

Korea Health Industry Development Institute



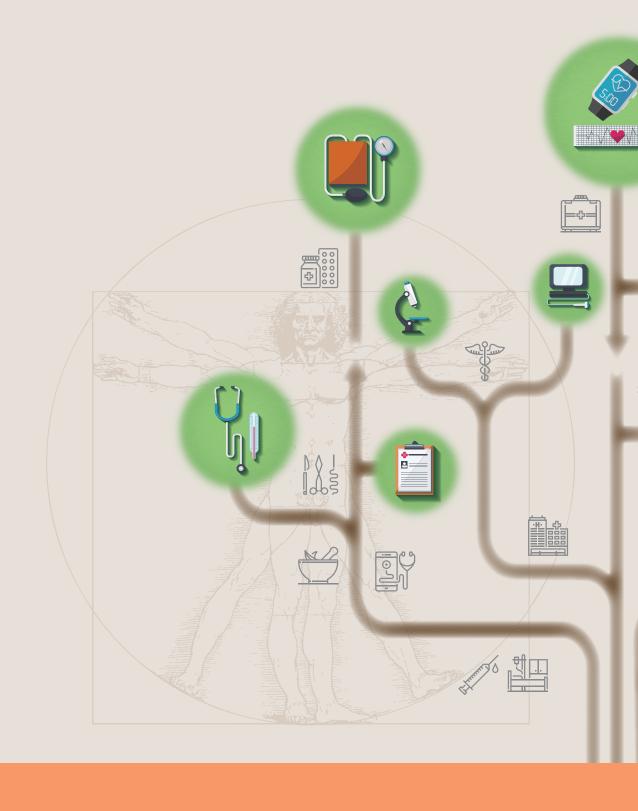


Professional institute promoting the health industry and creating its future values









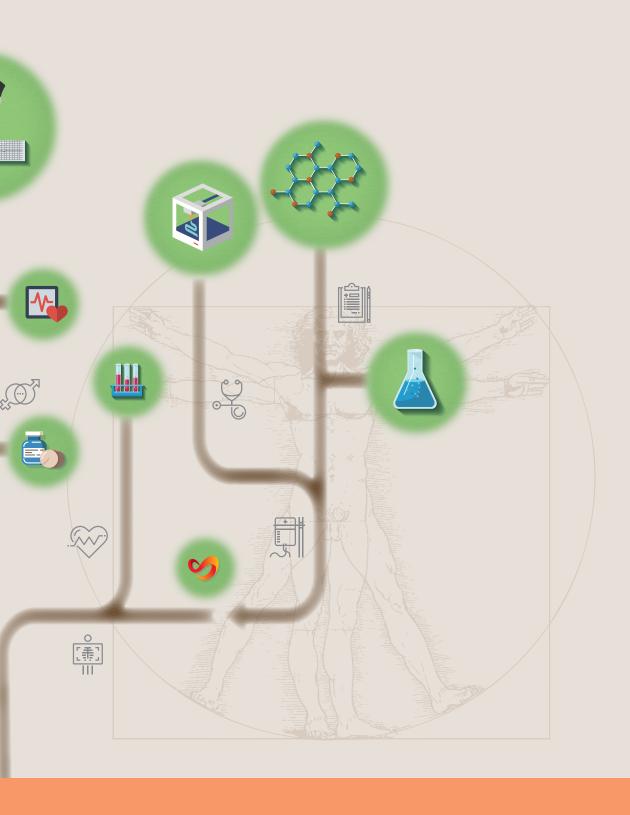
CONTENTS

04

05

MISSION

VISION



06

07

08

24

PEOPLE

CEO MESSAGE

STRATEGY & BUSINESS

KHIDI INFO



KHIDI, Healthcare Innovator

KHIDI MISSION

Development & Promotion of the Health Industry and Improvement of Healthcare Services

