

The image features a large, stylized lowercase 'h' and 'u' in white, positioned on the left side of the frame. The background is a solid blue color with a large, lighter blue circular shape behind the text.

Humedix

Investor Relations

3Q 2023



Humedix

Disclaimer

All information in this book including business performance and financial report is written by Korean-International Financial Reporting Standards(K-IFRS) .

This book includes a “forecast” about future. It is not about the past, but the future business plan including expected management status and financial performance, and sometimes there can be word such as ‘anticipation’, ‘forecast’, ‘plan’, ‘expectation’, and ‘(E)’.

A “forecast” can mean uncertain factors which can affect the company either positively or vice versa, and those can include:

- Domestic or international financial market trends including fluctuation of foreign exchange rate or interest rate.
- Company’s very important strategic decision such as M&A
- Unexpected business environment change in the main industry
- Other internal and external change that can affect the company’s management and finance.

Because of those uncertain risks, company’s actual business performance can be different from the “forecast” in this booklet. Also the information we provide is written as of the day we deliver the presentation, so it can be changed due to unexpected external status of industry or internal company’s revision of strategies without any prior notice in the future.

Key Highlights

1. Performance & Finance

- ◆ 3Q 2023 Revenue 39.7 (YoY +24%), OP 11.4 (YoY +45%), Profit 7.2 (YoY +16%) (Unit; Billion KRW)

2. Aesthetic

- ◆ Total Aesthetic Solution : Filler(Elravie)+Medical Device(Derma Shine)+ Botulinum toxin(LIZTOX)
- ◆ Domestic sales network Expansion
- ◆ Discover new overseas market : China, Brazil, Southeast Asia, Russia, Middle east etc.

3. NEW Business

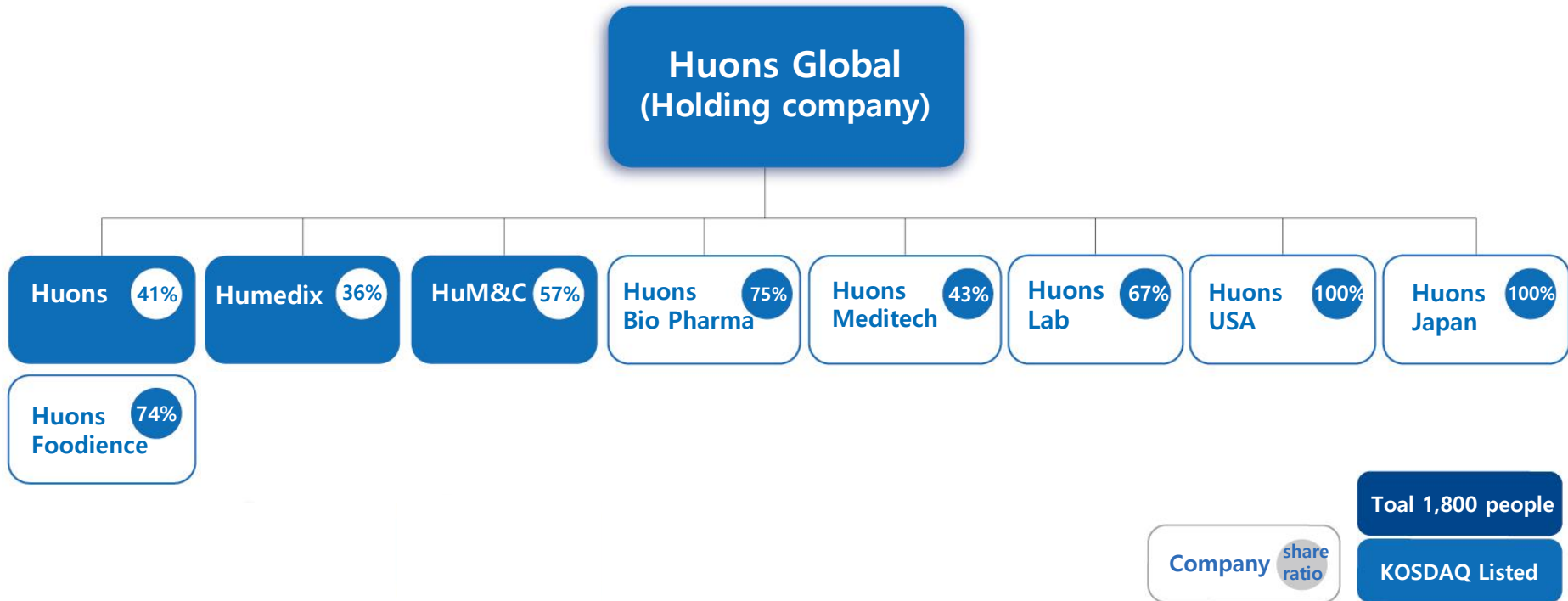
- ◆ Bio API(Heparin Sodium)
- ◆ Elravie Premier Soft filler, Elravie Mela Return sun serum, KERIEL
- ◆ CMO Business(PFS, Amp, Vial)
- ◆ New Vial injection line

Contents

- 01 Company Overview
- 02 Vision
- 03 Business Performance
- 04 Business Field
- 05 R&D & Business Strategy

“Total Healthcare Group”

Includes Pharma, Medical Device, Health Functional Food and Cosmetic business



Kim, Jin Hwan	Yoon, Sung Tae	Leem, Moon Jeong	Kim, Nam Mi	Koh, joong shik	Hong, Kyung Ho
<p>President CEO</p> <p>Head of Sales Marketing Division</p> <p>Huons</p> <p>BA Education At Chung-Ang Univ.</p>	<p>Chairman Executive Director</p> <p>Chairman of Huons Group</p> <p>IBM KOREA</p> <p>MS Project Mgt. At Hanyang Univ.</p>	<p>Executive Director</p> <p>Strategic Development Headquarters</p> <p>Dongwha Pharma</p> <p>Ph.D in pharmacy At Sungkyunkwan Univ.</p>	<p>Executive Director</p> <p>Production Headquarters</p> <p>Huons Production Department</p> <p>BA Chemistry At Ajou Univ.</p>	<p>Director Outside Director</p> <p>Director of Accounting Supervision, Financial Supervisory Service Outside Director, Hyundai Motor Securities</p> <p>College of Law, LL.B. At Korea Univ.</p>	<p>Director Outside Director</p> <p>Associate, Yoon & Yang LLC Prosecutor, Suwon District Public Prosecutor's Office</p> <p>College of Law, LL.B. At Korea Univ.</p>

