

HansBiomed Investor Relations 2023



Chapter 01. About Us

- 1) Company Overview**
 - 1-1. Introduction
 - 1-2. History
 - 1-3. Infrastructure
 - 1-4. Corporate governance
-

- 2) Product Portfolio**
-

HansBiomed

A leader in tissue engineering and plastic surgery medical devices in Korea
A leader in the global bio industry

Company Name	HansBiomed.Corp
Date Established	September 15, 1999
CEO	GeunYoung Kim
Business Areas	Development, manufacturing, and sales of allografts and medical devices
HQ	7, Jeongui-ro 8-gil, Songpa-gu, Seoul, Republic of Korea 05836
LAB / GMP	Yuseong-gu, Daejeon, Republic of Korea
In Global	Hans USA(NJ, CA) / Hans UK / Hans Mexico / Hans Columbia / Hans Thailand / Hans China
Affiliates	Hans Phama / Hans Care / ATEMs / Mint Medical / Rebirth(LCC)



Establish Technology

- **1993** Established HANS Medical for scar treatment business
- **1999** Converted Hans Biomed Co., Ltd. into Hans Biomed Corp.
- **2002** Established the largest tissue engineering research laboratory in Asia
Registered the first bone graft in Korea with the U.S. FDA
Selected as a world-class certified company
- **2005** Permitted to establish the first tissue bank in Korea

Make Innovations

- **2008** Gained CE certification (Europe) for breast implants for the first time in Asia
- **2009** Listed on KOSDAQ for the first in the industry
- **2011** Established Hans USA
- **2012** Became the first in Asia to be approved by AATB (American Association of Tissue Banks)
- **2014** Awarded the \$10 Million Tower of Export
- **2015** Successfully developed the first breast implants in Korea (first in Korea to be approved for production and sales)
- **2017** Constructed and relocated to the headquarters in Munjeong
- **2018** Established Hans Thailand

Steady Development

- **2019** Established a GMP manufacturing facility
Established Hans UK, Mexico and Columbia
Expanded Hans Daedeok R&D Center
- **2020** Selected as a "Youth-Friendly Small Giant" by the Ministry of Employment and Labor
Established Mint Medical Co., Ltd.
- **2021** Established a joint venture corporation, Rebirth, with Wego Group
- **2022** Applied for domestic clinical IND for ATEMs A-paste-C

**A company that creates unprecedented innovation
based on innovative R&D technology**



HansBiomed HQ

- **location** in SEOUL
- **Established** in 2017
- **Floor**
 - 1F New Tech. R&D
 - 4F Podium
 - 8F GMP Facility(clinical)
 - 9F Cellular treatment R&D
- **R&D** New launchings: Cellular treatments / Coil loader etc

HansBiomed GMP

- **location** in DAEJEON
- **Established** in 2002
- **GMP** Silicone
Human Tissue(Bone/Skin)
Medical Device
- **R&D** Tissue / Silicone
- **First Tissue Bank in Korea**



Hans Pharma

- **location** in DAEJEON
- **Established** in 2019
- **R&D** Stem Cell Derived
Exosome
- **Certi** ISO9001, ISO14001,
ISO22716

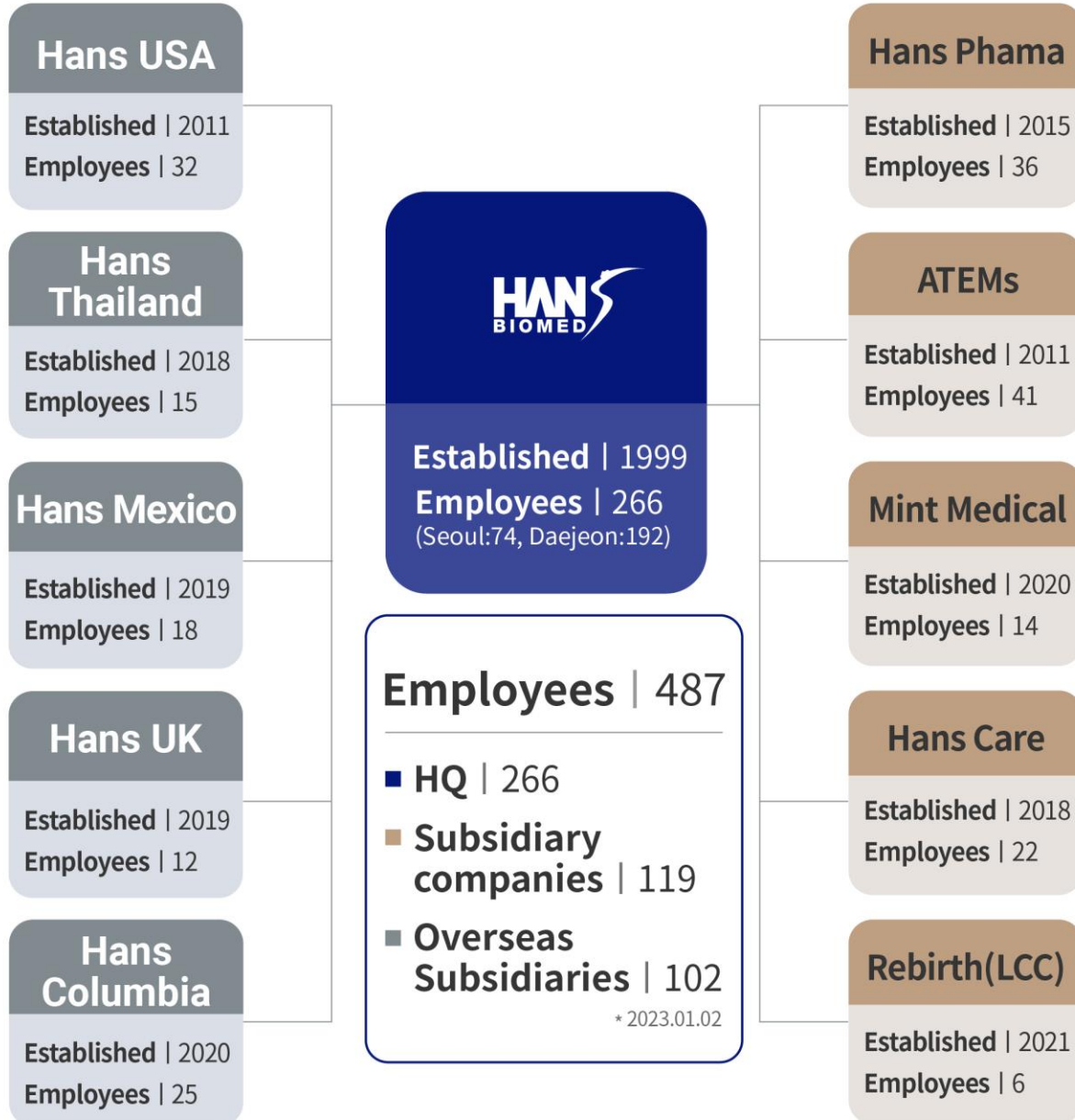
HansBiomed Laboratory

- **location** in DAEJEON
- **Established** in 2019
- **R&D** High-Technology
Biopharmaceuticals
- **GMP Facility**