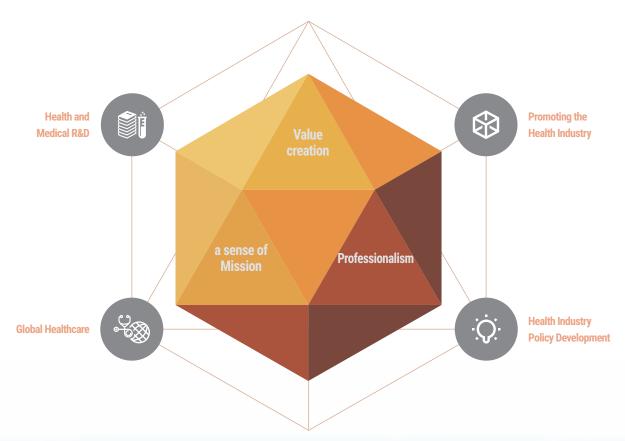
Korea Health Industry Development Institute (KHIDI) contributes to the improvement of the international competitiveness and the quality of national health through systematic and professional projects designed to develop and promote the health industry and to provide advanced healthcare services.

We conduct numerous global healthcare initiatives including Health and Medical Research and Development(R&D), the overseas expansion of medical institutes, attracting foreign patients, and the promotion of digital healthcare.

In addition, we have taken a pivotal role in developing state-of-the-art technologies to improve national health by implementing the Big Data platform on health and medical records and by developing technologies for IoT (Internet of the Things), genome, stem cells, and precision medicine.

KHIDI VISION

Professional institute promoting the health industry and creating its future values





Korea Health Industry
Development Institute
PEOPLE



KKIDI

"

KHIDI will put all of its efforts into fostering the health industry so it will flourish as the next-generation growth engine for Korea's Creative Economy.

"



Heart of Infinity

The logo shows that KHIDI is an organization pursuing national happiness and health by fulfilling its duty as a professional organization that promotes health industry and creates its future values.

Since its establishment in 1999, KHIDI has acted as a primary vehicle for creating future values in the health industry.

We are committed to advancing international competitiveness of Korea's health industry by continuing our efforts to conduct systematic and professional projects. It will enable us not only to have advanced healthcare services but also to turn the healthcare business into a new growth engine for Korea's creative economy.

Our goal is to develop the global healthcare industry as a next-generation growth engine that will create added value and healthy jobs. We are striving to generate the 'Korean-wave' in our health industry by combining the strength of Korea's medical technology, medical IT, national health insurance system, and also by attracting foreign patients.

In addition, we are willing to lead the development of cutting-edge technologies in the health industry, such as implementation of the Big Data Platform, Internet of Things, 3D printing system, stem cell technology and precision medicine.

KHIDI promises to foster and promote the health industry as a core growth engine for the future of Korea's creative economy.

President of Korea Health Industry Development Institute



Health and Medical R&D

There has been an increasing demand for the reduction of medical costs and the improvement of healthcare services. Advanced health and medical technology is at the core of our 'Technology for National Happiness' that leads the 'Creative Economy' and enhances the status of Korea's health industry.





Major Achievements and Future Directions

Economic Achievements	Ш
Patented Theses	1'
No. of clinical trials (domestic)	1
Annual budget for R&D projects under the management of KHIDI	1'

Health and Medical R&D – Achievements and Future Directions

KHIDI provides Research & Development support and has become the foundation of developing new medicines, medical devices, and technology export. Through enhanced Research & Development planning and evaluation, we will create fruitful outcomes to lead prospective studies such as stem cell research and precision medicine.

No. of New Drugs Developed 27

Economic Achievements

As of Nov. 2015

New Drugs

16 Synthetic (innovative) drugs, 4 herbal medicines, 7 biopharmaceuticals, etc. (excluding incrementally modified medicines)

- * 'Kanarb Tab' (Boryung Pharm Co., Ltd) (anti-hypertension drug), firstly reached US\$ 100 million export milestone
- * 'Supect((IL-YANG Pharm Co., Ltd)' (anti-super leukemia medicine), first in Asia
- *'Neuronata-R (Corestem Co., LTD)' (anti-Lou Gehrig's disease medicine), developed first-in-the-world from stem-cell research / approved
- * Developed first-in-the-world 'Quadrivalent cell culture flu vaccine (SK Chemicals, approved in Dec., 2015)'

