THE LEADER IN GLOBAL HEALTHCARE

GC Sustainability Report 2023

GC

ABOUT THIS REPORT

Overview

This is the second ESG Report published by GC Corp. [hereinafter referred as 'GC (Holding Company)', and presents economic, environmental, social and governance performance and plans for major affiliates including GC (Holding Company), GC Biopharma and GC Cell. We will continue to publish Sustainability Reports annually to communicate transparently with our stakeholders.

Scope of Reporting

This Report covers major workplaces such as GC (Holding Company), GC Biopharma and GC Cells and supply chains, and also performance of major affiliates. Performance of GC (Holding Company) includes outcomes for the headquarter; GC Biopharma includes performance of the headquarter, three plants, R&D Center and 10 business worksites; and GC Cell includes performance of the headquarter, Cell Center, 47 business worksites and the logistics division. Financial performances are prepared based on the K-IFRS consolidation and environmental performances of each workplace are collected based on the data from the three corporations including GC (Holding Company), GC Biopharma and GC Cell.

Reporting Period

The reporting period is from January 1st 2022 to December 31st 2022 and covers economic, environmental, social and governance activities. Some achievements include information up to the first half of 2023. Data for the past three years are provided in the area of quantitative performances to enable time series analysis.

Assurance of the Report

In order to ensure the validity of the procedure adopted to prepare the Sustainable Management Report and confirm integrity of the information within, third-party assurance by KMR (Korea Management Registrar) was carried out. For the assurance results, see Third-Party Assurance Statement on Page 134.

Reporting Standards

This Report has been prepared in accordance with Comprehensive Options of the GRI (Global Reporting Initiatives) Standards, the global reporting standards for sustainability management. Disclosure indicators for global sustainability initiatives, such as the UN SDGs (United Nations Sustainable Development Goals), recommendations from TCFD (Task Force on Climate-related Financial Disclosures) and standards set by SASB (Sustainability Accounting Standards Board), have also been reflected.

Report Terminology

This report integrates reports for three different affiliates: GC (Holding Company), GC Biopharma and GC Cell. Report for the 'GC Group' includes general information applicable to all affiliates for clear and correct understanding. Further, each affiliate's performance record is presented separately for GC (Holding Company), GC Biopharma and GC Cell.

Inquiries about the Report

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NAVIGATION

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This report was published as an interactive PDF that includes functions such as moving to related pages within the report and shortcuts to related web pages.

INTRODUCTION

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06 Overview

MESSAGE FROM THE CHAIRMAN

Dear Esteemed Stakeholders,

We are genuinely grateful for the continuous support you extended to the GC Group in spite of the difficult management environment last year. GC Group has been striving relentlessly to produce great performance in each business sector and establish our presence as a global leader in the healthcare industry. All our executives and staff members are well aware that these efforts are crucial to building a healthier and happier future for humankind and that these efforts are exactly in line with the goals of ESG management.
GC Group's first publication of Sustainability Report last year helped us to take the first step and communicate our ESG management goals and outcomes with stakeholders. In 2023, we are continuing the endeavors to advance our ESG management, strengthen internal stability and live up to social expectations. Accordingly, we will implement ESG management as follows.

We will contribute to the happiness of humanity through quality management.
With the firm conviction that high quality products are crucial to bring happiness for humans, we will supply zero-defect products and reinforce R&D management to contribute to creating a society where people lead happy lives without suffering from diseases.

We will strive to meet social expectations and create a transparent management environment through Compliance and Ethical Management.
We will spare no efforts to keep to the 'right and transparent path,' which is a core value of transparent management. After establishing our own ethical standards, we are encouraging executives and staff members to inculcate a sense of ethics through the ethical management culture. Furthermore, we will strengthen the compliance management system continuously for ethical management.

We will implement sustainable management by responding to climate change and through eco-friendly management.
We are committed to promoting eco-friendly management in overall business sectors internally so that we can minimize impact on the environment. We will consider environmental impact in all value chains and will do our best to increase the use of renewable energy and reduce environmental waste etc. Moreover, we will work hard to strengthen eco-friendly management and thereby achieve the 2050 Net-Zero goals.

We will move hand in hand with stakeholders through participating actively in social contribution activities.
Based on our core values, 'Voluntary work and caring' and 'Respect for man's life and dignity', we will contribute to the community and stakeholders to fulfill our Corporate Social Responsibility (CSR) and deliver value beyond financial performance. We will continue to strengthen social contribution activities and become a company that grows together with the local community.
We are well aware that our company is expected to grow further sustainably by contributing to create a healthier life for mankind, the environment and society. GC Group will leave no stone unturned to accomplish our sustainable ESG management goals for the next 50 years. We would like to thank our stakeholders again for the great support they have extended to us over the years.

Chairman of GC **Il-Sub Huh**

OVERVIEW

Company Overview

Since the foundation in 1967, for half a century, GC has taken the difficult path of developing 'Medicinal drugs that are difficult to make, but essential' with the devotion to help build a society where everyone can enjoy a happy life without suffering from diseases. Our path has taken us to remarkable growth. On the outside, we have grown from a small company with sales of KRW 12.8 million with about 10 employees in the early days of its foundation to a leading pharmaceutical company in Korea with sales of KRW 2.0796 trillion (consolidated basis) in 2022. We have been expanding our overseas business continuously, and are now a global company with 46 domestic and overseas affiliates. For a greater leap to become a biotechnology and healthcare group that leads the global total healthcare business, we are in the process of reorganizing our core business into a portfolio of products and services that cover the entire course of disease prevention, diagnosis, treatment, and healthcare.

Major Information

(as of Dec, 31, 2022, Consolidated basis)

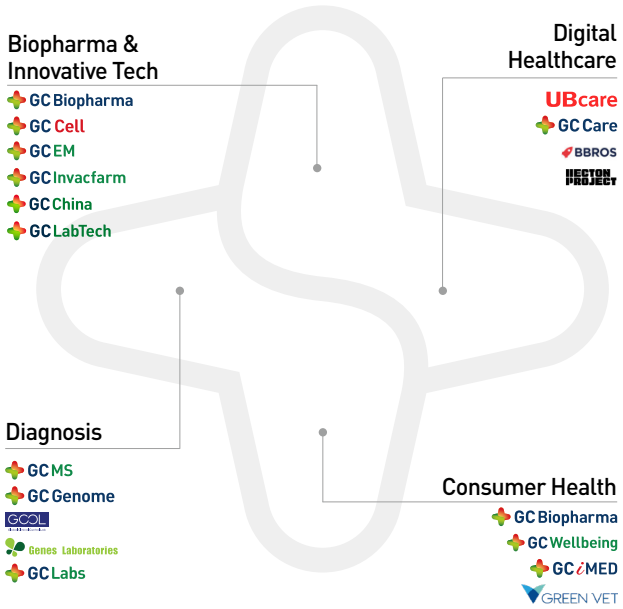
Employees (Consolidated basis)
6,571persons

Assets(Consolidated basis)
KRW 3.5921 trillion

Sales(Consolidated basis)
KRW 2.0796 trillion

Subsidiaries
6(Listed), **40**(Unlisted)

GC Business Portfolio



Management Philosophy

GC pursues growth as a global company in the fields of various health industries such as pharmaceuticals, medical devices and healthcare services so health of the body and mind can be maintained through prevention, diagnosis, treatment and care of diseases.

Mission & Vision

It is our MISSION to contribute to the healthy lives of humankind and it is our VISION to be a global leader in the health industry.

Core Value

Challenge and Innovation

The source of GC's growth

GC's relentless drive to rise and meet new challenges with innovative solutions has made the company what it is today. Having always preferred to blaze new trails over following easy and simple paths, GC intends to strengthen its reputation and brand value through greater R&D efforts.

Care & Compassion

The spirit of GC

GC has researched and developed innovative drugs for patients with rare diseases, and continues to undertake charity work for the socially excluded and marginalized. We are dedicated to restoring hope to patients over and beyond simply providing treatment for their illnesses.

Transparency and Integrity

Uncompromising commitment to the right path

GC refuses to reach its goals by anything other than the right way. The company has pursued growth with the unswerving conviction that there are right ways to do things, no matter how long and painstaking they may be. We honor and cherish the founding commitment to prioritize respect for life above profitmaking.

Respect & Dedication

Deep respect for life at the root of every choice

Respect for life is the first and foremost value guiding all GC pursuits. We remain committed to maximizing benefits and value for all our clients, including patients, medical practitioners, shareholders, and investors.

OVERVIEW

GC History

Our passion always drives us toward a healthy life.

GC strives for everyone to enjoy a happy life without the pain from diseases. We endeavor to become a leader in healthcare industry with respect for life and unswerving dedication beyond the pharma industry.

1967 Established Sudo Microorganism Medical Supplies Company

1968 Established Shingal Plant

1971 Company name changed to Green Cross Company Limited, Producing blood plasma-derived products for the first time in Korea

1973 First in Korea to produce Urokinase

1974 Produced AntiHemophilic Factor (AHF)

1978 IPO

1982 Established Green Cross Lab; Developed the intravenous immunoglobulin (I.V.Globulin)

1983 Third in the world to develop a hepatitis-B vaccine (Hepavax-B)

1984 Established Mogam Biotechnology Institute

1987 First in Korea to develop an AIDS diagnostic kit

1988 First in the world to develop vaccine against hemorrhagic fever with renal syndrome (Hantavax)

1993 Second in the world to develop varicella vaccine (Suduvax)

1995 Established GC China
Established a vaccine production plant in Indonesia

2000 Established a urokinase production plant in North Korea

2001 Acquired Sang-a Pharmaceuticals

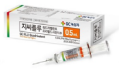
2008 Developed [Green Gene], the world's fourth recombinant treatment for hemophilia A

2009 Established Hwasun Plant, Korea's first vaccine production facility; Established Ochang Plant with cutting-edge facilities for production of blood plasma-derived products and recombinant proteins
Developed [Green Flu], the H1N1 vaccine
Developed [GC Flu], Korea's the first flu vaccine

2011 Developed [SHINBARO], a natural medicine for the treatment of osteoarthritis
Established GC Labcell

2012 Developed [Hunterase], the world's 2nd treatment for Hunter Syndrome
Acquired INNOCELL Corporation and founded GC Cell (GC Corp.)

2013 Started construction of the blood plasma-derived products facility for Thai Red Cross in Thailand
Established Green Cross R&D Center, the largest in Korea



2014 Produced over 100 million doses of flu vaccines, for the first time in Korea
Awarded the USD 100 Million Export Tower and Gold Tower Order of Industrial Service Merit

2015 Developed [GC Flu Quadrivalent], the world's fourth quadrivalent flu vaccine
Developed the first avian influenza vaccine in Korea

2016 Developed [GC Flu Quadrivalent], the world's fourth quadrivalent flu vaccine approved by WHO PQ
Developed the first TD vaccine in Korea

2018 Renamed from Green Cross to GC Biopharma; Constructed Cell Center; Awarded the USD 200 Million Export Tower

2019 Produced over 200 million doses of flu vaccines, for the first time in Korea

2020 Acquired UBcare (GC Care)
Developed [BARYCELA], the next generation of varicella vaccine

Obtained marketing approval for [Hunterase] in China for Hunter's Syndrome

2021 Obtained marketing approval for [Hunterase ICV] in Japan for severe Hunter's Syndrome, for the first time in the world
Obtained marketing approval for [Green Gene F] in China
Licensed-out CAR-NK technology platform to MSD at 2 trillion won - GC Labcell, Artiva
Launched GC Cell, an integrated corporation of GC Labcell and Green Cross Cell

2022 GC (Holding Company) and GC Cell, acquired BioCentriq in the U.S.
GC Genome, designated as a Good Clinical Laboratory Practice (GCLP).

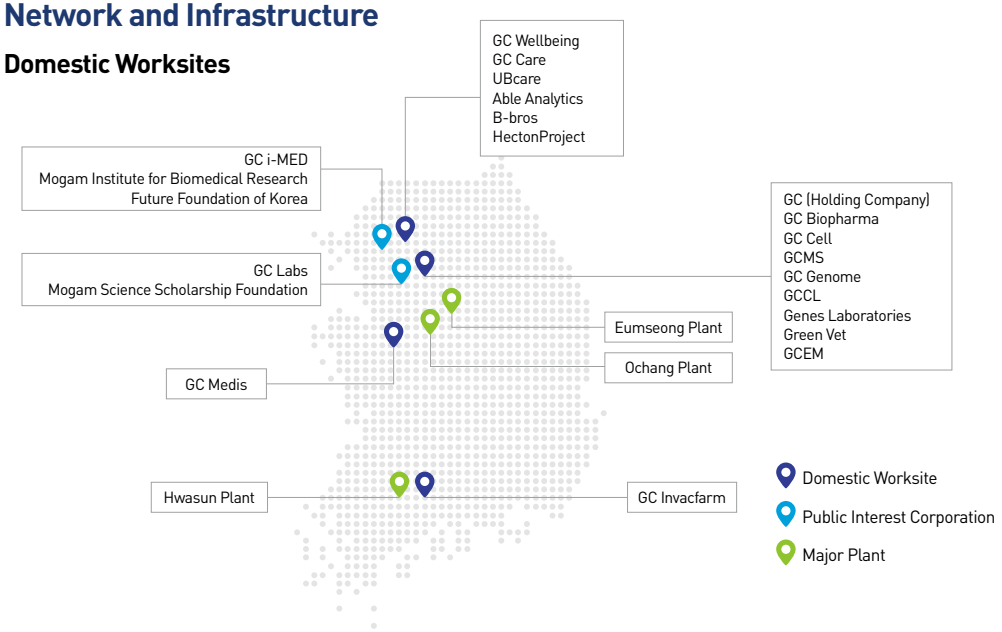
2023 GC Biopharma, acquired WHO's PQ(Pre-Qualification) for its Warehouse & Filling and Finish plant located at Ochang and its offering Varicella vaccine
GC affiliates moved into the Gusung Campus
Established GENECE in USA

1960 1970 1980 1990 2000 2010 2020

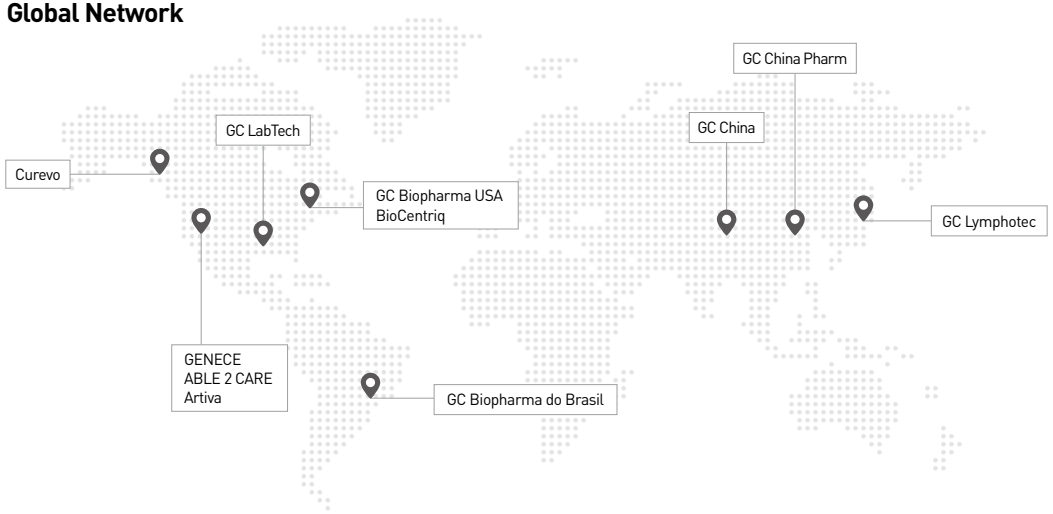
OVERVIEW

Network and Infrastructure

Domestic Worksites



Global Network



GC's Major Corporation and Global Network

*Listed Company

Category	Corporate Name	Location	Products and Services
Domestic	GC (Holding company)*	Yongin, Gyeonggi	Holdings
	GC Biopharma*	Yongin, Gyeonggi	Production of prescription and OTC medicine
	GC Cell*	Yongin, Gyeonggi	Development of CGT
	UBcare*	Seoul	Development of digital healthcare solutions
	GCMS*	Yongin, Gyeonggi	Development of diagnostic reagents
	GC Wellbeing*	Seoul	R&D of natural medicine and health functional food
	GC Care	Seoul	IT-based healthcare services
	GC Genome	Yongin, Gyeonggi	Specialized genomic analysis

Category	Corporate Name	Location	Products and Services
Domestic	GCCL	Yongin, Gyeonggi	Clinical trial examination and analysis services
	GC Medis	Cheonan, Chungnam	Production of Blood Glucose Meter
	Genes Laboratories	Seongnam, Gyeonggi	R&D of molecular diagnosis
	Green Vet	Yongin, Gyeonggi	Development of health functional foods and animal diagnosis services
	Able Analytics	Seoul	Consulting based on data analysis
	GCEM	Seongnam, Gyeonggi	Biotech facility engineering and construction services
	GC Invacfarm	Hwasun, Jeonnam	Production of fertilized chicken eggs for vaccine production
	B-bros	Seoul	Healthcare platform services
	HectonProject	Seoul	Hospital EMR and silver care platform services

Category	Corporate Name	Location	Products and Services
Overseas	GC China	Anhui, China	Production of blood plasma-derived products
	GC China Pharm	Shanghai, China	Sales of medicine
	GC Biopharma USA	New Jersey, US	Sales of medicine
	Biocentriq	New Jersey, US	CDMO service for CGT
	Curevo	Washington, US	Next-generation vaccine development
	GC LabTech	Texas, US	Plasma screening test
	GENECE	California, US	Cancer diagnosis services
	ABLE 2 CARE	California, US	Digital healthcare platform service
	Artiva	California, US	Development of cell therapy

Category	Corporate Name	Location	Products and Services
Overseas	GC Biopharma do Brasil	Sao Paulo, Brazil	Other services
	GC Lymphotec	Tokyo, Japan	Research and sales of cell therapy
Other Public Interest Corpo-rations	GC Labs (Include Health Examination Center GC i-MED)	Yongin, Gyeonggi	Clinical examination, comprehensive health examination
	Mogam Institute for Biomedical Research	Seoul	Research on cancer, vaccines, rare diseases and metabolic diseases
	Mogam Science Scholarship Foundation	Yongin, Gyeonggi	Support with scholarship programs for students with high levels of talent in science
	Future Foundation of Korea	Seoul	Scholarship program for North Korean defectors

OVERVIEW

Affiliates [Domestic]

GC Corp.(005250)

We endeavor to become a global leader in the healthcare industry for the healthy future of humankind.

GC (Holding Company) is accompanied by total of 46 affiliates consisting of 28 domestic and 18 overseas affiliates including GC Biopharma as the flagship affiliate. GC (Holding Company) establishes and coordinates strategies for the affiliates' business management, starts new businesses, and manages the investment asset portfolio. The affiliates are focused on the production and sales of drug products, and digital healthcare businesses.

Overview	
CEO	Il-Sub Huh, Yong-Jun Huh
Date of Establishment	Oct, 05, 1967
No. of Employees	163 persons
Website	www.gccorp.com
Address	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million)

Year	2020	2021	2022
Total Assets	32,412	34,968	35,921
Total Equity	16,735	19,107	19,670
Operating Revenues	17,193	18,406	20,796
Operating Income	707	862	712

※ Consolidated basis

GC Biopharma Corp.(006280)

Great Commitment, Great Challenge and a Great Company: We strive to build the foundations for a society where all humankind enjoys a happy life without suffering from diseases.

GC Biopharma has been contributing to patient treatment and public health through development of necessary medicines based on accumulated knowledge regarding blood plasma-derived products, vaccines and gene recombination treatments. We have established future growth engines by focusing on R&D to develop mRNA platform technology and innovative new drugs for rare diseases. Not only that, GC Biopharma has taken a great leap to becoming a top global pharmaceutical company and export medicines to more countries, especially the flu vaccine, IVIG and Hunterase etc.

Overview	
CEO	Eun-Chul Huh
Date of Establishment	Nov, 01, 1969
No. of Employees	2,302 persons
Website	www.gcbiopharma.com
Address	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million)

Year	2020	2021	2022
Total Assets	21,514	24,621	25,255
Total Equity	12,693	14,998	15,666
Sales	15,041	15,378	17,113
Operating Income	503	737	813

※ Consolidated basis

GC Cell Corporation(144510)

GC Cell makes bold strides ahead as the leading company for cell therapies under the vision of 'Global Creator of CGT'.

GC Cell is a leading cell therapy company for specializing in CGT-related CDMO, R&D and providing a laboratory medicine service. We plan to focus on expanding the global market with all our capacity by creating pharmaceutical value-chain by developing new CGT product and clinical trials to production through collaboration with U.S affiliates, Artiva (Clinical trials) and Biocentriq(Production) to become a global top-tier CGT company.

Overview	
CEO	James Park Jong-Eun
Date of Establishment	Jun, 21, 2011
No. of Employees	838 persons
Website	www.gccell.com
Address	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million)

Year	2020	2021	2022
Total Assets	764	6,456	6,765
Total Equity	518	5,157	5,457
Sales	856	1,683	2,361
Operating Income	64	363	443

※ Consolidated basis

OVERVIEW

Affiliates [Domestic]

UBcare UBCARE CO., LTD. (032620)

The No. 1 company in the market share of the Electronic Medical Record (EMR) system of domestic nursing institutions that creates the future of digital healthcare solutions through the convergence of medical information and ICT.

UBcare has No.1 market share in the domestic EMR market, developed EMR for the first time in Korea and provides various digital healthcare service solutions such as developing and providing EMR solutions, providing management consulting services, customized medical device, medicine data and market analysis services etc. for hospitals, pharmacies and pharmaceutical companies. Furthermore, UBcare invests in developing more advanced and new solutions and services to contribute to public health and bring down medical expenses.