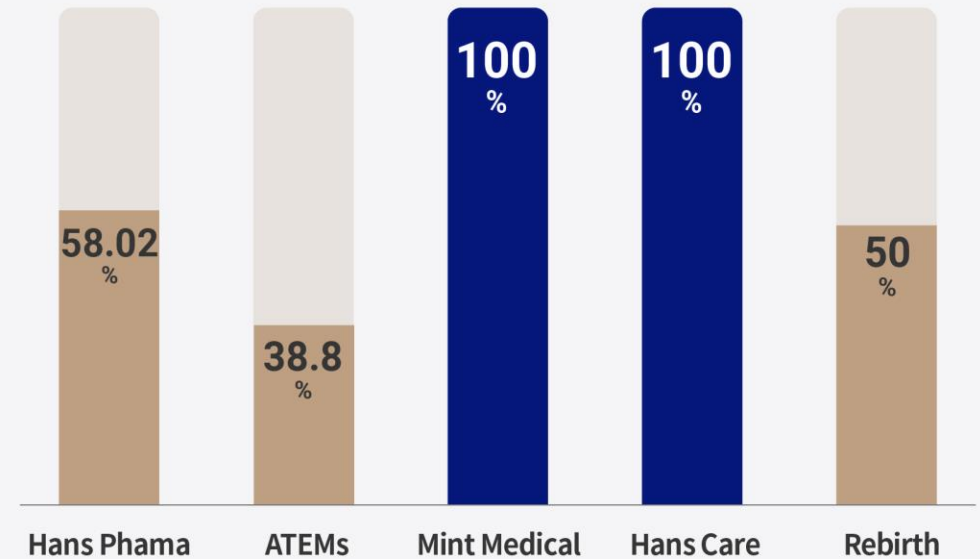


Chapter 01. About Us

1) Company Overview - Corporate governance

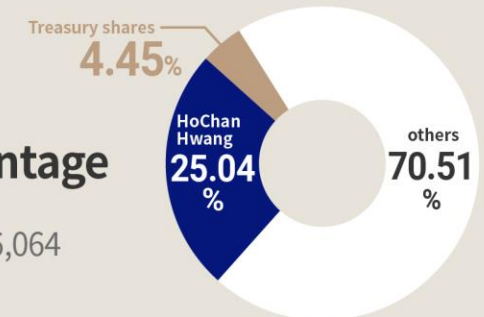


Ownership percentage of subsidiary companies



HansBiomed Ownership percentage

Total issued shares 12,116,064



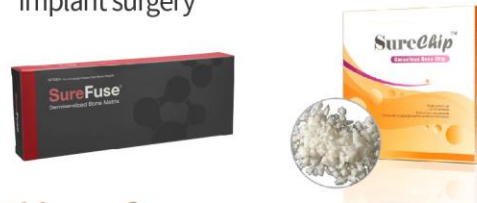
* 2023.04.30

Biologics

24 th Sales(%)	23 th Sales(%)
32,292 (43%)	24,832 (42%)

Bone graft

- Used in orthopedic and neurosurgical spinal surgeries, fractures, and bone tumors
- Used for gum reconstruction during dental implant surgery



Skin graft

- Used for reconstruction surgeries such as breast cancer and rotator cuffs
- Used for skin grafting in burn patients



Medical Device

24 th Sales(%)	23 th Sales(%)
35,121 (47%)	27,941 (47%)

Lifting thread

- Primarily used in plastic surgery and dermatology for facelift procedures



Hair transplant device

- Efficient hair follicle implantation device



Silicone Polymer

24 th Sales(%)	23 th Sales(%)
1,894 (3%)	3,075 (5%)

Breast implants

- Breast augmentation surgeries in plastic surgery
- Reconstruction surgeries in breast surgery for breast cancer patients



Scar treatment

- Scar-minimizing treatments
- Sold as OTC in pharmacies



Facial implant

- Used in nasal, forehead, and chin augmentation procedures in plastic surgery

Biocosmetic

24 th Sales(%)	23 th Sales(%)
2,176 (3%)	3,109 (5%)

Skin booster

- Anti-aging product line used in dermatology, plastic surgery, and aesthetic clinics



Cosmeceutical

- Cosmetics containing cell culture solution and fusidium extract.



Chapter 02. Business areas

1) Biologics	1-1. Bone graft 1-2. Skin graft 1-3. Sales analysis 1-4. Chinese Market
2) Medical device	2-1. Lifting thread (Mint lift) 2-2. Hair transplant device (Lion)
3) Biocosmetic	3-1. Cosmeceutical (Klardie)
4) Silicon Polymer	4-1. Breast implants (BellaGel) 4-2. Facial implants

Chapter 02. Business areas 1) Biologics – Bone Graft



Allografts from DFDBA, Cancellous and Carrier
(gel or putty type whose shape can be adjusted to fit the transplantation site)



Sponge-type allograft with compression and elastic of cancellous bone
(Sponge-type increases convenience for transplantation)

Product applications

NS/OS Wiz Meditech **JMT** **Hanmi**
For healthy life in new thinking

Used in surgical procedures to enhance bone conduction and osteoinductive abilities, as well as strengthen fixation, when bone defects occur due to various reasons such as trauma, infection, or degenerative changes

Dentistry **OSSTEM®**
IMPLANT

Using bone grafting prior to dental implant surgery to enhance fixation



Sales through diverse channels both home and abroad through collaboration with various partners
Further sales growth expected via additional distribution channels

Chapter 02. Business areas 1) Biologics – Bone Graft



Products are categorized according to needs for various fields (dentistry/orthopedics/neurosurgery) using bone allografts



Hans Biomed is the first company outside North America to register its bone grafting materials with the American Association of Tissue Banks (AATB), which guarantees the production of products using legal and safe donors

* The AATB is recognized as a role model for various international guidelines and standards, serving as a benchmark not only for the Korea Food and Drug Administration but also for tissue banks worldwide.



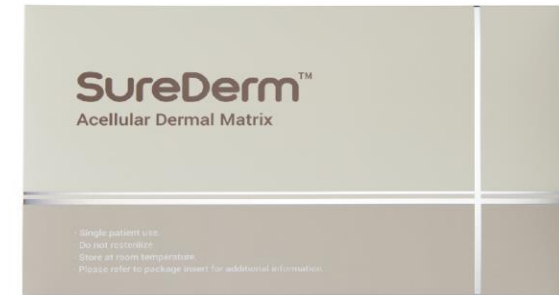
Obtained FDA 510K (US) to enter the US market, the largest market in the world

Chapter 02. Business areas 1) Biologics – Skin graft



BellaCell HD™

- Non-cellular allogeneic dermal products used in breast surgery and other procedures to transplant onto patients with skin defects
- Available for immediate use upon opening as a ready-to-use (RTU) product
- Increased flexibility by 40% compared to the previous products