[Open Innovation]

"Strategic Partnerships"

Co-R&D

Licensing

Sales & Marketing

CDMO



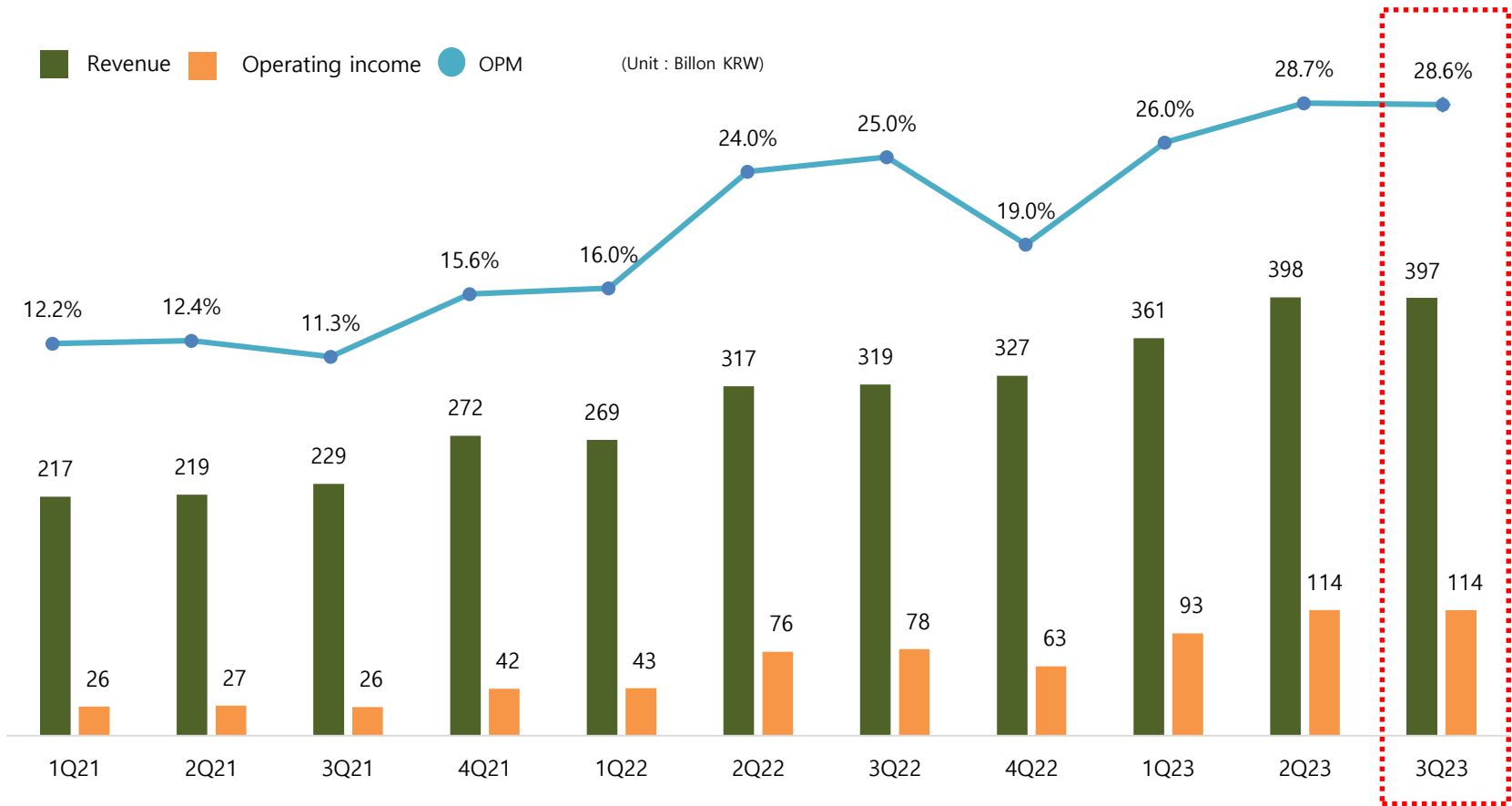
	<i>Heterodermic skin grafts R&D</i>
	<i>Heparin sodium R&D</i>
	<i>Exosome treatment and cosmetics R&D</i>
	<i>Long-acting injection for obesity treatment</i>
	<i>Long-acting injection for dementia treatment</i>
	<i>Immune anticancer antibody therapy</i>
	<i>Hair loss remedy R&D</i>
	<i>Osteoarthritis treatment</i>

Sales Structure(QoQ)

✓ 3Q 2023 Revenue 39.7(YoY +24%), OP 11.4(YoY +45%) (Unit; Billion KRW)

→ Aesthetic business growth such as Filler “Elravie” and Botulinum toxin “Liztox”

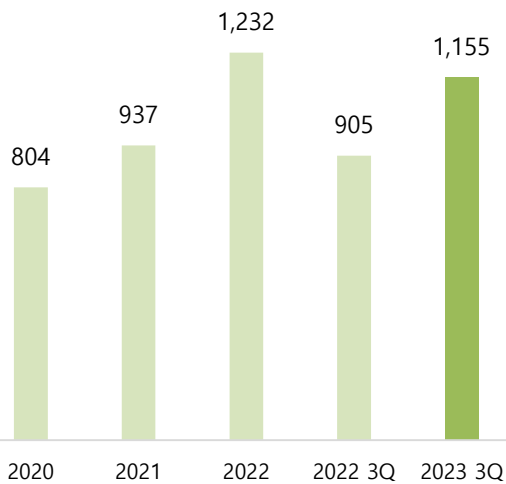
→ Increased sales of fillers and eye-drops, improved profitability, Reduce cost ratio by improving utilization rate



[Sales Growth & Profit Improvement]

