

Daegu Medical Cluster

A hub for medical R&D industry

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Medical Capital of Korea
MEDI-CITY+
DAEGU



Contents

Daegu Medical Cluster	
Daegu, convenient transportation city	04
Medical infrastructure and residential environment	06
Project outline & cluster facilities	08
New Drug Development Center	10
Medical Device Development Center	12
Laboratory Animal Center	14
Clinical Drug Manufacturing Center	16
Move-in national institutions & other supporting facilities	18
Move-in guide	20
Industrial Incentives	22

Manufacturing Zone	
Project outline & industrial incentives	24
Move-in guide	26

**Republic of Korea**

Population	50,617,045(2015)
Area	100,210km ²
Capital City	Seoul
Language	Korean(writing system:Hangeul)
Currency	Won(US\$1=1,151won/Apr. 2016)
GDP	Total US\$1.321 trillion(2016)
Gross Domestic Product	Per capita US\$25,990(2016)
Export	US\$573,09mil.(2015)
Import	US\$525,564mi.(2015)

Daegu Metropolitan City

Population	2,518,467(2015)
Area	884km ²
Administrative district	Districts 7, County 1
GRDP	US\$382.3billion(2015)
Gross Regional Domestic Product	
Export	US\$7,808mil.(2015)
Import	US\$3,681mi.(2015)

Transportation Infrastructure**Daegu International Airport to the World**

- Daegu Medical Cluster-Daegu International Airport by car 15 mins (8km)
- Regular Lines : International lines-Bangkok, Shanghai, Beijing, Taipei, Osaka, Shenyang
- Irregular Lines : Taipei, Zhangjiagie, Chengdu, Xian, Hanoi, Siem Reap, Fukuoka, Tokyo, Da Nang
- Domestic Lines : Daegu-Incheon (twice a day), Daegu-Jeju Island (10-13times a day)

KTX (Korea's express train) Rail Network

- Daegu Medical Cluster-20 minutes to Dongdaegu Station by driving
- About 3 hours for Dongdaegu Station-Seoul Station-Incheon International Airport
- 100 minutes for Dongdaegu Station-Seoul Station
- 39 minutes for Dongdaegu Station-Busan Station

Highway Infrastructure

- Reaching to five seaports within one hour driving (Pohang, Ulsan, Masan, Busan International Seaport, and Busan New Seaport)
- Seven highways connected to the cities nationwide (Gyeongbu line, Guma line, Jungang line, 88 line, Jungbu inland line, Iksan-Pohang line and Daegu-Busan line)



Daegu, a rising medical hub in Korea!

| Medical Infrastructure |

- Key facilities for the development of new drugs and medical devices, including the Pohang Accelerator Laboratory and Gyeongju Proton Accelerator Research Center
- The best preclinical and clinical facilities and medical devices outside the country's capital region
- A host of medical universities from the Daegu-Gyeongbuk region, including 5 medical, 2 oriental medical, and 4 schools of pharmacy
- 3,466 medical institutions and 5,236 pharmacies

General Hospitals		Hospitals	Clinics	Dental Hospitals / Clinics		Oriental Medicine Clinics	
12		175	1,607	835		837	
Pharmacies	Herbal Medicine Dispensaries	Medicinal Herb Suppliers	Medicinal Suppliers	Medicinal Supply Wholesalers	Medical Device Suppliers	Medical Device Repair firms	Over-the-counter Drug sellers
1,158	20	58	3	307	2,857	101	732

| Advanced Industry Infrastructure |

- Facilities for the development of the robot industry, led by Korea Institute for Robot Industry Advancement
- Large-scale projects, including a regional 3D Convergence industry development project
- Co-development of imaging device, next-generation display, and component industries
- Related industry facilities, including mechatronics, molds, nano and advanced materials and IT

| Medical Infrastructure |

- Joint research agreements with national research institutions, including Korea Research Institute of Bioscience and Biotechnology and National Cancer Center
- Global networks with Kobe Medical Foundation, New Jersey Medical Cluster, etc.
- Joint research agreements with local universities, including Kyungpook National University
- Agreements with related organizations, including Korea Drug Research Association and Korea Medical Devices Industry Association

| Human Resources |

- The largest cluster of universities outside the capital region (annually, over 85,000 graduates from universities and colleges in Daegu-Gyeongbuk)
- Customized manpower training projects optimized on-site
- Programs to avoid job mismatching, including a recruit tour and a company visit project



Kyungpook National University Hospital



Gyeongju Proton Accelerator Research Center



Pohang Accelerator Laboratory



Comprehensive and Integrative Medicine Institute

The ideal environment for business and living, for your uttermost satisfaction

| A premium city |

- A premium city fitted with living, commercial, education, cultural and leisure facilities, park, etc. (Innovation City : 22,000 residents)
- Green parks in the downtown core (2nd largest park area per resident among seven big cities)
- Apartment complexes within the 1st/2nd residential areas in the Innovation City
- Pleasant natural surroundings, including Palgong Mountain, Geumho River and Yulha Stream

| A global city |

- FIFA World Cup Korea/Japan 2002, Summer Universiade 2003
- IAAF World Championships in Athletics 2011
- World Energy Congress 2013
- World Water Forum 2015
- Global cultural festivals held around the year including the Daegu International Opera Festival(DIOF), Daegu International Musical Festival(DIMF), and Daegu Yangyeongsi Herb Medicine Culture Festival

| Educational City |

- Top-ranked in the 2012 national academic achievement test(middle school seniors)
- Ranked 1st in the 2012 national academic aptitude test(average score)
- Six students with a perfect score in the 2015 aptitude test(6 in Daegu-Gyeongbuk out of 29 students nationwide)
- Daegu Science High School for the gifted(opened in 1988), Daegu International School(LeeAcademy, opened in 2010), Daegu Il Science High School(located in Donggu Innovation City, opened in 2011)
- A cluster of educational institutes in Daegu-Gyeongbuk, including 21 universities and 23 colleges