SureDerm™



SureDerm™ UroMax

Product applications

PS/GS

Used in breast cancer reconstruction and burn treatment

NS/OS/URO

Used for ligaments and skin defect areas
Used for phalloplasty and defect areas

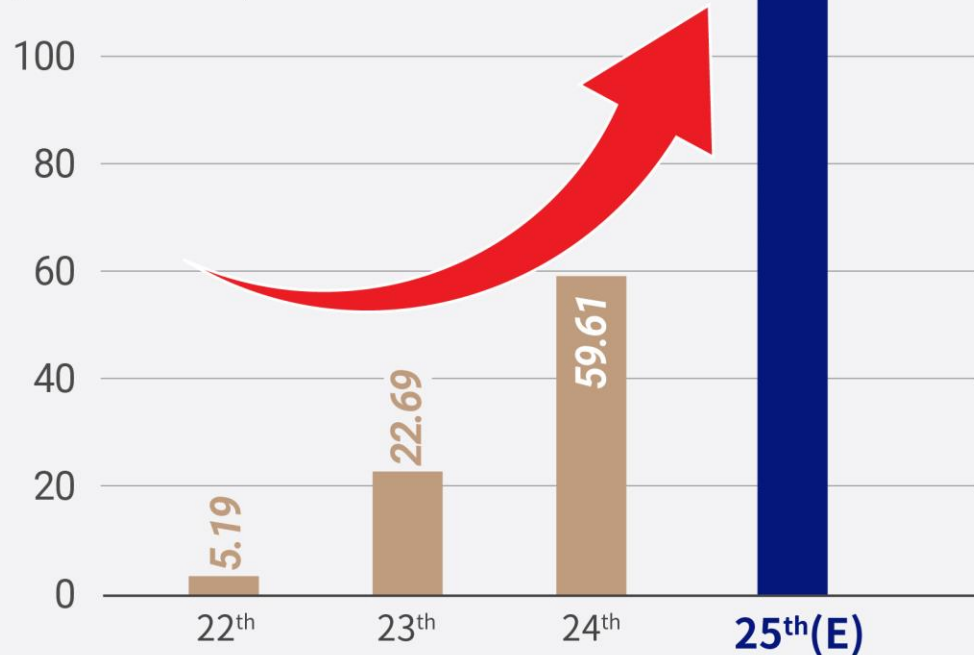
Dentistry

Used for gum defect areas during dental implants surgery

Promotion of rapid growth for BellaCell HD

BellaCell HD sales trend

(Unit : KRW 100 million)



Exploring emerging markets for ADM: PS breast reconstruction, wound care

1

Reconstructive surgery patients using breast implants and skin grafts have been increasing annually due to the expanded coverage for breast reconstruction surgeries starting from April 2015

2

Suitable for use in breast reconstruction due to excellent suitability and high tensile strength

3

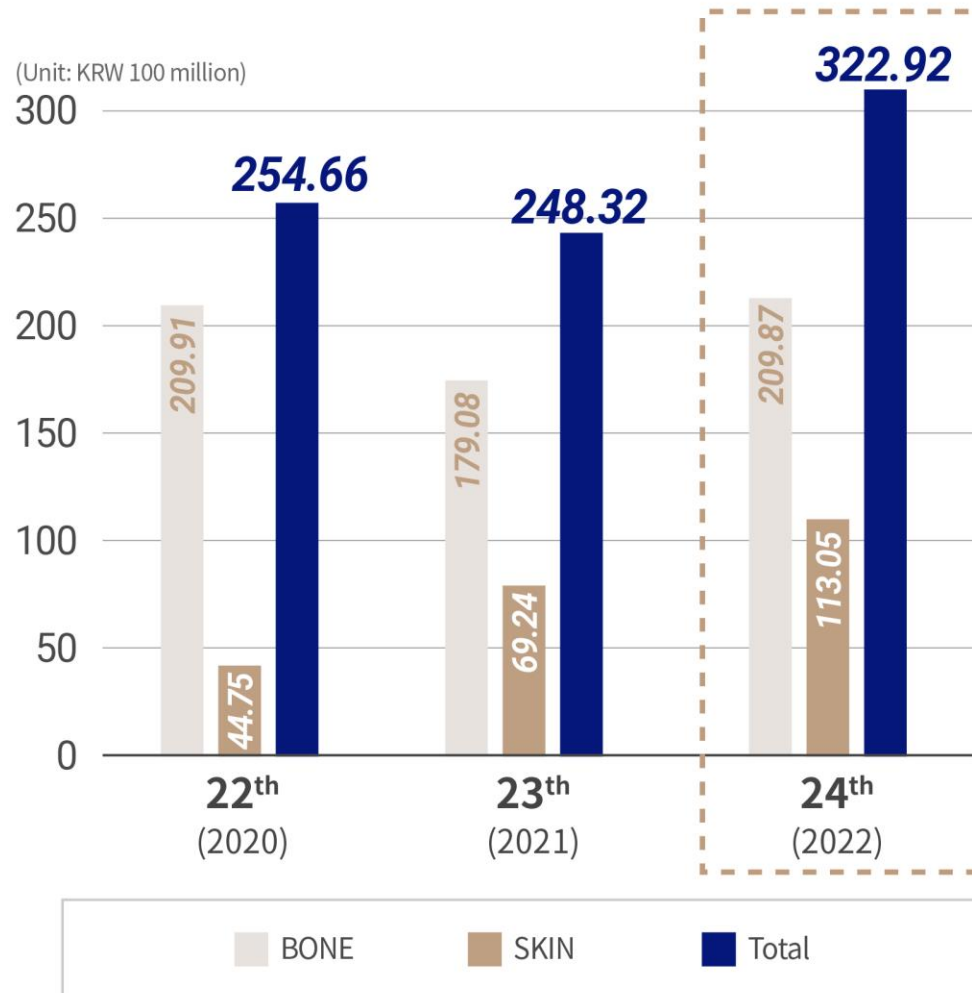
Potential for market expansion due to high demand in breast cancer reconstruction

Paradigm shift
subpectoral → **Prepectoral**

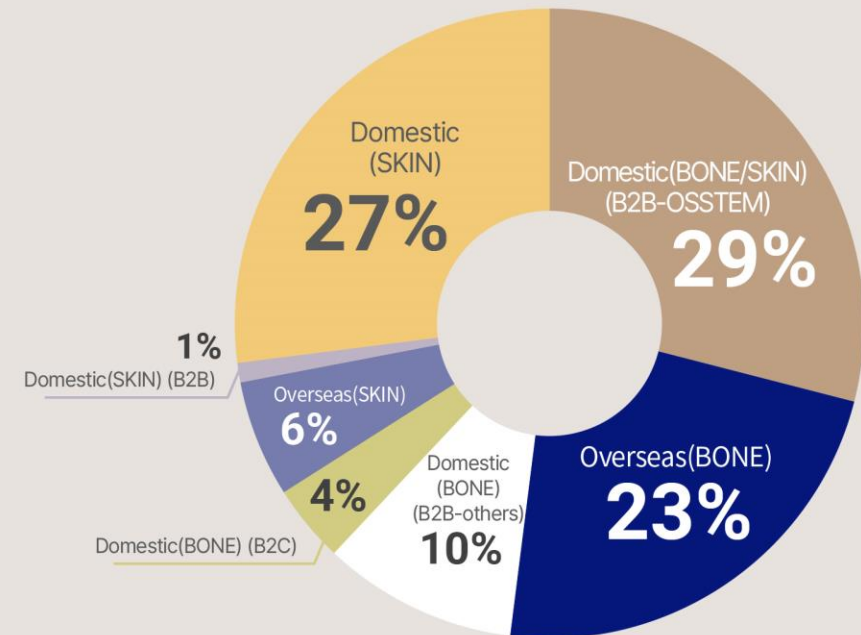
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Plans to increase prescriptions from plastic surgeon clients