No. of Medical Devices developed 150

Development of Medical Devices

- *'InnoSEAL (Class 2, approved Mar., 2015, Hemostatic for medical use): Adopted biomimetics(world's first), generates import-substituting effect
- * 'Synthetic bone grafting material (Class 4, Apr. 2014)' led revitalization of domestic medical industry







27 new drugs

4 new herbal medicines, including 'Synatura (Ahngook pharm)'



biopharmaceuticals, including 'NEURONATA-R inj (Corestem)

Medical Devices: 150



150 medical devices, including 'InnoSEAL(Innotherapy Co,. LTD)'

No. of cases for pharmaceutical technology transferred to overseas

Pharmaceutical Technology transferred to overseas



15 Others

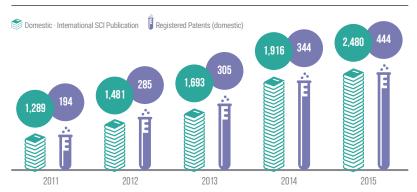
- Germany
 Poland
 Netherlands
 Australia
 Indonesia
 Vietnam
 Spain
 Brazil
- India UAE







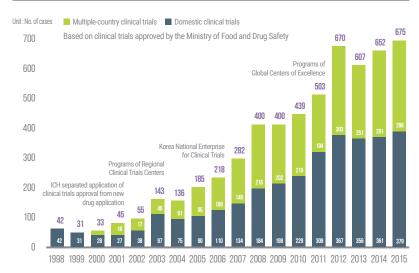
Patented theses



^{*} Record of 2015 based on NTIS system (Contribution rate of each department not considered)

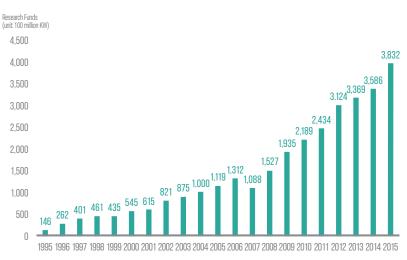
No. of domestic clinical trials

from 1998 to 2015



- * (World ranking for clinical trials according to the total no. of protocols) ('08) 15th \rightarrow ('14) 7th
- * (World ranking for clinical trials according to the no. of protocols designed for multiple-country clinical trials) ('08) 20th \rightarrow ('14) 13th

Annual budget for R&D projects managed by KHIDI

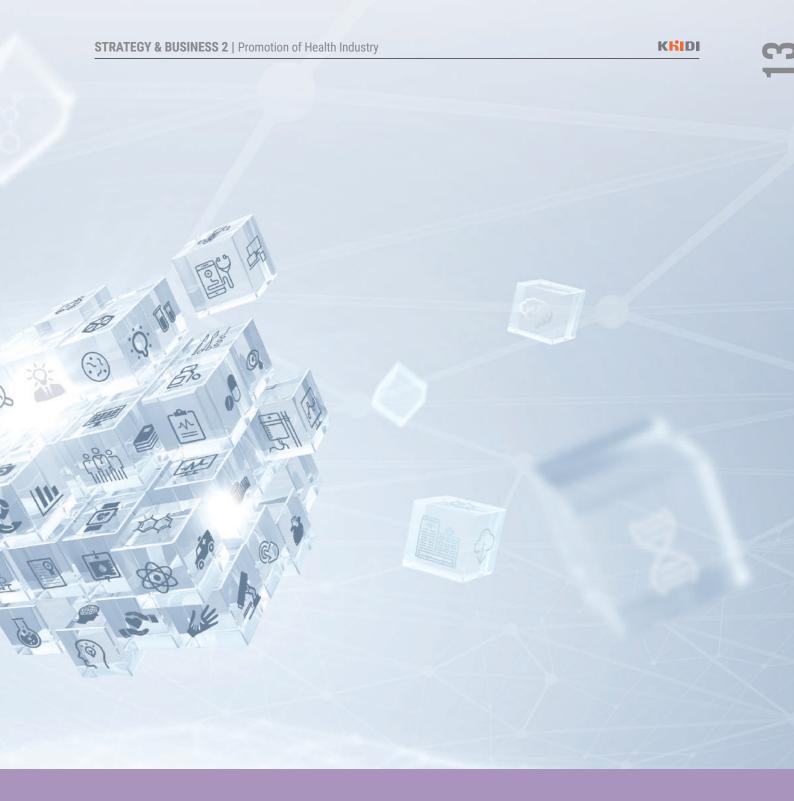




Promotion of Health Industry

We have been focusing on the promotion of the pharmaceutical and medical device industry in order to enhance our capability while enlarging our support for the technology commercialization.