Daegu Samsung Lions Park



Daegu Stadium



Daegu Opera House



Daegu Science High School for the gifted



Daegu Medical Cluster, a hub for medical R&D industry!

| Project outline |

- Location Sinseo Innovation City, Dong-gu, Daegu
- Size 1,054,000m²(Innovation City 4,216,000m²)
- Project Period 2009~2038(Construction of the cluster: 2009~2013)
- Total Project Costs USD \$4billion
- Supporting Facilities Core R&D Centers - New Drug Development Center, Medical Device Development Center, Laboratory Animal Center, Clinical Drug Manufacturing Center
Amenities - Communication Center, Science Village(apartment for researchers)

| Core Research Centers & Amenities |



History

- Designation of the Daegu Medical Cluster site: Aug. 2009
- Official notification of Daegu Medical Cluster: Dec. 2009
- Deliberation and resolution of the basic establishment plan: Jan. 2010
- Establishment of Daegu-Gyeongbuk Medical Cluster Foundation: Dec. 2010
- Sales of R&D and Manufacturing Zones: Jun. 2012 ~
- Completion of Communication Center: Jun. 2013
- Completion of Core R&D Centers: Nov. 2013
- Completion of Korea Brain Research Institute: Nov. 2014.
- Completion of Korea Institute of Oriental Medicine: Jun. 2015
- Completion of 3D Convergence Technology Center: Sep. 2015



Bird's-eye-view of Daegu Medical Cluster

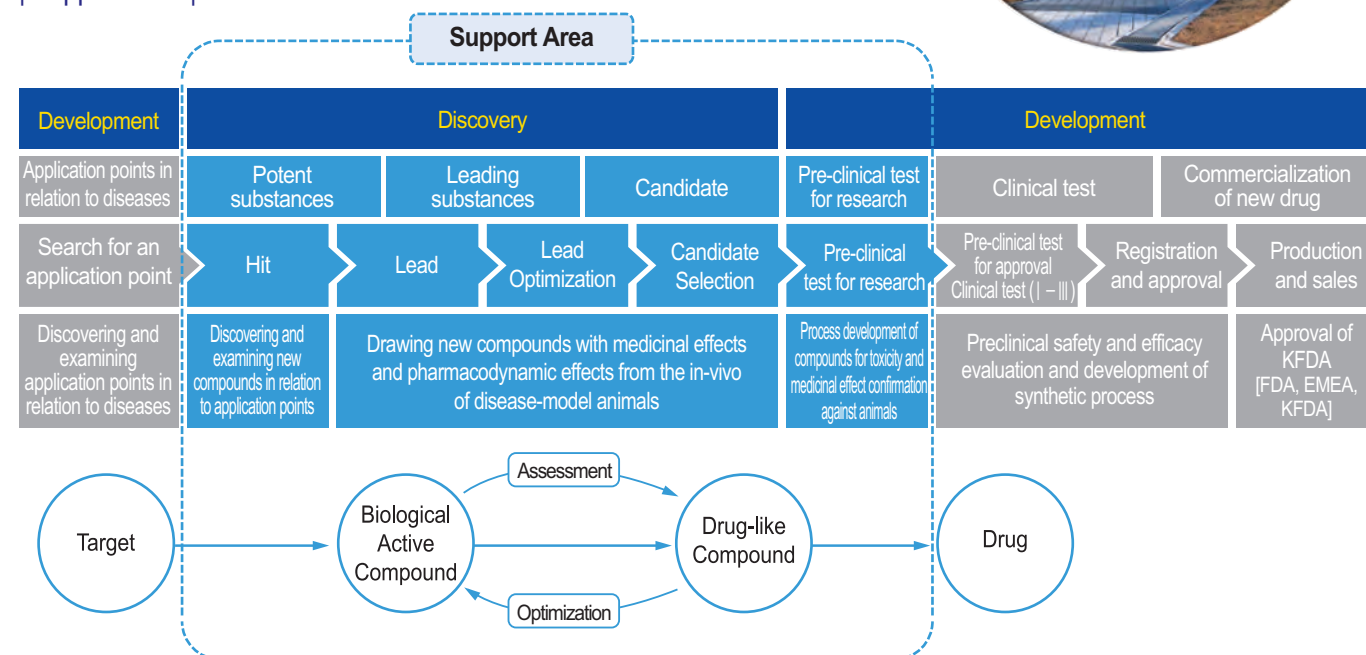
Securing global competitiveness for the development of synthetic new drugs

New Drug Development Center

- Facilitation of new synthetic drug development for target therapy
- Support for the 'drug candidate optimization' stage, the Death Valley in drug development
- Provision of key technologies for pharmaceutical evaluation of new synthetic drugs in the area of cancer, metabolic disorders and neurodegenerative disorders



| Support Area |



| Support Projects |

Support Projects	Support Contents
R&D support for companies in Daegu Medical Cluster	<ul style="list-style-type: none"> • Special financial support from Daegu City for move-in companies • Support for candidate development through joint research with New Drug Development Center • Support with US\$ 0.5~1million/project/yr up to 3 yrs
New drug candidate development support	<ul style="list-style-type: none"> • Support for candidate development of industry-academia-institute collaboration bodies with funds of Ministry of Science, ICT and Future Planning • Drug candidate development through joint research between the New Drug Development Center and proposing companies • Support with US\$ 0.5million per project for up to 3 years
Platform technology development support	<ul style="list-style-type: none"> • Establishment of essential platform technology for candidate development with funds of Ministry of Science, ICT and Future Planning • Advancement of the technology by joint research with New Drug Development Center • Support with US\$ 0.5million per project for up to 3 years
Technological Service	<ul style="list-style-type: none"> • Provision of customized cutting-edge technologies to industry-academia-institute collaboration bodies • Selection of application through internal review • Actual expenses are subject to change depending on projects
Entrustment	<ul style="list-style-type: none"> • Customized support for entrusted research • Actual expenses are subject to charged depending on projects