Biologics Sales trend



24 Sales analysis



WEGO 威高

- 10.5 trillion KRW market capitalization, 2.6337 trillion KRW in annual sales
- A full cash investment of 120 million yuan (approximately 21.5 billion won)
- A distribution infrastructure that includes over 6,000 medical corporate entities in China
- Manufacturer and distributor of medical devices

*2023.04.28

50%
Equity
Investment

Rebirth Biotechnology(LCC)

- Scheduled to complete a production facility on a 15,000-pyong (49586.8-square-meter) site in Qingdao, China
- Goal 1: To obtain product approvals by the first half of 2025
- Goal 2: To sell locally produced products by 2025
- Goal 3: To list locally in 2028
- Up to a maximum of 5% in royalties to be paid (taking into account the operating profit of Hans Biomed)

HansBiomed holds the groundbreaking ceremony for 'Rebirth' marking the start of its business in China



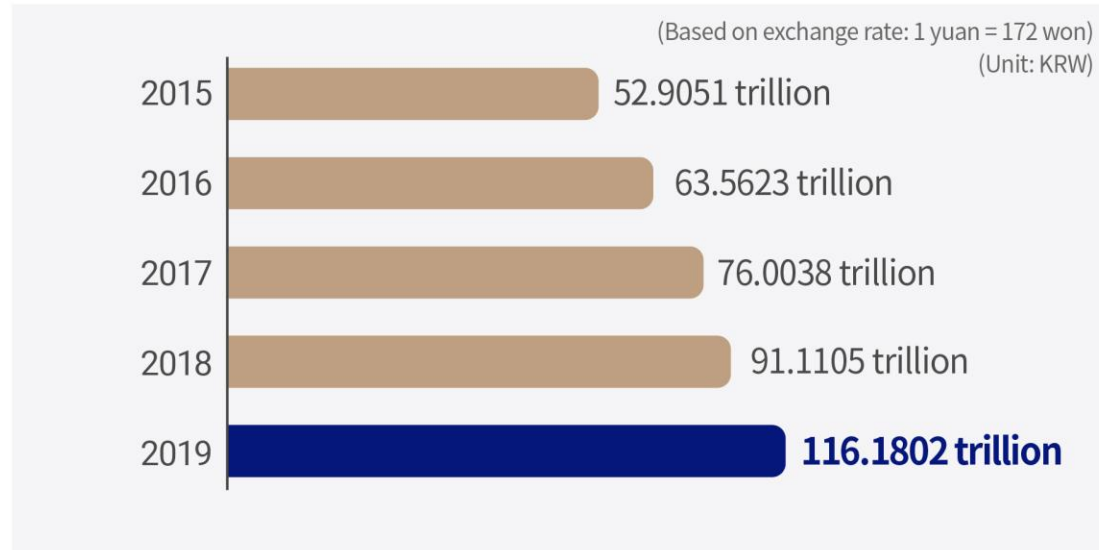
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50%
Equity
Investment



- A cash investment of 20 million yuan (approximately 3.5 billion won)
- Intellectual property rights recognized worth 100 million yuan (approximately 18 billion won)
 - Providing expertise and technology in Allograft
 - The largest form of compensation for technological provision in Korean human tissue medical device industry

Size of the Chinese medical device market



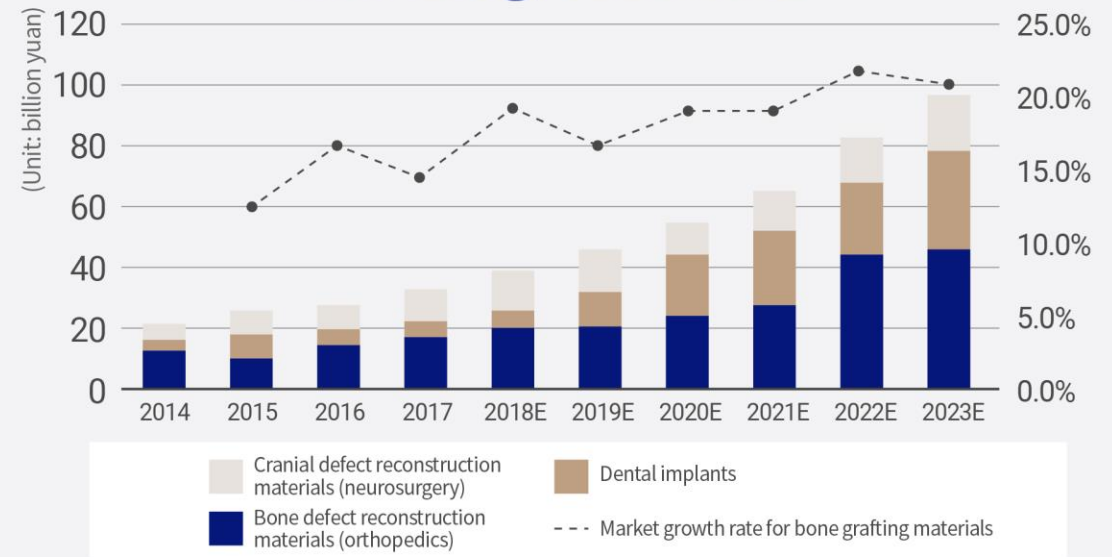
* Source: China Medical Device Report, published in 2019

Growing at an average annual rate of at least 20% since 2014

530.4 billion yuan as of 2018

The overall medical device market in China growing rapidly each year, with a CAGR of at least 20% since 2014

Chinese bone graft material market growth rate



* Source: Industrial Information Network, Dongxin Securities Research Report

The bone graft market in China, more than 30 times bigger than that of Korea

Large potential for growth

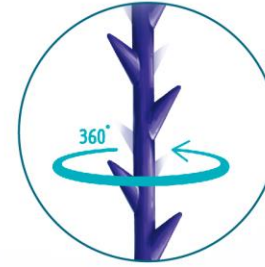
The size of the bone graft market in 2023 is predicted to be 9.69 billion yuan (1.8 trillion won)

360° HELICAL DESIGN lifting thread MINT Lift®

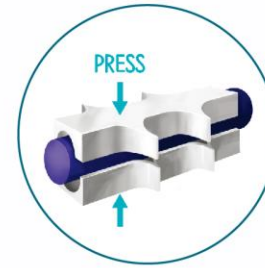
- Certified by MFDS (Korea), FDA (US), CE (Europe), NMPA (China), and others in 10 countries
- Being sold by export to 40+ countries
- Approved as Facial Tissue Fixation Thread for use in lifting for the first time in Korea
- During the press-molding process, the barbs are positioned in a 360° helical pattern around the MINT™ PDO threads. This design allows the PDO thread to better anchor onto the 3D structures of the skin for powerful repositioning effects
- Offers a diverse product portfolio for customized procedures to meet the specific needs



Patented manufacturing method



360° HELICAL DESIGN



Manufactured using molds for increased and approved **tensile strength and fixation**

* Manufacturing method patented in 11 countries
(Higher fixation and sustainability than those offered by other companies)