We are committed to making intellectual property out of health and medical technology, transferring prospective technologies, attracting investments, and founding start-up companies.



the health and medical technology	1
Korea Research-Driven Hospitals	1
Pharmaceutical industry	1
Medical Device industry	1



2016 BIO KOREA Exhibition Hal

Technology Commercialization

KHIDI provides an extended life-cycle support for excellent technologies such as intellectual property incubation and technology commercialization for IP creation, including protection and reinforcement which were discovered through technology evaluation.

We are strengthening the network and forming global technology transfer markets through BIO KOREA, and encouraging small-giant companies to expand their businesses through start-up platforms and life-cycle support by discovering venture ideas to strengthen their businesses.

- Discovering and managing excellent and promising technologies such as New Excellent Technology (NET)
- Operating Health Technology Licensing Office (H+TLO) Committee
- Providing global technology trade market platform such as Bio Korea international convention
- Encouraging healthcare start-up and operating K-Healthcare Start-Up membership program

Korea Research-Driven Hospitals



KHIDI started cultivating Korea Research-Driven Hospitals in an effort to turn them into the world-class medical institutions that develop state-of-the-art medical technology and services through R&D and technology commercialization based on government support and clinical data.



- Establishing public infrastructure for innovative health and medical treatment
- Establishing a network for the research cooperation





The pharmaceutical industry

In compliance with the pharmaceutical industry promotion act, we carry forward the supporting policy which allows pharmaceutical companies to obtain certifications. As a result, we expect the pharmaceutical industry to thrive as the core industry for Korea's creative economy.

We are taking the lead in establishing a ground for an industrial ecosystem with the purpose of enhancing competitiveness and the likelihood of an overseas expansion in the pharmaceutical industry.

- Promoting the pharmaceutical industry and establishing supporting plans
- Enabling innovative pharmaceutical companies to acquire certifications
- Providing support to universities specialized in pharmaceutical studies
- · Supplying individualized consulting with foreign pharmaceutical experts



The medical device industry

We are providing integrated support to establish government policies and professional manpower training programs for universities, specialized in medical device studies, while promoting the medical device industry. Moreover, our duty is to establish and operate total information systems while focusing on expanding the overseas markets and supporting marketing activities in the medical device industry.

- · Supporting trials of domestic medical devices in large hospitals
- Supporting overseas market expansion by operating consultative groups for export marketing of medical devices
- $\bullet \ \text{Supporting universities specialized in developing medical devices} \\$
- · Supporting the fitness-for-service assessment of medical devices

Standing consultants of Korea Health Industry Development Institute (supplying individualized consulting with foreign pharmaceutical experts)

Global Healthcare

Business designed to attract foreign patients plays a significant role in transferring the Korean medical industry into a notable healthcare power in Northeast Asia with its qualitative growth since the start of the business in 2009. Exporting medical systems from Korea increases employment prospects and advances the value due to our dedication to enhancing international competitiveness in the health and medical industry. We will continue to support the exportation of healthcare products, such as medical devices, pharmaceutical products and cosmetics, while concentrating on creating successful cases of overseas market expansion of digital healthcare.



Attracting foreign patients	18
Overseas expansion of medical institutions	19
Exportation of digital healthcare	10

Attracting foreign patients

We will gain reliability from foreign patients using Korean medical science and improve convenience for them by designing health-related programs, such as medical tours while devising various channels for each region.

Additionally, we will enhance capabilities in businesses to attract more foreign patients by the integration of oriental and western medical science.





Annual number of foreign patients visiting Korea (total) and the sum of revenue

2009		60,201	547
2010	(9)	81,789	1,032
2011	(0)	122,297	1,809
2012		159,464	2,673
2013		211,218	3,934
2014		266,501	5,569
2015		296,889	6,694
2016		400,000	
2017		500,000	
2018		630,000	
2019		800,000	
2020	(1)	1,000,000	



* The figures from 2016 are the targeted figures.