Target / Hit

Lead

Candidate

Operetta



Robotic liquid handling system



Multi label plate reader



Inverted fluorescence microscope



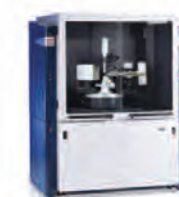
Real-time PCR



Mol. Modeling (Linux Cluster)



X-ray Diffractometer (Bruker VENTURE D8)



600 MHz FT-NMR Spectrometer



Surface Plasmon Resonance System



High-Throughput Crystallization Robot (TTP Mosquito HTS)



Automated Parallel Patch Clamp System



Metabolism analyzer



Protein crystallography instrument with LCP



Microwave



Isothermal Titration Calorimetry



Analytical Ultra-Centrifuge



V-10 Evaporator



H-Cube



Comprehensive Services for Medical Device Development

Medical Device Development Center

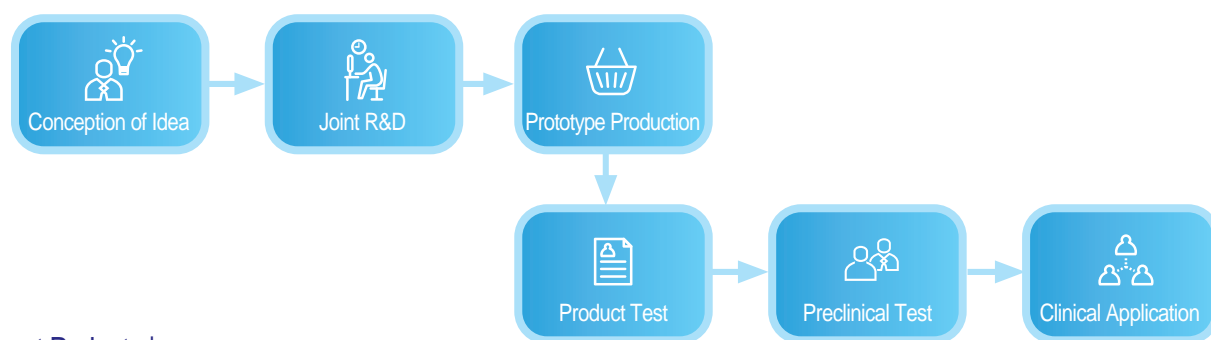
- Support for imaging-based fusion diagnosis and treatment device (IT) development with a focus on three major diseases: cardio-cerebrovascular, geriatric, and cancer diseases
- One-stop total solution services for commercialization



| Support Area |

R&D Support for IT-based Fusion Diagnosis and Treatment Device Commercialization

Research Equipment Support	Skill and Reliability Solution	R&D Support	Academic & Research Network
<ul style="list-style-type: none"> • Image fusion equipment • Research equipment (reliability test equipment, etc.) 	<ul style="list-style-type: none"> • Product technology analysis and developed technology application test 	<ul style="list-style-type: none"> • Reliability improvement • Product technology 	<ul style="list-style-type: none"> • Other support through network of industries, academia, research centers and hospitals



| Support Projects |

Support Projects	Support Contents
Joint R&D for Key Technology Development	Support for products that have great potential but have been delayed for release or have seen low sales due to technological problems
Customized Collaborative R&D	Support for products that feature excellent technological quality but have failed to access the market due to the lack of the credibility of hospitals
Prototype Production	PCB engineering/manufacturing & part installation (SMT)
Test and Evaluation	Main targets : surgical devices, diagnostic devices, medical simulators, in vitro diagnostic devices, syringes and needles, u-healthcare devices
Human Resource Matching for companies	<ul style="list-style-type: none"> • Matching a professional expert of the Center to a company (1:1) • Comprehensive consulting from the conception of an idea to the commercialization of a product
Exchange Lab Operation	<ul style="list-style-type: none"> • Joint research and close cooperation among companies, hospitals, research centers, etc. • Support for joint R&D and equipment utilization
Customized Education	<ul style="list-style-type: none"> • Education course development for each medical device development stage • Support with the Center's experts and professional instructors

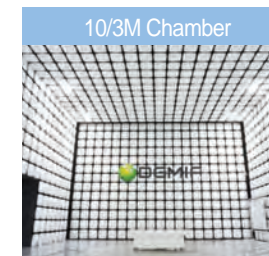
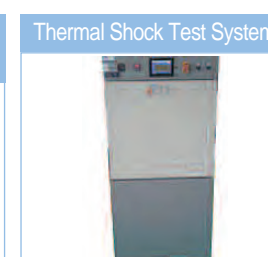
Image Fusion System



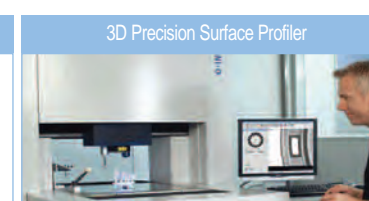
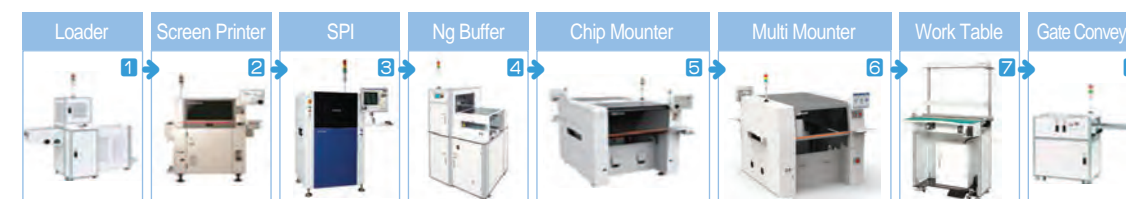
Research Equipment