H-Faculty

- Information-sharing platform for health professionals worldwide
- Enhances product understanding through ongoing training and webinars



3,000

Number of health professionals registered



65 countries

Number of countries of health professionals



14,000 times

Number of views on the technique demonstration video



96

Number of webinars held

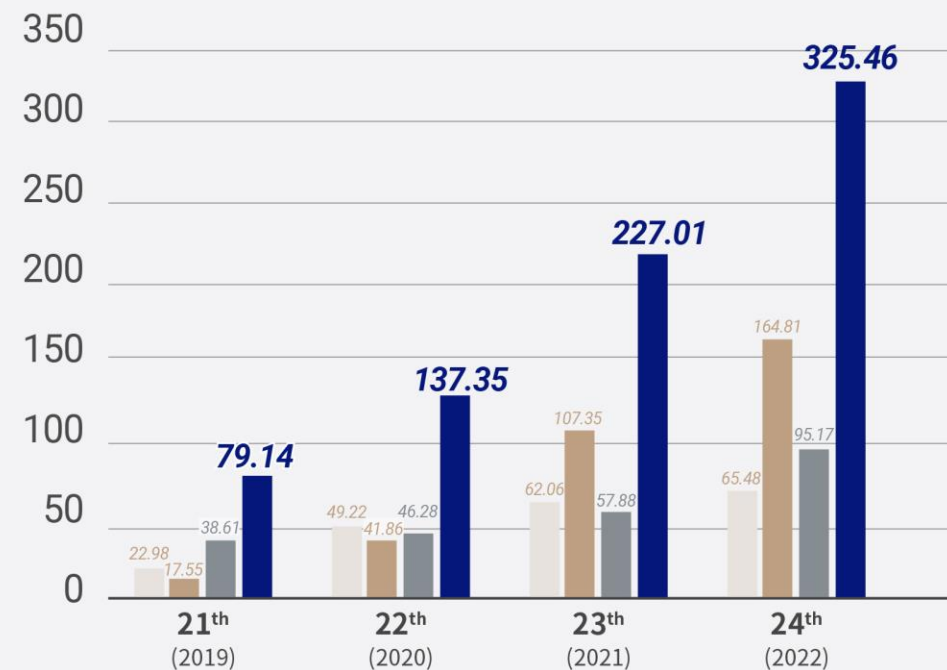
• 25 months of data

Awarded the Brand Award for three consecutive years



MINT Lift®

MINT Lift® Sales trend by Country



(Unit: KRW 100 million)

Korea USA Other countries Total

- MINT Lift showed a sales growth of 311%, with a particularly outstanding growth record of 839% in the US market, over the past four years
- High growth in various countries, including Colombia (203%), Mexico (171%), and Thailand (123%)

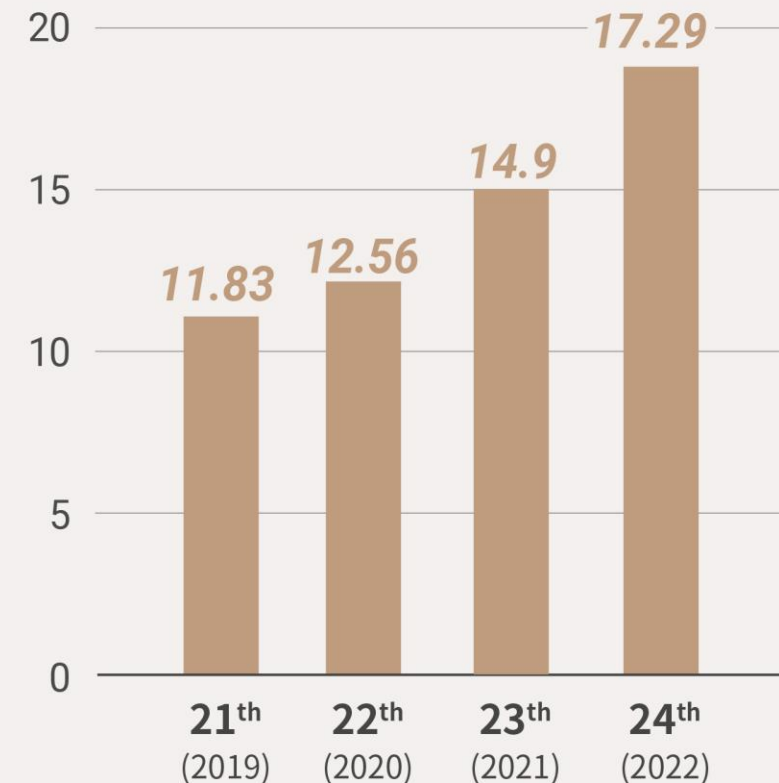
Patented hair transplant device, LION



- Lion is a hair transplant device approved in more than 10 countries, including the USA (FDA) and Korea(MFDS)
- Patented clips allow shortened procedure time and easier, faster replacement of transplantation needles
- Precise transplantation needles help reduce potential scalp injuries during procedures
- Positive growth trend of annual sales, and development in progress for hair transplant, hair loss treatments, and more

Lion Sales trend

(Unit: KRW 100 million)



A rebranded bio-cosmetic brand, Klardie

Klardie technologies



Continuous research on stem cell structure medium

A research paper on the topic of “The effects of human umbilical cord-derived mesenchymal stem cell (hUC-MSCs) culture medium on skin cells” published in an international academic journal



Found positive results in terms of skin cell regeneration, whitening, and antioxidant effects



Patent registration for neural stem cell culture medium



US MSC culture medium listed in INCI



Neural stem cell culture medium listed in INCI



Induced neural stem cell culture medium listed in INCI

Klardie product portfolio



• Skin booster

Skin tightening and whitening care for dermatological use



• Fusicare line

Moisturizing and soothing home care for consumers in their 20s and 30s



• Timeless line

Premium anti-aging home care for consumers in their 30s and 40s



• Scalp care line

Effective for preventing hair loss and improving scalp environment

Breast Implant

BELLAGEL® Smooth
Round base, Smooth surface



BELLAGEL® SmoothFine
Round base, SmoothFine surface



- The first artificial breast implants brand to be developed exclusively in Korea

2006년
Clinical trial
was conducted

2009년
Distriuted
abroad

2015년
MFDS(Korea)
registered

2016년
NMPA(China)
registered

- An issue with BellaGel emerged in 2020

2023.03.31

- Operation of the BellaGel CS Center

- Ran an integrated website for compensation and long-term monitoring
- Compensated 9,756 patients with a total of 1.65 billion KRW