Overview	
CEO	Sang-Kyoung Lee
Date of Establishment	Dec, 02, 1994
No. of Employees	306 persons
Website	www.ubcare.co.kr
Address	29,30,31 floor, Parkonetower2, 108, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea

Financial Results (Unit: 100 million)

Year	2020	2021	2022
Total Assets	1,542	1,493	1,619
Total Equity	1,095	1,210	1,235
Sales	1,048	1,118	1,333
Operating Income	128	100	67

※ Consolidated basis

GCMS GC Medical Science Corporation (142280)

GCMS, the domestic leader in the development of diagnostic business for the past 50 years, with a wide range of offerings from in-vitro diagnostic business to hemodialysis fluid and blood glucose meter.

Starting from the blood type diagnostic reagents launched in 1972, GCMS developed Korea's first AIDS diagnostic reagent in 1987 followed by the development of a diagnostic reagent for epidemic hemorrhagic fever in 1990. We strive to improve the quality of life through precise diagnosis using molecular immunodiagnostic technology. Through continuous R&D of medical devices and household healthcare products, we endeavor to become a global diagnostic medical device company.

Overview	
CEO	Young-Hee Sagong
Date of Establishment	Dec, 29, 2003
No. of Employees	135 persons
Website	www.greencrossms.com
Address	15, Yonggu-daero 2469beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: 100 million)

Year	2020	2021	2022
Total Assets	1,056	956	965
Total Equity	582	379	357
Sales	1,134	1,017	1,131
Operating Income	42	(202)	(13)

※ Consolidated basis

GC Wellbeing GC Wellbeing Corporation(234690)

GC Wellbeing provides various healthcare solutions based on personalized nutrition therapy.

GC Wellbeing, the No. 1 company in the domestic nutrition therapy injection market, develops, manufactures and distributes the prescription drug 'LAENNEC' placental injection and other various nutrition injections. In addition, GC Wellbeing will further advance personalized nutritional solutions that combine prescriptions of Ethical drugs and health functional foods. As a total nutrition provider striving for the prevention of disease, we strive to be a leader in proposing personalized wellness lifestyles.

Overview	
CEO	Sang-Hyun Kim
Date of Establishment	Sep, 02, 2004
No. of Employees	294 Persons
Website	www.greencrosswb.com
Address	33F, Park One Tower 2, 108, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea

Financial Results (Unit: 100 million)

Year	2020	2021	2022
Total Assets	1,146	1,390	1,502
Total Equity	831	883	962
Sales	756	910	1,097
Operating Income	23	78	84

※ Non-consolidated basis

OVERVIEW

Affiliates [Domestic]

GC Care GC Care Corporation

GC Care is an all-in-one healthcare service company that has launched a mobile app to help users maintain a 'Healthy Lifestyle' in daily life.

GC Care provides personalized healthcare service such as mobile self-checkup, daily health care etc. through the mobile platform 'Howcare'. The company has expanded its nationwide network to more than 500 such as local high-level general hospitals, specialized examination centers etc. It is taking bold strides to become an all-in-one healthcare company providing professional healthcare services to approximately 3,500,000 people through personalized healthcare solution, health consultation etc.

Overview	
CEO	Hyo-Jo Ahn
Date of Establishment	Aug, 01, 2003
No. of Employees	339 persons
Website	www.gccare.net
Address	32 floor, Parkonetower2, 108, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea

Financial Results (Unit: KRW 100 million)			
Year	2020	2021	2022
Total Assets	3,816	3,889	4,024
Total Equity	1,498	1,736	1,636
Sales	1,006	1,416	1,660
Operating Income	81	49	(12)

※ Consolidated basis

GC Genome GC Genome Corporation

A clinical genomic diagnostics company that comprehensively conducts disease-oriented genomic diagnosis, prevention, and research.

Using state-of-the-art equipment such as Next-Generation Sequencing (NGS) to provide distinguished services with shortened turnaround time and affordable prices, GC Genome provides essential clinical genomic diagnosis services in medical fields such as cancer, rare genetic diseases, prenatal and newborn care, health checkup, and microbiomes etc. We strive to become a frontier company in genomic diagnostics by pioneering unknown areas in the field of clinical genomic diagnostics.

Overview	
CEO	Chang-Seok Ki
Date of Establishment	Jul, 31, 2013
No. of Employees	128 persons
Website	www.gcgenome.com
Address	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yonginsi, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million)			
Year	2020	2021	2022
Total Assets	418	424	489
Total Equity	187	190	266
Sales	136	185	241
Operating Income	0	(21)	(32)

※ Non-consolidated basis

GCCL CO., LTD.

A business offering customized clinical sample analysis services through all clinical trial stages with the highest quality standards, dedicated laboratory services, and logistics networks.

GCCL, certified for GCLP (Good Clinical Laboratory Practice) and ISO15189, provides a full-cycle analysis service for clinical trials from Phase 1 to Phase 4 with an optimized lab to meet customers' needs. Through partnership with 250 companies developing new drugs, we are building trust to reach greater heights as a leading central laboratory globally.

Overview	
CEO	Song-Hyun Yang
Date of Establishment	Aug, 01, 2019
No. of Employees	81 persons
Website	www.gccl.co.kr
Address	15, Yonggu-daero 2469beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million)			
Year	2020	2021	2022
Total Assets	169	160	315
Total Equity	114	99	191
Sales	67	80	151
Operating Income	(2)	(18)	(8)

※ Non-consolidated basis

OVERVIEW

Affiliates [Domestic]

Genes Laboratories

Genes Laboratories is a company that diagnoses diseases, evaluates health conditions, determines treatment effects, and prevents diseases using in vitro diagnostic technologies such as molecular diagnosis, immunochemical diagnosis, and POCT etc.

Genes Laboratories have top-level technology to produce enzymes and offer optimized services from producing raw materials to finished products based on diagnosis R&D capacity (Having GMP-certified facility). It supplies raw materials and partially developed products to many diagnosis companies with high quality control and competitive prices through self-development and production. It focuses mainly on becoming a global company by diagnosis and prevention of various human and pet diseases based on sophisticated technology.

Overview	
CEO	Uck-Jin Chang, Pyong-Joo Jang
Date of Establishment	Nov, 04, 2008
No. of Employees	54 persons
Website	www.geneslabs.com
Address	520Ho, 388, Dunchon-daero, Jungwon-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million)

Year	2020	2021	2022
Total Assets	53	116	111
Total Equity	23	75	42
Sales	94	18	82
Operating Income	14	(31)	(34)

※ Non-consolidated basis

GREEN VET Green Vet

Green Vet, a company for specialized checkups and healthcare for pets' live cycle.

We provide consulting services for diagnosis and treatment of diseases in pets, and to this end, we operate diagnostic video, web clinical consulting, health examination, and management services as our main business. We strive to become total healthcare company for pets through their entire lifecycle and will endeavor continuously to enter the global market in the future by presenting new standards for the pet healthcare business and strengthening R&D and business competencies through steady investment.

Overview	
CEO	Dae-Woo Park
Date of Establishment	Dec, 01, 2020
No. of Employees	57 persons
Website	www.greenvet.co.kr
Address	15, Yonggu-daero 2469beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million)

Year	2020	2021	2022
Total Assets	32	50	123
Total Equity	30	20	36
Sales	0	15	39
Operating Income	0	(23)	(34)

※ Non-consolidated basis

GCEM GC Engineering Maintenance Corporation

Korea's only bio-engineering construction company that provides total services from consulting to design, construction, validation, and maintenance.

GCEM has been the country's only bio-engineering and construction company since its establishment. From design to construction, validation and maintenance, we create customer based on with excellent quality, safe construction, and thorough customer care. We are poised to to become 'A leader in bio and GMP engineering sector' as 'Total solution partner' in all relevant sectors beyond customers' expectations.

Overview	
CEO	Chung-Gwon Park
Date of Establishment	Mar, 16, 2001
No. of Employees	330 persons
Website	www.gcem.co.kr
Address	8, Gumi-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million)

Year	2020	2021	2022
Total Assets	700	817	826
Total Equity	399	419	431
Sales	1,238	1,259	1,591
Operating Income	43	43	53

※ Non-consolidated basis

OVERVIEW

Affiliates [Domestic & Overseas]

GC Invacfarm Corporation

GC Invacfarm produces high-quality fertilized chicken eggs used for vaccine production and provides assurance of steady supply.

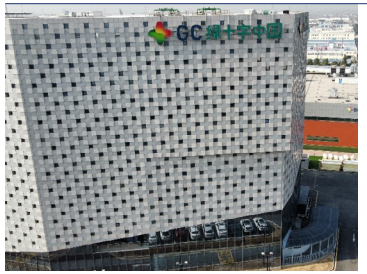
GC Invacfarm has established an excellent quarantine system in the hatcheries and poultry farms, and provides steady supply of high-quality fertilized chicken eggs by operating a hatchery together with local hatchery farms to contribute to the growth of GC Biopharma's flu vaccine business.

Overview	
CEO	In-Gyu Lee
Date of Establishment	Nov, 29, 2007
No. of Employees	24 persons
Website	-
Address	40, Sandan-gil, Hwasun-eup, Hwasun-gun, Jeollanam-do, Republic of Korea

Financial Results (Unit: KRW 100 million)

Year	2020	2021	2022
Total Assets	183	190	192
Total Equity	166	172	172
Sales	188	215	215
Operating Income	2	9	3

※ Non-consolidated basis



GC China Corp.

Producing and distributing blood plasma-derived products in China.

GC China, the global production hub of GC, is focusing on producing blood plasma-derived products in production facility that acquired accreditation by on-site certification from China's Ministry of Health in 1998. GC China also acquired China's GMP certification for the first time in Anhui Province. GC China supplies its products throughout China through GC China Pharm, an affiliate for distribution of products in China, and directly operates four blood centers in China for stable supply of blood plasma.

Overview	
CEO	Chang-Sup Kim
Date of Establishment	Jul, 01, 1995
No. of Employees	277 persons
Website	www.greencrosschina.com
Address	No. 26, Guoqing East Road, Datong Economic Development Zone, Huainan City, Anhui Province, China

Financial Results (Unit: KRW 100 million)

Year	2020[1)]	2021[1)]	2022
Total Assets	1,297	1,391	1,357
Total Equity	733	840	727
Sales	571	716	457
Operating Income	59	27	(11)

1) Corrected

※ Consolidated basis

Major Overseas Affiliates

GC Biopharma USA
· New Jersey, U.S.
Commercialization of drug products in North America

GC LabTech
· Texas, U.S.
Conducting research and developing plasma screening and other tests for producing blood plasma-derived

BioCentriq
· New Jersey, U.S.
CGT CDMO

GENECE
· California, U.S.
Cancer diagnosis services

GC Biopharma do Brasil
· Sao Paulo, Brazil
Commercialization of drug products and development of business in South America

GC LTEC
·Tokyo, Japan
Manufacturing and commercialization of cell therapy and medium for cell culture

curevo VACCINE
· Washington, U.S.
Development of next-generation vaccines (next- generation varicella zoster vaccines, etc.)

artiva Biotherapeutics
· California, US
Development of cell and gene therapy

OVERVIEW

Affiliates [Public Interest]

GC Labs Green Cross Laboratories (GC Labs)

GC Labs is a medical institution focusing on R&D of high-tech specialized test by applying new technology into clinical trial in cooperation with professional organizations in the world.

The GC Labs, founded in 1982, which started as a medical institution specializing in clinical trials has focused on introducing cutting-edge equipment, training of talented people, and researching and developing of specialized tests in the field of clinical examination. The GC Labs provides reliable results of clinical examination by maintaining total quality management through participating in Clinical Laboratory Accreditation oversea and domestically and quality management program such as US CAP, Germany G-EQUAS and ISO 15189 (International Standard for Medical Laboratories) etc.

Overview	
CEO	Eun-Hee Lee
Date of Establishment	Jul, 01, 1982
No. of Employees	566 persons
Website	www.gclabs.co.kr
Address	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million)

Year	2020	2021	2022
Total Assets	1,097	2,128	2,587
Total Equity	318	666	1,066
Sales	2,248	4,400	5,219
Operating Income	145	897	1,060

※ Non-consolidated basis

GC i-MED Green Cross i-Med (GC i-MED)

GC i-MED is a functional medical care center to find and treat diseases in advance through high-tech testing system to improve quality of life.

GC i-MED is a comprehensive health examination and functional medical care center that strives to establish 'Healthpia' for health for all. The combination of cutting-edge health examination systems and professional and experienced medical staff enables personalized diagnostic and healthcare services that cater to clients' health needs throughout all stages of life. GC i-Med tries to provide comprehensive health examinations for diagnostics and functional medicine, and is capable of providing optimal health solutions for all clients.

Overview	
CEO	Sang-Man Kim
Date of Establishment	Jul, 01, 1982
No. of Employees	236 persons
Website	www.gcimed.com
Address	4F~5F Majesta City Tower 1, 12, Seocho-daero 38-gil, Seocho-gu, Seoul Seocho-gu, Seoul, Republic of Korea

Financial Results (Unit: KRW 100 million)

Year	2020	2021	2022
Total Assets	415	357	425
Total Equity	62	58	75
Sales	354	491	563
Operating Income	(35)	5	29

※ Non-consolidated basis

Other Public Interest Businesses

MOGAM Institute for Biomedical Research

Mogam Institute for Biomedical Research (Seoul)

A nonprofit research foundation searching for solutions to prevent, diagnose and treat diseases (Founded in 1984)

목암과학장학재단

Mogam Science Scholarship Foundation (Yongin)

A scholarship foundation to find and support future scientists through providing scholarships and research funds and thereby contribute to science and technology. (Founded in 2005)

미래나눔재단

Future Foundation of Korea (Seoul)

Providing scholarship programs to foster promising North Korean defectors and enable them grow into leaders with a passion for learning and hope for the future in the era of unification (Founded in 2009)

OVERVIEW

Business Highlights [GC Biopharma]

Acceleration of the Development of mRNA Flu Vaccine

GC Biopharma exercised its option in April, 2022, by signing a non-exclusive licensing agreement with Acuitas located in Canada for LNP (Lipid Nano Particle hereafter called 'LNP'), which is an opportunity to pursue possible development of mRNA flu vaccine.
LNP is a system to deliver nano particles into cells in the body so that mRNA can work properly. For this reason, it is a core technology to develop mRNA-based drugs.
GC Biopharma plans to enter Phase 1 by 2024 based on its accumulated technology of flu vaccine and Acuitas's technology.
Along with this, GC Biopharma is investing in mRNA production facility. The company decided to invest in building pilot production facility for mRNA in Hwasun, Jeonnam, and plans to secure its next-generation growth engine by accelerating the development of innovative new products for vaccine and rare diseases through mRNA platform technology.

Launch of Personalized SW for Hemophiliac Patients, for the First Time in Korea

GC Biopharma launched 'WAPPS-HEMO', a personalized SW for domestic hemophiliac patients, in June, 2022.
WAPPS-HEMO helps medical teams to anticipate patients' pharmacokinetic profile to decide the proper dose and space for each patient prescribed with Green Gene F' and 'GreenMono'. Not only that, patients can manage their disease by themselves through checking the predicted blood coagulation level using the app.
GC Biopharma is the first company to launch this kind of service in Korea. It spares no effort to create an environment where domestic patients suffering from rare diseases can get proper personalized treatment and cut total medical costs to improve adherence to medication and quality of life and decrease bleeding rate.

GC Biopharma, Participating in EL-PFDD with FDA to Develop 'Patient-centered New Drugs'

GC Biopharma had the opportunity to establish guidance for the development of new drugs for rare intractable diseases by participating in EL-PFDD (Externally-Led Patient-Focused Drug Development), together with FDA in Aug, 2022, as a co-host with its U.S. partner company, Speragen.
In Jul, 2021, GC Biopharma signed a joint development partnership with the U.S. company Speragen for the treatment of a rare intractable disease called "SSADHD*(Succinic Semialdehyde Dehydrogenase Deficiency)" that has no cure yet but patients are only prescribed with anti-seizure drugs. Through this partnership, the two companies are aiming to develop First-in-Class drugs for the disease. EL-PFDD is an important meeting that serves as a platform to develop treatment for rare diseases, where FDA invites patients, their families, medical teams and relevant business personnel together to establish criteria for benefit-risk assessments of clinical trials. It was the first case for a Korean pharmaceutical company to participate in EL-PFDD where a total of 113 relevant personnel participated including SSADHD patients worldwide, their families, medical teams and FDA representatives. After the meeting, GC Biopharma and Speragen plan to establish clinical trial criteria to develop Enzyme Replacement Therapy.

Accredited with 'Orphan Drug and Rare Pediatric Disease Designation, RPDD' Regarding Treatment for Sanfilippo Syndrome Type A (MPS III A)

GC Biopharma has been accredited with 'Orphan Drug and Rare Pediatric Disease Designation, RPDD' regarding treatment for Sanfilippo syndrome Type A (MPS III A) ,co-developed with the bio venture company, Novel Pharma, developer of rare drugs in Jan, 2023.
Sanfilippo syndrome Type A (MPS III A) is a recessive genetic disease that causes gradual damage to the central nervous system caused by the accumulation of Heparan sulfate in the central nervous system due to genetic defects. MPS III A is a severe disease and there has been no treatment yet and most patients die before 15 or have to live with severe symptoms.
GC Biopharma has been co-developing Enzyme Replacement Therapy for this disease since 2020. It has established GMP-certified production facilities to produce drugs with its own specialized protein recombination technology and Novel Pharma performs the non-clinical trials.
GC Biopharma will make continuous efforts to provide better treatment for patients with rare diseases and support their families based on its accumulated know-how in the rare drug sector.

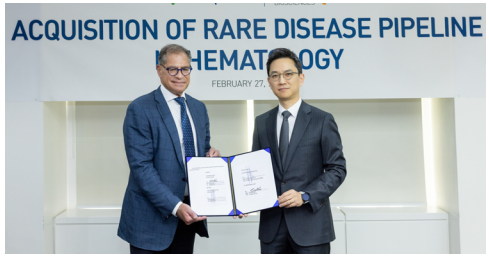
OVERVIEW

Business Highlights [GC Biopharma]

Acquired WHO's PQ(Pre-Qualification) to Improve Global Competitiveness

GC Biopharma acquired WHO's PQ(Pre-Qualification) for its 'Integrated Finished Drug System' located in Ochang, Chungbuk and its offering 'Varicella vaccine' in Feb, 2023.
This accreditation helps GC biopharma to establish a global-level production base for 'Integrated Finished Drug System' where medicines can be supplied to international organizations upon their order through production from the vaccine production plant in Hwasun, Jeonnam.
This plant is the largest filling and finish facility based in South Korea, established in 2019. GC Biopharma installed an isolator facilities and applied a single-use system in the site, and it has state-of-the-art automation facilities that automate the entire process from raw material warehousing to production and shipment. Product stability of Varicella has been improved with higher virus dose, production in sterile production system through cell incubation, virus injection and purification etc. It is characterized as the only vaccine in the world that does not use antibiotics. GC Biopharma will contribute more to cutting social and economic costs caused by pandemics based on its global network.

Acquired Pipeline of Medicine for Rare Blood-clotting Diseases with Catalyst Bio-sciences in U.S.

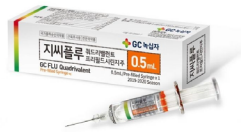


GC Biopharma signed an Asset Purchase Agreement for the pipeline of medicine for rare blood-clotting diseases with Catalyst Bio-sciences (NASDAQ: CBIO), new drug developer, in U.S in Feb, 2023.
This agreement will help GC Biopharma to acquire a total of three pipelines including Marzeptacog alfa(MarzAA) in global Phase 3.
In its previous clinical development trials, MarzAA demonstrated efficacy and safety as a treatment for rare bleeding disorders. More significantly, MarzAA, unlike majority of existing therapeutics, is delivered by subcutaneous injection, making it more convenient to administer and less burdensome for the patients, who require life-long treatment.
This acquisition of pipelines that are already in clinical stages in U.S will serve as the basis for GC Biopharma to enter the global market in advanced countries such as U.S to offer First-in-class launches.

Acquired Domestic Product License for Livmarli

GC Biopharma acquired domestic product license for Livmarli(Mara Lixibat Chloride), treatment for a rare multisystem genetic disorder caused by defects in infant liver, from the U.S company Mirum Pharmaceuticals in Feb, 2023.
Livmarli is the first treatment in Korea for patients suffering from Alagille syndrome, a rare liver disorder caused by defects in infant liver such as hepatobiliary reduction and stagnancy in producing bile juice.
Furthermore, GC Biopharma plans to start the process for acquiring domestic product license for medicines to treat a total of three indications such as 'Progressive familial intrahepatic cholestasis, PFIC' and 'Biliary Atresia'. Livmarli is the only drug in the market for rare liver disorders, and is expected to offer new hope for patients.
GC Biopharma will do its best to help patients receive proper treatment with orphan drugs like Livmarli that will be required by a population of less than 20,000 in Korea.

Acquired Domestic Product License for Flu Vaccine in Taiwan



MVC, Medigen Vaccine Biologics Corp. whose manufacturing technology was transferred from GC Biopharma aquired product license for its quadrivalent flu vaccine from Taiwan Food and Drug Administration in March, 2023.
Taiwan is one of the countries where acquiring licenses for pharmaceutical products is difficult, and the Taiwan government is nurturing the bio industry for potential innovations. and the Taiwan government is nurturing the bio industry for its innovation potential. Most global pharmaceutical companies are having business in Taiwan and acquisition of this product license suggests that GC Biopharma has reached almost the same level as global companies. MVC will establish a system for local production with the transferred technology for manufacturing finished vaccines, with GC Biopharma supplying vaccine drug substances to MVC. The Taiwan flu vaccine is known to occupy a market size of approximately $50 million. GC Biopharma will accelerate localization of vaccine production starting from Taiwan to expand market share in the global flu vaccine market.
GC Biopharma's goal is to establish global vaccine infrastructure based on its sophisticated vaccine technology and know-how accumulated for half a century.