Test System



Prototype Production



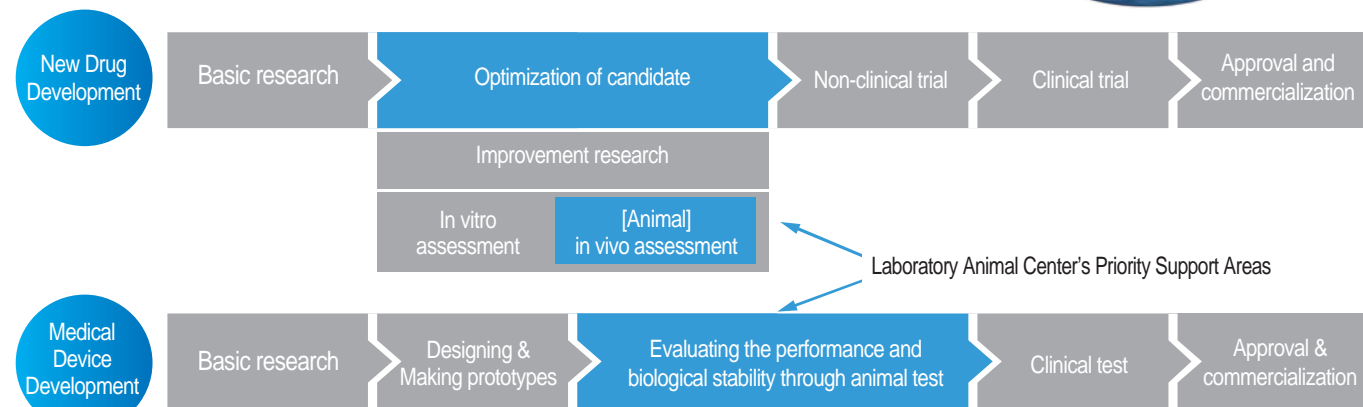
A Cutting-Edge Animal Testing System

Laboratory Animal Center

- An animal testing system for synthetic drug and IT medical device development
- Support for customized animal testing through three strategies of differentiation
Bio-imaging analysis / Advanced fusion microsurgery / Customized animal models



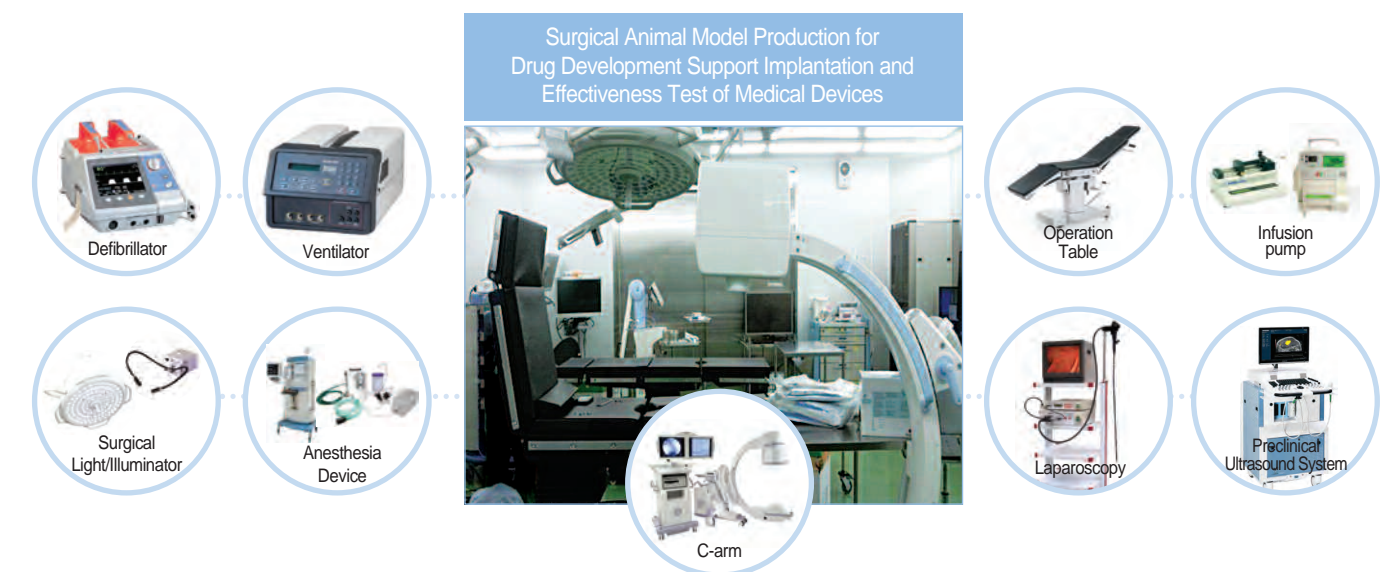
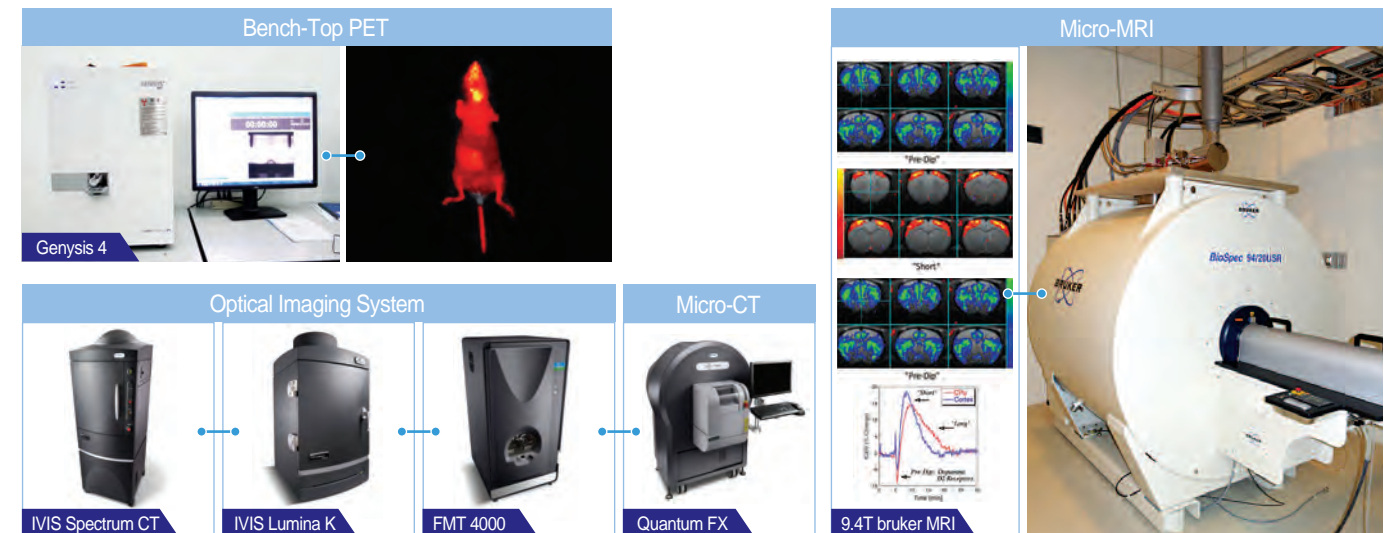
| Support Area |