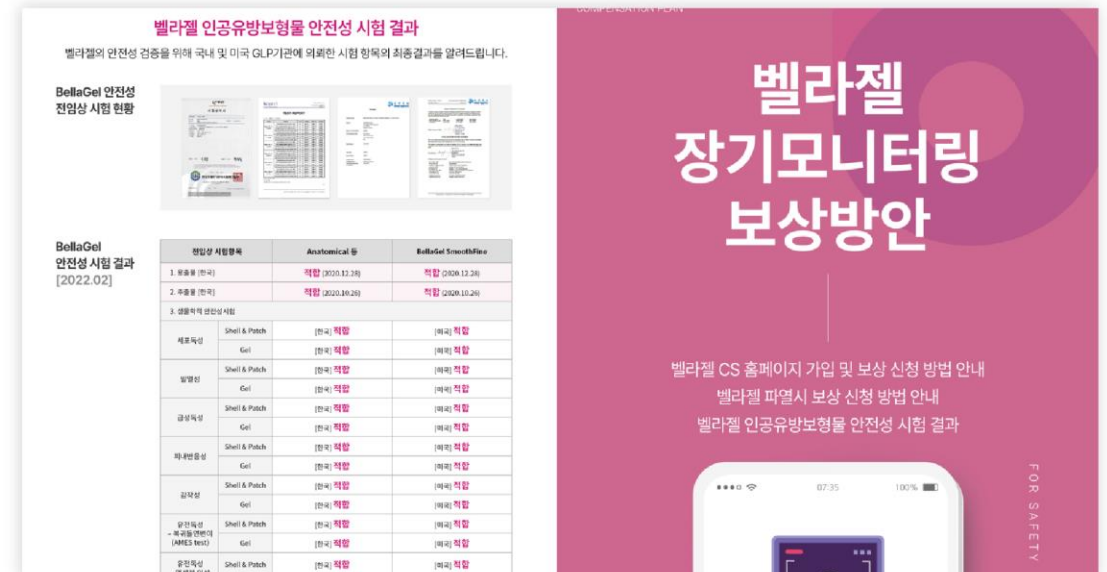
- 1st retrospective observational study conducted

- Completed by a total of 6,623 individuals from 14 research institutions (e.g., Seoul National University Hospital, JW Plastic Surgery)
- 2nd retrospective observational study scheduled in 2024 (a total of 5 study phases, biennially)

- Goal: to establish marketing strategies for global re-launch in the first half of 2024



▲ BellaGel CS Center website



▲ BellaGel long-term monitoring brochure

Chapter 03. Growth strategy

1) R&D

1-1. Tissue Engineering Research Center

1-2. Research center for advanced medical devices

2) ATEMs

The largest tissue engineering research center in Asia

An institution for research and production of allografts and medical devices equipped with world-class facilities recognized by the FDA

Research and production of products for skin and bone grafting and reconstruction, as well as Silicone Polymer products

We have top-notch facilities for the development of the world's best therapies and are dedicated to continuous R&D by constantly working with professionals and experts with specialties in relevant fields



Process

- Process improvement
- R&D of automation

Skin, Bone

- Development of next-generation process techniques
- Development of next-generation products

Medical device

- Management of medical device approvals
- Establishment of efficacy and safety factors
- Polymer analysis and synthesis

4F | Silicone / Lion Product

3F | BONE / Product

2F | SKIN / MINT Product

1F | Silicone / MINT Product

Research center for safety and high-performance advanced medical devices

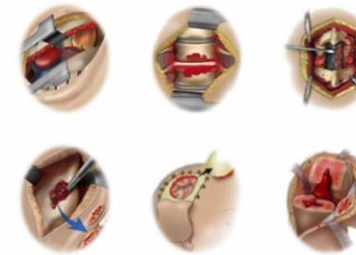
Medical device R&D institution for vascular
disease treatment

Research for advanced medical devices and treatment of embolic substances - vascular diseases

We are conducting various R&D activities, such as the development of cutting-edge medical procedure materials and pharmaceutical raw materials, including embolic agents, tissue regeneration patches, vascular hemostatic devices, and hemostatic adhesives.

Hemostatic agent for bone

- Increasing usage due to the rise in surgeries for musculoskeletal disorders such as spine, artificial joint insertion, and nonunion fracture surgery
- Immediate hemostasis with bioabsorbable material
- Expected MFDS approval in Q3 2023 (scheduled for launch in 2024)



Intraoperative bleeding
in orthopedic surgery



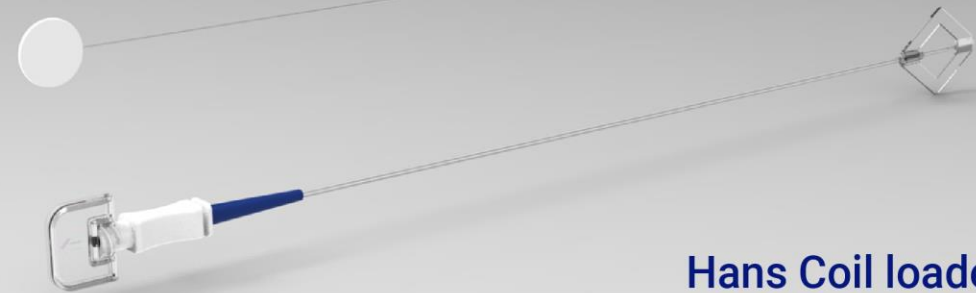
Physical compression
(formation of barrier membrane)



Hemostatic effect

Embolic coils

- First embolization device for endovascular procedure to be developed in Korea
- Product superiority compared to competition (performance, efficacy)
- Ongoing non-clinical trials in 2023 (launching in March 2024)



Hans Coil loader

ATEMs specializing in regenerative therapy with globally competitive technology

R&D of cutting-edge medical and bio-therapy products for the treatment of degenerative tissue defects based on tissue engineering