OVERVIEW

Business Highlights [GC Cell]

Signing CDMO for Solid Cancer CAR-T for the First Time in Korea

GC Cell signed CDMO with CellabMED for production of CAR-T therapy targeting solid cancer, after finishing discussions on technology transfer and production in May, 2022.

It is performing production and quality test for investigational product Phase 1 clinical trial for CellabMED's CAR(Chimeric Antigen Receptor)-T therapy('YYB-103').

CAR-T requires technology to produce cell therapy, processes for gene manipulation and high-level technology to meet the manufacturing and quality standards. There has been no successful case yet for CDMO of investigational product solid cancer targeting CAR-T treatment in Korea.

Challenge for the Development of Innovative New Drug Targeting T-cell Lymphomas

GC Cell added 'CT205A(CD5 CAR-NK)' into the pipeline in Jun, 2022 and signed an agreement to export technology for the treatment of T-cell lymphomas to Artiva Biotherapeutics (Hereafter Artiva), a US affiliate in Jan, 2023.

GC Cell will lead Phase 1 clinical trial in close cooperation with Artiva to meet MFDS and FDA guidelines. The two companies are planning to develop the cell therapy together by performing Phase 2 clinical trial separately in Asia and U.S. respectively. Since its manufacturing process is efficient compared to autologous CAR-T treatments, 'CT205A' with an independent CAR-NK platform is expected to be an innovative new drug for T-cell lymphomas and has less expected side-effects.

The CAR-NK therapy (AB-201) of GC Cell-Artiva, FDA Phase 1/2a IND Approval

Artiva Biotherapeutics (Hereafter Artiva), one of our overseas affiliates, passed FDA's Phase 1/2a IND approval for 'AB-201' in Sep, 2022. CAR-NK, an allogeneic cord blood-derived treatment, targeting solid cancers such as HER2 overexpressed breast cancer and gastric cancer etc., is one of GC Cell's original technology-based pipelines for Natural Killer (NK) cell therapy that transferred to Artiva in 2020.

Additionally, there are other pipelines such as 'AB-101' whose Phase 1/2 is already ongoing in U.S apart from another CAR-NK cell therapy called 'AB-202'.

Especially, it is very remarkable to see that clinical trial has been approved for off-the-shelf CAR-NK targeting solid cancers since CAR-T cell therapy has been approved by FDA only in hematologic malignancy (in 2017) so far.

Signing CDMO for Stem Cell Therapy

GC Cell signed CDMO for stem cell therapy with AcesoStem Biostrategies in March 2023. This agreement was for CDMO of Mesenchymal Stem Cell (MSC) taken from the umbilical cord. As part of this contract, we will perform quality tests on processes such as manufacturing, warehousing and attribute analysis etc. over a period of approximately three years. Further, we are planning to perform freeze preservation and quality test to assess stability in the event of long-term preservation of cells.

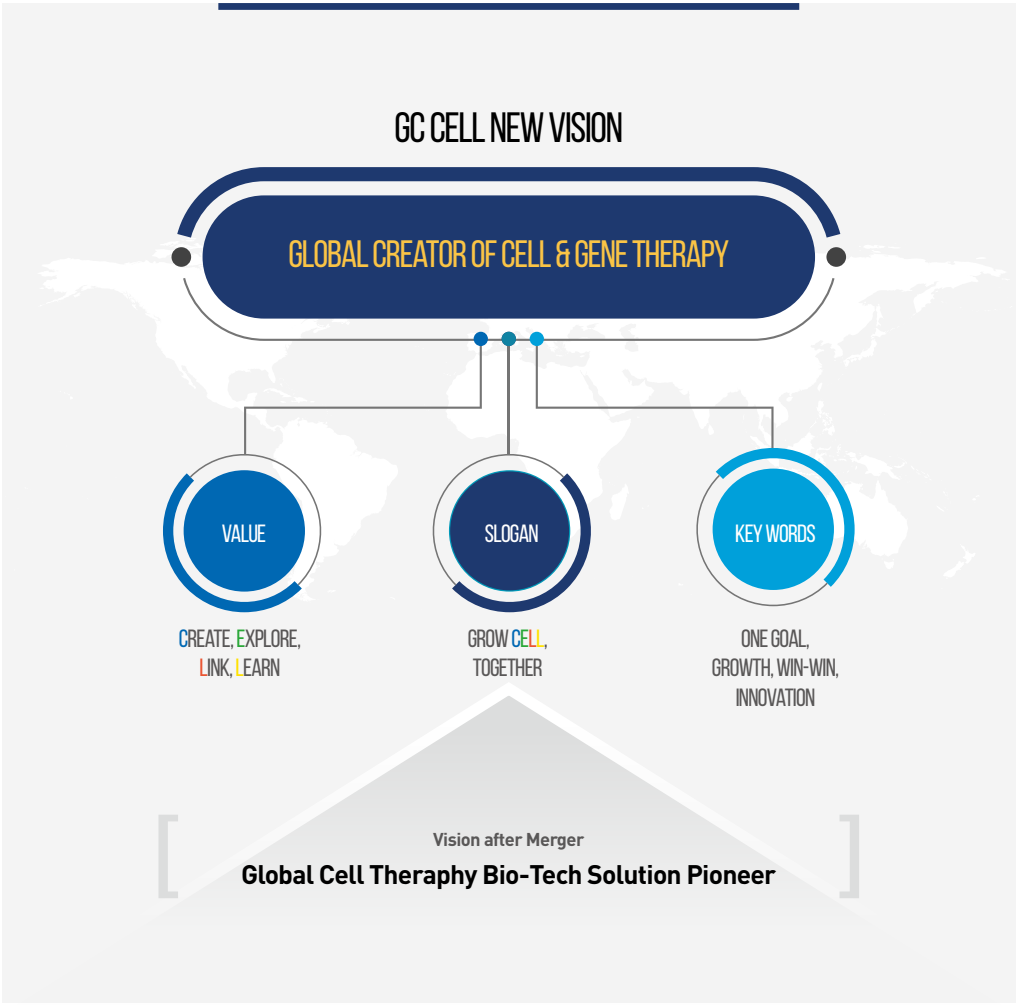
GC Cell provides one-stop total services specialized in CGT CDMO business from production of high-tech biopharmaceuticals to quality/analysis tests for processes such as ▲Production of raw materials for high-tech biopharmaceuticals ▲Production of various cells ▲Analysis through CDMO especially for CGT ▲Production of high-tech biopharmaceuticals for clinical trials/commercial use ▲Long-term warehousing and logistics for high-tech biopharmaceuticals.

OVERVIEW

Business Highlights [GC Cell]

Announcing the Corporate Slogan with New Vision through the GC Cell Declaration Ceremony

GC Cell declared its new vision, 'Global Creator of Cell & Gene Therapy' to reinforce its position as a global top-tier CGT company with the inauguration of CEO, James Park at the vision declaration ceremony held in April, 2023.
In the ceremony, GC Cell shared with all executives and employees the meaning of four core values, which are the first letters of CELL: ▲Create a healthier life for humankind ▲Explore the road no one takes for enhancing health, safety and the environment ▲Link best technology with precious human live ▲Learn new things to become a sustainable company through ongoing R&D.



OVERVIEW

Business Highlights [Affiliates]

UBcare Presented 'Ysarang Kiosk' in KIMES 2023

UBcare participated in KIMES 2023 with the largest booth under the theme of 'Ysarang All New'. It presented 'Ysarang Kiosk' for the provision of all-in-one services from application, reception and print out of certificates by linking with 'NEW EMR' with a better interface. The menu and screen could be set to meet characteristics of each department and users' convenience. In particular, UBcare presented 'Doctorvice' a platform to manage chronic diseases, for the first time. Doctorvice manages, trains patients based on guidelines for treatment of chronic diseases, and helps them to claim health insurance fee and engage in two-way communication with doctors through the app.

GCMS, Building a New Production Line for Powder-type Hemodialysate

GCMS, Korea's No. 1 producer of hemodialysate, is developing powder-type hemodialysate that offers better convenience compared to the present fluid-type, and plans to complete building a new production line for powder-type hemodialysate by the second half of 2023 at the new plant in Eumseong, Chungbuk. We are relying on imported powder type as of now but GCMS will be the first case in Korea if we can commercialize powder-type hemodialysate successfully.

GC Wellbeing First Shipped Placental Injection 'LAENNEC' in New Plant at Eumseong, Chungbuk

GC Wellbeing first shipped placental injection 'LAENNEC' and vitamin injection 'Fursultamine' in the new plant located in Eumseong, Chungbuk. The new plant in Eumseong is a pharmaceutical production facility, the construction of which was started in 2019 and completed in June, 2021. A total of 11 injections and 12 CDMO products will be produced in the new plant. GC Wellbeing is planning to expand its injection market share based on its new, improved production capacity.

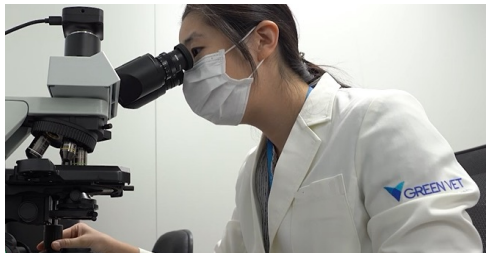
GC Care, 'Howcare', Received 'the Smart App Award 2022' in the Medical Sector

'Howcare', GC Care's personalized health care platform, received 'the Smart App Award 2022' in the medical sector. 'Howcare' provides personalized health care and customized healthcare services for a healthier lifestyle. Users can check their lifestyle patterns and habits based on body health records and take better care of their bodies on their own through customized recommendations.

OVERVIEW

Business Highlights [Affiliates]

Green Vet, Introducing a Digital Pathology System to Provide 7-day Report, which is Faster than Ever



Green Vet has changed biopsy trend by introducing a digital pathology system into the pet market in Oct, 2022. Green Vet Digital Pathology system can deliver sample information faster to users by way of uploading digital scan files into cloud. This also makes it possible to examine tissue clearly with high resolution files that are magnified up to 800 times.

Mogam Institute for Biomedical Research, Reinforcement of AI-based new drug R&D

Mogam Institute for Biomedical Research signed a MOU with SNU AI and CHA Vaccine Institute etc. to develop new drugs in Nov, 2022. The Institute has grown into a new drug AI R&D Center and is striving to improve business capacity and secure talented researchers by relocating the R&D center from Yongin to Seoul.

GC Labs, Opening ESAC, Endocrine Substance Analysis Center

GC Labs opened ESAC, the Endocrine Substance Analysis Center, for the first time in Korea in Jan, 2023. ESAC specializes in endocrine R&D laboratory to measure, analyze and perform R&D on various hormones, metabolites and endocrine disruptors etc. in order to contribute to the early diagnosis of endocrinopathy and precise measurement of metabolites.

New Start in 2023 at the New Workplace in Guseong Campus!

GC Guseong Campus is located in Giheung-gu, Yongin-si, Gyeonggi-do and GCMS, GC Genome, GCCL, Green Vet and Genes Laboratories moved in to the Campus on New Year day of 2023. GC Guseong Campus consists of: ▲2F- GCMS/Green Vet/Genes Laboratories ▲3F- GC Genome ▲4F- GCCL. There is a meeting room and cafeteria on 1F. A GYM has been set up on 5F for employees' wellbeing and healthcare.

SUSTAINABLE FUNDAMENTAL

22 ESG Management Strategy

23 ESG Management Implementation Framework

24 Materiality Assessment

ESG MANAGEMENT STRATEGY

Direction of ESG Strategy

The ESG management strategy system has been established, based on Mission & Vision and Core Values that guide GC's management philosophy. GC Group has also established the strategic direction for fulfilling economic, social, and environmental responsibilities toward stakeholders and implementing ESG management.

GC's ESG Management Strategy System

Mission & Vision	It is our mission to contribute to the healthy life of humankind, and our ideal is to become a global leader in the health industry			
Core Value	Challenge & Innovation	Care & Compassion	Transparency & Integrity	Respect & Dedication
ESG Management Vision	Implementation of ESG Management based on the GC Spirit			
Direction of ESG Strategy	(S) Expand stakeholders' access to healthcare by providing total healthcare solutions	(E)(S)(G) Strengthening Supervision of Product Quality for Pharmaceuticals and Customer Safety and Supply Chain ESG Risk Management	(G) Business Risk Management through Ethical Management	(E) Establishing Environmental Management System and Responding to Net-Zero
2023 ESG Report Disclosure Areas	Focus Area 1. Extending Access to Healthcare	Focus Area 2. Customer Safety and Quality Responsibility	Focus Area 3. Corporate Ethics and Compliance	Focus Area 4. Environmental Responsibility

GC performs ESG management based on its ESG Commitments.

GC ESG Commitment

Environmental
We protect the health of the company, society, and the earth through environmental management and safety and health management.

Social
As a good social companion, we perform our social responsibilities towards our customers, employees, and local communities.

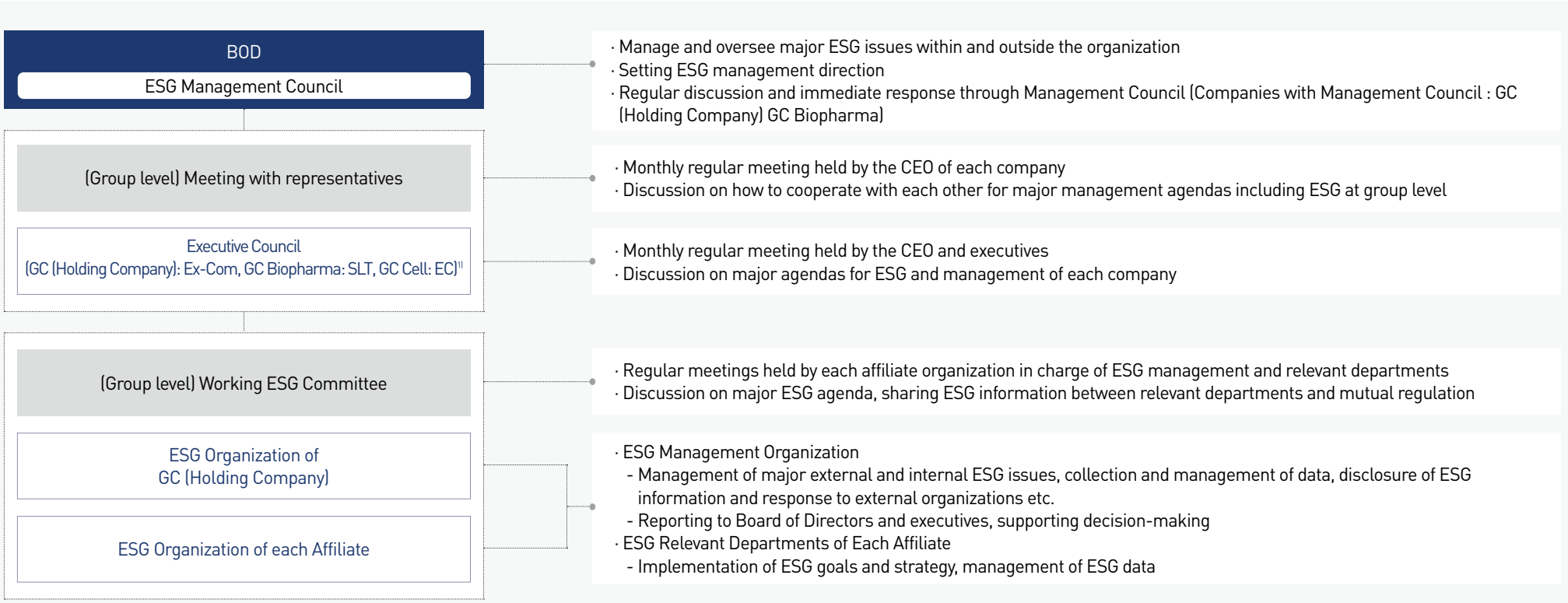
Governance
We do our utmost to protect the rights and interests of our shareholders and stakeholders through responsible and ethical management.

ESG MANAGEMENT IMPLEMENTATION FRAMEWORK

Establishing an ESG Management System Centered on the Board of Directors (BOD)

To enhance ESG management strategy, GC operates an ESG management system led by BOD. Under the system, all affiliates under GC share the philosophy and policies of ESG management, discuss how to cooperate with each other for ESG management at the company level and make best efforts to incorporate ESG management into each affiliate. Each affiliate organization in charge of ESG management is also responsible for developing ESG management implementation plans and managing overall performance, identifying internal ESG risks and opportunities, managing data, disclosing ESG information and responding to external organizations etc. Further, the ESG management system shares ESG information with other affiliates responsible for ESG and relevant departments, and discusses and comes up with results regarding major agendas to implement each affiliate's ESG strategy through the Working ESG Council at GC Group level.

ESG Management Governance



1) GC (Holding Company): Ex-Com (Executive Committee), GC Biopharma: SLT (Senior Leadership Team), GC Cell: EC(Executive Committee)

MATERIALITY ASSESSMENT

GC's Major Issues in 2023

Collecting Feedbacks from Stakeholders

GC Group utilized contents by each communication channel to reflect relevant stakeholders' feedbacks regarding ESG issues through various communication channels such as surveys, interviews and written questionnaires.

Major Issues by Area

●●●●● 1.0~0.9 ●●●●○ 0.7~0.8 ●●●○○ 0.5~0.6

ESG Sector	Report Agenda	GRI Index	Characteristics of the Effect	Impact Assessment	Target			
					Economy	Society	Environment	Human
Environment	GHG Emission	305-1~5	Negative	●●●○○			V	
	Environmental Pollutants Emission	303-4, 305-7	Negative	●●●○○			V	
	Waste Emission	306-1~5	Negative	●●●○○			V	
Society	Strengthening Product Quality and Patient Safety	416-1	Positive	●●●●●		V		V
	Expansion of Access to Pharmaceuticals	N/A	Positive	●●●●○		V		V
	Nurturing Pharmaceutical/Bio Talents	404-1~2	Positive	●●●○○		V		V
	Management of ESG Risks in the Supply Chain	308-1~2, 414-1~2	Positive	●●●○○		V	V	
Governance	Prevention of Unethical/Corrupt Behaviors	205-1~3, 206-1	Positive	●●●○○	V			V
	Violation of Research Ethics	N/A	Negative	●●●○○		V		V
Others	R&D Innovation	N/A	Positive	●●●●○	V	V		V

Issue Identification Process

GC determined the major issues through a four-step process in discussion with internal·external stakeholders and experts by identifying the impact of each issue and performing Impact Materiality Assessment.

STEP. 1

Identification of ESG Issue Pool
- Review GC Group's Business
- Coming up with overall ESG issues relevant to the company
  - Review of Global Initiatives (SASB, MSCI, DJSI etc.), ESG issues and ESG Trends etc. in the same field.
- Prioritizing a total of 27 ESG issues with Simple Scoring

STEP. 2

Identification of Each ESG Issue's Impact
- Definition of ESG issue's impact on economy, society, environment and humans.
- Identification of policy/legal requirements, suggestions by shareholders/investors, media analysis, etc.
- Developing criteria and questions for Impact Materiality Assessment

STEP. 3

Impact Materiality Assessment
- Performing Impact Materiality Assessment on each ESG issue
  - Performing evaluation with stakeholders including SMEs and internal·external stakeholders (Feb, 1, 2023 – Feb, 7, 2023)
- Consideration of size, scale, reversibility and possibility of effects in overall.
- Performing 3rd party review for the evaluation process

STEP. 4

Selection of Major Issues and Reporting to the Board of Directors
- Selection of material issues based on evaluation results
- Report results of material issues to the Board of Directors

MATERIALITY ASSESSMENT

Reporting Major Issues

Major Reporting Agenda and Focus Areas

GC Group defined four Focus Areas (ten major reporting agendas) among major reporting agenda based on the results of Materiality Assessment, based on which we will set issue management goals and plan the way forward for GC Group. Other ESG issues are open to General Disclosure.

Focus Area 1. Extending Access to Healthcare

Society
Strengthening Access to Medicines

Others
R&D Innovation

Society
Nurturing Pharmaceutical/ Bio Experts

Focus Area 2. Customer Safety and Quality Responsibility

Society
Strengthening Product Quality and Patient Safety

Society
Supply Chain ESG Risk Management

Focus Area 3. Corporate Ethics and Compliance

Governance
Prevention of Unethical/ Corrupt Behaviors

Governance
Violation of Research Ethics

Focus Area 4. Environmental Responsibility

Environment
GHG Emission

Environment
Environmental Pollutants Emission

Environment
Waste Emission

FOCUS AREA

27 Area 1. Extending Access to Healthcare

40 Area 2. Customer Safety and Quality Responsibility

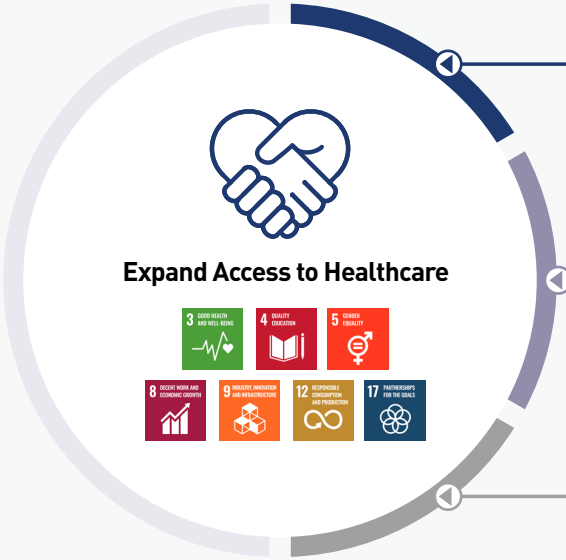
53 Area 3. Corporate Ethics and Compliance

65 Area 4. Environmental Responsibility

AREA 1. EXTENDING ACCESS TO HEALTHCARE

Management Approach

GC Group has expanded access to healthcare by establishing a strategy for strengthening access to healthcare at home and abroad, developing new drugs by R&D innovation and nurturing pharmaceutical/bio experts so that we could become a global leader in the healthcare industry and contribute to creating a healthier and happier life for humankind.