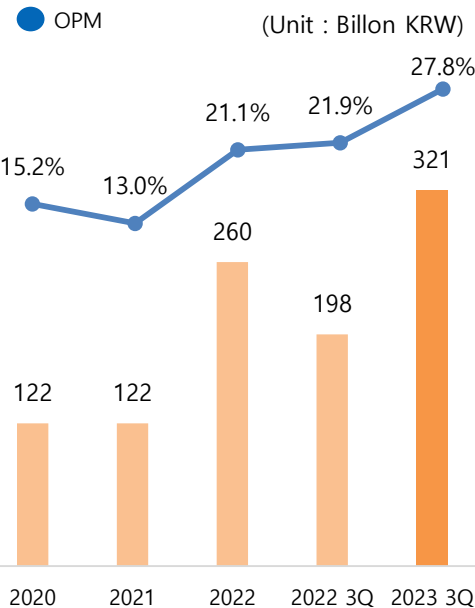
Revenue

(Unit : Billion KRW)



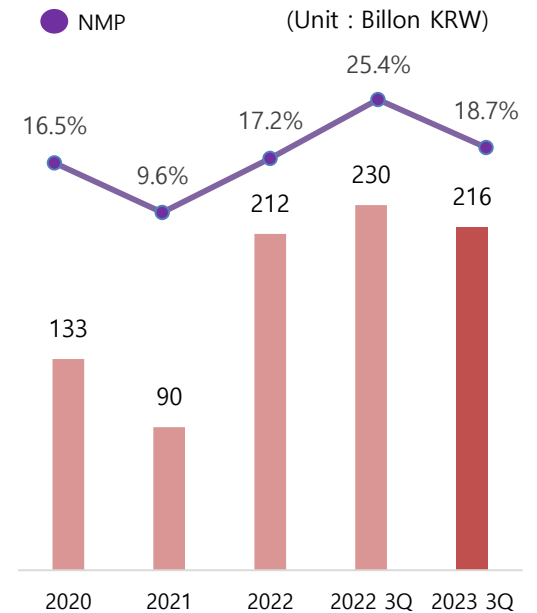
Operating income

(Unit : Billion KRW)



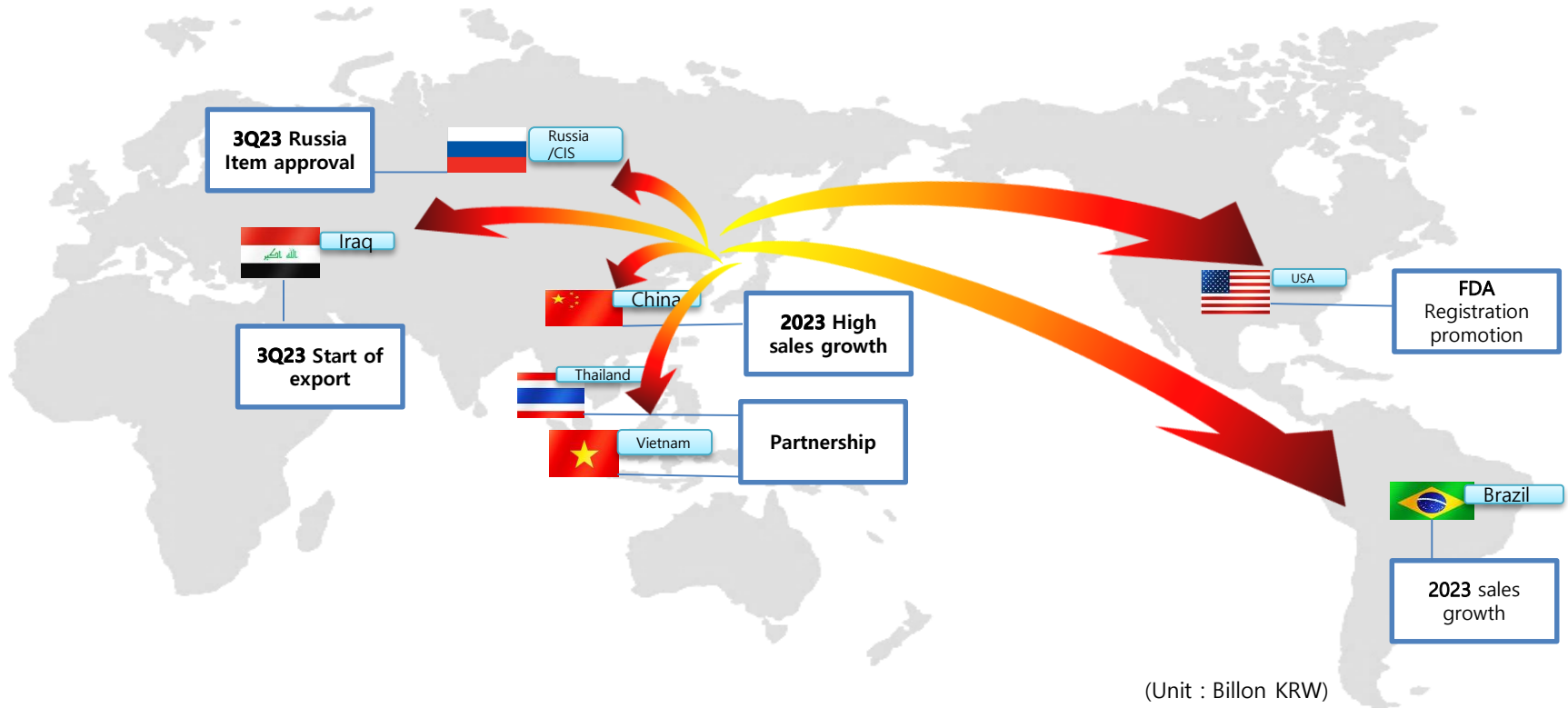
Profit

(Unit : Billion KRW)