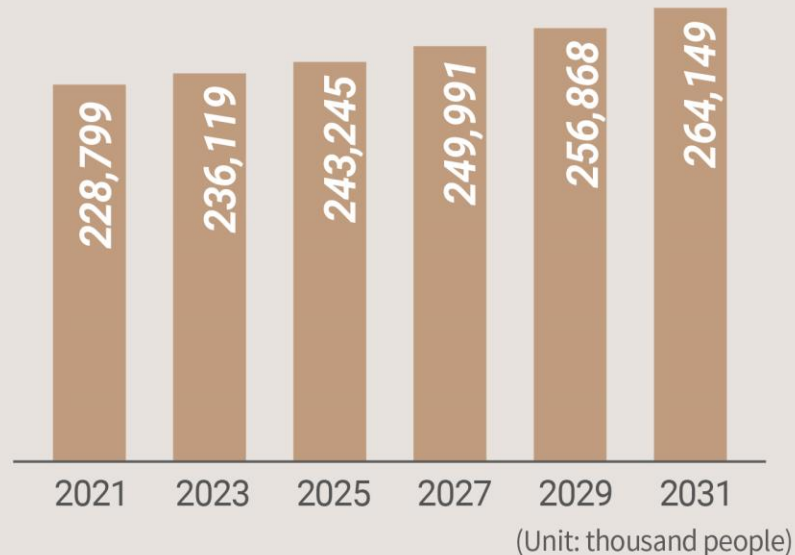
A-paste-C

Regenerative therapy for hyaline cartilage

Market size

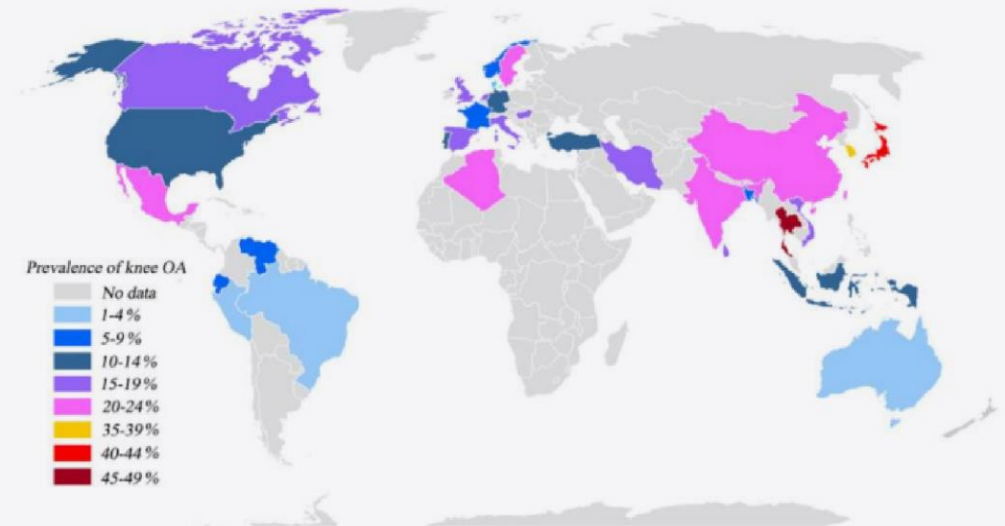
- The number of knee osteoarthritis patients worldwide is approximately 250 million and is increasing annually
- There is currently a fundamental lack of treatment options for regenerating hyaline cartilage

Global incidence of knee osteoarthritis (Over K&L Grade 2)



Source : DatamonitorHealthcare : Osteoarthritis and osteoarthritis pain
* The Burden of Musculoskeletal Diseases in the United States

Global prevalence map of knee osteoarthritis

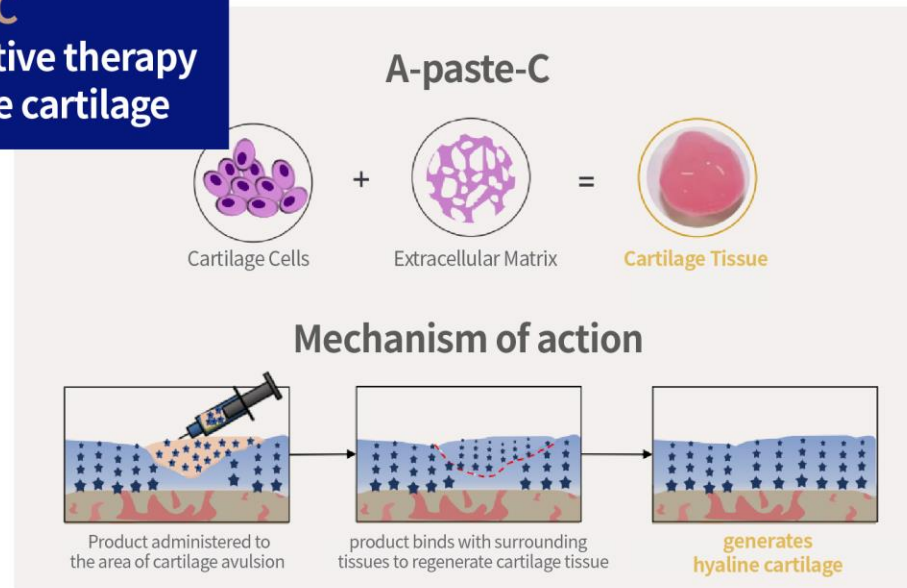


Source : Allen, K. D. (2015) "Global, regional prevalence, incidence and risk factors of knee osteoarthritis in population-based studies". EClinicalMedicine, 29

ATEMs specializing in regenerative therapy with globally competitive technology

R&D of cutting-edge medical and bio-therapy products for the treatment of degenerative tissue defects based on tissue engineering

A-paste-C Regenerative therapy for hyaline cartilage



Comparison of A-paste-C and conventional osteoarthritis treatments

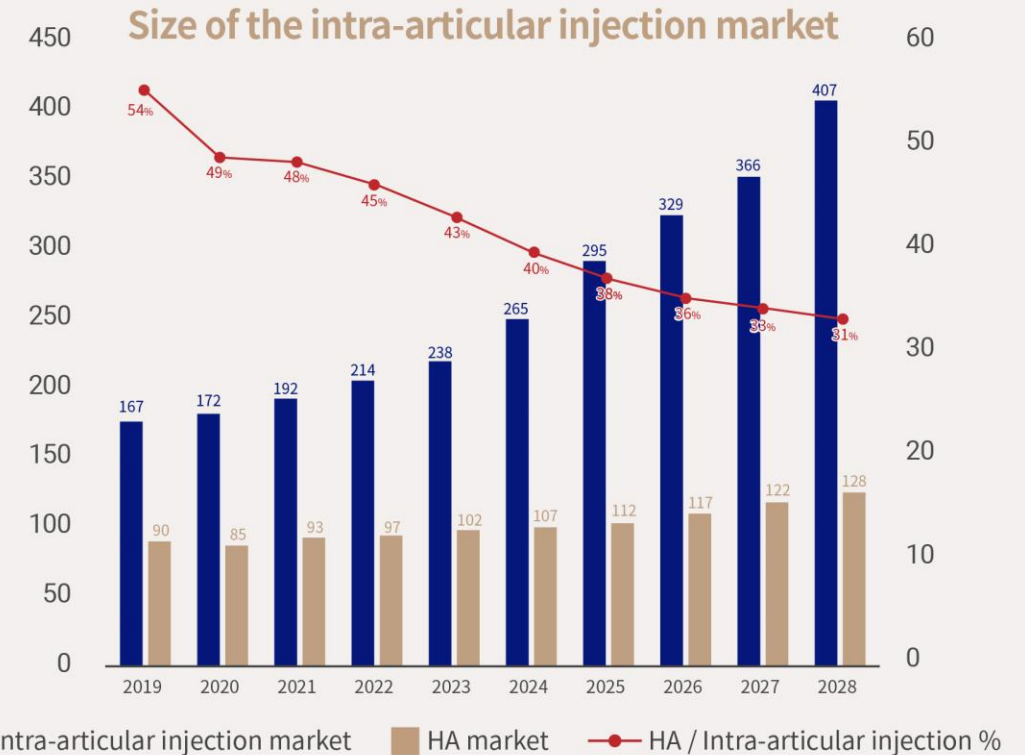
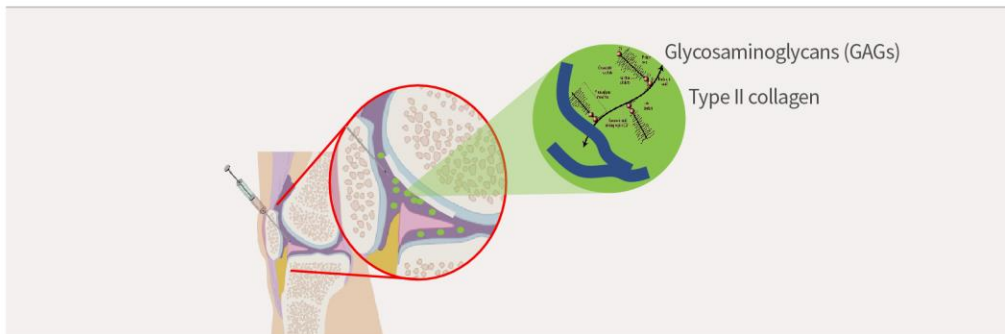
	Hyaluronic acid	Stem cell therapy	A-paste-C	Total joint replacement
Explanation	Temporary relief of pain through injection therapy	Induces regeneration of damaged cartilage tissue	Regeneration of hyaline cartilage in damaged cartilage tissue	Surgical procedure for severe cases
Target patient	K&L Grade 1-3	ICRS Grade 4	ICRS Grade 2-4	K&L Grade 4
Surgery required	Surgery not required	Surgery required	Surgery optional	Surgery required
Treatment method	Administration of injectables	Removal of normal cartilage and micro-drilling, followed by administration of a liquid-type product	Injects and applies gel-type product to the affected area while maintaining normal cartilage	Removal of normal cartilage and insertion of artificial joint
Timeliness of treatment	O	X (To be used within 96 hours after production)	O (off the shelf, Valid for 2 years)	X
Life of treatment	X	X	O (No lifespan constraints)	△ (15years)
treatment of disease	X	X	O	X

