# GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH





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# GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH

# **MESSAGE FROM THE CEO**



Jaeyong Ahn
President and Chief Executive Officer

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# From Prevention to Cure, SK bioscience is creating a healthier tomorrow for everyone.

**??** 

We overcame global pandemic threat by the power of 'ONE TEAM', and we recognized the importance of creating a vaccine ecosystem as well as building production hubs, based on a robust partnership partnership.

The network that SK bioscience is building together with leaders in the global vaccine industry including international organizations, research institutes and vaccine companies, becomes a driving force for sustainable growth, and a key to attain both economic (EV) and social value (SV) in the same time.

SK bioscience will continue its efforts to enroot all over the world this hope, born from the passion of our executives and staff members.

SK bioscience as a leader in South Korean vaccine industry, with its cutting-edge R&D technology and advanced manufacturing facilities, has been recognized all over the world for its capabilities, such as self-development or consignment production of COVID-19 vaccines.

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SK bioscience takes the lead in advancing human health by expansion of its own vaccine portfolio, enhancement of R&D as well as production infrastructure, and it actively enters into new biotech areas, securing global production bases.



From prevention to cure, SK bioscience continues to make every effort to promote life and health.

At SK bioscience, we continue investments to secure innovative technologies and advanced manufacturing systems. We have successfully created commercial vaccines and have become a trusted global partner based on our achievements. Given our innovative achievements in the vaccine markets, and our preparations to respond to endemic outbreaks and the next pandemic, we are attracting interest from governments, institutions and companies around the world.

Now, we are embracing the next-level challenges that will accelerate another leap in our development.

#### 07

# GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH



# Global Innovative Partner of Vaccine and Biotech

# **Global Innovative Partner of Vaccine and Biotech**

SK bioscience has continued investing in vaccine R&D and manufacturing as the medical paradigm shifted from treatment to prevention. We achieved innovation in all business areas, from basic research to manufacturing and commercialization, which led to successful development of our premium vaccines. In the early stage of the pandemic, with faith in our extraordinary technology, we entered an unprecedented business. Our intrepid decision of the two-track strategy of vaccine CMO and original vaccine development resulted in the company's highest-ever performance. Constant innovation has allowed us to discover more possibilities and accumulated capabilities have offered us a blueprint for the future to create new values.

# **New Strategy for SKBS 3.0**

SK bioscience is becoming a global innovation partner in the vaccine and bio-industry. To achieve our vision, we have designed a new strategy to strengthen new future growth and implement action plans.

With robust investments in R&D and manufacturing facilities, we are strengthening our vaccine portfolio to prepare for the COVID-19 endemic. We will further prepare to fight against a new pandemic by securing new technologies such as mRNA. We will diversify the vaccine pipeline and strengthen our core competitiveness by initiating a range of projects. Our proven competitiveness will attract synergistic global partners, further solidifying our commercial relationships. Taken together, these strategies will create a hub for global vaccine manufacturing and supply.

# GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH

By expanding our manufacturing base around the world, we are becoming a global hub for vaccine distribution.



As demand for vaccines rises, we will become a hub for vaccine distribution while harnessing innovative capabilities to further empower our global partnerships.

We have created a global vaccine network through co-development and collaboration with global partners, international organizations and research institutions. As we deepen international partnerships forged during the pandemic, we will improve our R&D capabilities and expand our worldwide vaccine CMO/CDMO businesses to lead the global market. In parallel, we will transfer our certified vaccine manufacturing, development capabilities and CMO business know-how to global markets. That transferred glocalization\* expertise will help local governments and partners in emerging markets to build manufacturing infrastructures tailored to their regional needs. Such efforts will fortify our standing in global vaccine distribution and expand access to pharmaceuticals around the world.



\*Joint Venture \*\*Public-Private Partnership

# GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH

# We create new opportunities with constant innovation.

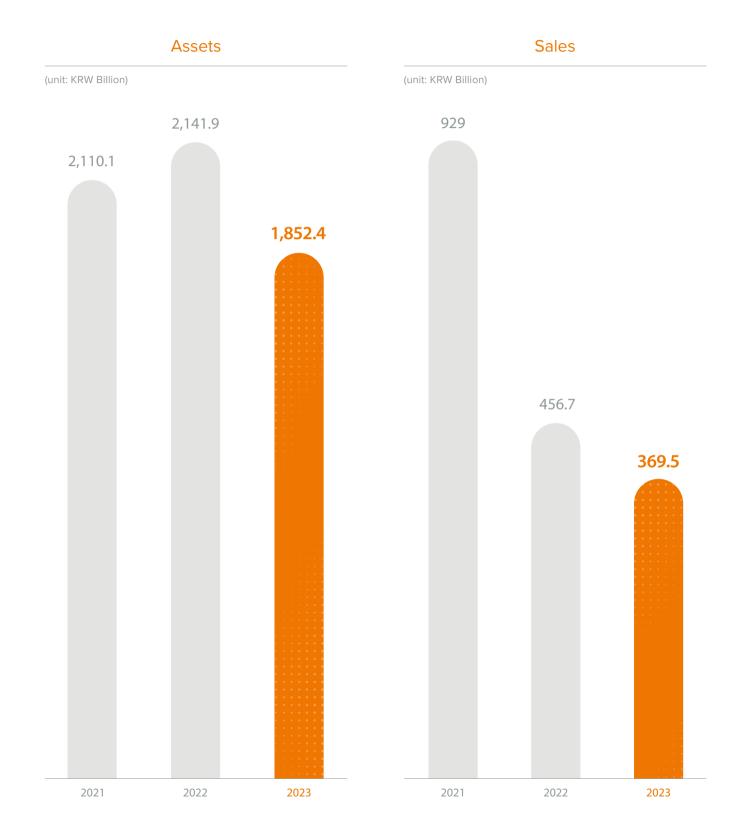
SK bioscience is a leading company in the vaccine industry, aiming to advance human health and achieve sustainable growth. We continue to cooperate with the top global companies and international organizations by the means of partnerships built over the last 20 years.