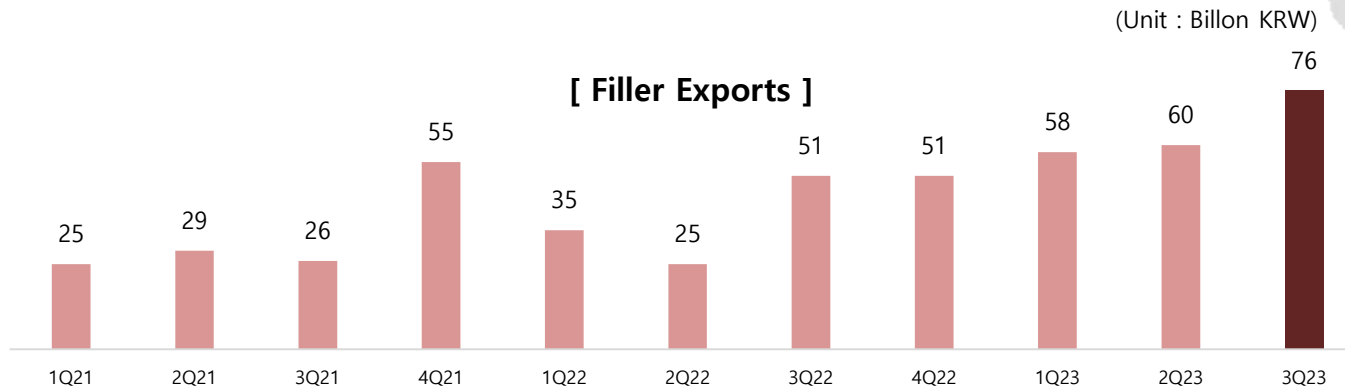


	2020	2021	2022	2022 3Q	2023 3Q
Revenue	804	937	1,232	905	1,155
Operating income	122	122	260	198	321
Profit	133	90	212	230	216

[Expansion of the Global Filler Market]



[Filler Exports]



[Business Structure]

Filler, LIZTOX	<ul style="list-style-type: none"> ▪ High purity HA ingredient ▪ Superior viscosity/elasticity/durability ▪ Registered in NMPA (Mar. '15) ▪ Product package strategy(Filler+LIZTOX) ▪ LIZTOX 50/200 Unit(Jan. '22) ▪ Elravie Premier Soft filler(Dec. '22)
Arthritis	<ul style="list-style-type: none"> ▪ Exported the technique of 1 shot arthritis medication to China ▪ Humiaju®: Approved as an once injection type <ul style="list-style-type: none"> - Strengthen exercise capacity, Less pain ▪ "Humia", Acquired European CE certification(May. '21)
Pharma, CDMO	<ul style="list-style-type: none"> ▪ Approved PDRN injection 'Revitalex' in Apr. 2018, MFDS. <ul style="list-style-type: none"> - Entered into regenerative medicine market ▪ Ethical drugs (anemia, internal secretion, and etc.) ▪ Eye-drop Line(3Q '20)
API	<ul style="list-style-type: none"> ▪ Polymer/Low Molecule HA Registration(2008) ▪ Ultra-high low molecule HA Registration(Sep. '21) <ul style="list-style-type: none"> - Supplied as a raw material for fillers, arthritis, eye drops, and cosmetics ▪ PDRN Registration(2018) <ul style="list-style-type: none"> - Supply of raw materials for regenerative medicine and cosmetics
Cosmetics, Others	<ul style="list-style-type: none"> ▪ "Derma Elravie' Brand marketing ▪ Functional cosmetics : wrinkle care, whitening, and etc. ▪ Medical Device : Derma Shine Series, DermaAkne

[Business Area]



Filler

Product : Elravie Premier, Revolline

Elravie Filler + Medical Device + LIZTOX

Various product lines based on high purity HA

Domestic sales network Expansion

- Application of advanced HI method (High molecular Ideal Reticulated Matrix)→ High viscosity, Elasticity, Safety
- Good volume sense compared to competing products, also excellent durability and resistance to enzymes
- 'Elravie Deep Line-L' NMPA registration (Dec. 2019)
- Four kinds of Elravie obtained European CE Certification(Dec. 2015)
- Revolline Grande filler(Apr. 2020)
- Export registered country : China, Russia, Indonesia, Singapore, Japan, Iran, Brazil, Iraq, Kazakhstan, Ukraine, Uzbekistan, Slovakia, etc.
- Revolline HARA-L(Feb. 2021)
- BelPN Filler : Clinical trial approval(2023)

Main product line



<Light-L>

<Deep Line-L>

<Ultra Volume-L>

<Ultra Volume-2mL>

<Revolline HARA-L>

Botulinum Toxin

Product : LIZTOX

Product package strategy(Filler+LIZTOX)

Completion of domestic clinical trials in phase 1, 2, and 3

LIZTOX 50/200 Unit(Jan. '22)

- Maximize Revenue and Profit from Expanding the Esthetic Product Line
- By establishing a package sales strategy for botulinum toxin products "LIZTOX" of Huons and "Elravie series" of Humedix
- Efficacy: Glabella wrinkle improvement
- API: Botulinum toxin type A

Main product line



<LIZTOX 50 unit>

<LIZTOX 100 unit>

<LIZTOX 200 unit>

Osteoarthritis treatment

Product : Hihyalonce, High Hyal Plus, High Hyal

Improved usability : single-injection

Technology export and strategic alliance (HAIBIN, China)

"Humia", Acquired European CE certification(May. 2021)

- 'Hihyalonce' launched(Jul. 2019)
- Licensed and contracted with Huons&Shinpoong Pharmaceutical(Jan. 2019)
- Patient synovia with increased inflammation factors is reverted to the normal joint synovia conditions
- The high viscosity and resulting lubricating activities of the joint improve joint movements and reduce pain.
- Excellent cost(from raw material to product) & absolute advantage of the quality(sterile material)
- Export registered country : High Hyal Plus (Iran, Bahrain, Vietnam, Kazakhstan, Belarus, Mexico, Dominica, etc.)/ High Eye(Malaysia, Nigeria, etc.)

