trainees
completed
Medical Observation
Program
(Year 2007-
September2020)

Korea-
Russia
82
persons

Korea-
Mongolia
173
persons



Medical Korea
Academy
448
persons

No. of trainees
completed
Medical Clinical
Program
(Year 2015-
September2020)

Dentists
12
persons

MDs
149
persons



- **MEDICAL KOREA**, a global healthcare event, held annually since 2010 to exchange the latest information on healthcare sector and to provide a place for networking.

- Hosting of conferences, B2B(business meetings), Korean hospital experience event, exhibition & PR hall

KHIDI Information

Major Events

BIO KOREA

As the largest international biohealth convention in Asia, it has been held annually since 2006, featuring conferences, business meetings, and exhibitions.



MEDICAL KOREA

It is an international conference held since 2010 to share the trends and prospects of the global healthcare and medical tourism industry.



History



February 1999
Korea Health Industry Development Institute(KHIDI) founded

January 2000
Designated as an institution for the management of R&D projects related to healthcare technology

January 2001
Designated as an institution specialized in technology trade and evaluation in the healthcare industry



September 2006
Hosted the 1st BIO KOREA

January 2008
Designated as Senior-friendly Industry Support Center

May 2008
Designated as an institution authorized to produce national statistics (Statistics Korea)

December 2009
Announced 'MEDICAL KOREA' brand



November 2010
Moved to Osong Health Technology Administrative Complex

June 2012
Started to provide support for graduate schools specialized in pharmaceutical industry, medical devices (September 2013), senior-friendly (September 2015)

June 2012
Started authorization program for innovative pharmaceutical companies

Awards

- Job of the Year (Year 2018-2020, Ministry of Employment and Labor)
- Korea Knowledge Award (Year 2019-2020, Ministry of the Interior and Safety)
- The IMTJ Medical Travel Award (Year 2019-2020, IMTJ)
- Porter Prize for Excellence in CSV (Year 2019, The Institute for Industrial Policy Studies)
- Korea Trusted Innovation Awards (Year 2020, Ministry of Trade, Industry and Energy)



February 2016
Opened MEDICAL KOREA Information Center

June 2016
Designated as supporting institution for overseas healthcare expansion and foreign patient attraction

March 2018
Opened Biohealth Innovation Startup Center

September 2019
Launched Healthcare big data platform



May 2020
Operated a support center to alleviate problems faced by companies developing COVID-19 treatments-vaccines

October 2020
Designated as a special institution for coupling and utilizing of pseudonymous healthcare data

KHIDI's Support for the Industry

Senior-friendly Industries
www.khidi.or.kr/esenior

MEDICAL KOREA
www.khidi.or.kr/medicalKorea

Health Technology R&D Portal
www.htdream.kr

KHISS Healthcare Industry Statistics
www.khiss.go.kr

BIO KOREA
www.biokorea.org

Biohealth Innovation Start-up Center
www.khidi.or.kr/kbic

Visit Medical Korea
www.visitmedicalkorea.co.kr

Korea Overseas Hospital Expansion Service
www.khidi.or.kr/kohes

Medical Device Industry Information
www.khidi.or.kr/device

Pharmaceutical Industry Information Portal
www.khidi.or.kr/epharmakorea