As an innovative partner in the global vaccine market, we continue sustainable growth

through CMO/CDMO businesses. Our collaboration with AstraZeneca's COVID-19 vaccine CMO business during the pandemic led to remarkable sales growth and the first supply of a COVID-19 vaccine in South Korea. In addition, the Novavax COVID-19 vaccine CDMO business added vaccine choices for South Koreans.

With our advanced R&D technology and manufacturing facilities that adhere to strict global standards, we emerged as a global vaccine hub during the COVID-19 pandemic. In close relationships with global organizations such as the Bill & Melinda Gates Foundation, CEPI and IVI, as well as with international governments and biotech companies, we are determined to address the global vaccine supply inequality and take the lead in building a new portfolio to tackle the next pandemic.

# **Performance Highlights**



# GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH

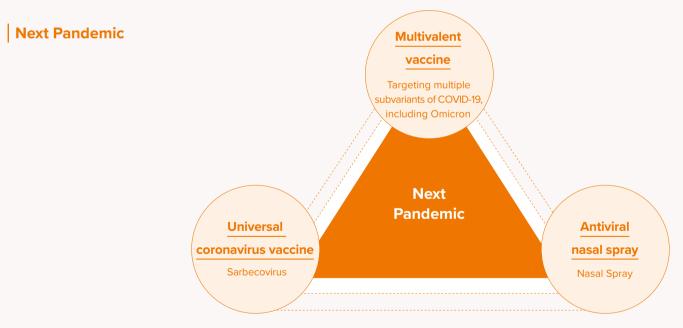
# We strengthen core competitiveness by expanding the vaccine portfolio.

SK bioscience is actively responding to the COVID-19 endemic phase and the next pandemic by pursuing continuous growth fueled by our proprietary vaccine development capabilities. With bold and sustained investments in R&D and manufacturing infrastructure, we are preparing for the future by upgrading our vaccine pipelines from basic to premium.

SK bioscience is seeking to develop vaccines to secure vaccine sovereignty and promote public health, as an annual vaccination is being considered in the transition to the COVID-19 endemic phase. With our proven vaccine platform, we are developing next-generation vaccines in a variety of new forms and concepts, including a universal vaccine to replace the broadly protective vaccine against sarbecovirus as well as its larger viral family; a multivalent vaccine to address multiple variants of COVID-19; and an antiviral nasal spray to prevent COVID-19. We are also investing in advanced infrastructures to address endemic COVID. By serving as a development base for next-generation vaccines and biotechnology, and as an open innovation center to nurture top biotechnology talent our new Global R&PD Center in Songdo is designed as a global hub for the bio-industrial ecosystem. We are also expanding and improving our manufacturing facility, L HOUSE in Andong.

As we manufacture the next-generation of innovative vaccines at L HOUSE, we are further venturing toward becoming a hub for global vaccines and bioproducts.





· Developing new vaccine formulation technologies, such as nasal spray and micro needle patch

• Acquiring products and businesses from international vaccine companies

Acquiring companies with a basic vaccine portfolio

**Securing new** 

formulations

Merger &

Acquisition

# GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH

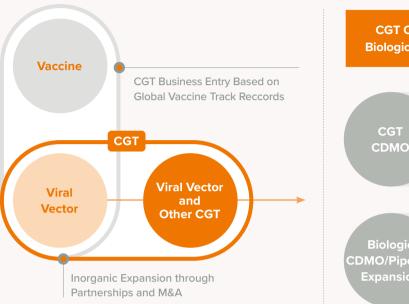
# We invest in future value to secure growth.

SK bioscience is securing innovative capabilities to respond to the next pandemic. These preemptive measures and the ability to overcome challenges are creating new opportunities and improving the fundamentals of our business and management.

We focus on business innovations to become more competitive in response to the next pandemic. These innovations include digital transformations to improve business efficiency and ESG management with sustainability at every stage of business. In this rapidly changing environment, such innovations will raise awareness and increase the value of our business.

We also focus on technological innovation. To acquire cell and gene therapy (CGT) technology, and advanced biotechnology with high-growth potential, we will make strategic investments and focus on M&A of international vaccine and biotech companies. Those initiatives will set the foundation for sustainable growth and new opportunities. We will keep growing as an expert in the vaccines and biotech industry to meet the needs of our current and future stakeholders.