Main product line



<five-injection cycle : High Hyal> <three-injection cycle : High Hyal Plus> <one-injection cycle : Hihyalonce>

CDMO

Product : Vial , Ampules , Pre-filled Injection

Fully equipped with the latest pre-filled syringe filling facility

New growth momentum secured through operation of the second plant

Provides from product development to analysis support

- Introduce new disposable eye drops facility (Installation completed July. 20)
- The latest pre-filled syringe production facilities and sufficient production capacity
- Domestic HA refining business revitalized due to Japanese production suspension
- Shortening consignment production period by specializing in hyaluronic acid
- Using auxiliary materials such as syringes optimized by various evaluations
- Expansion of vial line 2 (GMP approval expected 4Q 2022)

Main product line



<Revitalax pre-filled> <Lincomycin> <Dexamethasone> <Eripotin pre-filled>

Cosmetics

Product : Derma Elravie

Launched vegan cosmetics "Zero Line"

Developed high-functional cosmetics raw materials; HA , PDRN, Exosome

China NMPA & CE CPNP permit(1Q 2022)

- NMPA registration(Base, Ampoule, Maskpack) (Nov. 2019)
- Honey bush : Specified individual approved raw materials, Wrinkle-improving raw material
- Duty Free Shop, Home Shopping, Road Shop, Visit Sales, H&B Store
- China, United States, East O2O Biz
- moisturizing cream containing immunomodulatory substance 'Alloferon'

Main product line



Eye-drop

Product : Prosan Eye Drops

Introduced eye-drop Machine Equipment(2Q 2020)

Increased orders for HA eye drops from other pharmaceutical companies

Securing annual production capacity of 150 million eye-drops

- Expansion to the finished product business as well as the raw material business for eye-drops
- Eye-drops market size : Domestic (300 billion won), Overseas (5 trillion won)
- Increasing demand due to online classes and increased smartphone use

Main product line



Health Care Technology & Application Leader



Injection
(PFS/Vial)

Aesthetics & Injection

- HA crosslinking technology (HDRM, HI, Hive, I-Cross)
- PDRN/PN formulation
- Heparin sodium formulation
- API Injection

- **Cash Cow**

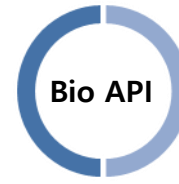


Health
Care

Filler, Osteoarthritis

- Filler(Elravie,Revolline)
- Osteoarthritis(Hihyalonance, High Hyal Plus)

- **Global Business**



Bio API

Biopolymer & API

- Sodium Hyaluronate (high molecular, low molecular, ultra low molecular)
- PDRN
- Heparin sodium
- high purity Hyaluronidase

- **New Application**



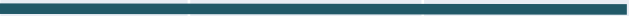

New
Technology

Platform Technology

- Microfluidics DDS(obesity, hair loss)
- 3D printing imitation (skin, hair loss)
- heterogeneous tissue(Porcine) (skin, hair loss)

- **Open Innovation**

Sort	Code	Indication	Status					
			Discovery	Preclinical	Phase I	Phase II	Phase III	Registration
Pharma	HMC3-078	double chin improvement	[Yellow bar spanning Discovery, Preclinical, Phase I, Phase II, Phase III]					
	HMC3-039	tissue penetration	[Yellow bar spanning Discovery, Preclinical, Phase I, Phase II, Phase III]					
	HMZZ1-099	Dementia	[Yellow bar spanning Discovery, Preclinical, Phase I]					
	HMC2-073	obesity treatment	[Yellow bar in Discovery]					
	HMC3-089	double chin improvement	[Yellow bar in Discovery]					
Medical devices	HMM1-048	improvement of facial wrinkles	[Blue bar spanning Discovery, Preclinical, Phase I, Phase II]					
	HMM1-082	Lip volume restoration	[Blue bar spanning Discovery, Preclinical, Phase I, Phase II]					
	HMM1-047	Neck Wrinkle	[Blue bar in Discovery]					
	HMM1-100	Improvement of stretch marks and scars	[Blue bar in Discovery]					

Sort	Code	Indication	Status					Note	
			Process research	Pilot test	Production for permission	Application for permission	Registration		
API	HMS1-049	blood clotting inhibition						New DMF	
	HMS1-017	tissue penetration						New DMF	
	HMS1-069	tissue penetration						New DMF	
	HMS1-068	tissue restoration						New DMF	
Sort	Code	Indication	Status					Note	
			Discovery	Preclinical	Phase I	Phase II	Phase III		Registration
Open Innovation	Microfluidics Sustainable microsphere	obesity treatment							HLB
		hair loss suppression							Bio venture
	Heterogeneous tissue	heterogeneous skin							GenNBio
	3D Bio Printing technology	skin/hair loss							Bio venture

■ HA Filler Manufacturing Technology Development

HDRM Method

◆ Elravie Release

- 2nd license in Korea
- Korea's first monophasic filler
- European CE Certification
- NMPA registration
- pharmaceutical raw materials
- Jang Young-sil Award
- **High density reticulated matrix**



HI Method

◆ Elravie Premier Release

- Low-temperature crosslinking method
- Optimal crosslinking efficiency
- Developed filler for volume recovery
- **High molecular Ideal reticulated matrix**



HiVE Method

◆ HARA Release

- biphasic technology
- Minimize the use of crosslinking agents
- **High Viscoelasticity**



I-Cross Method

◆ Elravie New

- Collection of hyaluronic acid crosslinking technology
- Maximize crosslinking efficiency
- Maximize cohesion
- minimal Swelling in the body
- US market target
- Realization of optimal physical properties for indications
- **Ideal Crosslink**

Hi-HB Method

◆ Monophasic + Biphasic Technology Development

- **Elravie Premier Soft filler**
- Developed Korea's first monophasic filler and biphasic filler grafting technology
- Optimal crosslinking efficiency



New Linker Filler

◆ Development of new crosslinking agent filler technology



HA (Hyaluronic Acid)

Hybrid Filler

- Monophasic + Biphasic Technology Development
 - excellent performance
 - High procedure convenience
 - Safety without initial edema
- clinical study phase III completed (1Q 2022)
- Launched (3Q 2022)

Expectation effectiveness

- Possible sophisticated treatment with low injection pressure
- Available for various indications such as lip and neck wrinkles

Biphasic Filler

- Korea's first monophasic and biphasic full-line products
- Application of new cross link method
- High viscoelastic biphasic filler
- Completion scheduled (4Q 2020)

Expectation effectiveness

- Development of a high viscoelastic biphasic filler that solves the problem caused by the fluidity of HA gel particles due to the low viscosity, which is a disadvantage of existing biphasic filler

Urology Filler

- Higher safety compared to existing products
 - Compared to existing products (PLA, crosslink dextran)
- Proven safety / efficacy through clinical trials
 - Clinical trials approved by the Ministry of Food and Drug Safety
 - clinical study phase III completed (4Q 2018)
 - Launched (1Q 2020)