Strengthening Access to Medicines

GC GC Biopharma GC Cell

Our Approach	- We provide Total Healthcare Solutions encompassing prevention, diagnosis, treatment and management of diseases, and maintain a pricing policy to expands drug choices and relieves patients' financial burdens.
Positive Impact	- Our activities to strengthen access to healthcare in the biopharmaceutical industry can resolve global healthcare health issues and meet patients' demand for medical services in more advanced and also developing countries.
2022 Our Actions	- (GC Biopharma) Approval of 'Livmarli' item license for the treatment of rare liver disease in children, and PAHO Flu Vaccine tender top market share - (GC Cell) Signed an agreement with the Indian company Rivaara Immune Private Limited to export technology for 'Immuncell-LC' for the first time

R&D Innovation

GC GC Biopharma GC Cell

Our Approach	- We strive to extend the lives of mankind by developing new drugs and biopharmaceuticals and secure original technology to achieve diversification and specialization of technology
Positive Impact	- We strengthened pipeline and expanded access to medicine by producing low-cost and high-quality medicines in a short time through R&D management.
2022 Our Actions	- (GC Biopharma) Domestic Phase 1 for Hunter Syndrome ICV was approved In April, 2022, and Acquired pipeline of related to rare blood-clotting diseases with U.S Catalyst Bio-sciences in Feb, 2023. - (GC Cell) Obtained FDA IND approval for Phase 1/2a clinical trial of treatment of advanced HER2-positive breast cancer or gastric/gastroesophageal junction cancer in Sep, 2022.

Nurturing Pharmaceutical/ Bio Experts

GC GC Biopharma GC Cell

Our Approach	- We try to nurture pharmaceutical/bio experts, improve job competency and strengthen experts by providing various training and network.
Positive Impact	- Securing pharmaceutical/bio experts and talents could contribute to not only competitiveness of a company but also expansion of the pharmaceutical industry and enhance national competitiveness.
2022 Our Actions	- (GC Biopharma) Establishing professional job training specialized for pharmaceutical/bio personnel

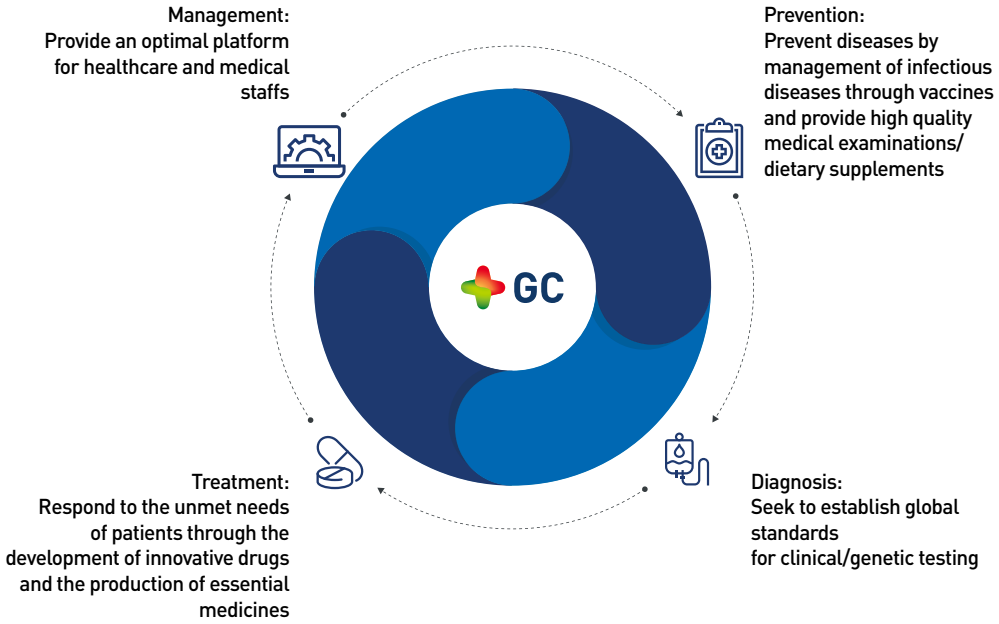
AREA 1. EXTENDING ACCESS TO HEALTHCARE Strengthening Access to Medicines

GC Group

Strategy for Expending Healthcare Pipeline

GC Group has made tremendous progress in improving patients' quality of life by developing treatments such as blood plasma-derived products, vaccines, medicine for rare diseases, chronic diseases and anticancer etc. We are working relentlessly to become a total healthcare solution provider covering areas such as prevention, diagnosis, treatment and management of diseases etc.

To Become a Total Healthcare Solution Provider



Entering the Global Pharmaceutical Market

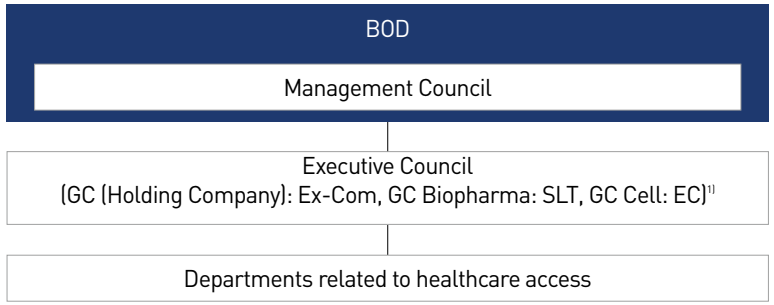
We are working to expand the scope of our business into the global market by establishing affiliates overseas, localization and R&D, and participating in relevant associations to improve R&D capacity. Shortcut

Blood Plasma-derived Products	Vaccines	Cell and Gene Therapy, CGT	Diagnosis
GC China GC Biopharma USA GC LabTech	curevo VACCINE	artiva BioCentriq GC LTEC	GENECE

Governance to Control Access to Healthcare

Through regular meetings, each of our affiliates discusses agendas on stakeholders' access to healthcare, focusing on key decision makers at the C-level. For the agendas on investment strategy, R&D area, and sales market, which must be discussed in depth, these discussions are continued at the Board of Directors.

Healthcare Access Management System



1) GC (Holding Company): Ex-Com(Executive Committee), GC Biopharma: SLT(Senior Leadership Team), GC Cell: EC(Executive Committee)

AREA 1.

EXTENDING ACCESS TO HEALTHCARE

Strengthening Access to Medicines

GC Biopharma

Policy for Strengthening Access to Medicines

Since the foundation, GC Biopharma has been striving for drug sovereignty by nationalizing blood plasma-derived products and vaccines that have been dependent only on imports.
Also, we are striving to reduce the financial burden for patients suffering from rare diseases and offer a greater variety of choices by developing and supplying treatments for hemophilia and Hunter syndrome etc. Based on this business base, we have been supplying medicines such as treatment and vaccines to approximately 40 countries, not only in domestic but also in developing countries. GC Biopharma is establishing and selling various portfolios in the treatment and vaccine sectors to bring healthier life for more patients. We are preparing to create a better future by developing innovative drugs and establishing mRNA platform for rare intractable diseases.

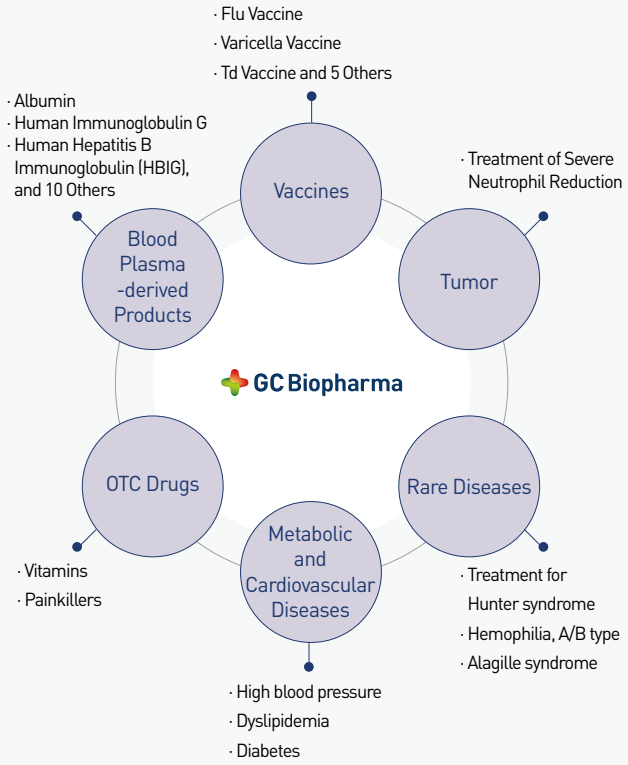
Pricing

GC Biopharma with highest proportion of pharmaceutical products, is heavily affected by the domestic market where the sales price is determined by national drug pricing policy. On the other hand, price policy in export is established at a reasonable level in consideration of global pricing trends and financial impacts to supply essential medicines smoothly through bidding by international organizations and countries.
Through strong supports by decision makers and management's continuous discussions considering the economic and social aspects, GC Biopharma is successfully wining in bidding of the flu vaccines. As a result, we maintain No.1 market share in the flu vaccine market for bidding run by Pan American Health Organization (PAHO), under the World Health Organization (WHO).

Direction to Expand Market

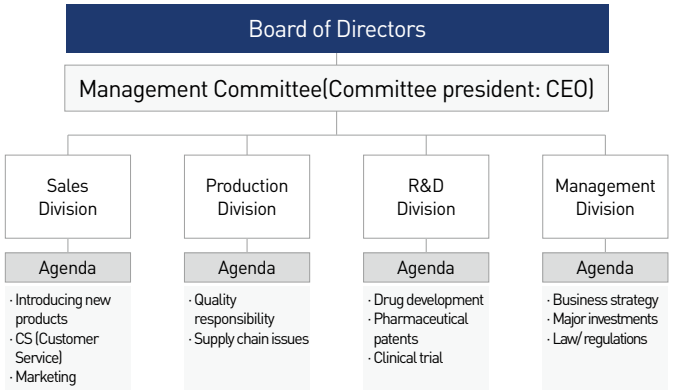
GC Biopharma has operated its business domestically to support Korean people lead a healthy life so far. Based on this foundation, we have been diversifying overseas business centered around emerging markets, and achieved $ 200 million for the first time in Korea phamaceutical industry in 2014 by enlarging export of blood plasma-derived products and vaccines. Not only that, we established local corporations in US and Brazil and are focusing on technology development and improving business competence to enter into the advanced market. Starting with the launch of immunoglobulin (IVIG), we enter into the U.S, the largest market for pharmaceuticals, and we promise to expand into the global market, through follow-up pipelines.

Medicines Access of GC Biopharma



Dedicated Organization

GC Biopharma establishes management systems centering around BOD to enhance access of healthcare for patients. If matters are decided as critical in sales of products, production, R&D and business strategy etc., they are presented to BOD and Management Committee which make decision through discussion. Responsible personnel with expertise in each sector manage critical issues at integrated all cooperate levels.



Performance for Healthcare Access

Pricing Access Management (Unit : Items)

Category	2020	2021	2022
The Number of Target Items for Equitable Pricing Policy	3	3	3

AREA 1. EXTENDING ACCESS TO HEALTHCARE Strengthening Access to Medicines

GC Cell

Policy for Strengthening Access to Medicines

GC Cell has received approval from MFDS (Ministry of Food and Drug Safety) for 'Immuncell-LC' (Autologous T cell Therapy) as treatment for liver cancer (HCC) in 2007. The therapy remains the only treatment to prevent reoccurrence of the cancer for patients who underwent surgery for removing hepatocellular cancer. We are performing Phage 3 clinical trial for 'Immuncell-LC' with pancreatic cancer patients to expand the range of indications that can be treated with 'Immuncell-LC' so that we could improve quality of lives for cancer patients. We continue to conduct R&D for CAR-NK an allogeneic cell therapy product, to complement high-cost autologous cell therapies. We expect that these initiatives will enable us to supply cell therapy product for cancer patients worldwide at reasonable prices.

GC Cell is working to serve cancer patients with easier access to medicines by not only establishing its own capabilities to develop Cell and Gene Therapy (CGT) products but also internalizing the production and logistics system. In 2018, GC Cell built 'Cell Center', the largest plant for CGT in Korea, and also secured a production site in the United States, the world's largest CGT market by acquiring BioCentrig, a CGT CDMO company in the United States.

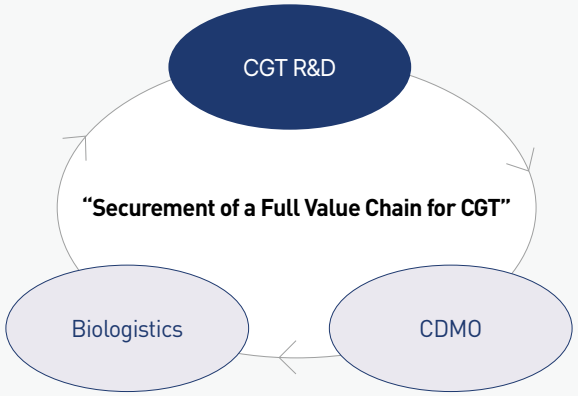
Through cold-chain bio-logistics services specialized for pharmaceutical, it has been contributing to the creation of better access to medicines for patients /subjects to medical institution by providing inland transportation and overseas import and export services of medicine/sample for clinical trials.

Direction for Enlarging the Export Market

With the establishment of Artiva, a local corporation in 2019, GC Cell is seeking market expansion through joint R&D utilizing infrastructure (manpower, partners, funds, systems, etc.) in the United States, a leading CGT market. In addition, considering the characteristics of 'Immunecell-LC', an autologous cell therapy, the direction of entering the global market was specified through technology export. As a result, in January 2022, Rivaara, CGT developing company in India, has signed a technology export contract. Based on the India contract, we plan to continue to advance into China and Southeast Asian countries.

Medicines Access of GC Cell

- Establishing a pipeline for various cell therapies
- Licensing out CAR-NK cell therapy to MSD, a U.S pharmaceutical company (KRW 2 trillion)



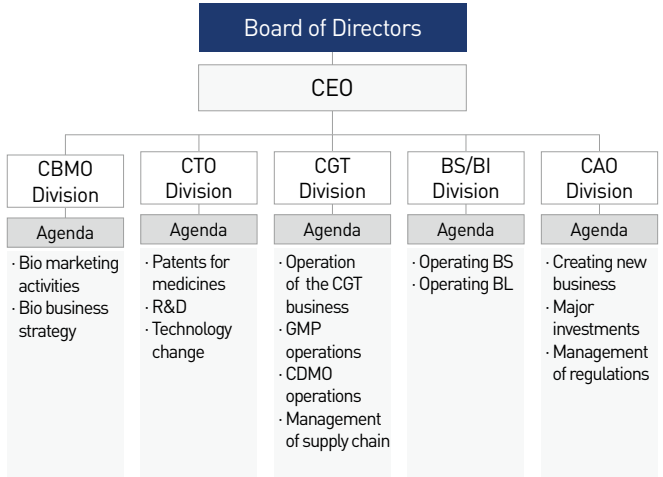
- Establishing a domestic transportation system that can deliver medicine within 24 hours
- Establishing a cold-chain system
- Logistics service for export and import of bio products such as medicines, diagnostic kits etc.
- Receiving orders from KDCA (Korea Disease Control and Prevention Agency) for domestic transportation for infectious substances for seven years in a row
- Having the largest plant for CGT production in Korea
- Experience in the production of commercial cell therapy
- Experience in CDMO of CGT

Pricing

To prevent cancer patients who need GC Cell's 'Immunecell-LC' from stopping or delaying treatment due to economic reasons, price competition is refrained from, and when price adjustment is necessary, management and society as a whole are reviewed to see if it is appropriate. Despite the increase in raw material costs and quality control costs due to global inflation, we have maintained the launch price without any increase so far through continuous work efficiency efforts to preserve the selling price.

Dedicated Organization

GC Cell's Meeting Committee organized by the CEO monitors the strategic directions and execution plans regularly for expanding access to healthcare, and presents major risks and matters for decisions to the Board of Directors for discussion and decision-making.



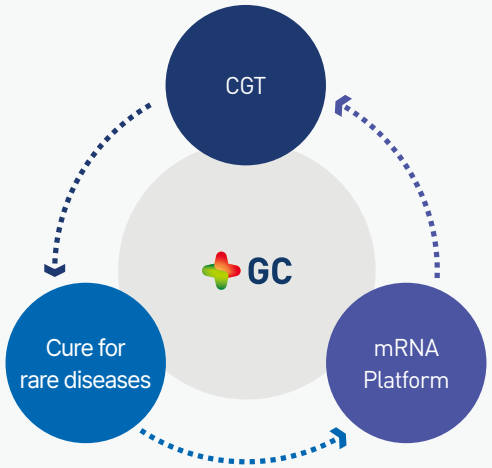
AREA 1. EXTENDING ACCESS TO HEALTHCARE R&D Innovation

GC Group

R&D Management

GC Group has been running business in blood plasma-derived products and vaccines. To secure a new growth engine, we are focusing on developing rare disease treatments in the field of therapeutics along with mRNA platform and CGT products.
Even though the pharmaceutical industry can produce high added value in case of success in new drug development, it would require extensive investment over a long period of time (generally longer than 10 years) and comes with very small probability of success. Nevertheless, with our belief that R&D is the driving force for growth and source of future revenue, we have invested in R&D boldly and aggressively at the highest level in domestic industry. In addition to our extensive investment, we are also deeply focused on recruiting talented researchers and reinforcing their core capabilities for research.
GC Group will continue to grow into a leading life science company that realizes the healthy life of mankind through constant challenges and active investment in new drugs and biopharmaceuticals.

Core Research Area



GC (Holding Company)

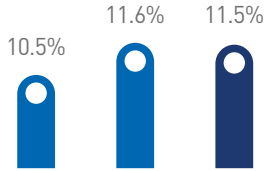
R&D Innovation Performance

Healthcare Patents, Domestic and Overseas (Unit : Cases)

Category		2020	2021	2022
Domestic	The Number of Registrations of Patent (Accumulated)	11	10	10
	The Number of Patent Applications	1	1	2
Overseas	The Number of Registrations of Patent (Accumulated)	41	41	52
	The Number of Patent Applications	12	12	8
	The Number of Voluntary Applications and Non-exclusive Patents/Products	0	0	0

R&D Investments

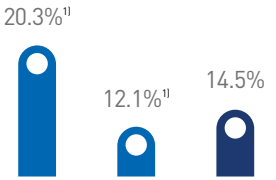
R&D to Revenue Ratio GC Biopharma



Category	Unit	2020	2021	2022
R&D Costs	KRW million	129,097	135,642	142,977

R&D workforce (As of March 2023) Total 534 persons
- Master's/Doctorate - 345 persons
- Bachelor's/- 113 persons
- Others - 76 persons

R&D to Revenue Ratio (Non-consolidated basis) GC Cell



Category	Unit	2020	2021 (Merger)	2022
R&D Costs	KRW million	16,119	19,235	32,142

R&D workforce (As of March 2023) Total 106 persons
- Doctorate - 28 persons
- Master's - 54 persons
- Bachelor's - 21 persons
- Others - 3 persons

1) Modification of electronic disclosure business report standards

AREA 1.

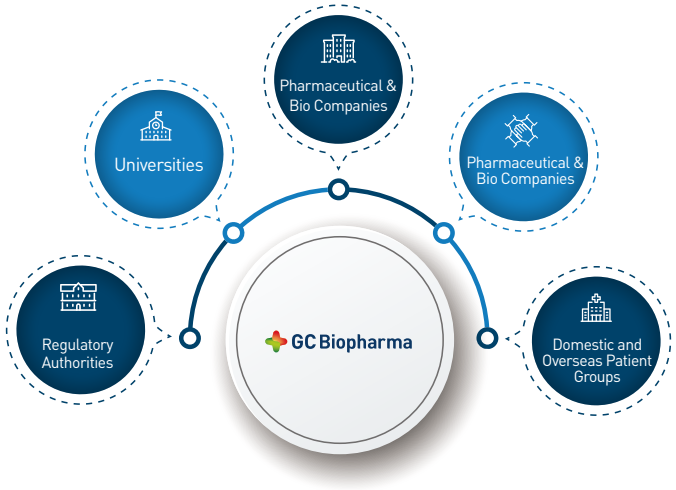
EXTENDING ACCESS TO HEALTHCARE R&D Innovation

GC Biopharma

Strategy for Developing Innovative Drugs

GC Biopharma focuses on its corporate-level competence and resources to enter into advanced markets for blood plasma-derived products, developing premium vaccines and innovative drugs for rare diseases. To accelerate the development of innovative products and to develop customized innovative drugs for patients with unmet needs, GC Biopharma is developing plans to enhance internal R&D capability, and cooperating with partner companies, patient groups and medical institutes etc. We are performing open innovation in different ways such as listening to the voice of patient groups and reflecting it in clinical trial design stage in cooperation with medical institutions/regulatory authorities etc.
We will do our best to achieve greater heights as a global medicine & bio company by developing strategic products with competitiveness in advance.