# **CGT Business Strategy**



CGT CDMO Business Entry Followde by Biologic CDMO/Product Pipeline Expansion

Investment into or Acquisition of CGT CDMO Based in a Highly Regulated Country

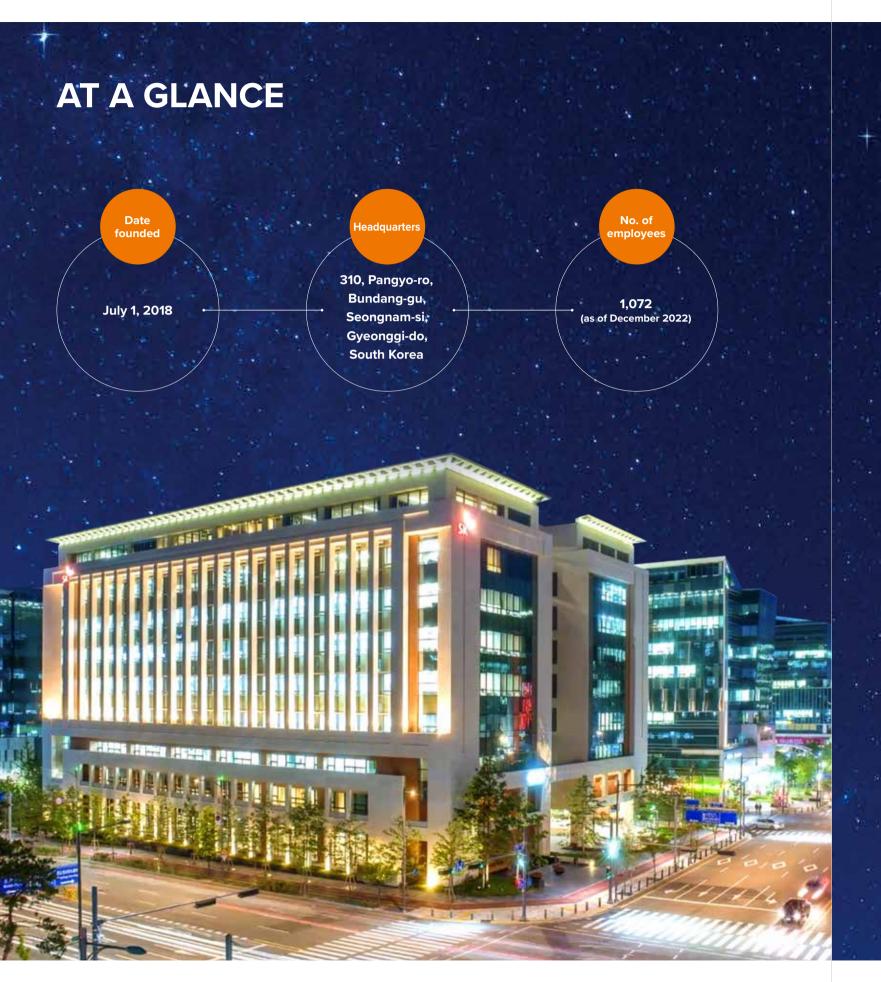
Increase asset value and financial performacne by adopting core technologies and innovative business models

Expand CDMO Offerings to Biologics

CDMO/Pipeline Expansion

Add Biologic/CGT Assets to Pipeline through Partnership and Investment





# **Vision & Mission**

We are committed to Promoting Human Health from Prevention to Cure as we develop and distribute vaccines and biopharmaceutical products. We are harnessing our proprietary technology and global network to grow as a Global Innovative Partner of Vaccine and Biotech.

Mission

**We Promote** Human Health, from Prevention to Cure

**Global Innovative** Partner of Vaccine and Biotech

Vision

We operate domestic and international businesses in advanced technology vaccines, the driving force for the future of life sciences. Collaborating with domestic and international companies and institutions, we strive to find solutions that will save lives.

- Research and develop in-house vaccines such as COVID-19 vaccines in cooperation with global organizations and companies
- Immediate mass manufacturing of vaccines through L HOUSE in Andong, a world-class vaccine plant

- Joint development and technology transfer during the whole vaccine development process, from candidate discovery to clinical trials, licensing and sales
- Offering fast product development solutions
- Open innovation with global partners

business

Global CMO/CDMO • Joint research on developing various vaccines with global companies and institutions while operating CMO/CDMO businesses based on our technology and flexible manufacturing capabilities

**Domestic business** 

• Joint sales and CMO/CDMO businesses with domestic and international companies to enhance convenience in administering vaccines and expanding the domestic vaccine market based on our sales and marketing infrastructure

# **MILESTONES**

SKBS 1.0 / Scaling Up

# Entering the South Korean vaccine market

#### 2001

 Acquired Dongshin Pharm (vaccines, blood products)

#### 2005

2001

• Established the vaccine R&D center

2001 - 2005

## Key points of the of original technology

2015 - 2017

#### 2015

 Launched SKYCellflu®, South Korea's first cell culture-based trivalent influenza vaccine

#### 2016

 Launched SKYCellflu® Quadrivalent prefilled syringe, the world's first cell culture-based quadrivalent influenza vaccine

#### 2017

- Launched SKYZoster® Inj., the world's second herpes zoster vaccine
- Signed an agreement with the international organization PATH to develop and manufacture a rotavirus vaccine for developing countries

2018

2018 - 2019

## **Planning for growth**

#### 2012

Established L HOUSE, a vaccine manufacturing plant in Andong

2012 - 2014

#### 2013

- Earned LEED Gold certification for L HOUSE, a global green building certification program run by the US Green Building Council
- Signed a contract with the International Vaccine Institute (IVI) to develop and supply a typhoid conjugate vaccine