Expectation effectiveness

- Expansion of HA filler new market with a new indication with safety / efficacy secured by clinical trials

Volumizing Filler

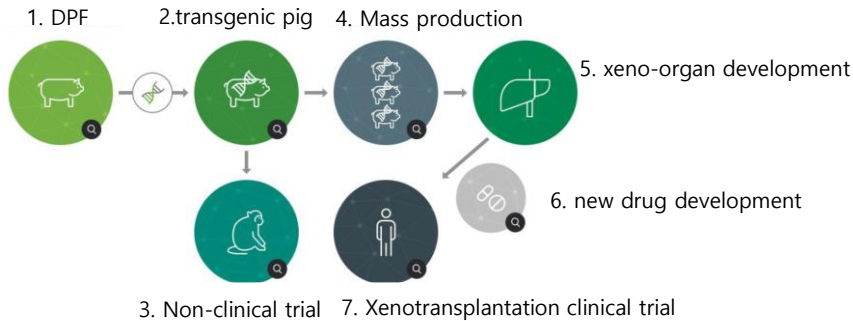
- Hyaluronic Acid (HA) based, naturally derived polymer
- Leading the filler field through diversification of physical properties and materials
- clinical study phase III completed (3Q 2018)
- Launched (1Q 2019)

Expectation effectiveness

- safety improvements
 - Reduced HA and crosslinker content
- Facial volumizing effect
 - Improved high viscosity / high elasticity

Technical overview

- Resolving the shortage of organs for transplantation through transformation of pigs that are genetically, anatomically and physiologically similar to humans



Necessity

- Increased demand for organ transplants due to increase in chronic diseases
- Lack of supply and demand globally
- In the U.S., the number of people waiting for transplants has increased 6 times in the last 25 years.

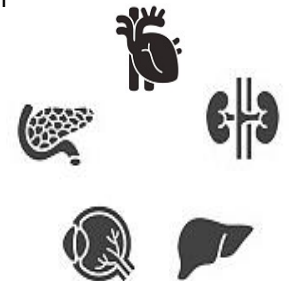
Business area

- Development of bio-dressing and skin graft material for heterogeneous skin
- Signed a business agreement with Humedix and Genenbio (August 2021)



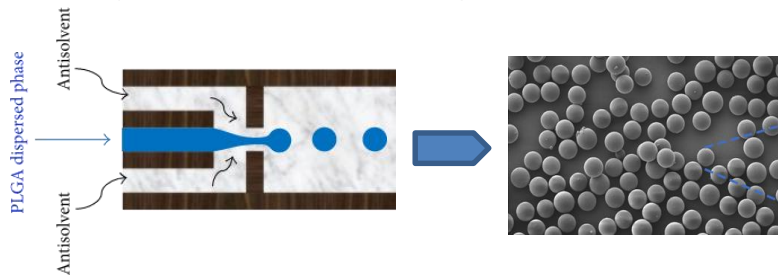
Long term goal

- Xenogeneic organ development
- Research on new drugs related to organ transplantation
- Transplantation technology research
- Establishment of transplant hospital



Technical overview

- It is easily broken down in the blood, and the duration of effect of water-soluble drugs in the body is increased.
Improving the convenience of taking medication



SMEB™Technology(HLB Pharmaceutical)
(Smart continuous Manufacturing system for Encapsulated Biodrug)

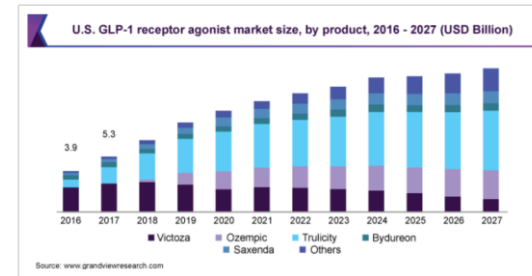
Business area

- Development of anti-obesity treatment using technology (SMEB)
Long-acting obesity/diabetes injection development agreement with HLB pharmaceutical(August 2021)



Necessity

- GLP-1 Receptor agonist Global Sales Growth
- Daily Medication needs to be improved
→ Improving Patient Satisfaction
- Increase in R&D of global pharma companies



Long term goal

- Development of continuous hair loss injection
- Development of a treatment for persistent diabetes
- Global CMC & Clinicalization

Technical overview

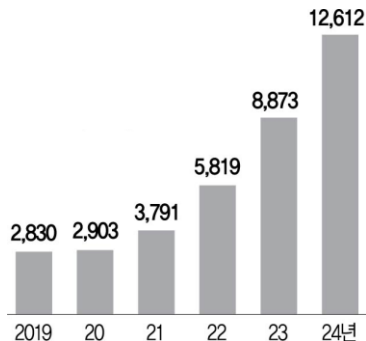
- **Best-in-class drug** : New drugs with improved efficacy and safety with the same mechanism of action



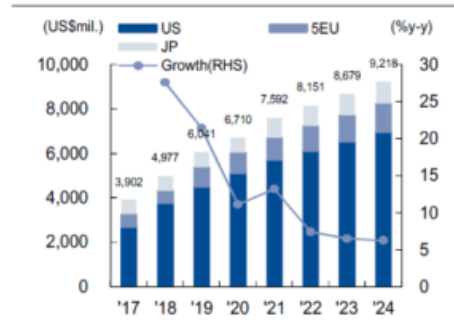
Best-in-class

- Improve existing drug problems
- Improved efficacy, safety, and ease of administration
- Indications with high marketability

(Unit: million dollars)



<Global Alzheimer's Treatment Market Size>



<Prospects for treatment of degenerative arthritis>

Business area

- **Development of donepezil oral drug as an improved new drug for injection**
 - Signed a joint development and licensing agreement with G2GBIO for long-term dementia treatment(Oct. '22)
- **Development of peptide substance-based osteoarthritis treatment(E1K)**
 - Signed an investment contract with Ensol Bioscience and secured priority negotiation rights for domestic commercialization of E1K (Feb. '23)