- A-paste-C provides a fundamental treatment method for the chronic condition of osteoarthritis that leads to repeated damage to cartilage tissue and inflammatory responses → regenerates hyaline cartilage with elastic and translucent properties resembling native cartilage
- A stem cell-based therapeutic agent derived from immature cartilage tissue, ensuring safety from immune rejection, toxicity, or tumorigenicity
- Improves patient accessibility based on large-scale production processes compared to competition: applicable to over 1 million patients with just one tissue (1 to 300 patients in the case of competition)
- Secured a base for entering the global market thanks to its longer effective period compared to competition

Intra-articular injection to treat damaged knee cartilage

About CartiSave

Indication	Knee osteoarthritis, ICRS 1-3 Grade
Mechanism of action	Creating a conducive growth environment for chondrocytes through extracellular matrix supplementation
Key features	Pain relief based on anti-inflammatory properties, improvement of joint function, supplementation of key components of cartilage including Type II collagen and GAGs
Development schedule	item approval expected in Q3 2023



Source : Health Insurance Review and Assessment Service (reprocessed by ATEMs)

- As of 2019, the HA injection market accounted for 53.7% of the Intra-articular injection market
- The market for HA injection agents is declining due to the research findings that the pain reduction effect of HA does not reach a clinically significant level

* Company P recorded sales of 51 billion KRW in 2022 (PN) | Company S recorded sales of 11.8 billion KRW in 2022 (Type I collagen)

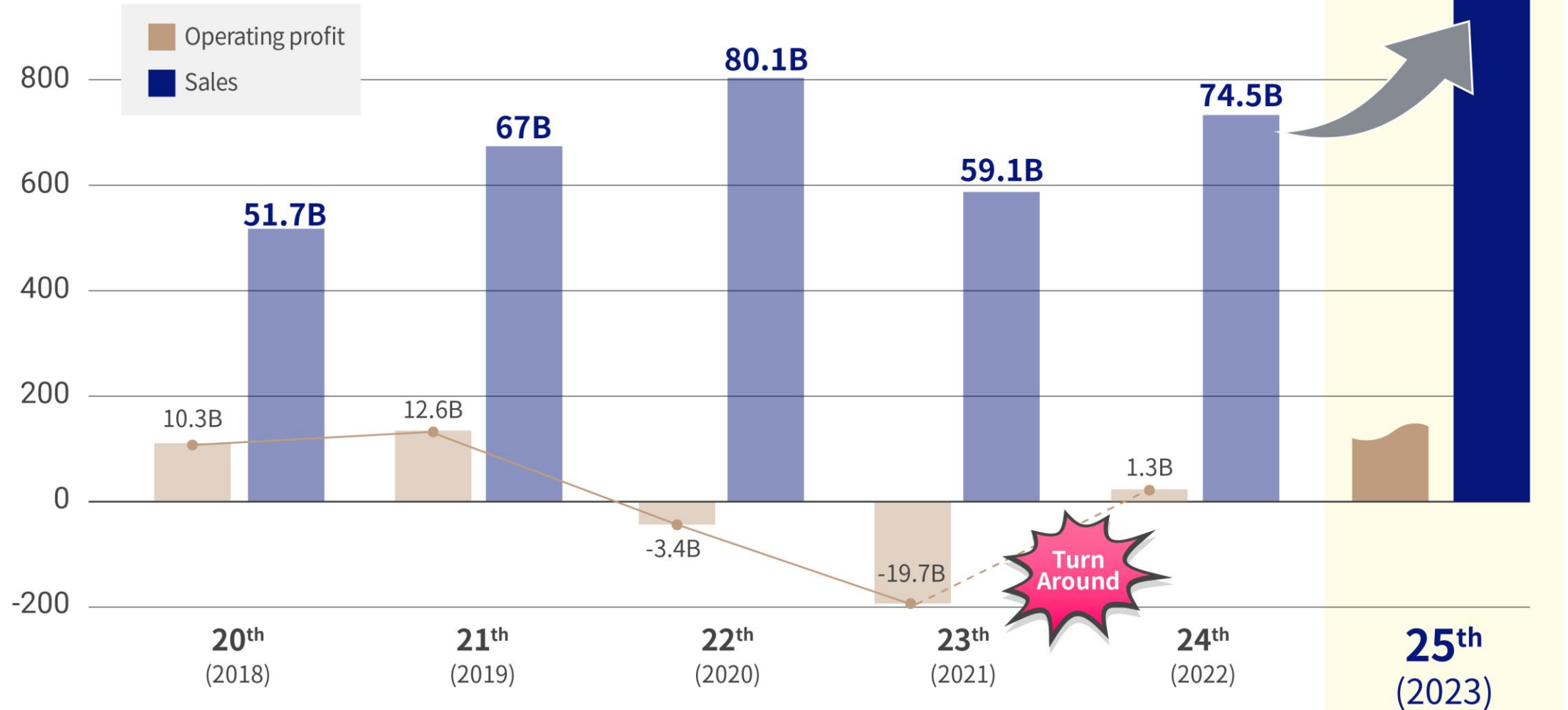
Chapter 04. Business performance and ESG

1) Business performance and Forescast

2) ESG

Goal: sustainable growth of sales and generation of profit

(Unit : KRW 1won)



CSR

HansBiomed employees participate in year-end kimchi volunteer service

[조선일보] 오정주 기자

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- Quarterly employee volunteering and donation activities to contribute to the community

Carbon neutrality

HansBiomed participates in the Ministry of Environment's eco-friendly campaign 'GoGo Challenge'

(서울=뉴스1) 김민석 기자 | 2022-06-02 11:45 송고

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- Implementing eco-friendly paper and ink packaging, using biodegradable materials to minimize negative impacts on human health and the environment
- Participation in the Ministry of Environment's eco-friendly campaign 'GoGo Challenge'

Compliance

HansBiomed accelerates its ESG initiatives

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최종수정 2022.04.21 09:00 기사입력 2022.04.21 09:00



- Declaration of ethical management to minimize the risk of management corruption



HansBiomed focuses on sustainable management driven by Sustainable Development Goals (SDGs)



Thank you