GC Biopharma Network and Cooperation



R&D Pipeline

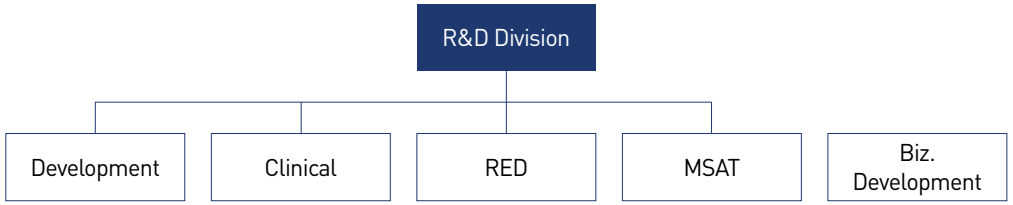
Type	Project	Indication	Research	Preclinical	Phase 1	Phase 2	Phase 3	Approval	Collaboration	Remarks
Blood plasma-derived products	GC5107B	Congenital immunodeficiency syndrome(IVIG-SN 10%)					In progress			U.S. FDA Approval in progress
	GC5107D	Congenital immunodeficiency syndrome (IVIG-SN 10%, Infants)								
	GC5125A	vWF deficiency								
Vaccines	GC501/GC3110	Seasonal influenza vaccine					Commercialized			Obtained 23 countries' approval for domestic use apart from WHO
	MG1111	BARYCELA					Commercialized			Launched in domestic market, obtaining WHO PQ
	GC3107A	Tuberculosis vaccine								Planning for application of domestic product license within this year
	GC3111A	Tetanus, diphtheria and pertussis vaccine								
	GC1109	Anthrax vaccine								Planning for application of license in Oct, 2023
	MG1120A(CRV-101)	MG1111 Varicella vaccine MG1120A H							curevo VACCINE	
	GC3117A	mRNA Flu								Entering into Phase 1 in 2024
Innovative drugs for rare diseases	GC1111F	Hunter Syndrome					Commercialized			Sales in 12 countries including Korea
	GC1123A	Hunter Syndrome (ICV)					Commercialized			Received approval in Japan, domestic Phase I trial underway
	GC1101D	Hemophilia A (Green Gene F)					Commercialized			Obtained Domestic and Chinese approval
	GC2127A	Treatment for Alagil syndrome					Commercialized		mirum	Passed domestic product license and ready for launch
	GC1138A(MarzAA)	Glanzmann thrombasthenia								Submission of application for US Phase III IND in 2024
	MG1113A	Hemophilia A, B								
	GC1126A	Thrombotic thrombocytopenic purpura								
	GC1130A	Sanfilippo syndrome A							NOVEL PHARMA	Designated by U.S. FDA regarding ODD and RPDD
	GC1134A	Fabry disease							Hanmi	
	GC4003A	SSADH deficiency treatment							Speragen	
	GC2120A	Hemophilia A/B (oral)							Atomwise	
	GC2126A	Gangliosidosis treatment							鳥取大学	

AREA 1.

EXTENDING ACCESS TO HEALTHCARE R&D Innovation

GC Biopharma

R&D Organization



Developing Global New Drugs for Rare Diseases

GC Biopharma is developing global new drugs for rare diseases to secure the next-generation growth engine. Domestic Phase I trial for Hunter Syndrome ICV was approved in April, 2022. Sanfilippo syndrome A was designated as ODD(Orphan Drug Designation)/RPDD(Rare Pediatric Disease Designation) in Jan, 2023 and domestic product license was obtained for Alagil syndrome treatment for childhood rare diseases in Feb, 2023. We acquired a pipeline of treatment for rare blood-clotting diseases with U.S Catalyst Bio-sciences in Feb, 2023 to accelerate the development of innovative drugs for rare diseases. In addition, we are concentrating on R&D for mRNA Platform as the next-generation new drug modality to become a global pharmaceutical company.

R&D Innovation Performance

Healthcare Patents, Domestic and Overseas (Unit : Cases)

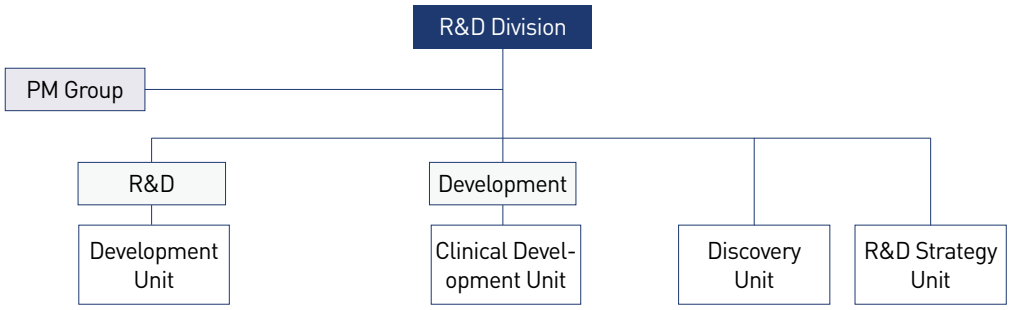
Category		2020	2021	2022
Domestic	The Number of Registrations of Patent (Accumulated)	56	69	72
	The Number of Patent Applications	60	47	31
Overseas	The Number of Registrations of Patent (Accumulated)	146	186	192
	The Number of Patent Applications	233	274	286
	The Number of Voluntary Applications and Non-exclusive Patents/Products	0	0	0

GC Cell

R&D Pipeline

Type		Project	Indication	Pre-clinical	Phase 1	Phase 2	Phase 3	Approval	Collabo-ration	Remarks
Autologous	PBCIK	Immuncell -LC	HCC				Commercialized			Renewed approval for high-end biomedicine (Aug. 2021)
		ILC-P3-PAN	Pancreatic Cancer							Phase 3 clinical trial in progress
	CAR-T	CT207A	Pancreatic Cancer							Process development, non-clinical tests
Allogenic	CBNK	AB-101+ Rituximab	r/r B-cell Non Hodgkin Lymphoma						artiva	Phage 1/2 clinical trial in progress
	CAR -CBNK	AB-201	HER2+Solid Cancers						artiva	IND (US FDA) approval (Sep, 2022)
		AB-202	B Cell Lymphoma						artiva	Process development, non-clinical trial stage
		AB-205	T Cell Lymphoma							Preparing IND
		MSD Projects	Solid Cancers						MSD	Process development, non-clinical trial stage
	Stem Cell (TMSC)	CT303	Psoriasis							Completing single dosing in Phase 1 clinical trial

R&D Organization



AREA 1. EXTENDING ACCESS TO HEALTHCARE
R&D Innovation

GC Cell

Developing Global New Medicines for Cell·Gene Therapies

GC Cell is developing global new medicines in the field of cell·gene therapies focus on regenerative therapy using stem cell and anti-cancer immunotherapy with cells and its gene manipulation to treat rare an intractable diseases and thereby contribute to humankind.
We got FDA IND approval for Phase 1/2a clinical trial and designation as an ODD drug (by Artiva) of treatment for advanced HER2 positive breast cancer or gastric/gastroesophageal junction cancer as indications in Sep, 2022.
Phase 1/2a clinical trial of cord blood-derived allogeneic NK cell therapy (AB-101) and Rituximab for patients with B cell lymphoma have been designated as an expedited approval (fast-track) subject by the FDA and is being conducted.
We are also focusing on R&D to develop follow-up pipelines and platform technologies, such as finding candidates for CAR-NK treatment with MSD for solid cancer patients.

R&D Innovation Performance

Healthcare Patents, Domestic and Overseas (Unit : Cases)

Category		2020	2021	2022
Domestic	The Number of Registrations of Patent (Accumulated)	10	15	19
	The Number of Patent Applications	0	2	4
Overseas	The Number of Registrations of Patent (Accumulated)	25	30	35
	The Number of Patent Applications	11	16	6
	The Number of Voluntary Applications and Non-exclusive Patents/Products	0	0	0

AREA 1. EXTENDING ACCESS TO HEALTHCARE
Nurturing Pharmaceutical/Bio Experts

GC Group

Strategy for Nurturing Pharmaceutical/Bio Experts

GC Group provides various training and networking opportunities such as training courses, domestic/overseas academic seminars and conferences etc. to help employees to adjust to the organization and work and improve work capability, and thereby nurture pharmaceutical/bio experts. In addition, the establishment of a smart-learning platform supports personalized self-directed learning based on digital curation.

Support for Acquiring Degrees and Certifications

All members of the GC are provided with a variety of training opportunities for competency development required for job performance, and selected members will have further opportunities to develop a higher level of competency through educational institutions at home and abroad. Especially, in order to foster next-generation leaders with professional competencies, we operate a system that supports employees in acquiring degrees and certificates. Members selected through the fair and transparent selection process can join the in-house MBA, domestic part-time MBA, master's and Ph.D. courses, and GC provides support with tuition fees for these courses, degrees, and certificates.

GC Group's Affiliate News

Training Program on Responding to Infectious Diseases for Developing Countries

Green Cross Laboratories (GC Labs) has implemented an ODA (Official Development Assistance) project by working with KOFIH targeting developing countries starting since 2021.
Three experts (Doctors and medical laboratory scientists) in Ethiopia and Tanzania had theoretical and practice training through the '2022 Jong-wook, Lee Fellowship Program Expert Course in Response to Infectious Diseases (Tuberculosis)' for three months from Aug to Dec, 2022. The GC Group will continue to expand its knowledge and develop its international cooperation capabilities to improve level of global healthcare.

AREA 1.

EXTENDING ACCESS TO HEALTHCARE

Nurturing Pharmaceutical/Bio Experts

GC Biopharma

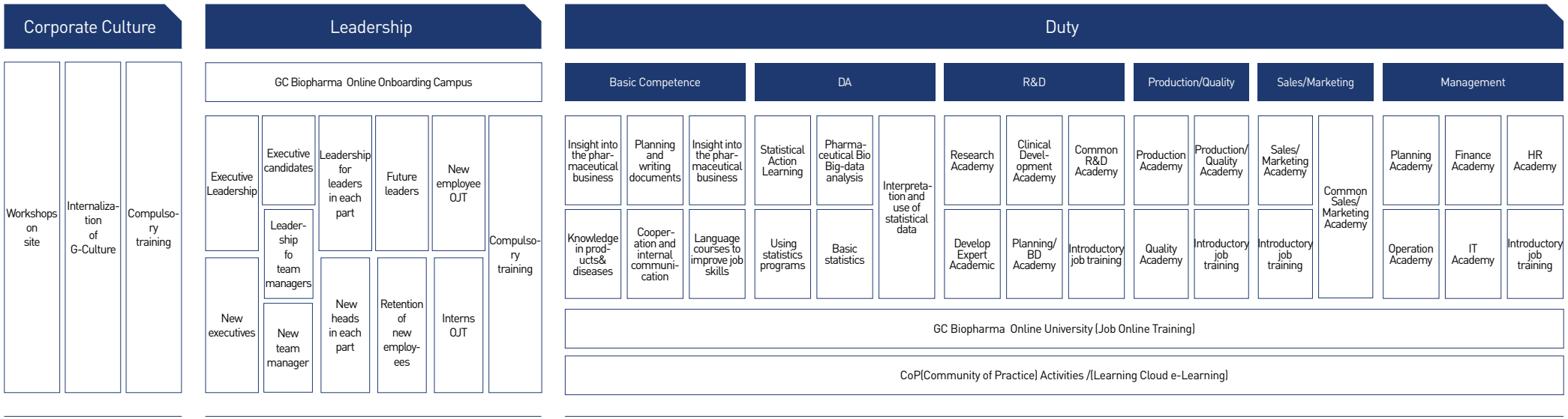
Pharmaceutical/Bio Talent Development System

GC Biopharma has established a talent training system for defining duty/leadership to nurture talents systematically based on the necessary job competencies. Approximately 200 Subject Matter Experts (SMEs) from each division participated to define 60 job expert types and necessary job competencies, and established around 300 course profiles to improve job competencies. Further, based on analysis of individual talents, we set 7 job levels to improve effectiveness of training and advance performance to meet changes in organization and strategies. We are modeling competency details for leadership through the review of roles at each level, trend research and job interviews, and there are 13 courses for all employees. We hold a GC Biopharma leadership workshop once a year for approximately all 200 leaders(Above team manager level) gather together to discuss the company's strategy and direction, and improve leadership capability. Moreover, we provide around 18 on/offline onboarding training courses and conduct retention training after one year of joining the company in order to facilitate smooth onboarding and competency development of new employees. We also provide five organization culture courses to help new employees adjust better to the organization, develop competence and improve their quality of life. We establish individual competence improvement plans through self-development plan (DP) and provide better opportunities to become experts and leaders in their duty considering career development program (CDP). We monitor and develop this talent nurturing system in real time through the LMS(Learning Management System) System established in Success Factors.

Annual average training hours for executive and employees
46hours

Annual average cost for executive and employees training
KRW **1.2**million

GC Biopharma's Talent Development System



AREA 1. EXTENDING ACCESS TO HEALTHCARE Nurturing Pharmaceutical/Bio Experts

GC Biopharma

Program to Improve Leadership

GC Biopharma conducts PLT (Pharma Leadership Team) meetings quarterly to establish company-level strategic direction for particular agendas, and executives to enlarge insight through networking between executives. We support leaders to participate in the Korea Management Association (KMA) Executives' Breakfast Meeting, Leaders' Morning Forum and SERICEO (established by Multi Campus). Furthermore, we operate 1:1 language courses to improve global competence levels and also provide special invitational lectures by well-known speakers to help our executives develop knowledge in various areas such as history, culture, health and trend etc. Each year, executives and team leaders and part leaders are diagnosed for competencies and personal characteristics required for their roles. We provide debriefing and coaching sessions on the diagnostic outcomes to support leadership development based on self-evaluation and awareness and also conduct online/offline internal/external training and employee language program to improve leadership/global competence.

GC Biopharma's Leadership Diagnosis and Development Program

Assessment Center	Development Center	
	Individual Development	Organization Development
Multi-faceted Leadership Diagnosis for Leadership (Executives, Team Managers/Unit Managers, Part Managers)	Leadership: · Feedback coaching · Program for enhancing competencies · Training for new employees etc. Onboarding: · Onboarding · Introduction program etc. Management/ Global: · SERICEO · Special lecture on trends · Internal MBA lecture	Training for Performance Management Leader Training based on G Culture GC Biopharma Leadership Workshop

Support for Obtaining Degrees and Certification

All members of GC including contract workers are provided with a variety of training opportunities for the development of competencies required in their jobs, and selected members will have further opportunity to develop higher levels of competency through educational institutions at home and abroad. Especially, in order to foster next-generation leaders with professional competencies, we operate a system to support employees acquire degrees and certificates. Members selected through the fair and transparent selection process can join the in-house MBA, domestic part-time MBA, master's and Ph.D. courses, and GC provides support with the tuition fees. There are accumulated 38 persons who acquired MA/PhD/MBA from the beginning of 2006 to 2022 and there are 10 persons who are receiving this support as of May, 2023.

Selection Criteria and Performance

GC Biopharma

· Qualification: Worked in GC Biopharma for more than five years, High performer (above E in average for more than three years)
· Evaluation Criteria: Dedication (in the past), Achievement of business strategy (In the future), Growth Potential (Individuals)
· Application Ratio: Master's/ doctorate course- 68.8%; External MBA- 31.2% (As of Dec, 2022)

Supporting MBA Course (Selection in 2 Tracks)

GC Biopharma

· Executive candidates: Selecting candidates through a selection process to meet the immediate business strategy
· Team manger candidates: Selecting candidates for the internal MBA (persons with good academic performance) to retain important talents

Scope of support for Master's/Doctorate degree (Based on Division)

2022 ~ 2023	2024	After 2025
R&D Division	Expanding Production Division	Expanding Entire Division

AREA 1. EXTENDING ACCESS TO HEALTHCARE Nurturing Pharmaceutical/Bio Experts

GC Biopharma

Training Hub to Nurture WHO Global Bio Talents

In July 2022, GC Biopharma conducted the '2022 Basic Training for Vaccines and Biopharmaceutical Production Processes' hosted by the International Vaccine Institution(IVI). As South Korea was selected to be the WHO's global bio-manpower training hub, 29 persons from 10 countries were invited to visit GC Biopharma's R&D sites to share know-how on vaccine development. We had an opportunity to present the development and production processes of the flu vaccine, our signature product, and to share various pipelines and vaccine development experiences.

Assessment on the Effectiveness of Training

We operate a feedback process regarding the operation of training, lecturers and appropriateness of the training environment by conducting satisfaction survey for all employees. The before-and-after evaluations measure improvement level of job training and if necessary, we regularly check effectiveness of the training course through action learning after the training. We strengthen application level on site through evaluating and developing teaching plans and simulation training.

GC Biopharma's Evaluation Steps for Training

Classification	Step 1	Step 2	Step 3	Step 4
Measurement	Reaction	Learning	Behavior	Result
Criteria	Training Satisfaction	Improvement in Knowledge/ Technology/Attitude	Behavioral Change	Impact on Organization's Performance

Effectiveness of Training (Unit : Point)

Classification	Score
Training Satisfaction	4.6 (Out of 5)

Trend of Education and Training

Job expert course in GC Biopharma is operated as a compulsory training, and its completion rate is 100% as of 2022.

Employee Education and Training[1)]

Classification			Unit	2020	2021	2022
Total Education/Training Hours for Executives and Employees			Hour	63,534	81,229	105,651
Average Annual Education/Training Hours for Executives and Employees			Hours/ Persons	30.6	37.1	45.9
Average Education/ Training Hours per Executives and Employees	By Gender	Male		27	33	39
		Female		43	49	48
	By Job Category	Sales/Marketing		25	31	34
		Development		45	46	70
		Manufacturing		28	37	34
Total Education/Training Costs for Executives and Employees[2)]			KRW million	1,667	1,934	2,732
Average Annual Education/Training Cost for Executives and Employees			KRW million /Persons	0.8	0.9	1.2
Executives and Employees Education /Training ratio	Ratio		%	100	100	100
	Executives and Employees Receiving Education/Training		Persons	2,076	2,187	2,302
	Total Executives and Employees			2,076	2,187	2,302

1) Value excluding statutory training and GMP quality training
2) Base on a Financial Statement.

AREA 1.

EXTENDING ACCESS TO HEALTHCARE Nurturing Pharmaceutical/Bio Experts

GC Cell

Talent Development System

GC Cell is currently conducting various educational programs to cultivate talents with the necessary competencies for the business. Hierarchical education is systematically implemented to develop suitable competencies for different roles, including new executives, managers, middle managers, and team members. For strengthening R&D capabilities, job-specific training consists of foundational statistics/DoE/QbD courses and Bio Project Management courses. In the Bio Services business sales organization, role-based training is conducted for team members, sales managers, and branch managers to enhance their skills. In addition to talent development education, mandatory legal training and opportunities for self-directed learning through unlimited online courses are provided as common education. Furthermore, we offer virtual English education to foster global competencies.

Program for Strengthening Leadership

GC Cell performs annual executive training to improve leadership. We try to make positive changes in the executive group at corporate level through expanding awareness of sustainable growth and development. Furthermore, we are conducting leadership training for Unit managers and team managers, competence training for middle managers and team members above L3 and heads of sales office, and training for prospective heads of sales office.

Support for Taking Degree

GC Cell operates a system to support employees in acquiring degrees and developing R&D capabilities. Through this, we have been able to suggest a growth vision for our current researchers. We strive to strengthen organizational competence by nurturing talented researchers as experts in their fields, retaining talented R&D personnel and conducting R&D for relevant technology.

Effectiveness of Training

We try to enhance course of training through satisfaction surveys, and the feedback is reflected in the next training. In terms of training for leadership in the bio service industry, lecturers deliver a presentation on relevant topics and share insights with the participants, and the responsible persons give feedback.
In the satisfaction survey conducted in the first half of 2023, improvement in job competence had the highest points, while understanding of training contents had the lowest, which will be reflected in next training course.

Effectiveness of Training (Unit : Point)

Classification	Score
Improvement in job competence	80 (Out of 100)

Trend of Education and Training

Employees Education and Training

Classification			Unit	2020	2021	2022
Total Education/Training Hours for Executives and Employees			Hours	12,801	28,494	27,705
Average Annual Education/Training Hours for Executives and Employees			Hours/ Persons	28.8	35.7	33.1
Average education/ Training Hours per Executives and Employees	By Gender	Male		29	38	33
		Female		29	31	33
	By Job Category	Sales/ Marketing		29	39	29
		Development		29	42	54
		Manufacturing		N/A[2]	25	32
Total Education/Training Costs for Executives and Employees[1]			KRW million	48	141	202
Average Annual Education/Training Cost for Employees			KRW million/ Persons	0.1	0.2	0.2
Executives and Employees Education/ Training Ratio	Ratio		%	100	100	100
	Executives and Employees Receiving Education/ Training		Persons	445	799	838
	Total Executives and Employees			445	799	838

1) The value is adjusted from KRW to KRW one million for unification of the units used by each affiliate
2) Prior to merger in 2021, no subject to evaluation

AREA 1.

EXTENDING ACCESS TO HEALTHCARE Nurturing Pharmaceutical/Bio Experts

GC (Holding Company)

Pharmaceutical/Bio Talent Development System

GC (Holding Company)'s Employee Competency Improvement Program focuses on developing future leaders proactively, in consideration of business direction and characteristics. To this end, we focus on the development of employee competencies and their careers, and operate various training programs for our employees, including the leadership capability development and executive strategy workshops.

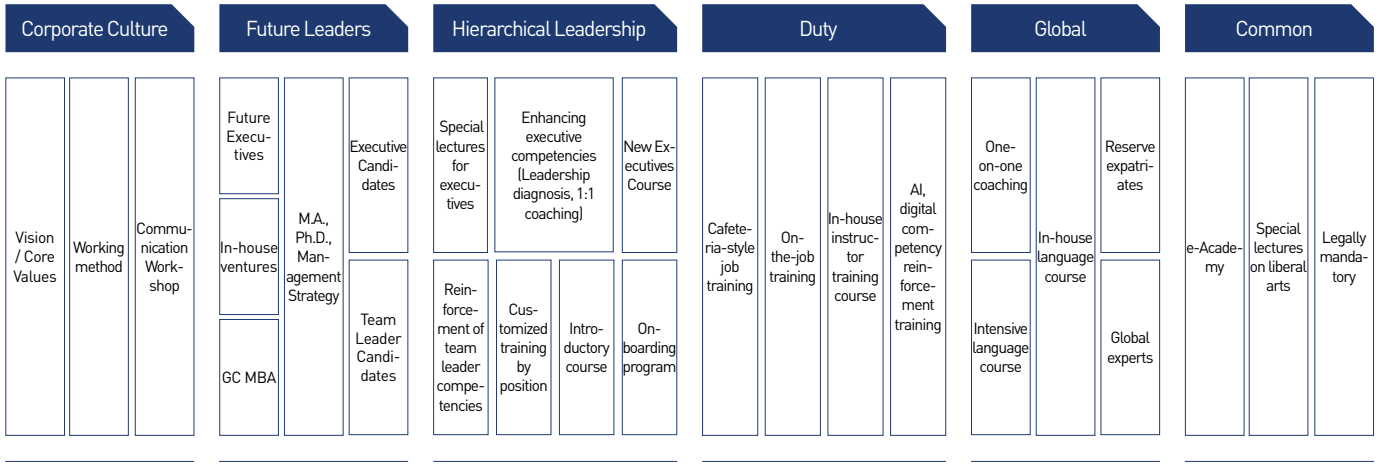
Operation of Degree and Certificate Support System

All members of the GC (Holding Company), including contract workers, are provided with various development programs for each life cycle based on the talent development system to develop their capabilities, careers, and leadership capabilities. In addition, we operate a degree and certificate acquisition support system as well as educational opportunities to develop high-level capabilities through domestic and foreign universities and professional educational institutions for those recommended by excellent personnel.