Major Laboratories			Number of Animals	Note
Small Animal's Testing	• 18 rooms • ABSL - 2 rooms • Bio-imaging Zone (MRI Room, PET Room, Optical Imaging Room)	• Re-entry Zone - 4 rooms • 2 autopsy rooms • 3 test rooms	Mouse 32,000, Up to 40,000 expected	6,400 Cages (8,000 Cages)
Mid-sized Animals Primates Surgery Zone	• 3 operating rooms • 2 dog rooms • 2 rabbit rooms	• 2 primates rooms • 2 pig rooms	Monkey 52, Dog 72 Mini Pig 19, Rabbit 99	
Medical Devices (Small&Mid-sized Animals)	• 4 rabbit rooms • 1 SPF rooms	• 4 guinea pig rooms	Rabbit 138, Guinea pig 512 Mouse 2,800	

| Support Projects |

Support Projects	Support Contents
New Drug Development Support	Efficacy Assessment Assessing drug efficacy using disease-model animals • Tumor : Breast cancer, Colorectal cancer, Liver cancer, Prostate cancer, Hematological cancer, Pancreatic cancer, etc. • Metabolic disease : Osteoporosis, Arthritis, Obesity, Diabetes, etc. • CNS/ Cardiovascular diseases : Neuromyelitis optica, Neuropathic pain, Stroke, Cardiac infarction, etc.
	In vivo PK Assessment Supporting for PK assessment using mice, rats and dogs
	Preliminary Toxicity Test Supporting for preliminary toxicity assessment using mice, rats and dogs
Medical Device Development Support	Medical Device Performance Assessment • In vivo performance assessment of prototypes • Material assessment / Imaging-based material assessment • Material insertion test • Telemetry test
	Study monitoring • Evaluation of approval test Monitoring • Consulting on items of safety assessment • Manual/SOPs establishment and supplementation
	Preliminary Biological Stability Assessment of Medical equipment • Cytotoxicity • Genotoxicity(Micronucleus, Ames) • Blood compatibility • Material monovalency • Acute/subacute systemic toxicity • Sensitization test • Elution test • Irritation test • Telemetry test



Innovative Support for Global New Drug R&D

Clinical Drug Manufacturing Center

- Production and supply of global GMP-level drugs
- Development of analytical method / formulation process optimization
- GMP consulting
- KGMP certified



| Support Area |

Investigational New Drug Application(IND)

New Drug Application(NDA)

Non-clinical Test

Clinical Test (I ~ III)

Approval / Sales

- Manufacturing and supply of pharmaceutical products(Complete products and API)
- Process development
- Formulation study

- Development and support of analytical procedures
- Stability test (expiry date setting, re-evaluation time setting, post-sales stability test, etc.)
- Quality control
- CMC(Chemistry, Manufacturing, Control) documentation

| Support Projects |

Support Projects	Support Contents	Support Areas
Drug Production	Providing services for drug manufacturing and facility lease, offering a technical resources to pharmaceutical companies and institutes	<ul style="list-style-type: none">• Injections : liquid (vial, pre-filled syringe), lyophilized (vial)• Oral solid dosage : tablets(single-layer/multi-layer), capsules
Analysis and Licensing Support	<p>Analysis Support QC analysis, analytical procedure development and methods validation for drug substances and products</p> <p>Licensing Support Support for organizations and companies that plan to request domestic/global licensing of drugs in licensing documentation and work process</p>	<p>Stability test, lot release test, etc.</p> <p>Investigational New Drug Application(IND, NDA), etc</p>
Education and Training	Training for students majored in pharmacy and workers in pharmaceutical fields	Practice in drug production, QC/testing, GMP facility management and operation, etc.
GMP Consulting	Support for organizations that plan to build new GMP facilities or need expertise on drug production and analysis	Drug production process, analysis skills, EH&S, GMP facility establishment/operation/management, etc.

Injection
Production

Magnetic Mixing system with a disposable bag



Small Robot Filling Machine



Isolator & Vial filling Line



Automatic loading & Unloading system

Oral Solid
Dosage
Production

Continuous Granulator(ConsiGma-25™)



Rotary tablet press



Capsule filling machine



Tablet coater



QC

Isolator



Enclosure System



UPLC



ICP





National Research Institutes



Korea Brain Research Institute

- Total building area : 21,918.78m² (B1-5F)
- Completion of construction : Nov. 2014
- Target research areas : brain foundation, brain diseases, and brain engineering
- Venue for the 10th IBRO World Congress of Neuroscience in 2019



Korea Institute of Oriental Medicine

- Total building area : 6,190m² (B1-3F)
- Completion of construction : Apr. 2015
- Specializing in natural drug development
- Cooperating with the New Drug Development Center, oriental medical institutions and clinical test institutions



Medical Technology Testing & Training Center

- Project period : 2016 ~ 2020
- Host agency : Ministry of Health and Welfare(Korea Health Personnel Licensing Examination Institute)
- Building infrastructure for national practical test and clinical training of health professionals



K-Medical Center

- Project period : 2016 ~ 2018
- Host agency : Ministry of Health and welfare, Daegu Metropolitan City
- Foreign medical expert training projects for global networking to draw foreign patients and help local medical centers enter the global market



3D Convergence Technology Center

- Total building area : 8,800m²
- Completion of construction : Sep. 2015
- Medical and 3D convergence technology development and commercialization



High-tech Medical Genome Research Center

- Total building area : 7,300m² (B1-3F)
- Project period : 2015 ~ 2019
- Host agency : Korea Research Institute of Bioscience and Biotechnology
- Genetic information analysis personalized diagnosis treatment technology development IT-BT fusion research



Ministry of Food and Drug Safety, Daegu Office

- Project period : 2016 ~ 2018
- Host agency : Ministry of Food and Drug Safety
- One-stop services for move-in companies to help their R&D, clinical tests, licensing, commercialization, etc.