#### 201

- Established a strategic partnership with Sanofi Pasteur to co-develop a next-generation pneumococcal conjugate vaccine
- Received the KGMP Sustainability certification for L HOUSE

# Advancing into the global healthcare market

#### 2018

- Established SK bioscience, a subsidiary spinoff of SK chemicals' VAX business unit
- Launched SKYVaricella® Inj., South Korea's second chickenpox vaccine

## 2019

- Received WHO Prequalification (PQ) certification for SKYCellflu® Trivalent/ Quadrivalent cell culture-based influenza vaccines
- Received WHO PQ certification for SKYVaricella® Inj. chickenpox vaccine
- Began exporting SKYCellflu® to Asian markets

SKBS 2.0 / Making the Quantum Jump

# 2020

- Began COVID-19 vaccine candidate development, GBP510
- Signed COVID-19 vaccine CDMO agreement with Novavax
- Signed COVID-19 vaccine CMO agreement with AstraZeneca
- Secured funding from the Bill & Melinda Gates
   Foundation to develop a COVID-19 vaccine
- Initiated phase 2 clinical trial for nextgeneration pneumococcal conjugate vaccine co-developed with Sanofi Pasteur
- GBP510, COVID-19 vaccine candidate selected for Wave 2 vaccine (CEPI)
- Exported SKYVaricella® Inj. chickenpox vaccine to Turkiye

# Taking off as a global innovative partner of vaccine and biotechnology

#### 2022

- Obtained additional EU-GMP certification for a COVID-19 vaccine manufacturing facility
- Received Turkiye-GMP certification for influenza, chickenpox, and shingles vaccine manufacturing facility
- Signed advance purchase agreement for SKYCovione™ with the KDCA
- Obtained license with Novavax for COVID-19 vaccine Nuvaxovid from the MFDS
- Began to develop nasal spray-type antiviral drug (International AIDS Vaccine Initiative, the Bill & Melinda Gates Foundation)
- Hosted the first ceremony of the Park MahnHoon Award
- Obtained an export license by MFDS for typhoid conjugate vaccine
- Exported SKYVaricella® Inj. chickenpox vaccine to the Latin American market through the European Commission's international public procurement market
- Published the first ESG report
- Obtained license for SKYCovione<sup>™</sup> Multi Inj. from the MFDS,
   South Korea's first COVID-19 vaccine
- Agreed on mRNA vaccine development with CEPI
- Agreed on joint development of new platform with Hilleman Laboratory

2022

2020 2021

2021

- Signed licensing and purchase agreement for NVX-CoV2373 (Novavax, KDCA [Korea Disease Control and Prevention Agency])
- Listed on KOSPI (Korea Composite Stock Price Index) market
- Obtained EU-GMP certification for COVID-19 vaccine manufacturing facility
- Signed MOU to expand L HOUSE and purchase additional sites in Andong
- Established the Park MahnHoon Award, with the International Vaccine Institute (IVI)
- Secured funding to develop sarbecovirus vaccine candidate GBP511 from CEPI
- Achieved the largest-ever sales and operating profit

2022

2023

19

#### 202

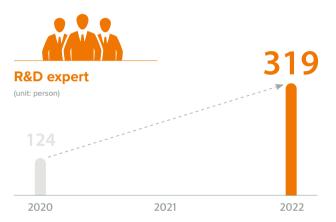
- Signed a research collaboration agreement on influenza research with the Doherty Institute
- Signed MOU with the Government Pharmaceutical Organization (GPO)
- Strategic equity investment in Novavax
- Collaboration agreement with Vaxxas to develop a second-generation typhoid conjugate vaccine
- Signed MOU with Serbia to establish a strategic partnership in vaccine development and manufacturing
- Development licensing agreement with Hilleman Laboratories for joint development of a secondgeneration Zaire Ebola virus vaccine.
- Announced positive results from its Phase II clinical trials and initiated submission of Phase III Study Investigational New Drug Amendment to the U.S. FDA of 21-Valent Pneumococcal Conjugate Vaccine Candidate (Sanofi)

SKBS 3.0 Next Generation



# **LEADERSHIP IN TECHNOLOGY**







Continuous investment in R&D has allowed us to develop advanced technology and recruit excellent researchers. We have developed a cell culture-based quadrivalent influenza vaccine, a shingles vaccine, a chickenpox vaccine, a COVID-19 vaccine and more. Such achievements also led us to the joint development of a next-generation pneumococcal vaccine with Sanofi Pasteur, a leading international vaccine company. In 2022, we developed South Korea's first COVID-19 vaccine, which not only proved our innovative technological capabilities but also secured the nation's vaccine sovereignty. Looking ahead, we are focusing on vaccine pipelines for endemic COVID as well as for the next pandemic. We are also working to diversify our business areas, such as adding an mRNA platform and CGT technology.



# **The Songdo Global R&PD Center**

SK bioscience plans to establish a Global R&PD Center on the site measuring 30,413.8m² (9,200 pyeong) in Songdo, and to relocate its headquarters as well as research institute, currently located in Pangyo, Gyeonggi Province. We aim to establish a cutting-edge R&PD Center which will encompass the entire process from research to commercial production. We are also going to expand our existing business areas and create a vaccine ecosystem in order to respond pre-emptively to new infectious diseases. The Songdo Global R&PD Center will feature an Open Lab for collaboration with global companies and institutions as well as a Pilot Plant, small-scale experimental facility installed before the implementation of new processes or products.