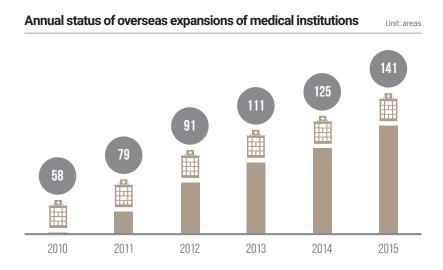




With the support of intergovernmental cooperation (G2G), we will overcome obstacles toward overseas expansion of Medical institutions and achieve a higher value-added business with sustainable development by enhancing our infrastructure.

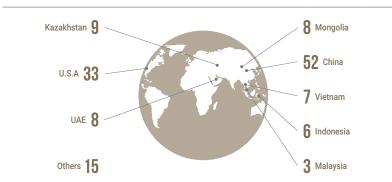






Status of overseas expansions of medical institutions in major countries

Based on the research on Dec. 2015



Exportation of digital healthcare and pharmaceutical products

We aim to create more successful cases in overseas expansions of telemedicine businesses in Latin America and China by MOU Follow-up activities. Additionally, we will continue to carry forward strategic plans on overseas expansions by implementing demonstration projects for remote medical care for Korean nationals residing in other nations and supporting the development of a telemedicine system through a field survey. We will help the exportation of pharmaceutical products, for example, medical devices, pharmaceutical products, and cosmetics through the promotion of the business investments, such as funds on global healthcare and the overseas expansion of pharmaceutical companies.



Health Industry Policy development

To become a pioneer in the health industry, it is essential to predict both domestic and foreign environmental changes in order to formulate alternative plans and establish policies accordingly. In particular, it is very important to ensure that corresponding policies are prepared beforehand so as to push forward the developing industry so that the New Future Industry, the Healthy Aging Industry, and the Health Industry are easily influenced by policies.



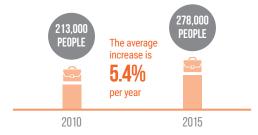
rialining Strategies for the New Future industry	
Supplying statistics on technical commercialization in the health industry	22
Activating the Healthy Aging Industry	22
Advancing Healthcare	23
Promoting Digital Healthcare	23



Planning Strategies for the New Future Industry

Development of technology convergence in Healthcare is opening up numerous new markets. We are constantly seeking new agendas, such as big data in healthcare, in order to implement with government policies and plan long-term sustainable strategies.

- Suggesting the new agenda for the Health Industry
- · Promoting an active use of Healthcare Big data
- Pioneering new professions in the Health Industry



• The average increase is 5.4% per year



Providing statistical information on the Health Industry

We offer statistical information on the Health Industry to support establishing strategies and policies for the industry. We research, analyze, and produce reliable statistical data, including national statistics in order to strengthen the reliability of forecasting the particular industry.

- Producing and offering the national statistics of the health industry.
- Researching the actual condition and analyzing trends in the health industry.
- Improving the appropriateness of the statistical information on the Health Industry and strengthening the capability to predict trends.
- Offering support for international trade negotiations in the Health Industry



Activating the Healthy Aging Industry

We are enhancing prospects for the New Healthy Aging Industry by building foundations and systems for supporting plans while taking a lead in the new growth industry with a full support to the development of policies and services related to population aging, nutrition, and beauty products.

- Devising corresponding policies on the aging society in advance.
- Establishing the infrastructure for the anti-aging industry and supporting systems
- Developing policies on national nutrition and providing the support to promote the nutritionmanagement service industry.
- Providing widened support for the promotion and overseas expansion of the cosmetic industry.





Advancing Healthcare

We offer management support to improve the competitiveness and capabilities of individual medical institutions and have devoted ourselves to developing policies establishing sustainable supply systems for the Healthcare service in order to effectively manage medical institutions.

- Improving the clarity of accountancy processes of medical institutions.
- Building and operating the accounting information system (HAS System) of medical institutions
- · Offering consulting to hospitals
- Establishing and operating K-Medical Center (Integrated training center for foreign medical personnel)
- Establishing and supporting the foundation of medical information exchanges.
- · Researching policies and analyzing trends for the Healthcare Industry.