Laboratory Animal Resource Bank

- Project period : 2015 ~ 2018
- Host agency : National Institute of Food and Drug Safety Evaluation
- Building infrastructure for recycling bioresources of high value-added lab animals

Amenities



Communication Center

- Total building area : 17,825m² (B1-8F)
- Completion of construction : Jun. 2013
- Major facilities : DGMIF office, lodging place for researchers, a fitness center, conference rooms, meeting rooms, rental labs, etc



Science Village

- Total building area : 1,839m² (B1-5F)
- Completion of construction : Dec. 2014
- Major facilities : dormitory for researchers (40 units), a fitness center



High-tech Clinical Trial Center

- Project period : 2016 ~ 2018
- Host agency : Daegu-Gyeongbuk Medical Innovation Foundation and local general hospitals
- Verifying clinical application of drug candidates and prototype products developed in Daegu Medical Cluster to promote drug/medical device development



Korea Medical Venture Center

- Total building area : 21,918.78m² (B2-10F)
- Completion of construction : Sep. 2015
- Rent available for start up companies

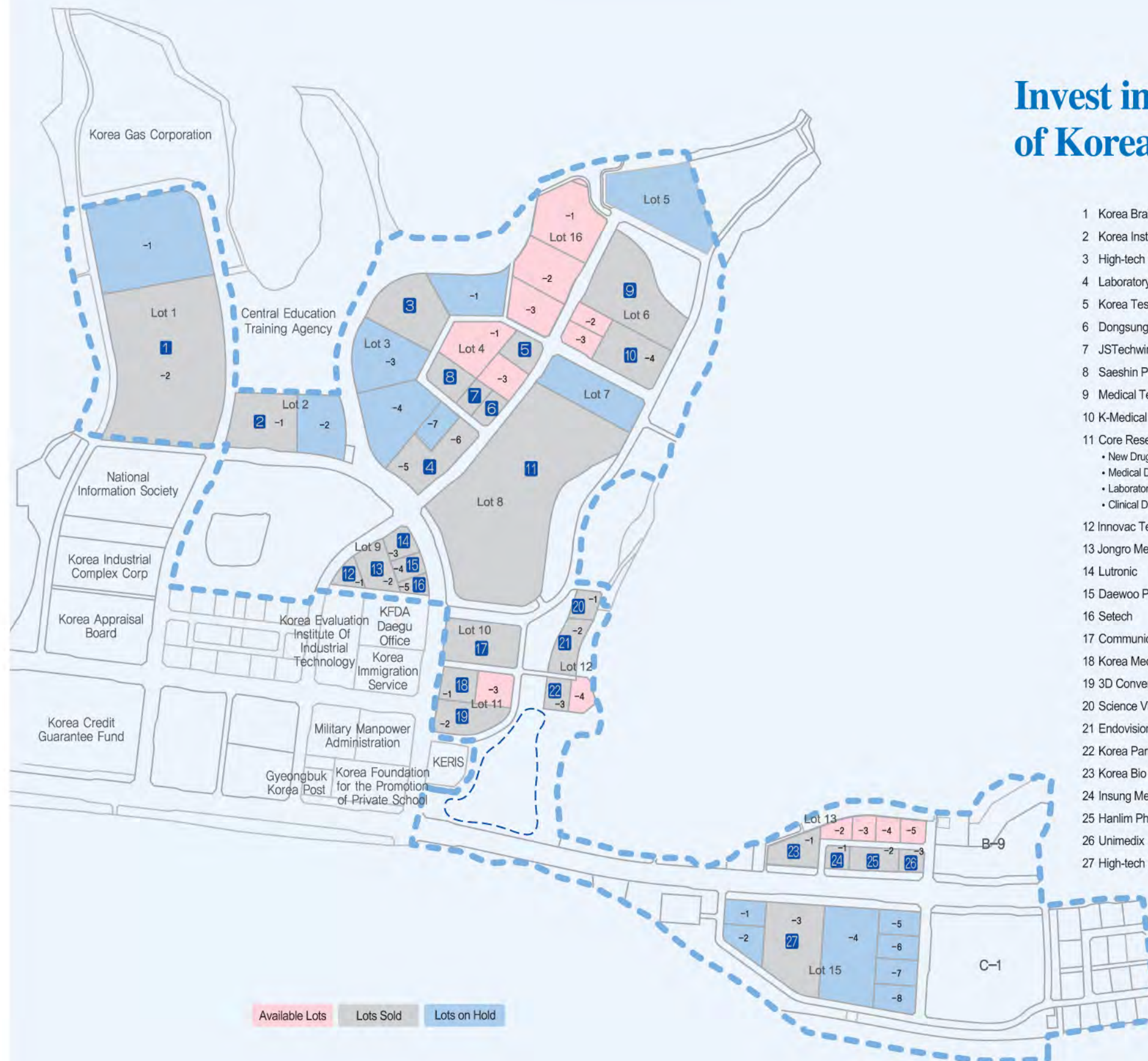


Industry-Academia Convergence District

- Project period : 2017 ~ 2021
- Host agency : Industry & Academia Convergence Headquarters (by creating a consortium)
- Building a virtuous cycle system of 'education-job-research'



Invest in Daegu Medical Cluster, the future of Korea that is beyond your imagination