# **PIPELINE**

SK bioscience is creating a diverse vaccine pipeline by developing innovative technologies based on its our firm commitment to in-house vaccines.

Capitalizing on development capabilities and experiences, we are developing next-generation vaccines that will accel erate entry into the global market.



# **OPERATION EXCELLENCE**









# **Advanced Manufacturing Capabilities with Efficiency and Expertise**

With the help of our specialized system and cutting-edge facilities with technology integration, we operate manufacturing with exceptional efficiency. Our L HOUSE, a vaccine manufacturing facility, provides outstanding manufacturing solutions and operational standards that satisfy various customer needs.

Collaborations with a variety of international businesses demonstrate the high caliber of our manufacturing, and they allowed us to distribute COVID-19 vaccines all over the world. We are enhancing our manufacturing capabilities to diversify our product line through ongoing infrastructure expansion and manufacturing technology upgrades.

# MANUFACTURING INFRASTRUCTURE & QUALITY CONTROL

As the largest vaccine plant in South Korea, L HOUSE is capable of mass production. The advanced capacity of L HOUSE enables business expansion with global companies, including COVID-19 vaccine CMO, CDMO and more. SK bioscience also manufactures high-quality products that comply with global standards throughout the entire manufacturing process, from raw material purchases to manufacturing, quality control, shipment and distribution.

## **L HOUSE**

L HOUSE is a manufacturing base optimized for the mass production and distribution of vaccines. We are currently expanding a new site of more than 1 million square meters as we pursue CDMO and CMO projects with worldwide partners. This will not only increase our manufacturing capacity but also secure the core infrastructure to manufacture next-generation vaccine products, including new platforms such as mRNA. L HOUSE is on track to become a global vaccine manufacturing hub.

## **EU-GMP Certification**

L HOUSE earned EU-GMP with WHO prequalification (PQ). We earned EU-GMP certification for our COVID-19 vaccine manufacturing facility, the first EU-GMP certified vaccine facility in South Korea, thus proving our high-quality international management expertise. In addition, L HOUSE is preparing for cGMP certification from the US FDA (Food and Drug Administration), which will pave the way for entry into such advanced markets as North America.



# **MANUFACTURING SYSTEM**

The core of our differentiated manufacturing capabilities is an efficient and high-level vaccine manufacturing system. Our rapid processing abilities speed productivity while maintaining a stable quality during mass manufacturing.

# Pioneering a Single-Use System for Commercial-Scale Vaccines

We introduced the single-use system for the first time in South Korea, which uses a disposable incubator without any washing process to enable a complete aseptic technique on a commercial scale. The single-use system shortens the time for facility replacement and process development, allowing for flexible and rapid response to customer needs.

# Adopting a Multi-Modular System for Diverse Vaccine Types

Equipped with 9 suites (8 culture suites, 1 cell bank) and a comprehensive facility for vaccine manufacturing, including cell culture, bacterial culture, and gene recombination, L HOUSE has an excellent manufacturing capacity for a wide range of vaccines. We offer optimized manufacturing systems for each vaccine type to achieve the best cost-effectiveness.



# **The Single-Use System**

- More efficient for speedy process development and scaling up
- Higher cost-effectiveness with quick process replacement, easy validation and fewer cleaning requirements

#### **Diverse Platforms**

- Various vaccine manufacturing systems depending on the product
- Flexible and rapid response to the supply of clinical materials and commercial manufacturing changes

#### **Future Expansion**

• Flexible expansion for capacity increase

# Fermentation E coli/Yeast Polysaccharide Protein conjugate DT/CRM197/TT Recombination Cell culture Suspension adherent microcarrier

# TRUSTED PARTNERSHIPS

SK bioscience is embracing global collaborations to promote health and lead the global vaccine and biotech market. Harnessing partnerships built on globally recognized technology and manufacturing capacities, we are expanding our CMO and CDMO businesses. In joint research and development, we are working closely with a range of partners within the bio-ecosystem, including global initiatives, companies, and governments. We will consolidate our collaboration as we grow into a global vaccine hub through joint development, commissioning projects, technology transfer, strategic M&A, and open innovation.

# **Global Partnership for Development of the Blockbuster Vaccines**

Our commitment to developing vaccines and biopharmaceuticals to prevent and treat viruses that pose a threat to humanity led to a range of international cooperations.