Digital Healthcare

We play a leading role in promoting the industry by establishing the foundation for digital healthcare, which is the combination of both IT and medical knowledge. We provide full support to develop policies and plans for the core management systems of digital healthcare where individuals are able to administer their own health and medical-treatment information on mobile healthcare apps.

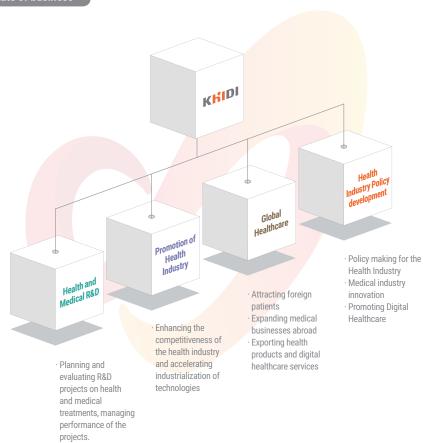
- Establishing foundations for information exchange among cooperative medical institutions.
- Establishing foundations for overseas expansions through G2G cooperation
- Developing overseas businesses on digital healthcare
- \bullet Establishing the foundation for promoting Digital Healthcare
- Analyzing changes in the habitual action of those who utilize healthcare Apps and incentives.



KHIDI INFO |

the current state of business, the history, the current state of overseas branches, Industrial supporting information

the current state of business



The history

2001.01

Designated as a national health technology valuation

and transfer in stitution by Ministry of Health & Welfare

2000.01

Designated as a

R&D Management Institute

by Ministry of Health & Welfare

2008.01

Designated as Senior Products Industrial Center

by Ministry of Health & Welfare





1999.02

The establishment of Korea Health Industry Development Institute



2006.09

Hosted the 1st BIO KOREA





2008.05

Designated as national statistics writing institution

by Korea National Statistical Office

Overseas Branches

	Country	City	Contact No.
	U.S.A	New York	1-646-783-6090
6	Singapore	Singapore	65-6570-3261
*	China	Beijing	86-10-8531-0763
	U.K	London	44-20-8528-1613
	UAE	Abu Dhabi	971-2-643-4422
	Kazakhstan	Almaty	7-727-228-2304

Industrial supporting information

Health Technology R&D

www.htdream.kr

Korea Research-Driven Hospital

www.khidi.or.kr/rndhospital

The pharmaceutical industry

epharmakorea.or.kr

The medical device industry

medicaldevice.khidi.or.kr

Health Technology Transfer Center

www.khidi.or.kr/technomart

Korea Health Industry Statistics System

www.khiss.go.kr

Senior-Friendly Industry Support Center

www.khidi.or.kr/esenior

Professional manpower training of health industry

www.khidi.or.kr/edu

Korea Healthcare Export System

www.kohes.or.kr

Attracting foreign patients

medicalkorea.khidi.or.kr



2010.11

Relocated to the Osong Health Technology Administration Complex, Osong, Chungcheongbuk-do



2010.04 Hosted the 1st MEDICAL KOREA



2012.06

Provided support to universities specialized in the pharmaceutical industry, medical facilities (2013.09), the silver industry designed for the aged people (2015.09)

2012.12

Signed Letter of Understanding to strengthen collaboration in order to develop relevant studies in the health and medical sector and also to realize common objectives with the National Institute of Health (NIH)



2014.09

Signed MOU for mutual information exchange and research with MRC in the UK





2013.12

Signed MOU for R&D international joint research and information/research exchange with A&STAR (Office of Science and Technology in Singapore)



2016.02

Opened MEDICAL KOREA information center



Future medical system will transform into a sustainable structure that allows the population's voluntary healthcare and disease prevention for the better of society.

We are capable of becoming the pioneer for new fields in the health industry.

Internet of Things can create new markets in the industry and telemedicine can reduce costs while improving the quality of medical services.

Health industry can expand through combining new ideas and new technologies.

Enhancement of existing technologies through new knowledge will construct a better reality for everyone to share.

KHIDI will continuously revolutionize the health industry to make a healthier world for all.





















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