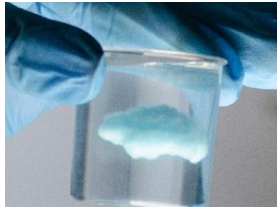


Long term goal

- Development of 1-month long-acting Alzheimer's treatment and development of new market
- Development of peptide osteoarthritis treatment(E1K)
- Securing domestic copyright

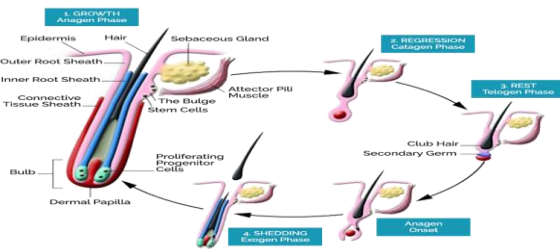
Technical overview

- 3D Printing : Machining/laminated materials according to actual data→ Technology for rapid modeling with 3D CAD
- 3D BIO Printing : Customized facial contour implants or human cells → Printing in the desired form and culturing, making corneas, cells, and mimic organs



Business area

- Application of dermal papilla cell culture and transplantation technology
- Transplantation and culture of dermal papilla cell culture scaffolds



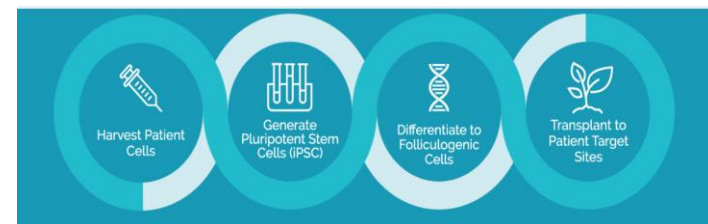
Adapted from Cotroneo et al. J Clin Invest. 2006

Necessity

- Growing demand in the field of tissue regeneration
- Application of cell therapy using autologous tissue
- world market : 16.2 billion\$(2020) → 26.1 billion\$(2022),
- healthcare market : 5 billion \$(2020)

Long term goal

- Development of skin mimetics
- Application of tissue regeneration engineering by simulating tissue in the human body
- Development of fast-acting drugs



[API Business Expansion]

HA

- DMF approval for HA API(2008)
- Ultra-high low molecule HA Registration(2021)
- Used for fillers, Osteoarthritis treatment, eye drops, etc.
- High purity HA ingredient
- High purity HA raw material refinement sales rise

PDRN

- DMF approval for PDRN API(2018)
- As it has cell regeneration effect, it is used as a raw material in the cosmetic field
- Revitalex launched(April 2018)

Hyaluronidase

- DMF Proceeding for Hyaluronidase API(2023)
- 90-95% impurities extracted from bovine testes, 5~10% main raw material, Various side effects such as anaphylaxis occur and are widely used as injections
- The market share of high-purity hyaluronidase with less side effects is expected to increase in the future
- Domestic market size(20 billion), Global market size(2,700 billion)

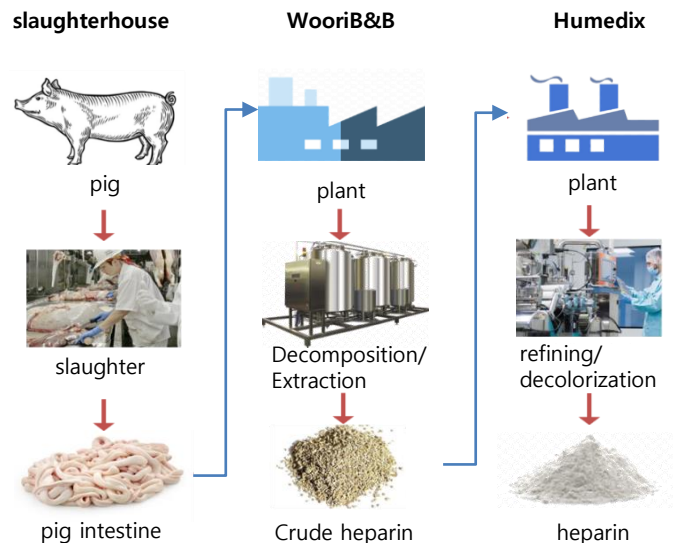


1 Factory

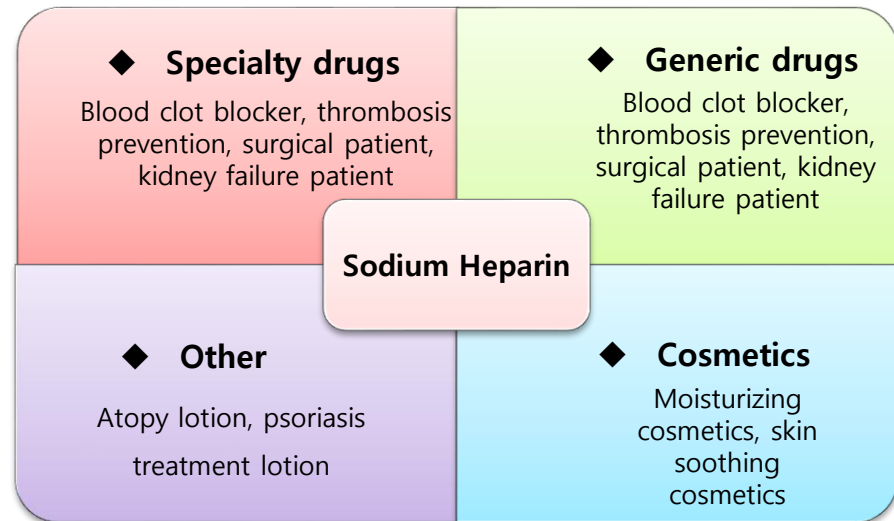


2 Factory

- Signed business cooperation with WooriB&B for the localization of Heparin sodium(Nov. 2019)
- Heparin sodium raw material drug approved by the Ministry of Food and Drug Safety(2022)
- Heparin Sodium raw material line investment for domestic production of animal-derived raw material drugs for the first time in Korea(2023)
- Entered the bio natural raw material pharmaceutical industry
- Domestic market size(20 billion), Global market size(3,700 billion)



Heparin sodium applications



[Total Aesthetic Solution]

The Past

Filler Business Market Expanding



Future

Aesthetic Portfolio Strengthening



※ Strengthening the Total Aesthetic Business by Expanding Aesthetic products

[Aesthetic Portfolio Expansion]

CellExosome

- Prosthemics skin booster 'CellExosome' introduction contract(Feb. 2020)
- Strengthening Aesthetic portfolio with Filler / Toxin / Aesthetic medical Equipment
- Skin regeneration and elasticity effects using MTS rollers, etc.