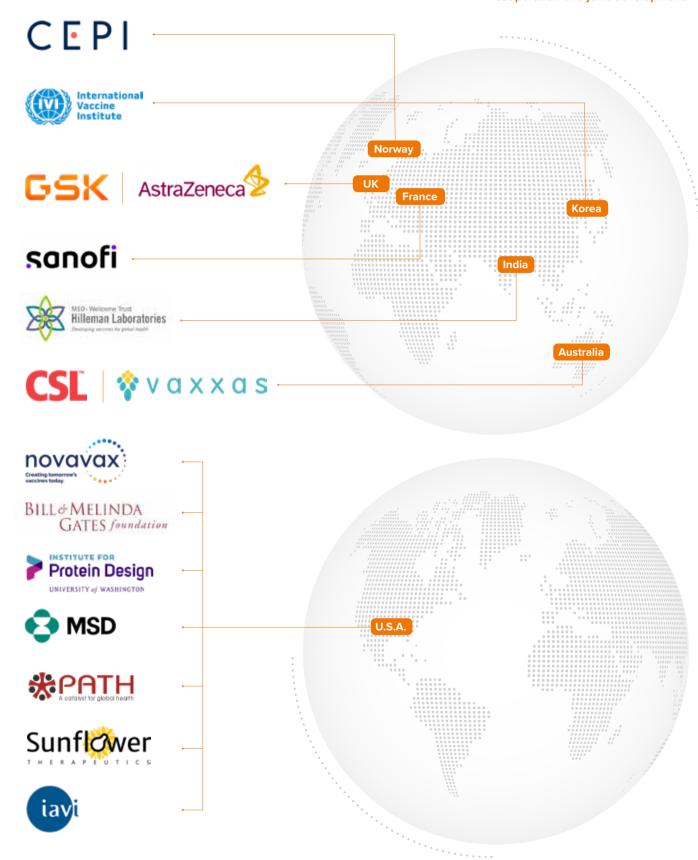
Expansion of CMO/CDMO Partnerships

- AstraZeneca COVID-19 vaccine CMO (2020~2021)
- Novavax COVID-19 vaccine CDMO, licensing and commercial manufacturing (2020~2022)
- MSD next-generation Ebola Zaire vaccine candidate CMO(2023)

Comprehensive
Cooperation to expand
vaccine portfolio

- mRNA vaccine platform development with CEPI
- Universal COVID-19 vaccine development in collaboration with CEPI and the Institute for Protein Design (IPD) at the University of Washington.
- Development of Recombinant Herpes Zoster Vaccine
- Development of RSV Vaccine

Bolstered by our proven technology and expertise, we are actively engaging partnerships with a range of global pharmaceutical companies and institutions for technological cooperation and joint development.



# PRODUCT PORTFOLIO



# SKYCellflu® Quadrivalent (Cell-culture-based influenza vaccine)

As South Korea's only cell culture-derived influenza vaccine and the world's first launch, SKYCellflu Quadrivalent is the world's first cell culture-based quadrivalent influenza vaccine. Unlike the conventional technique of using fertile chicken eggs, it is manufactured in bioreactors without any antibiotics or preservatives. This offers a significant benefit for patients with egg allergies or hypersensitivity to antibiotics. Manufacturing time is also cut nearly in half, allowing for rapid manufacturing. Its innovation and reliability have garnered high market shares.



# SKYCellflu® Trivalent (Cell-culture-derived influenza vaccine)

In 2015, SKYCellflu Trivalent was the first cell culture-based influenza vaccine developed in South Korea. It is manufactured in bioreactors without any antibiotics or preservatives, unlike fertile chicken eggs which can be dangerous for people with allergies. As a cell culture-based vaccine. it acquired the first World Health Organization Pre-Qualification(PQ) certification.



# SKYZoster® Inj. (Herpes zoster live attenuated vaccine)

The world's second and South Korea's first shingles vaccine (herpes zoster), SKYZoster Inj. is a premium vaccine.

The vaccine is a live attenuated varicella-zoster virus, which has been rigorously proven safe by specialized non-clinical trial institutes. After its launch, the vaccine has become a leading product in meeting the rising demand for herpes zoster treatments.



Our self-developed vaccines are manufactured under rigorous quality controls and recognized for their high market shares. In addition, we are expanding our vaccine portfolio to provide more customer choices and secure new growth.

# SKYVaricella® Inj. (Live Varicella virus vaccine)

A chickenpox vaccine, SKYVaricella Inj. was developed with our own bioprocess technology. Its immunogenicity and safety have been confirmed in a global phase 3 clinical trial conducted in children between 12 months and 12 years at 19 clinical institutions both domestic and abroad. It received the world's second WHO PQ certification by WHO PQ, and won the bid for export to Latin America from the Pan American Health Organization (PAHO), an international United Nations organization.