- 1 Korea Brain Research Institute
- 2 Korea Institute of Oriental Medicine
- 3 High-tech Medical Genome Research Center
- 4 Laboratory Animal Resource Bank
- 5 Korea Testing Certification
- 6 Dongsung Pharm
- 7 JSTechwin
- 8 Saeshin Precision
- 9 Medical Technology Testing & Training Center
- 10 K-Medical Center
- 11 Core Research Centers
 - New Drug Development Center
 - Medical Device Development Center
 - Laboratory Animal Center
 - Clinical Drug Manufacturing Center
- 12 Innovac Technology
- 13 Jongro Medical
- 14 Lutronic
- 15 Daewoo Pharm
- 16 Setech
- 17 Communication Center
- 18 Korea Medical Venture Center
- 19 3D Convergence Technology Center
- 20 Science Village(dormitory for researchers)
- 21 Endovision
- 22 Korea Parma
- 23 Korea Bio Medical Science Institute
- 24 Insung Medical
- 25 Hanlim Pharm
- 26 Unimedix
- 27 High-tech Clinical Trial Center

| Available Lots |

Division	Area(m ²)
Lot 4-1	7,815
Lot 4-3	3,958
Lot 6-2	2,299
Lot 6-3	2,298
Lot 11-3	5,180
Lot 12-4	2,187
Lot 13-2	1,891
Lot 13-3	1,889
Lot 13-4	1,889
Lot 13-5	1,888
Lot 16-1	9,011
Lot 16-2	9,747
Lot 16-3	8,995

| Sales and Lease Process |



※ Contact
 Medical Hub Development Division of
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We provide customized support for companies as a reliable partner

| Tax Benefits | Various tax benefits to relieve financial burdens of companies

- **National Tax** Corporate tax and income tax - 100% exemption for 3 years and 50% reduction for the subsequent 2 years
- **Local Tax** Acquisition tax exemption / property tax - 100% exemption for 10 years and 50% reduction for the subsequent 3 years
- **Foreign-invested Company** Corporate tax and income tax - 100% exemption for 5 years (max) and 50% reduction for the subsequent 2 years / Acquisition tax exemption and property tax - 100% exemption for 15 years

| Financial Support | Broad financial support to help companies concentrate on research and manufacturing

- **Site and Investment Subsidiary** Max USD\$ 0.9million
- **Special Support for Large Investment Company** Within 50% of the total investment (land purchase cost, construction cost, facility and equipment cost, etc.)
- **Employment and Training Subsidiary**
- **Foreign-invested Company** Support for companies with at least 30% of foreign investment (land purchase cost, rent, construction cost, employment and training subsidiary, etc.)
- **Transition to Metropolitan Area / Construction and Expansion in Local Area** Max USD\$ 6million for land and facility investment
※ Subject to change according to the type, investment size and other aspects of companies (Support to be provided based on relevant laws and Daegu city ordinances)

| Special Support | From human resources to R&D budgets

- R&D budget support for drug and advanced medical device research and development
- MediCity Fund (USD\$ 4.34 million to be raised for medical industry promotion), Medical Industry Promotion Fund (USD\$ 15 million)
- Customized HR development sharing of local and foreign R&D experts and facilities

| Land Purchase Support | Mitigating the burden of land purchase

- Interest-free installment for 5 years
- Discount for lump-sum payment (3.0% off for pre-payment)
※ Small and Medium-sized enterprises & research startups: Offices available in the private building of Korea Medi Venture Center

| Deregulation(Special Acts) | Exceptional deregulation to provide better environments for doing business

- **Immigration Control Act(article 20)** Foreigners working for a supportive institution for R&D of medical services or a resident R&D institute of medical services may be allowed to stay maximum 5 years on each occasion.
- **Medical Service Act(article 21)** Any foreign medical doctor or dentist who meets the standards may conduct medical activities for the purposes of R&D of medical services in a medical institution in the Daegu Medical Cluster.
- **National Health Insurance Act(article 22)** The medicines, medical appliances, or medical technology applied to any person under clinical trials conducted for R&D of a medical institution in the Daegu Medical Cluster.
- **Pharmaceutical Affairs Act/Medical Devices Act (article 23/24)** Any resident R&D institute of medical services that desires to manufacture any medicine/a medical appliance developed as a result of its research shall obtain item permission of the Minister of Food and Drug Safety.
If any supportive institution for research and development of medical services or any resident research and development institute of medical services obtains approval for import from the Minister of Food and Drug Safety with regard to the item and quantity of any medicine/medical appliance imported, such institution is deemed to have obtained the permission for import.
- **Bioethics and Safety Act (article 25)** The National Bioethics Committee shall install a sub-committee for the Daegu Medical Cluster to have the sub-committee deliberate on the matters specified by Ordinance of the Ministry of Health and Welfare within the Daegu Medical Cluster.
Resident R&D institutes of medical services may jointly organize an institutional bioethics committee.
- **Patent Act (article 26)** The Commissioner of the Korean Intellectual Property office may authorize examiners to preferentially examine patent applications filed by any resident R&D institute of medical services in connection with research and development within the Daegu Medical Cluster prior to other patent applications.

| Other Special Support | Daegu's special business support programs to help companies grow

- Support for a successful settlement of resident companies through preferred purchase benefits, clinical test support for prototype products, etc.
- MOU with MediCity Council Corp. consisting of six doctors' associations and six general hospitals (Jul 2012)
- **Medical R&D projects based on Daegu's key industry support system**
- Regional lead industry : Medical device, pragmatic robot, smart device component, etc.
- New growth engine projects : Robot, 3D convergence industry, laser, mobile convergence, etc.
※ Planning to perform large-scale research projects and national R&D projects with focus on resident companies
- **Company Development Project (2007-2015: 146 companies)**
- Individual support : Product competitiveness increase, marketing and product planning, business environment improvement, inter-company partnership, etc.
- Public support : HR development, business PR, networking expansion
- Various business support programs, including customized HR development, financial support, and global marketing
- One-stop administrative support from site selection to moving-in
- Daegu Joint Institutional Review Board (IRB) Joint clinical support system of five hospitals in Daegu region