Varrerderm MD cream

- Introduced Varrerderm MD cream of Regencare, a specialized burn scar care company
- Contains high purity beta-glucan extracted from skirt mushrooms to moisturize / protect skin
- Expected to increase new sales with medical devices added to existing aesthetic products
- Veraderm MD cream upgraded Veraderm dual balance cream MD & lotion MD release
- Safe adhesive transparent wound dressing that can be used from infants to adults (Medical device grade 2)

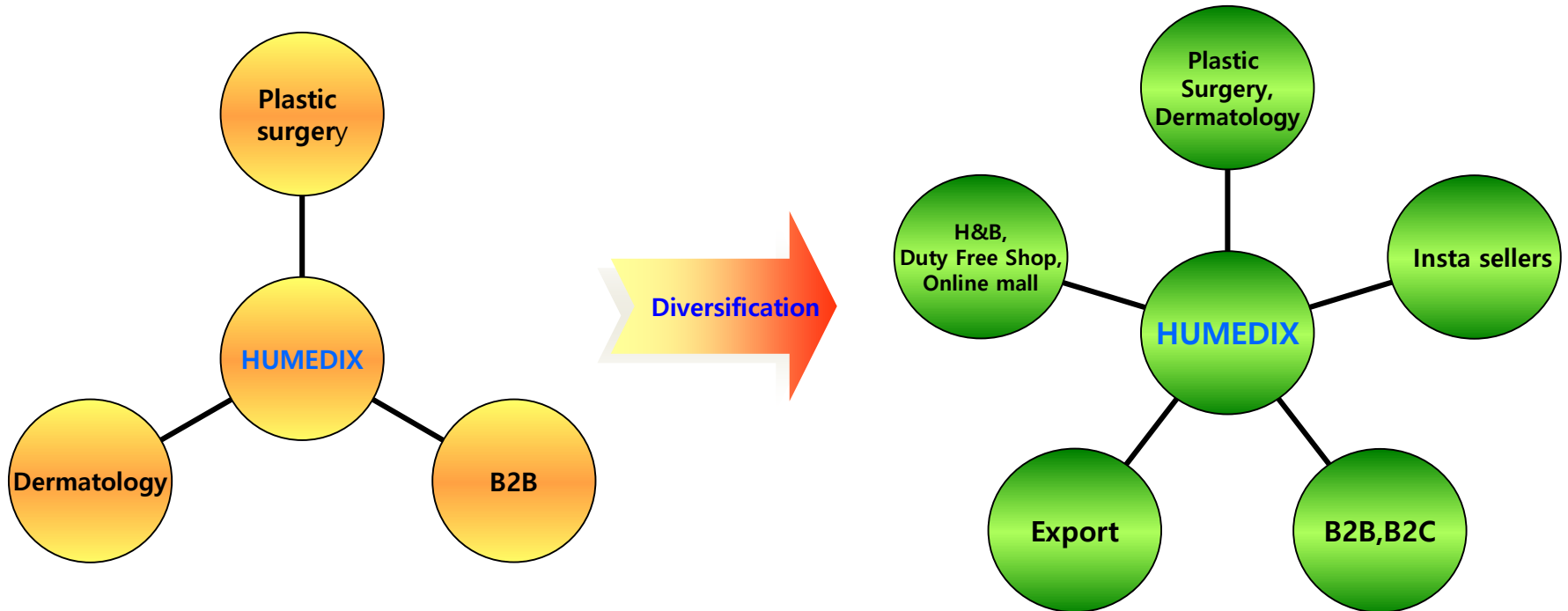


KERIEL

- Domestic exclusive contract with Onebiogen for adhesive transparent wound dressing "KERIEL"
- Skin protective effect by forming a physical barrier in the area where the skin barrier is destroyed
- Contains vitamin E derivatives, squalane, and silicon oxide to prevent skin elasticity and skin aging



Cosmetics Business Diversification of Sales Network



※ Secure diverse customer base and sales channels by expanding online / offline and overseas sales network

Development of new materials applying specialized cosmetic raw materials [Humedix formulation technology + Introduction of external technology]

New cosmetic ingredients

- **Introduction of proprietary materials or external technologies**
 - ✓ **New materials with proprietary technology**
 - Patented, new anti-aging material
 - ① Cetyl/Stearyl NR ester, Cetyl NR amide
 - ② Huvita DP (7-Dehydrocholesteryl Palmitate)
 - ✓ **Introduction of technology through external cooperation**
 - Eco-friendly formulation technology
 - Introduction of ultra-moisturizing specialized raw materials
- **Material research using biotechnology**
 - ✓ Expansion of product application of fermented honeybush extract
- **New functionality Complex™**
 - ✓ Development of new antioxidant complex (Hu-Phyto Whitening™)
 - ✓ Development of whitening functional ingredients

Expectation effectiveness

- ✓ Development of cosmetic materials using an external drug delivery platform
- ✓ Development of high-functional materials through improvement of skin permeability
- ✓ Development of patented raw materials for the development of vegan, specialized functional new products

High functional cosmeceutical cosmetics

- **Cosmetic research of stem cell-derived exosomes**
 - ✓ Differentiated product research through external technology cooperation
 - Human fat stem cell-derived
 - extract derived from plant stem cell
 - ① Transporters with tissue permeability, cell fusion
 - ② Anti-oil of various molecular substances such as growth factors and salt substances
- **Microbiome cosmetic application research**
 - ✓ Development of moisturizing and skin barrier cosmetics using "L. acidophilus YT1"
 - ✓ Expansion of new vegan products(Complex™)
 - Hu-Phyto Whitening, Phyto PDRN

Expectation effectiveness

- ✓ Development of skin booster and ampoule products that are excellent for skin regeneration
- ✓ Microbiome Product Development
- ✓ Development of market-leading high functional cosmetics

Thank you