# SKYTyphoid™ Multi Inj. (Typhoid conjugate vaccine)

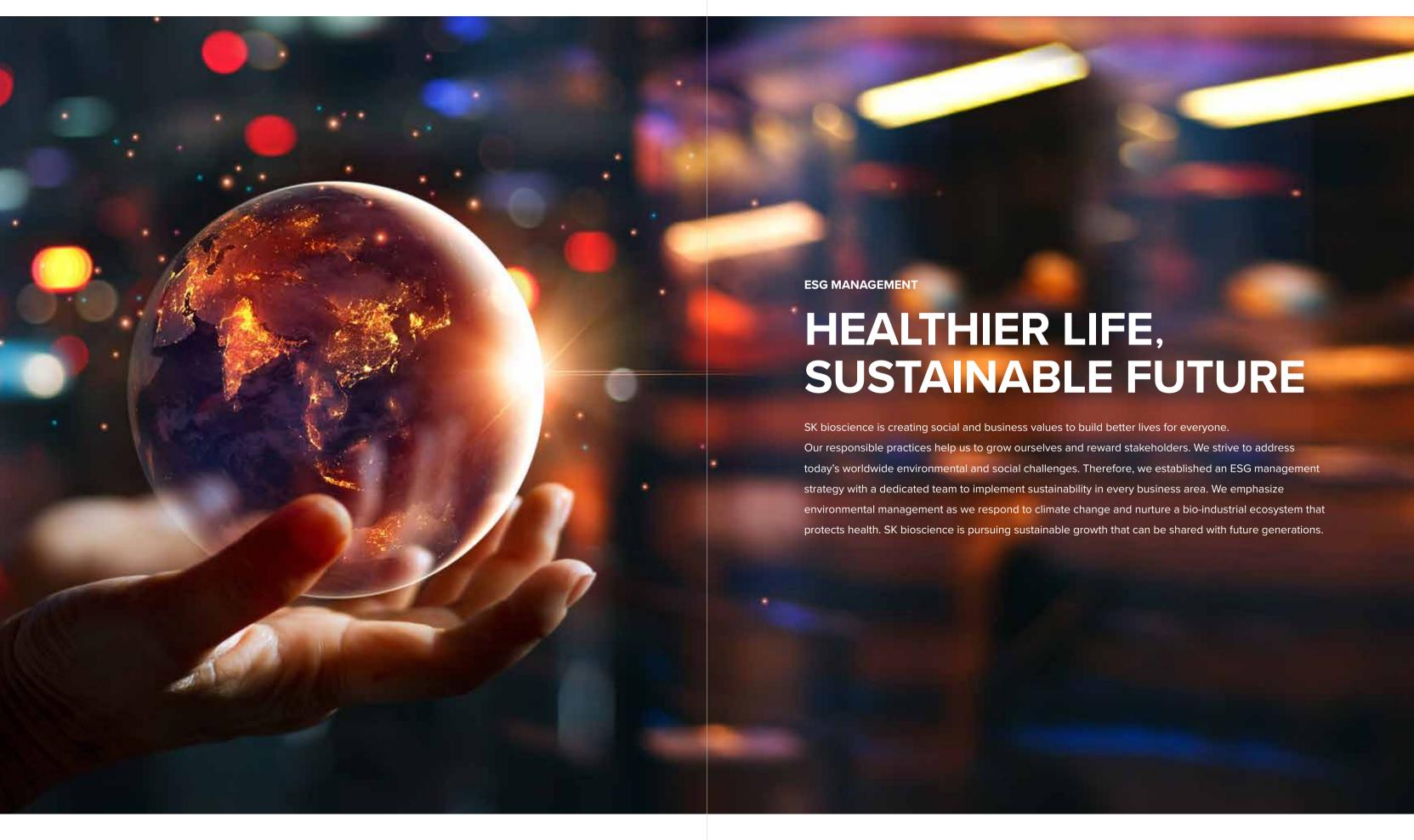
Jointly developed with the International Vaccine Institute, SKYTyphoid Multi Inj., is a typhoid conjugate vaccine. It is a polysaccharide-protein conjugate vaccine developed by conjugating the polysaccharide of typhoid bacteria, which acts as the antigen, to the diphtheria toxin protein (diphtheria toxoid), which acts as a carrier. Compared to existing live oral vaccines or polysaccharide vaccines, it offers higher immunogenicity with a single dose and provides longer-term prevention. Children aged 6 months to 2 years can receive the vaccine.



# SKYCovione™ Multi Inj. (Recombinant protein vaccine for COVID-19)

South Korea's first developed COVID-19 vaccine, SKYCovione is a recombinant protein-based vaccine, which has proven immunogenicity and safety. Unlike mRNA vaccines that require ultra-cold chain logistics and have very short stability, SKYCovione can be refrigerated at 2–8°c for transport and can be stored for a longer period.





# **ENVIRONMENT**

By adopting SHE (Safety, Health and Environment) policies as our business foundations, SK bioscience seeks to coexist with nature and people as it minimizes environmental impact throughout operations, from R&D to manufacturing and from distribution to disposal. We established an environmental management system and built a specific carbon neutrality roadmap tto help overcome the challenges of climate change we face today.

# **Energy Consumption Management and Reduction**

We are considering eco-friendly designs, constructions and technologies at every business site to reduce energy consumption. In designing our headquarters and the R&D center in Pangyo, we incorporated 101 eco-friendly materials and technologies. Our L HOUSE introduced a range of energy-saving equipment for the manufacturing process. Our energy consumption is systematically managed and constantly monitored.



With 101 eco-friendly materials and technologies for our headquarters and R&D center design, we earned the highest LEED Platinum certificate

Our R&D center participated in a demand response market

L HOUSE was the first
pharmaceutical plant to earn
a LEED Gold certificate for
introducing 16 energy-saving
technologies

37

## **Waste and Pollutant Management**

SK bioscience strives to recycle and reuse all the resources involved in the entire production process. From waste generation to disposal, every stage of the process is being monitored. Considering the impact on the society, people and nature, waste that poses a risk pollution is separately sorted and sterilized before being discharged, in order to eliminate its harmful effects. Waste that poses a risk of contamination to the surrounding environment is strictly supervised, being discharged separately by external companies. Except for hazardous waste designated by law, which cannot be discharged in other way than by incineration, we make efforts to advance the process of general waste recycling, by looking for external recycling partners and handling the waste management law.