Leadership Capability Development

Each year, executives and team leaders are diagnosed for competencies and personal characteristics required for their roles. We provide debriefing and coaching sessions on the diagnostic outcomes to support leadership development based on self-evaluation and awareness.

GC(Holding Company)'s Talent Development System



Annual average training hours for executive and employees

36Hours

Annual average cost for executive and employees training

KRW **1.1** million

The number of courses through smart-learning that are open for application

2,900courses(42,000contents)

Trend of Education and Training

Employees Education and Training[1]

Classification			Unit	2020	2021	2022
Total Education/Training Hours for Executives and Employees			Hours	5,301	5,100	5,824
Average Annual Education/Training Hours for Executives and Employees			Hours/ Persons	32.1	34.9	35.7
Average Education/ Training Hours per Executives and Employees	By Gender	Male		32	34	34
		Female		29	32	31
Total Education/Training Costs for Executives and Employees			KRW million	156	162	179
Average Annual Education/Training Cost for Executives and Employees			KRW million/ Persons	0.9	1.1	1.1
Executives and Employees Education/ Training Ratio	Ratio		%	100	100	100
	Executives and Employees Receiving Education/Training		Persons	165	146	163
	Total Executives and Employees			165	146	163

1) Including contract jobs

Effectiveness of Training

Training Effectiveness (Unit : Point)

Classification	Score
Field Application of Training	4.6(Out of 5)

AREA 2. RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

Management Approach

We promote ESG management focusing on GC Biopharma and GC Cell with special attention to our responsibility for customer safety and quality. We recognize the responsibility for the safety and health protection of all stakeholders, including customers and patients, and thoroughly perform risk prevention activities in advance to achieve quality safety assurance and a sustainable supply chain.

Our Approach	- We make quality management our highest priority to fulfill our social responsibility and satisfy all stakeholders.
Negative Impact	- If we fail to thoroughly perform quality management in all processes from the development of drugs, production, warehouse, distribution and sales, this may threaten the safety of customers.
2022 Our Actions	- (GC Biopharma) Conducted pharmaceutical quality tests 180,000 times and completed training on quality management, training on pharmacovigilance/drug information, and training for marketing personnel. Ochang Plant holds GMP certificates from 31 countries, one institution and Hwasun Plant holds GMP certificates from 12 countries, one institution. - (GC Cell) Conducted quality tests for Immuncell-LC with 8,800 batches and provided training on quality management/training and pharmacovigilance. Cell Center holds GMP certified.

Our Approach	- We directly and indirectly invest in the supply chain to extend the sustainability of the industrial ecosystem, and manage supply chain ESG risks for shared growth.
Negative Impact	- Risks in quality, environment and human rights of the supply chain can degrade management, increase investment risks and reduced corporate reliability.
2022 Our Actions	- (GC Biopharma) Securing transparency through regular supply chain ESG assessment and supporting partners to improve their level of sustainability management.

AREA 2. RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

Strengthening Product Quality and Patient Safety

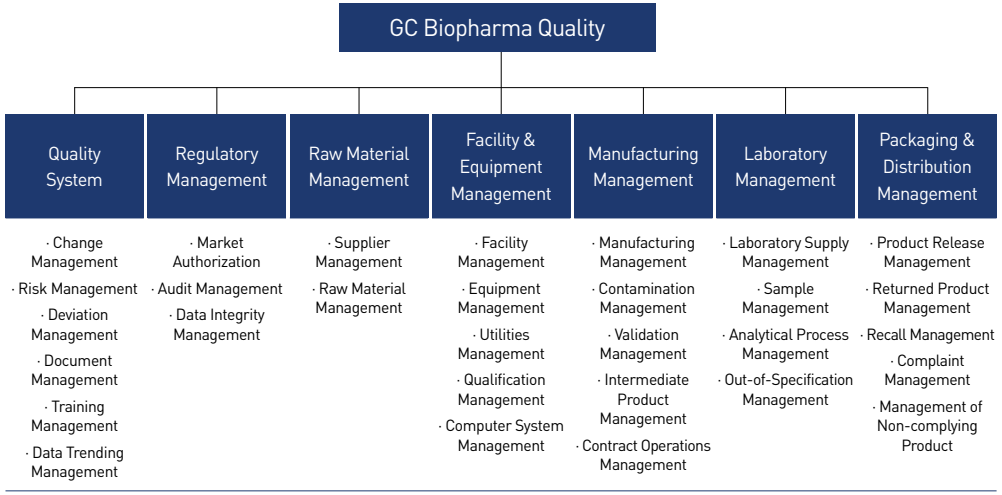
GC Group

Pharmaceutical Quality Management System

It is an essential factor for corporate sustainable growth to provide high quality products and services to customers. In the pharmaceutical industry, quality and safety management of pharmaceuticals is the most important matter since this is directly connected to public safety, health and life. GC Biopharma established the CQM (Corporate Quality Manual), which defines standardized quality levels in an effort to secure the quality system in the production stage for all products and services in regard to quality, efficacy and safety factors and to meet domestic and international regulations. All affiliates in the GC Group comply with this manual to define all responsibilities of quality management when providing products and services.

GC Group's quality strategy is to focus on sustainable quality and regulations by performing oversight and regular checks of the quality system, quality performance and quality management learning culture. The Group learns and implements quality control in order to secure the safety of customers and ensure the overall safety and sustainable supply of products and services. We strictly conform to quality standards and the Group's own policies and procedures to identify, measure, control and maintain superior quality.

GC Biopharma Corporate Quality Policy (CQP)



Quality Policy

We deliver reliable products and services to customers by establishing a quality system that ensures quality, efficiency and safety in compliance with domestic and international regulations.

Quality Management Governance

Those responsible organization for quality management in GC Group operate independently and plan, approve, implement and monitor all activities for all systems.

The quality management organization is responsible for establishing standards to ensure that manufacturing, tests, releases and distribution of all products and services adhere to regulations. The organization dedicates its best efforts to continuously meet and improve GxP[1)] . Furthermore, it helps employees to perform their duty effectively and correctly by providing them adequate and continuous GxP training. It ensures that all employees receive necessary training and it administers job qualifications through job qualification tests to determine whether workers are suitable for relevant jobs and to monitoring effectiveness of training.

1) GxP (Good X Practice) is a good practice that applies to various industries such as in pharmaceutical industry and medical devices industry, and X can be applied with various concepts such as M (Manufacturing), S (Supplying), C (Clinical), and L (Laboratory).

Quality Management Certification (GMP Certification)

Classification	Certificate Type	Pharmaceutical Manufacturing Plant
Ministry of Food and Drug Safety (MFDS)	Pharmaceutical Manufacturing and Quality Control	GC Biopharma (Ochang Plant, Hwasun Plant, Eumseong Plant), GC Cell (Cell Center), GC Wellbeing (Eumseong Plant), GCMS (Eumseong Plant)
	Health Functional Foods	GC Wellbeing (Seongnam Plant)
	In Vitro Diagnostic Medical Devices	GCMS (Eumseong Plant)

AREA 2. RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

Strengthening Product Quality and Patient Safety

GC Biopharma

Quality Management Strategy

GC Biopharma has established its overall quality mission and vision as stated below.

▶ Quality Mission: Customer satisfaction through good pharmaceutical quality

▶ Quality Vision: Leading the healthcare industry through continuously Quality Culture improvement

The Quality Vision will not be achieved without active effort. To meet the diversity of international requirements, GC Biopharma can cooperate with local companies and achieve vision through their expertise and help. Also, investment in talented human resources and advanced technology are essential requirements for sustainable growth. Therefore, GC Biopharma seeks to improve Quality Management Maturity to ensure the quality, effectiveness and safety of products and to establish a high-level Quality Plan according to its global business strategy. In addition, we continue to improve our quality management system that encompassing approximately 30 categories of Quality Policies including R&D, raw materials, process, and distribution with the objective of providing high-quality medicines for patient.

Emergency Planning/Mitigation Control System

GC Biopharma has established its business continuity plan based on the 4M 1E perspective to sustainably provide necessary medicines for patients.

The 4M 1E Perspective

GC Biopharma

- Man: Securing back-up operators
- Materials: Minimizing risks in the supply chain for raw materials by securing dual vendors
- Machinery: Securing manufacturing and analysis equipment and back-up warehouses. Locating the data storage server far from the original data server
- Method: Manufacturing drugs in multiple manufacturing sites inside GC Biopharma or referral to an external company, CMO(contract manufacturing organizations).
- Environment: Prevention of blackouts through UPS (Uninterruptible power supply) and ESS (Energy storage system) and emergency generator etc.

Quality Management System

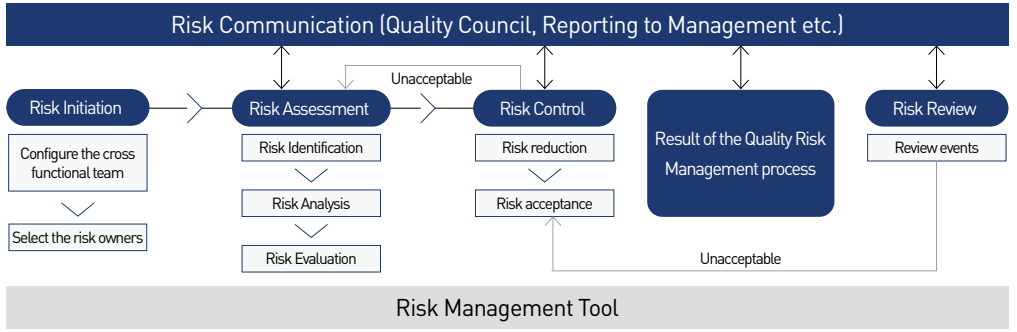
GC Biopharma's quality management system is in accordance with ICH Q10, which covers ISO 9001:2015, classified into the 7 categories shown below. The quality management system maintains all equipment and system during the GMP production. EDMS (Electronic Document Management System) is operation to create, approve and archive GMP documents. Also, regular inspections are conducted on the overall production process and quality control by regulatory authorities in domestic and overseas exporting countries.

Scope of Quality Management

GC Biopharma

- Quality System: Change management, risk management, deviation management, document management, training management and data trending management
- Regulatory Management: Market authorization, audit management and data integrity management
- Raw Material Management: Supplier management, raw material management
- Facility & Equipment Management: Facility management, equipment management, utilities management, qualification management and computer system management
- Manufacturing Management: management, contamination management, validation management, intermediate product management, contract operation management
- Laboratory Management: Laboratory supply management, sample management, analytical process management and out-of-specification management
- Packaging & Distribution Management: Product release management, returned products management, recall management, complaint management and management of non-complying product

Risk Management Process for the Quality Management System



AREA 2.

RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

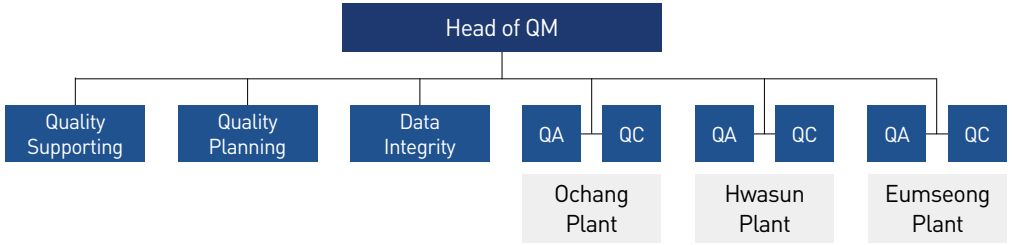
Strengthening Product Quality and Patient Safety

GC Biopharma

Quality Management Organization

All quality management are independent from production organizations and free from intervention and profit-interests in GC Biopharma, and they make the final decisions in accordance with GMP regulations and such decisions cannot be dismissed by any other organization.
Quality assurance (QA) and quality control (QC) organizations are separated by their functions. QA decides whether to release raw materials, in-process materials, bulk products and drug products, reviews and approves all processes and records. We perform trend analyses for aseptic process facilities based on incubation results though environmental monitoring. QC evaluates the appropriateness of raw materials and products, and creates data to assess whether a manufacturing process has been performed well to meet specifications and standards. QC creates data to assess whether a manufacturing process has been performed well to meet specifications and standards.
GC Biopharma employs quality personnel with expertise in biosciences and biotechnology, more than 10% of whom have M.A and Ph.D. degrees, to provide safe medicines for patients. QC conducts quality control testing on all samples throughout the production process, including raw material, in-process materials, bulk products, drug products, and stability test samples at its own facility. Also we identify and mitigate any risk associated with the quality for the entire life cycle of a product from development, market approval, release and distribution.

GC Biopharma Quality Management Organization



Quality Management Certifications (GMP Certifications)

Based on the regulations and guidance of the Korea Ministry of Food and Drug Safety (MSDS), WHO (World Health Organization), the U.S. Food and Drug Administration (FDA), European Medicine Agency (EMA), Japan Pharmaceutical and Medical Devices Agency (PMDA), and China National Medical Products Administration (NMPA), we fulfill our mission and responsibilities in ushering in healthier lives of human kind by development and production of high-quality, effective and safe drugs.

Domestic and Foreign Regulations on Pharmaceutical Manufacturing

Domestic	Overseas
· Pharmaceutical Affairs Act · Regulation on the Safety of Pharmaceuticals, etc. · Bioethics and Safety Act · Personal Information Protection Act · Occupational Safety and Health Act · Serious Accidents Punishment Act	· U.S.: The Food, Drug, and Cosmetic Act, the Code of Federal Regulations · EU: European Medicine Agency Pharmacovigilance legislation (Regulation (EU) No 1235/2010, Regulation (EU) No 1027/2012, etc.) · ICH (The International Council for Harmonization of Technical Requirements for Pharmaceuticals for Humans) · World Health Organization Guidelines · GMP (Good Manufacturing Practice) regulations of each country and enforcement decrees, enforcement rules, public notices, guidelines, etc.

Foreign GMP Certifications

Classification	Type of Certification	Countries and Institution
Ochang Plant	Drug products	31 Countries: Dominican Republic, Russia, Malaysia, Mongolia, Mexico, Vietnam, Belarus, Bolivia, Brazil, Syria, Argentina, Algeria, Uruguay, Iraq, Iran, Egypt, India, Indonesia, Japan, China, Kazakhstan, Cambodia, Kenya, Colombia, Thailand, Tunisia, Pakistan, Paraguay, Peru, Philippines, Turkey one Institution: WHO
Hwasun Plant	Drug products	12 Countries: Taiwan, Malaysia, Vietnam, Ukraine, Iran, Indonesia, Thailand, Colombia, Philippines, Brazil, Argentina, Saudi Arabia one Institution: WHO

AREA 2. RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

Strengthening Product Quality and Patient Safety

GC Biopharma

Conducting Quality Tests on Products to Quality Safety

GC Biopharma conducts quality control testing on all samples throughout the production process, including raw material, in-process materials, bulk products, drug products, and stability test samples at its own facility. Also we identify and mitigate any risk associated with the quality for the entire life cycle of a product from development, market approval, release and distribution.
We secure analysis method and data reliability through Analytical Method Validation and ensure data integrity through LIMS (Laboratory Information Management System).
We have performed tests 180,000 times, with 1,800 of test methods and 800 kinds of testing equipment, and maintained the OOS at less than 0.05%.
Test methods can be categorized into physicochemical tests, biochemistry tests, instrumental analyses, and microbial and animal tests. Physicochemical tests are performed in accordance with general tests in pharmacopoeia, national regulations such as USP, EP and KP etc., and biochemistry tests are performed with product-specific protein analysis and antigen analysis, etc..
Test facilities and equipment including constant temperature/humidity chambers use in stability studies, are classified/validated in accordance with USP 1058(Analytical Instrument Qualification) and continuously monitored to maintain an optimal condition for testing. We also provide safe medicines for patients by evaluating elemental impurities in products in accordance with ICH.

Safety Tests for Products (Unit : Times)

Classification		2020	2021	2022
QC Test	Number of Tests		Open Since 2022	180,000

Impact Assessments[1] of Products and Services

Classification		Unit	2020	2021	2022
Impact Assessment on Health & Safety	Ratio	%	100	100	100
	The Number of Products That Completed Impact Assessments on Health & Safety	EA	254	239	213
	Total Number of Products/Services		254	239	213

1) Biological products are managed through the quality organization's quality assessment and assurance process, and then the product shipment approval process after passing KFDA national inspection. General products are managed by the quality organization's quality assessment, assurance and shipment approval process.

Quality Management Training

GC Biopharma's employees (including regular employees and interns) and the employees of its partners (including contract workers, consultants, etc.) complete a course including important training for each site and mandatory GMP training after completing the introductory training. After that, they obtain qualifications through job training to perform their duties. Employees are also responsible for maintaining 100% of the qualifications required for their job. The learning status of employees is monitored by the employees themselves, their supervisors and the GMP system and if they cannot complete training, they are restricted from performing work since they are deprived of GMP qualification.
Training is conducted in various forms, including document reading, quizzes, on-the-job training, e-learning and training guided by lecturers. New employee training, periodic training and process change training programs help employees perform their duties properly. We also develop an annual training plan to define/develop employee capabilities.
As of 2022, there were 5,200 courses for approximately 500 major job positions, which are managed through the Learning Management System. Records and results of all training programs are archived to use as an evidence for regulatory and client audit.

GMP Trainings (Annual) in 2022

Title	Training Target	Target	No. of Course Completions	Completion Rate
GMP Regulations	Employees and Partners' Employees	2,814 Persons	2,814 Persons	100%
Quality System		1,316 Persons	1,316 Persons	100%
Data Integrity		1,878 Persons	1,878 Persons	100%
Sampling		1,299 Persons	1,299 Persons	100%
Manufacturing Process		247 Persons	247 Persons	100%
Sanitation		336 Persons	336 Persons	100%
Microbiology		1,116 Persons	1,116 Persons	100%
Aseptic Process		336 Persons	336 Persons	100%
Job Training in Each Department		7,109 Persons	7,109 Persons	100%

AREA 2. RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

Strengthening Product Quality and Patient Safety

GC Biopharma

Good Distribution Practice (GDP)

It is essential to quality control not only in production but also in distribution to provide safe medicines for patients. In particular, biological drugs are sensitive to temperature and require more attention and therefore we perform validations mandatorily. GC Biopharma delivers medicines to patients safely based on know-how accumulated over four decades about the Global Cold Chain, establishing its own logistic centers and system. We have redundancy of logistics warehouses in case of emergency, and real-time conditions in the logistics chain including temperature is monitored through our integrated control system based on ISO27001(Information Protection Management System). We were selected as national logistic provider in 2022 to take the lead in overcoming the environmental difficulties caused by pandemics.

PV System

GC Biopharma maintains a PV system, including a safety database, based on global standards. We also maintain the PV System Master File (PSMF) in accordance with the European GVP (Good Pharmacovigilance Practice). GC Biopharma established an advanced PV system in 2016 by adopting the Oracle Argus Safety Database, upgraded it to the latest version and performed suitability and verification processes for requirements and performance. Our verified safety database adheres to ICH E2B (R3) and supports a smooth and speedy process for submitting each stability report.

Organization Specific to Pharmacovigilance

GC Biopharma has its own organization specifically dedicated to pharmacovigilance, which monitors and analyzes safety information over the entire life cycle from drug development to marketing after approval.

PV Agreements

GC Biopharma signed agreements for exchanging safety information/PV with domestic and overseas partners who may have been aware of our safety information and to collect safety data from all over the world. We check the timely delivery of safety information and compliance with government reporting through regular reconciliations with partners and we regularly check the pharmacovigilance in each country. We also enhance regulatory intelligence by obtaining information from regulations on PV in each country through overseas partners to respond to the requests of overseas regulatory affairs in a timely manner. In cases where we submit individual safety information reports, recent safety reports and risk management plan for drugs etc., GC Biopharma provides relevant data to partners that are global authorizers of products to comply with the regulations in each country. In cases where there are safety issues, we support overseas partners to take necessary measures in a timely manner.

PV Audits

GC Biopharma performs internal audits regularly to assurance the high-quality of PV. In cases where there is room for improvement, we analyze root causes and perform corrections, prevention and maintenance measures and establish appropriate processes and systems for PV.

Benefit and Risk Assessments

GC Biopharma searches for clues based on the frequency and predictability of safety information accumulated in the safety database, analyzes and evaluates a product's benefits and risks regularly and reports the latest comprehensive safety report to regulatory affairs. We also do our utmost to ensure the safe use of products by establishing and implementing risk management plans designed to minimize product risks.

AREA 2.

RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

Strengthening Product Quality and Patient Safety

GC Biopharma

Safety Information Management

GC Biopharma collects safety information through an unplanned collecting system, including voluntary reports, academic papers and governmental reports, or through a planned collecting system including non-voluntary or observed research, etc. in order to ensure the safe use of its own drugs, vaccines and medical devices. The PV audit team manages the routes for collecting safety information and performs regular reconciliations to ensure that all information is sent to the team. All collected data are accumulated in the safety database through standardized collecting and processing procedures, which includes inputting data, comparison with original data, medical coding, medical assessment and final approval by the safety manager.