Manufacturing Zone , leading the global competition of manufacturing

| Project Outline |

- **Objectives** Serve as a cluster of manufacturing facilities for innovative medical products of drug and medical device manufacturers in cooperation with the R&D Zone
- **Location/Size** Daegu Innovation City, Sinseo-dong, Dong-gu, Daegu / 1,087,000m² (Innovation City 4,216,000m²)
- **Project Period** 2011~2015
- **Action Plan**
 - Creating a global medical industry ecosystem
 - Establishing a medical hub along with the R&D zone, as a core area of Daegu City which claims MediCity as its development strategy
 - Creating a medical industry ecosystem for the development of new drugs and medical devices by the companies located within the cluster along with local medical universities and research centers
 - Creating synergic effects on the IT convergence technology industry in a relation with the R&D Zone



Bird's-eye-view of Manufacturing Zone

“Exceptional incentives for Manufacturing Zone” corporate tax reduction to retrieve initial investment

| Tax Benefits |

- **National Tax** Corporate tax - 100% exemption for 3 years and 50% reduction for the subsequent 2 years
- **Local Tax** Acquisition tax exemption / property tax - 100% exemption for 7 years and 50% reduction for the subsequent 3 years
- **Eligibility** Advanced technology companies, research companies
 - ※ Requirements for advanced technology company designation
 - Holding domestic or overseas patents in areas of advanced technology and products
 - Producing and selling products using patent right. operating in the cluster
 - At least 5% of annual R&D cost in total annual revenues
 - At least 30% of annual revenues arising from product manufacturing and sales using patent right in total annual revenues

| Land Purchase Support |

- Interest-free installment for 5 years
- Discount for lump-sum payment (3.0% off for pre-payment)

| Administrative Support |

- One-stop administrative support from site selection to moving-in
- One-on-one personal support from pre-lease counseling to R&D





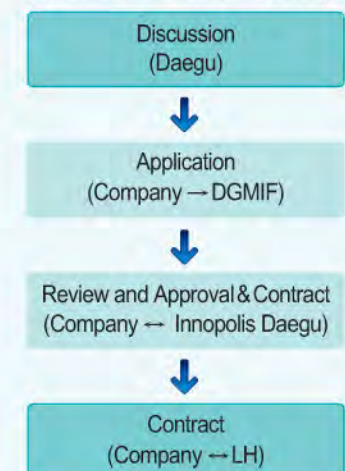
Synergy effect with R&D Zone to lead technological prowess in the world

Company Name	Main Products
1 Seokmun Electrical Engineering	Power generator for ambulance
2 Micro NX	Dental handpiece
3 Sysone Technology	Real-time positioning-based wearable band & controller
4 CM Tech	Low temperature plasma sterilizer
5 Bowon Dental	Dental materials and equipment
6 Hane	Stress tester, diabetograph
7 Rayworld	Digital board showing food poisoning index
8 Daeryu	Low-frequency therapeutic appliance
9 HanA IT	Communication products for medical use
10 Woosung TOT	Dental CAD-CAM milling device
11 Hankook Sensors	3-phase medical appliances sensor
12 Zentops	Medical monitors, laser curer
13 KR Tech	Medical magnets
14 Jei Design Works	Designing of medical device & mechanism
15 Vactron	Medical accelerator equipment & parts
16 Vision Science	Contact lens
17 AnA	Combination stimulator for medical use
18 Sungdo Tech	Medical pump, blood glucose tester
19 U-BioMed	Micro needle for direct drug delivery
20 Allin Market	Dental prosthesis
21 Daeil Industry	Medical curtain, beds, etc.
22 Innovac Technology	Medical plasma sterilizer
23 Daewon GSI	Medicine for skin disease
24 Hisensor & Robot	Pulse sensor, human body detecting sensor system
25 Okchundang	Herbal medicine
26 3H	Medical beds
27 Prime Dental	Dental prosthesis
28 Humanherb	Herbal medicine
29 Osang Tech	Medical supplies (medical dressing cart & bed)
30 EOS	Contact lens
31 Kongsung	Patient lift & carrier
32 Rapha Bio	Dental implant
33 Hirosci	Rehabilitation medical devices, AI Robot
34 Finemedix	Endoscopic
35 KMF	Water soluble calcium
36 Dentis	Dental implant, medical LED light system, 3D printing system
37 RNU	Urine chemistry analyzer for home use, personal blood glucose test meter
38 Denstar	CAD/CAM, vacuum mixer
39 Silla System	IT service provider, rehabilitation robot
40 AK Medi	Medical beds and supplies
41 Woochang Engineering	Rehabilitation training device, motorized wheelchair
42 1ST Platform	Medical parts of 3D printer
43 Cretem	Automatic tablet packing system
44 Total Soft Bank	Medical imaging software
45 Gem-Tech	Combination stimulator, low powered sunlight phototherapy system
46 Space	Optical fiber for skin disease treatment
47 Duksan Cotran	Medical thermo-hygrostat, MRI Chiller
48 Dae Kyung High-tech	Medical machinery
49 Ortho-Tech	Implant for orthopedics
50 JS Techwin	Medical imaging diagnostics
51 Megacom	Medical air compressor
52 Saeyang	Dental handpiece
53 Inthetech	Medical lighting, oxygen saturation meter
54 Myeong Moon Dental	Dental implant
55 POEM	Prosthetics Orthotics Exercisable Method Appliances for rehabilitation treatment
56 IMT Korea	Filter syringe, safety syringe for hospitals
57 Angel Tech	Vitamin D3 generating irradiator, Pen-grip correction device for rehabilitation
58 Medipia E&C	Diagnostic apparatus for diabetic complication, plasma sterilizer
59 Thuringen Korea	Cosmeceuticals
60 Yesbiotech	Dental implant

| Available Lots |

Division	Area(m ²)
Lot 2-1	9,851
Lot 9	23,867
Lot 11	11,215
Lot 13-12	9,071
Lot 13-13	35,417
Lot 19-1	14,822

| Sales and Lease Process |



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