# **Hazardous Chemicals Management**

As global regulations are being strengthened and the importance of toxic substances management is often brought up, SK bioscience regularly surveys the inventory in order to comply with chemicals legislation SK bioscience manages and constantly updates the GHS-MSDS (Material Safety Data Sheets) through the SHE IT system, and tests toxicity of new chemicals before their implementation in order to prevent chemical exposure in the workplace as well as local community. Moreover, efforts are being made to prevent safety accidents by conducting legal inspections of facilities responsible for safe management of hazardous chemicals. In addition to the preliminary evaluation of the chemicals flowing into the facilities, the development of a chemical management system is already underway to thoroughly manage the whole waste life cycle. The system is expected to be fully implemented in the first half of 2024.

# **Climate Change Management**

In 2021, SK bioscience established a 2031 Net Zero Roadmap in response to the problem of climate change, especially greenhouse gas emissions. SK bioscience intends to reach medium to long-term 2031 Net Zero, by reduction of 71% of total greenhouse Scope 2 emission (electricity, steam etc.), and pre-emptive transition to renewable energies such as solar power, aiming to achieve Scope 1 emission reduction like LNG in accordance with government hydrogen policy.

# **SOCIAL**

We envision a world in which we can grow together with the society. By building workplaces that offer diverse growth opportunities in safe environments, creating a virtuous circle of ecosystems that connect people and technologies and revolutionize the bio-industry, as well as growing together with our partners, we share our social values. We promise a sustainable world for tomorrow.

## **Caring Professionals**

Our company propels a global internship and recruitment of vaccine R&D professionals through talent recruitment networking, aiming to expand our global business and secure future growth engines. Instead of standard recruitment, we have switched to a year-round recruitment program with a view to hiring talented individuals in good time, and we are actively using external recruitment platforms to find prospective job seekers with excellent skills.

## Safe and Healthy Workplaces

We are committed to creating workplaces where employees can work in safe environments. With our firm belief in SHE (Safety, Health and Environment), the basis of our management principles, we are identifying and reducing workplace risks in advance.

We conduct routine joint inspections and provide SHE education for all employees and visitors as part of our commitment to "safety first". We aim to prevent even the smallest hazards that may threaten safety.



#### **Sustainable Win-Win Growth with Partners**

To create a sustainable supply chain as well as win-win management, we are building strategic partnerships, sharing ESG management values and mutually enhancing competitiveness with our partners. Based on the supply chain ESG policy, SK Win-Win Academy also provides educational and training programs as a way to foster mutual growth and boost the capabilities of our partners. In addition, we manage ESG risk across the entire value chain, by making supply chain ESG risk diagnosis and supporting improvement programs.

#### **Building a Global Bio-Ecosystem**

In what regards our social contribution, we perform our mission of "public health protection by creating a global bioecosystem", and we remain active in three main areas: development of global bio-oriented human resources, promotion of healthy lifestyle and co-existence with local communities. By the development of globally bio-oriented human resources, we are going to solve the problem of unequal vaccine distribution and prepare for the next pandemic. Additionally, we strive to promote a both physical and mental health by launching campaigns on infectious disease prevention and installing local facilities. We support co-existence with local communities by sponsorship and eco-friendly volunteer activities. We will also continue our efforts to create a bioecosystem that can be developed together with our stakeholders.

# Female Employee Ratio



# Female Team Leader Ratio



# 2023 Employee Volunteer Activity

Participants
880
people

Annual Number of



Total Participation Time



1,950.5

Total Contribution Amount



3,498

# **GORVERNANCE**

As global ESG management standards become increasingly critical, SK bioscience is building an innovation in governance. By establishing an ESG Committee that reports to the board of directors, we ensure that ESG management is embedded throughout our whole business process, from management strategy to implementation, to achieve sustainable growth. Through transparent governance, we are gaining the trust of the world.

# **ESG** Vision and Strategy

ESG VISION	HEALTHIER LIFE, SUSTAINABLE FUTURE					
ESG STRATEGY	Building an eco-friendly management	Being a reliable partner for society	Creating social values through business	Implementing sustainable governance		
ESG GOAL	Enhancing the environmental management system	Expanding talent/ human rights management	Creating a social values through business	Internalizing ESG management		
	Addressing climate change by moving toward net zero	Creating a social value for the community	Building a global bio-ecosystem	Strengthening Board-centered management		

# **Transparent Board Composition and Operation**

SK bioscience has proclaimed "SK bioscience Governance Charter" to establish a governance framework that would put the company's management philosophy into practice, appointing directors by criteria of independence, professionalism and diversity. Furthermore, our company ensures that by splitting the roles of the CEO and the Chairman of the Board, the Board can perform their inherent duties of checks and balances, based on their authority of independent decision-making process, and can continue to manage the work effectively.

## **Operations of the ESG Committee, under the Board of Directors**

In 2021, we established the ESG Committee and the Nomination and Compensation Committee. The ESG Committee reviews and shares the direction and performance of ESG strategy in regular meetings. When necessary, the committee places issues on the board agenda to gain assistance in decision-making for ESG management. Additionally, we are actively internalizing ESG management by incorporating ESG elements into the company's KPIs.

# **Ethics and Compliance Management**

We established a code of ethics that considers various stakeholders. By codifying the principles and guidelines of ethical management, we provide clear and consistent standards for all employees. We regularly conduct ethics education for employees. In addition, new hires must undergo compliance education.



# Published by SK bioscience Co., Ltd.

www.skbioscience.co.kr 82-2-2008-2200

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SKB-PO02-240510-01







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