PV Training

All employees of GC Biopharma complete PV training within two months of joining the company and complete refresher training sessions more than once a year, and fulfill their duties to report to PV team once they recognize safety information. Also, those whose jobs are highly relevant to safety information may undergo additional PV Training in non-contact or contact forms, to ensure that data can be fully reported to the PV team.

Policy on the Responsible Marketing of Medicines

GC Biopharma provides medicinal information based on science and complies with all relevant regulations. This policy is stipulated in the Code of Conduct and Code of interaction with Healthcare professionals (HCP).

Audit Process for the Marketing for Medicines

Training for Personnel in Charge of Marketing Medicines

GC Biopharma conducts interaction training with HCP once a year for personnel in sales, marketing, etc. in contact with HCP.

Violation of Relevant Marketing Regulations on Products, Services, Labelling etc.

Classification		Unit	2020	2021	2022
Violation	The Number of Actions That Led To Raids, Seizures, Arrests or Criminal Charges Involving Counterfeit Drugs	Cases	0	0	0
	Total Monetary Losses Due To Lawsuits Related To False Marketing	KRW Million	0	0	0
	Cases Where A Fine Or Punishment Was Imposed for Violating Regulations	Cases	0	0	0
	The Number of Warnings Due To the Violation of Regulations		0	0	0
	The Number of Violations of The Voluntary Code		0	4[1)]	1[2)]

1)This can be found in the announcement on recall of medicines/medical devices (GC Biopharma website) (Target: Woohwangchungsimwon Suspension, Cell-culture Japanese Encephalitis Vaccine Inj. Neo Cande, Hyalobarrier Gel Endo)
2) This can be found in the announcement on the collection of medicines/medical devices (GC Website) (Target: Tirano Gold Plus Chewable Tab.)

AREA 2.

RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

Strengthening Product Quality and Patient Safety

GC Cell

Quality Management Strategy

In the manufacturing stage, GC Cell conducts quality control activities encompassing all process, including facilities and equipment, workers, resource management, sampling, test results, product release, and complaints processing, and GC Cell ensures quality and safety in accordance with the Advanced Biopharmaceutical Manufacturing and Quality Control Standards and Pharmaceutical Manufacturing and Quality Control Standards.

Quality Management System

GMP document hierarchy consists of the Quality Manual, Quality Standards, Managing Standard Operation Procedures and Working Standard Operation Procedures.

Scope of Quality Management

GC Cell

- Quality System: Change control, risk control, deviation control, document control, job and training control and trend analysis control
- Regulatory Management: Approval control, inspection and data integrity control
- Raw Material Management: Supplier control, raw material control
- Facility & Equipment Management: Facility control, equipment control, utility control, qualification control and computer system control
- Manufacturing Management: Contamination control, validation control, half product/finished product control, consignment control
- Laboratory Management: Testing tools control, sample control, test control and OOS control
- Packaging & Distribution Management: Release control, returned product control, return control, complaint control and disinfected product control

Quality Management Organization

GC Cells implements its quality management system by appointing QA personnel experienced throughout R&D, manufacturing and distribution in accordance with GxP[1].

1) GxP (Good X Practice) is a good practice that applies to various industries such as in pharmaceutical industry and medical devices industry, and X can be applied with various concepts such as M (Manufacturing), S (Supplying),C (Clinical), and L (Laboratory).

Quality Management Certifications (GMP Certifications)

GC Cell's manufacturing facilities for investigational product and Immuncell-LC are managed to the effectiveness, safety and quality of drug in accordance with the regulations and guidelines of Korea ministry of food and drug safety(MFDS). We also adhere to the guidelines of U.S FDA (Food and Drug Administration) and enhance our quality levels through quality system assessment and audits by clients.

ISO9001 Certifications

Classification		Unit	2020	2021	2022
Acquisition of Certification	Ratio	%	100	100	100
	Number of Worksites of Acquisition of Certification[1]	Places	1	1	1
	Number of Worksites Required for Acquisition of Certification		1	1	1

1) Biologistics of GC Cell

Emergency Planning/Mitigation Control System

GC Cell establishes a system for preparing and responding to emergency situations, and annually plans and executes simulation test scenarios for drills on emergency situations such as fires, leakage of chemical materials. In 2022, we performed simulation tests for fire conditions, and then revised the Code of Conduct and other resources with reflect the collected feedback.

AREA 2. RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

Strengthening Product Quality and Patient Safety

GC Cell

Performing Quality Tests on Products to Quality Safety

GC Cell is making efforts to ensure quality safety so that consumers can use medicines safely by updating risk management plans and safety reports on changes through frequent checks and inspections of safety information.
We are provided with necessary raw materials by our partners, and these materials are already approved and verified and managed. We only input approved raw materials and materials which have passed quality tests before the incoming raw materials arrive at manufacturing sites. We manage through quality tests so that only approved raw materials can be put into the manufacturing process.
As of 2022, 8,800 batches of Immuncell-LC were released (monthly average of 733 batches) and we confirmed whether the product quality on each batch were appropriate, then approved their release.

Impact Assessments of Products and Services

Classification		Unit	2020[1)]	2021	2022
Impact Assessment on Health Safety	Ratio	%	N/A	100	100
	The Number of Products That Completed Impact Assessments on Health Safety	EA	N/A	1	1
	Total Number of Products/Services		N/A	1	1

1) Prior to merger in 2021, no subject to evaluation

Quality Management Training

GC Cell performs training on the manufacturing and quality control of drug, GMP operations and regulations, the management of data integrity, etc., in accordance with the mandatory annual training plan for all employees, in order to strengthen manufacturing capacities and GMP operations and management. GC Cell also performs theoretical evaluations after training completion. Other than the annual common essential training, we conduct regular trainings, occasional training, trainings on precautions (behavior guidelines) for aseptic processing, job training for contract workers and new employee to make sure that we control manufacturing and quality without any issues. We check and evaluate the appropriateness of employees who perform special duties to ensure that they can perform their jobs well.

GMP Trainings (Unit : Times)

Classification	2020	2021	2022
Regular Training for All Employees	10	4	6
Regular Training by Department	-	37	37
Training for New Employees	18	32	16
Job Training	106	156	230
Change Control Training	190	462	592
Other Training	172	237	420

AREA 2.

RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

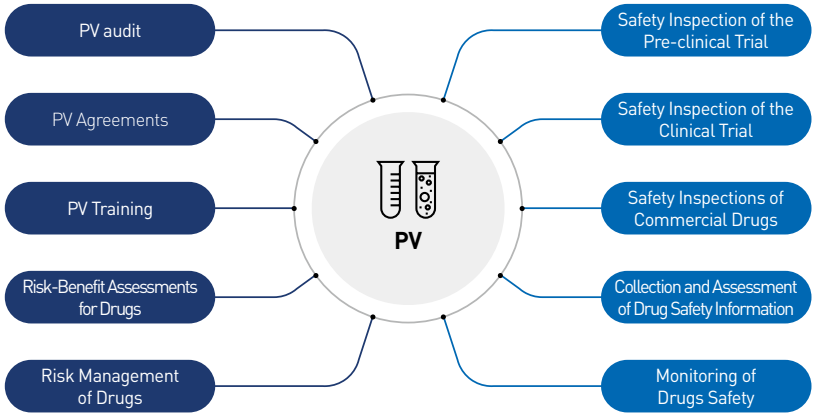
Strengthening Product Quality and Patient Safety

GC Cell

PV System

GC Cell adheres to rules for reporting abnormal events before and after commercialization and clinical trials to regulatory affairs in accordance with their PV (pharmacovigilance). We are managing drug safety information with a more systematic system by continuously enacting and revising SOPs. In addition, we reinforce procedures for the PV system and PV quality management as required by domestic and global regulations and comply with European GVP (Good Pharmacovigilance Practice) and ICH guidelines.
GC Cell is considering measures to introduce the Oracle Argus Safety Database, which is the most widely used in accordance with global standards and plans, to smoothly implement the reporting of individual safety reports and submissions to regulatory bodies.

Safety Inspections of Entire Life Cycle of Medicines



Organization specific to Pharmacovigilance

We operate a PV organization which monitors, analyze and evaluates safety information during the entire life cycles, from clinical drugs investigational products to medicines released in market after approval.

Safety Information Management

To ensure the safe use of drugs such as anticancer drugs, GC Cell collects safety information through an unplanned collection system, including voluntary reporting, literature, and government agency reports, or through a planned collection system including non-voluntary or observed research. In addition, it is easy to report adverse event of investigational products and commercial drugs under development through our own safety information reporting system, and we manage meaningful information for safety analysis through risk-benefit evaluations of collected safety information.

PV Training

GC Cell annually conducts PV training for all employees. GC Cell's new PV training program is designed to encourage all employees to learn reporting procedures for the safety information of drugs and the safety information of GC Cell's pharmaceutical products.

Violation of Relevant Marketing Regulations on Products, Services, Labelling etc.

Classification		Unit	2020	2021	2022
Violation	The Number of Actions that Led to Raids, Seizures, Arrests or Criminal Charges Involving Counterfeit Drugs	Cases	0	0	0
	Total Monetary Losses due to Lawsuits Related to False Marketing	KRW million	0	0	0
	Cases Where a Fine or Punishment was Imposed for Violating Regulations	Cases	0	0	1[1)]
	The Number of Warnings due to the Violation of Regulations		0	0	0
	The Number of Violations of the Voluntary Code		0	0	0

1) Administrative disposition due to non-compliance with quality specification(sterility test) ; 'Non-submission of Self-recall/Disposal' and 'Non-compliance with Worker Standards'.

AREA 2. RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

Supply Chain ESG Risk Management

GC Group

Partners' Purchasing Policy: GC Green Book

To uphold responsible supply chain practices, GC Group established the 'GC Green Book' on GC Purchase Regulations, which includes the common goals and principles set by PSCI and published policies and regulations on purchasing activities for partners of all affiliates. Through this, we expressed our commitment to co-prosperity with our partners through proper 'Buyer's Attitudes,' and we defined the code of conduct that our partners should follow through the "Code of Conduct of Partners." This effort helps us to perform management in pursuance of co-prosperity with partners and to establish and maintain sustainable relationships with partners based on fair deals and strengthened competence.

GC Green Book

- GC practices a transparent management ideology that establishes a fair and transparent trading culture, and it seeks to develop together with all partners with empathy, consideration, and co-prosperity.
- GC discovers and fosters strategic partners with the potential and competitiveness to grow together with GC. To ensure that equal opportunities for participation are guaranteed, partners shall be selected based on the principle of fairness and transparency, and GC ethical norms and fair trade laws shall be strictly followed.

GC Purchasing Regulations

1. Mission
   - Sustainable profits for GC through co-growth with partners
2. Vision
   - Contribution to organizational goals to become a global leader
3. Core Value
   - Clean and transparent deals based on basic principles
   - Improving competitiveness and purchasing capability
4. Code of Conduct
   - Ethical Purchasing: Establishing fair trade based on practicing transparency & integrity
   - Win-win Purchasing: Growing together with business partners to create social value
   - Value Purchasing: Practical rather than formal, practical rather than reporting, practical rather than justification

Classification	Contents
ESG Supply Chain Management	Advance Purchasing Policy and Management System for Partners Improving the supply chain's competitiveness through ESG performance evaluations of partners
Co-growth With Partners	Regularly listening to VOC through meetings with partners Minimizing potential risks by sharing the code of conduct with partners
Eco-friendly Purchasing	Identifying environmental harmful factors in advance and sharing them with stakeholders Prioritizing the use of eco-friendly materials or products made by eco-friendly companies

Compliance with the Nagoya Protocol [1]

GC Group supports the Nagoya Protocol, which seeks to preserve biodiversity for prevent ecosystem destruction, and share the benefits arising from the use of biological resources in relation to the selection and use of natural ingredients used in pharmaceutical manufacturing. GC complies with the Republic of Korea's Act on Access to and Utilization of Genetic Resources and Benefit-sharing.

1) International convention on the sharing of benefits from the utilization of biological resources. The main contents include access to genetic resources and fair and equitable sharing of benefits arising from the use of genetic resources (Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, ABS)

Supply Chain Governance

Each affiliate's purchasing and quality departments are responsible for ESG risk management through supply chain selection and assessment, and major risks are reported to each affiliate's board of directors in the event of a significant risk.

Major Area	Purchasing Department	Quality Department
Selection of the Supply Chain	· Performing evaluations of partners once they are registered · Changes in the type of partners · Approval of the registration of partners · Provision of written audit documents on partners	· Performing quality audit of partners · Provision of evaluation results
Assessment of the Supply Chain	·Management of the partners' performance and comprehensive assessment in perspective of QCDRM ·Comprehensive assessment and final decisions on accepting/expelling partners ·Guidance on improving partners' competence	· Assessment from the quality perspective and responses to GMP audits · Responses to quality issues and guidance on solving quality issues

AREA 2. RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY Supply Chain ESG Risk Management

GC (Holding Company)

Revision of GC Purchasing Policy

GC (Holding Company) is preparing a revision of the GC Green Book, which updates partner assessment and management standards, the scope of purchasing activities, material types of affiliates, and purchasing regulations that reflect ESG management assessment items. The revisions will be announced in September 2023.

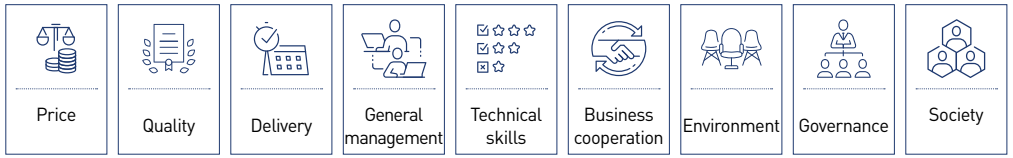
GC (Holding Company) Purchasing Guidelines

GC
- Ethical compliance
- Fair trade
- Sustainable purchasing

Assessment and Management of the Supply Chain

GC (Holding Company) established a fair and consistent operating system for selecting, supporting, and compensating partners through the regular assessment of partners based on in-house evaluation standards. The assessment is conducted on 9 items, and environmental safety inspections and support activities for partners, consignors and partners are conducted. We encourage continuous improvement with partners throughout periodic inspection and assessment process, and provide support in various ways to achieve co-prosperity with partners.
We control environmental risks through ESG purchasing regulations in the supply chain environment sector. We suggest a labor-related items especially for partners in our "Human Rights and Code of Conduct" to encourage compliance by partners. We implement a more advanced system for evaluating partners by covering quality, environmental and social risks which may be very critical issues directly related to GC affiliates' product and service reputation risks.

Items for Supply Chain ESG Risk Evaluation



Management of Partners' ESG Activities

We will develop ESG assessment system to systematically evaluate ESG risk and trend to supply highly-reliable products with minimized ESG risks such as environment impact, quality, safety, human rights and ethics etc.

GC Biopharma

Purchasing policy

GC Biopharma declared GC Biopharma's policy and regulations on procurement through its 'Green Book' in 2010 and its 'Purchasing Guidelines 2.0' for responsible supply chain practices.
Through this framework, we declared our willingness to achieve legal compliance, social responsibility, green purchasing, fair trade and co-prosperity with partners. We hold an annual Partner's Day to communicate with partners, perform training on fair trade law and disseminate our action guidelines. Through these efforts, we implement fair trade by maintaining sustainable relations with partners and support their competence for co-growth management and fair trade. We have also agreed to and follow the PSCI1) principles (on ethics, labor, health & safety, environment management systems).

1) PSCI (Pharmaceutical Supply Chain Initiative): Non-profit organization for the sustainability of the global healthcare supply chain

Standards for Eco-friendly Procurement

GC Biopharma has established and operated standards for the eco-friendly procurement of eco-friendly products and services since 2023. We contribute to reducing the environmental impact on the supply chain by using FSC-certified materials and purchasing government-certified green products.

Korea Eco-Label · Good Recycled · CO2 Carbon Footprint KOREA · FSC

AREA 2. RESPONSIBILITY FOR CUSTOMER SAFETY AND QUALITY

Supply Chain ESG Risk Management

GC Biopharma

Assessment and Management of the Supply Chain

The assessment is conducted regularly on price, quality, delivery, production, general management, technical skills, business cooperation, and manufacturing environment for partners. Depending on the results, further environmental safety inspections and support activities for suppliers, consignors, and partners are conducted. Quality areas of the evaluation assessment items those are directly related to the quality of the medicine are managed by quality management organization. Quality management policy of supplier is presented in accordance with the Corporate Quality Manual (CQM), and supplier evaluation assessment system is established through supplier management and supplier due diligence.
The assessment includes quality systems, facilities and building management systems, raw material systems, production systems, packaging and labeling systems, and laboratory management systems. We perform initial qualification to check whether the quality levels of suppliers are adequate. We continuously monitor qualification through re-evaluations, periodic audits, test evaluations, quality history reviews, notifications of changes, quality agreements and control over deviations by suppliers. Through these activities, we encourage the continuous improvement of suppliers, and provide various supports for developing their capabilities to ensure co-prosperity with partners.

Support for Spreading Supply Chain ESG Management

GC Biopharma manages and supervises sustainability of partners with its quality control policy and audit process for entire production stage. For partners to follow GMP(Good Manufacturing Practice) to improve their awareness, we manage and supervise the progress of self-training or not etc. regularly. Also, partners' employees are trained regularly according to annual training plan just like GC Biopharma employees. In accordance with ESG purchasing regulations, we make an effort to spread ESG management by providing direction to partners and creating ESG perspective assessment items.

Suppliers already applying with ESG code of conduct

Classification	Unit	2020	2021	2022
Ratio	%	100	100	100
The Number of Partners	Places	165	169	167
The Total Number of Partners		165	169	167

Supplier Evaluation Process

Initial Assessment	Regular Assessment	For-cause Assessment	Corrective Action and Improvement, Monitoring
· Performing the qualification of new suppliers	· Regular re-assessments on partners that are already approved	· In case where serious quality defects or complaints are issued caused by partners' products, for-cause assessment are performed for applicable partners	· Sharing points that require improvement after reviews · Encouraging continuous improvement and performing training

GC Cell

Assessment and Management of the Supply Chain

GC Cell evaluates and checks whether all partners of raw materials incoming to GMP follow documented procedures in accordance with manufacturing and quality control standards. We manage raw materials that require GMP compliance entire production stage, and manage supplier's quality agreements.
We establish a plan for assessment evaluations for the following year based on audit results, monitoring of partner's and the results of annual evaluations, etc. every December and conduct partner assessment.

Through face-to-face due diligence with partners, if violations of relevant laws and regulations or behaviors that cause defects in product quality and service are discovered, we immediately point them out and request supplementation. If face-to-face due diligence is difficult, written due diligence is conducted by reviewing the quality system self-evaluation table, supplements and changes from previous due diligence, etc. We categorize factors as Critical, Major, Minor and request improvements. We evaluate whether partners implement improvement on specific points, classifying the results as approved, partially approved and rejected.

We sign quality agreements with partners and define the roles and responsibilities of partners' quality organizations. Also, we follow evaluation procedures for safety and health and the environment when we select partners, check whether they follow relevant safety health and environment relevant laws and GC Cell's procedures once in a half year to manage our partners properly.

AREA 3. CORPORATE ETHICS AND COMPLIANCE

Management Approach

GC Group practices our core values of 'Transparency & Integrity' with belief that the being righteous is our only path, and the awareness that the integrity of all executives and employees is the best system. We promise to strengthen our data integrity and maintain our ethical practices reflecting our respect for life to ensure fairness, transparency, and reliability.

Our Approach	- We established 'Ethical Standards' as the standard for correct behavior and value judgements that all executives and employees must comply, and continuously strive this to comply. And we prevent risks by spreading a sustainable ethical management culture and performing audits.
Positive Impact	- Transparent and Integrity ethical management including the anti-bribery, anti-corruption etc. contributes to sustainability and trust between stakeholders and helps to maintain balance between economical and social profit among various stakeholders.
2022 Our Actions	- (GC (Holding Company) Performed seven regular audits and adopted improvements and performed anti-corruption training. - (GC Biopharma) Conducted the 'Ethics Day' campaign, certified for ISO37301(Compliance management system) in Dec, 2022, and conducted training on ethics, anti-corruption, and compliance . - (GC Cell) Encourage executives and employees interest by publishing the CP letter, certified ISO37001(Anti-bribery management systems) in Apr, 2023., and performed anti-corruption/compliance training.

Our Approach	- We work to ensure transparency and reliability of regulatory compliance and research results by having a dedicated supervisory department and monitoring at all times to protect the safety and rights of humans, animals and the environment in the process of drug development.
Negative Impact	- Violations of research ethics during the drug development process has a direct negative impact on human rights, animal rights and public health and the development of excellent medicines.
2022 Our Actions	- (GC Biopharma, GC Cell) Institutional Biosafety Committee (IBC), Institutional Animal Care and Use Committee (IACUC). - (GC Biopharma) Maintained the certification of Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC).

AREA 3. CORPORATE ETHICS AND COMPLIANCE

Prevention of Unethical and Corrupt Behaviors

GC Group

Ethical Management Policy: GC Ethical Standards

GC Group has established "Ethical Standards Shortcut" for correct behavior and valuation that all executives and employees, third parties including partners, agents, temporary workers and subcontractors must comply with, and promotes various activities based on them.

All executives and employees in the GC Group sign the "Pledge for Ethics" annually to better understand the corporate ethics code and participate in following the corporate direction for ethical management.

Pledge for Ethics

Whistleblowing System

GC Group operates a reporting system for unethical behavior to reinforce ethical management. Stakeholders such as executives and employees and partners can use the "Ethical Management Information Shortcut" channel on the website without any restrictions on time and place. The unethical actions involving bribery, solicitation of personnel, cheating, sexual harassment and other harassment in the workplace, power abuse, and unfair behavior are subject to reporting. can be reported. The reports can be made anonymously, and the reporter's identity is protected in accordance with our internal reporting system operation regulations Shortcut

Reporting Process

Reporting/Reception (Using the Reporting Channel on the Website)	Review of Reports, and Decisions on Investigation	Investigation and Response To Unethical Actions	Follow-up Actions
· Anonymous reporting · Reporting channel - Red-whistleblowing center Shortcut - Counselling center	· GC (Holding Company): audit team	· Improvement order or implementing legal actions through a judicial institution to relevant executives and employees depending on the agenda · Replying with results back to the board in the reporting channel	· Training and monitoring for all executives and employees to prevention of recurrence

Spreading the Culture of Ethical Management

GC Group conducts training and promotional activities for ethical management by posting training materials for ethical management on the intranet used with its affiliates including GC (Holding Company), GC Biopharma and GC Cells.

GC (Holding Company)

Ethical Management Policy

GC (Holding Company) has established the GC Ethical Standards and the Charter of Human Rights to promote ethical awareness among executives and employees.

GC (Holding Company) Ethical Standards and Charter of Human Rights

1. Customer Respect We dedicate our best to achieve customer happiness and satisfaction.
2. Protection of Corporate and Investors We enhance corporate value and protect stockholders and investors.
3. Respect for Executives and Employees We encourage the individual growth of executives and employees and contribute to improving their quality of life.
4. Fair Trade We respect the free competitive market order and take the lead in promoting transparency on the pharmaceutical industry.
5. Anti-Corruption We foster a integrity corporate culture by preventing corrupt actions such as bribery and providing favors.
6. Environmental Preservation We do our best to protect the environment and comply with relevant legislations.
7. Social Responsibility We contribute to local community growth by fulfilling our social responsibilities.

GC's Charter of Human Rights We respect the human rights of all stakeholders including executives and employees in all sales activities.

Ethical Management Organization

GC (Holding Company) operates an audit team organization dedicated to ethical management. We are doing our best to establish a culture of ethics and compliance management, and reports activities related to compliance support and ISO37301 (Compliance Management System) certification to the Board of Directors.

Protection of Reporters

GC (Holding Company) receives reports on matters such as unethical actions and violations of law through the internal reporting system and handle these matters in accordance with its procedure. The internal reporting system ensures the anonymity and takes measures to receive legal protection of internal and external reporters by entrusting third-party contractor and operating an IP tracking blocking system.

AREA 3.

CORPORATE ETHICS AND COMPLIANCE

Prevention of Unethical and Corrupt Behaviors

GC (Holding Company)

Whistleblowing System

GC (Holding Company) received a total of zero case reports in 2022.

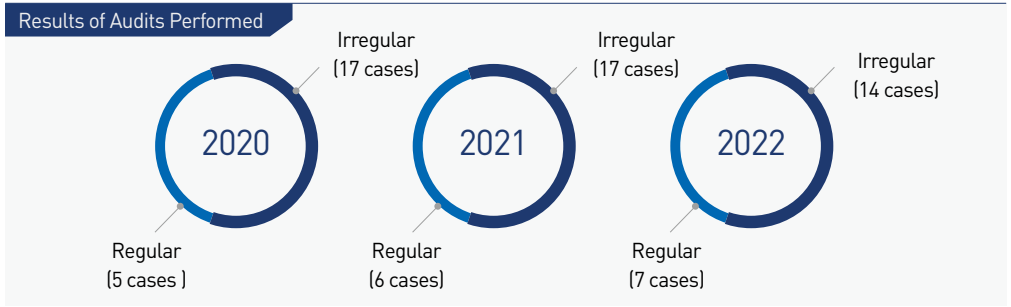
Reports in Whistleblowing System[1)]

Classification		Unit	2020	2021	2022
Reports	Treatment Rate	%	0	0	0
	Number of Reports	Cases	0	0	0
	Number of Treatment		0	0	0

1) Including the number of reports related to ethical management and human rights

Inspecting Ethical Awareness of Executives and Employees and Internal Audit

Regular and irregular ethical awareness inspection are conducted every year to improvement, and issues that require further action are resolved through consultation with related departments. Regular checks on ethics occur together when the audit team performs regular audits for compliance and ethical management. In 2022, a total of 7 regular audits (one case each in Feb, Mar, May, Aug, Sep and two cases in Dec) were conducted.



Spreading the Culture of Ethical Management

GC (Holding Company) conducts various promotional activities to foster the culture of ethical management. Programs that include quizzes, ethical flower pot events, promotional material distribution, poster production and internal reporting system promotion makes it easier for executives and employees to engage in ethical management.

GC Biopharma

Ethical Management Policy

GC Biopharma established 8 Ethical Code of the Conduct for customers, companies and investors, executives and employees, partners and local communities based on the GC Ethical Standards and Charter of Human Rights. We also revised and distributed the 'Policy for Anti-corruption', 'Policy on Gifts, Hospitality, and Entertainment', 'Policy for Conflicts of Interest' and 'Policy for Managing 3rd Parties' including Code of Conduct to employees and stakeholders in April 2023. We also constantly perform training on the Code of Conduct including examples and Q&A for better understanding.

GC Biopharma's Ethical Code of the Conduct

Ethical Management Organization

GC Biopharma's the Board of Director appointed compliance officer (persons responsible for anti-corruption measures and compliance) and compliance supporter in order to practice ethical management and efficiently operate the company's compliance policy and GC Biopharma report whether to implement regular ethics and compliance training and compliance with compliance control standards to the Board of Director annually. We also operate a compliance team which performs actual ethical management activities to assist compliance officer and compliance supporters under the direct supervision of the CEO.

Protection of Reporters

GC Biopharma receives reports on matters such as unethical actions and violations of law through the internal reporting system and handles these matters in accordance with its procedures. The internal reporting system ensures the anonymity and takes measures to receive legal protection of internal and external reporters by entrusting third-party contractor and operating an IP tracking blocking system.

AREA 3.

CORPORATE ETHICS AND COMPLIANCE

Prevention of Unethical and Corrupt Behaviors

GC Biopharma

Whistleblowing System

There were a total of five cases reported though the anonymous reporting system in 2022 and all cases were handled through the internal reporting (Shortcut) procedure (investigation, transfer to the relevant department, request for further materials, etc.).

Reports in Whistleblowing System[1]

Classification		Unit	2020	2021	2022
Reports	Treatment Rate	%	100	100	100
	Number of Reports	Cases	5	10	5
	Number of Treatment		5	10	5

1) Including the number of reports related to ethical management and human rights

'Ethics Day' Campaign for Executives and Employees

GC Biopharma operates a program that expresses its willingness to manage ethics at all times to raise continuous interest of executives and employees in establishing a corporate culture that complies with ethics and compliance and to encourage activities.
We are promoting the internalization of global-level ethical awareness through various campaigns such as "U-Quiz E (Ethics) Quiz" using Metaverse, "Ethical Plant" and "Sand Art" events to raise ethical awareness among executives and employees.

Performing Ethics Training

GC Biopharma performs ethics training constantly for executives and employees to achieve ethical value.

Ethics Training Completed in 2022

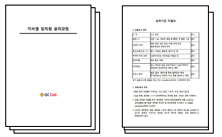
Title	Training Target	Target	Course Completion	Completion Rate
Ethical Management and Anti-graft Law	All Employees	2,208 Persons	2,072 Persons	93.8%

GC Cell

Ethical Management Policy

GC Cell established and shared ethical norms on the intranet, including materials on "presenting ethical standards of conduct," "refusing bribery, treats and entertainment" and "the whistleblowing system on solicitation" based on the GC Ethical standards and Charter of Human Rights in December 2022. We disclosed our responsibilities and duties toward customers (including healthcare), executives and employees, shareholders, the nation and local communities through Declaration of Ethical Management (Shortcut).

Ethical Norms



Ethical Management Organization

GC Cell organized compliance team under the direct supervision of the CEO and the Board of Director appointed compliance officer to implement ethical management. We hold compliance operating committee once a quarter to establish and operate policies and regulations to meet ethical management goals.

Protection of Reporters

The internal reporting system ensures the anonymity and takes measures to receive legal protection of internal and external reporters by entrusting third-party contractor and operating an IP tracking blocking system.

Whistleblowing System

GC Cell had a total of 1 case report in 2022 and all cases were handled through the internal reporting (Shortcut) procedure (investigation, transfer to the relevant department, request for further materials, etc.).

Reports in Whistleblowing System[1]

Classification		Unit	2020	2021	2022
Reports	Treatment Rate	%	100	100	100
	Number of Reports	Cases	0	1	1
	Number of Treatment		0	1	1

1) Including the number of reports related to ethical management and human rights

Spreading a Culture of Ethical Management

GC Cell publishes a CP Letter every other month to encourage all executives and employees to take interest in ethical management and relevant activities. GC Cell plans to conduct ethical management training for all executives and employees starting from the second half of 2023.

AREA 3. CORPORATE ETHICS AND COMPLIANCE Prevention of Unethical and Corrupt Behaviors

GC Group

Compliance

GC Group implements compliance management by establishing eight mandatory compliance units connected to the GC Ethical Standards and Charter of Human Rights. Each unit contains all issues that arise in all sectors.

Eight Mandatory Compliance Units

1. **Customer Respect**
   - External Issues
   - Major stakeholders: Customers
2. **Protection of Corporate Interests and Investors**
   - Internal & external issues
   - Major stakeholders: Investors, Independent directors etc.
3. **Respect for Executives and Employees**
   - Internal issues
   - Major stakeholders: Executives and Employees
4. **Fair Trade**
   - External issues
   - Major stakeholders: Partners, CRO etc.
5. **Anti-Corruption**
   - Internal & external issues
   - Major stakeholders: Public officers, HCP etc.
6. **Environmental Preservation**
   - External issues
   - Major stakeholders: Environmental groups, Governments etc.
7. **Protection of Human Rights**
   - Internal & external issues
   - Major stakeholders: Customers, Executives and Employees, Human Right Groups etc.
8. **Social Responsibility**
   - External issues
   - Major stakeholders: Relevant ESG

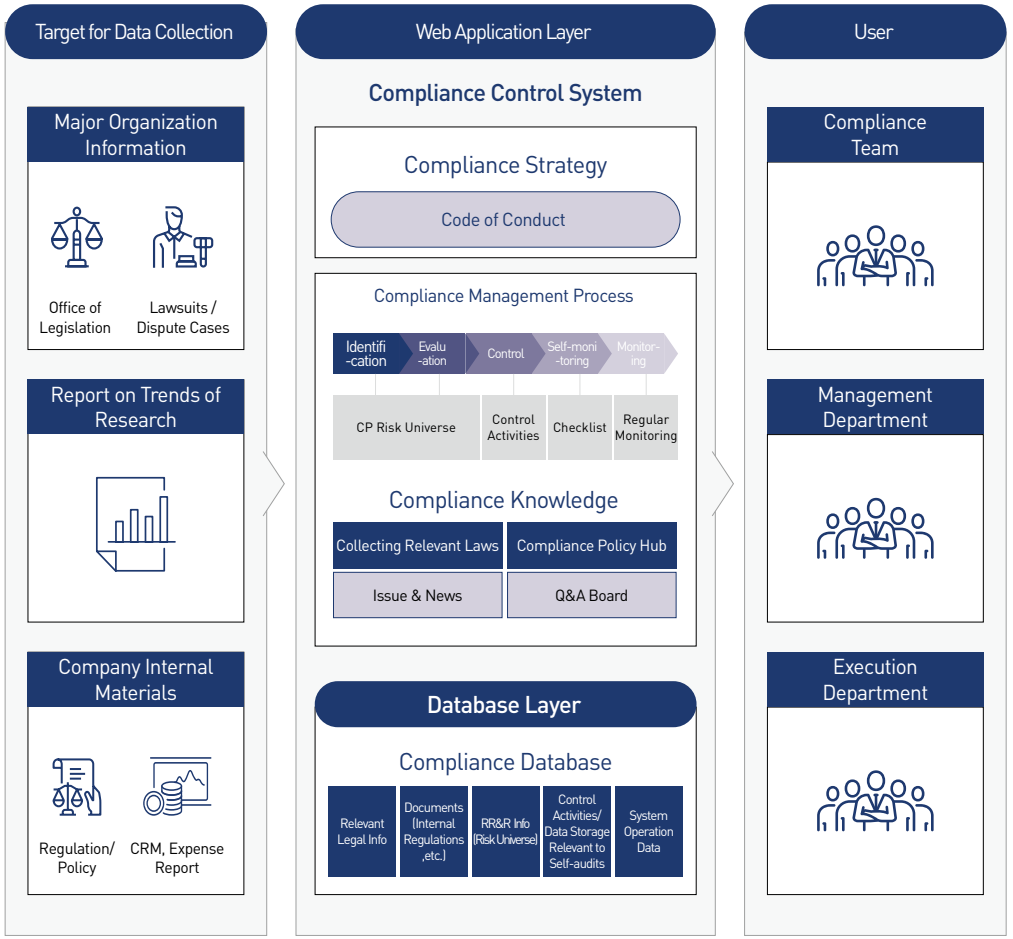
Internal Control Governance

The GC Group Compliance Organization reports major compliance management activities and future plans to the CEO.

Compliance Program

GC Group performs management and supervision to meet compliance standards. GC Biopharma and GC Cell together put more effort for fair competitiveness by establishing compliance organization, compliance programs and anti-corruption system. All marketing and sales activities are reviewed through discussion and review in advance, and we perform monitoring receipts of monthly expense of corporate cards, missed information of expense receipts and whether to violate relevant laws in marketing and sales activities by using RPA(Robotic Process Automation).

GC Group Compliance Management System



AREA 3.

CORPORATE ETHICS AND COMPLIANCE

Prevention of Unethical and Corrupt Behaviors

GC (Holding Company)

Anti-Corruption Policy

GC (Holding Company) plans to obtain ISO37301 (Compliance management system) certification during 2023 (approved by the board of directors in May 2023), and the anti-bribery and corruption policy is posted on the intranet in the form included in the ethical standards.

Implementing Prevention Audits and Compliance Risk Assessments

GC (Holding Company) assesses each affiliate's risks, including risks related to fair trade, and implements prevention audits by establishing an annual audit plan. We continuously check whether the results of the audit are actually reflected in sites by performing corrective measures.

Corruption Risk Assessments

Classification		Unit	2020	2021	2022
Anti-corruption Risks	Ratio of Workplaces	%	100	100	100
	Number of Workplaces	Places	1	1	1
	Total Number of Workplaces		1	1	1

Anti-Corruption Training

GC (Holding Company) establishes the Code of Conduct, including training on anti-corruption compliance with fair trade, and publishes it on the intranet to educate all executives and employees.

Training on Anti-Corruption in 2022

Classification		Unit	2020	2021	2022
Training on Anti-Corruption[1]	Training Completion Rate	%	100	100	0
	Number of Persons Who Completed Training	Persons	22	14	0[2]
	Training Target		22	14	0[2]

1) Training for internal auditors and training for personnel responsible for managing corruption risks
2) We did not perform training in 2022, as it was not required.

GC Biopharma

Anti-Corruption Policy

GC Biopharma has established anti-corruption guidelines and posts the CEO's message on its intranet every year to express its leadership and commitment to anti-corruption. In addition, in April 2023, the anti-corruption policy was upgraded and posted on the intranet and compliance management system, and training on this is continuously provided to executives and employees.

Compliance Program

GC Biopharma introduced the Compliance Program (CP) in Aug, 2007. We established regulations and guidelines for sales activities reflecting the Fair Trade Act, the Pharmaceutical Affairs Act, Fair Competition Rules etc. Ongoing training on these subjects were given to employees and monitored. Also, we perform effectiveness checks on the overall CP program to improve operations every years.

Compliance Risk Assessment

GC Biopharma identified and evaluated all compliance risks (Including risks related to unfair trade and illegal competition). We identified a total of 1,084 compliance risks and 158 risks were categorized as 'high risk' based on internal criteria. For matters evaluated as High Risk, we identified control means and identified the effectiveness of the control means, and additional control activities have been developed to mitigate residual risks.

Corruption Risk Assessments

Classification		Unit	2020	2021	2022
Anti-corruption Risks	Ratio of Workplaces	%	100	100	100
	Number of Workplaces	Places	16	15	15
	Total Number of Workplaces		16	15	15

AREA 3. CORPORATE ETHICS AND COMPLIANCE Prevention of Unethical and Corrupt Behaviors

GC Biopharma

Performing Audits

In addition to regular audits, special audits are conducted when there are special demands from management and reports received in the cyber reporting center. We strive to establish a transparent corporate culture by conducting investigations on violations of ethical management such as employee corruption. We continue to manage the implementation inspection of related corrective actions for affiliates and improve the process.

Compliance Monitoring

We perform regular monitoring biannually to check whether control means are working properly. As a result of compliance monitoring in 2022, we identified 21 cases which violated internal guidelines, and warnings were issued by the Compliance Team. In addition to marketing and sales activities, we performed monitoring of compliance with the Fair Transactions In Subcontracting Act (unfair unit price reductions unfair returns, non-issuance of written documentation, misappropriation of technology, unfair special contracts, unpaid subcontracts, etc.).

ISO37001 and ISO37301 Certifications

GC Biopharma acquired certifications for ISO37301 (Compliance management system) and ISO37001 (Anti-bribery management systems) from KCI (Korea Compliance Initiative). We first acquired certifications for ISO37001 in May 2018, and passed renewal audits in 2021.
In addition, we acquired certification for ISO37301 in December 2022, thereby officially we have been recognized the establishing of a global-level compliance system.

ISO37001
· Certification Scope:
GC Biopharma
(Headquarter, R&D Center,
3 plants, 10 workplaces)
· Effective date:
Dec, 12, 2022 - May, 22, 2024

ISO37301
· Certification Scope:
GC Biopharma
(Headquarter, R&D Center,
3 plants, 10 workplaces)
· Effective date:
Dec, 12, 2022 ~Dec,11, 2025

Certifications

Classification		Unit	2020	2021	2022
ISO37001 (Anti-bribery management system)	Overall Certification Rate	%	100	100	100
	Number of Worksites with Certifications	Places	16	15	15
	Number of Worksites with Certifications		16	15	15
ISO37301 (Compliance management system)	Overall Certification Rate	%	N/A	N/A	100
	Number of Worksites with Certifications	Places	N/A	N/A	15
	Number of Worksites with Certifications		N/A	N/A	15

Training on Anti-Corruption / Compliance (Including Fair Trade/Fair Competition)

GC Biopharma's compliance team performs regular training on anti-graft law, the Fair Trade Act and the Fair Transactions In Subcontracting Act, and special training on lectures and instructor interviews, and site training on Fair Competition Rules and Compliance, etc.
GC Biopharma conducts job-specific special training (subcontract law, fair trade law, sales secrets, training on compliance with relevant sales laws and clinical laws, etc.) for all executives and employees. We also performed training for all executives and employees (including contract workers, subcontractors and interns) based on the revised the Code of Conduct in April, 2023 on topics including "anti-corruption policy," "policy on conflicts of interest" and "policy on gifts, hospitality and entertainment." Special training was provided for employees in positions above team managers and for new employees.
Regular training is conducted biannually for departments with a high risk in relation to compliance. To enhance the effectiveness of the compliance education system, compliance trainings are conducted in various forms, such as visits to workplaces, online video trainings, lectures by outside instructors, and cartoons. Furthermore, training for new employees and for executives are provided frequently.

AREA 3. CORPORATE ETHICS AND COMPLIANCE

Prevention of Unethical and Corrupt Behaviors

GC Biopharma

Training on Anti-Corruption in 2022

Classification		Unit	2020	2021	2022
Training on Anti-Corruption	Training Completion Rate	%	97.6	91.1	93.8
	Number of Persons who Completed Training	Persons	1,984	564	2,072
	Training Target		2,032	619	2,208

Compliance Training in 2022

Title		Target Department	Target Number	Course Completion	Completion Rate
Summary and Issues of the Subcontract Act		Purchasing Department	9 Persons	9 Persons	100%
Compliance Training (Fair Competition Enforcement And CP Guidelines)		Sales Department	408 Persons	408 Persons	100%
Understanding Fair Trade Law With A Lawyer Specialized In Fair Trade Law		New Employees	262 Persons	262 Persons	100%
Special Lecture on Compliance (With A Lawyer)	Training On Protecting Business Secrets	R&D Department	375 Persons	375 Persons	100%
	Training On Law Compliance For The Clinical Trial Department	Clinical Trial Department	39 Persons	39 Persons	100%
	Sales/MKT Rebate Cases And Trends In The Health And Medical Sectors	Sales Department	452 Persons	452 Persons	100%

Effectiveness of Training

The results of our evaluations on the effectiveness of compliance training showed that the training satisfaction level in 2022 was 79.2 points, an increase of 5.3 % compared to the previous year. The promotion satisfaction level was 79.6 points, an increase of 4.7% compared to the previous year.

GC Cell

Anti-Corruption Policy

GC Cell planned and operated its anti-corruption management system by uploading its policy and directions (Shortcut) including the CEO's message on anti-corruption (Shortcut) on the intranet in June 2022.

GC Cell

- We actively participate in achieving anti-corruption goals.
- We detect possible corruption risks early and prohibit all corruption activities.
- We comply with all internal and external regulations on anti-corruption.
- We continuously monitor and improve the anti-corruption systems for effective operation.
- We create a corporate desirable reporting culture through the internal reporting system that ensures anonymity of whistleblowers who report corruption and bribery informants.

Compliance Program

GC Cell cooperates with GC Biopharma operate the fair-trade compliance program. We conduct business consultations through Q&A and FAQ bulletin boards on compliance, and respond to applications through wire and mail, such as inquiries on fair competition rules and CP standards and prior business consultations. We monitor CP by comparing monthly expense reports and expense receipts for company cards. There were no violations of regulations identified so far and we plan to check for violations of regulations through division of work.

7 Components of the Compliance Program

1. Willingness of the management to achieve compliance - Declaration of compliance on the corporate website and e-compliance every year
2. Operation of CP under the management of compliance officers who has authority & responsibility – Establishment and management of trainings and internal audits
3. Establishment and distribution of manuals for compliance with fair trade regulations – Creation & distribution of CP Letters and online materials
4. Performing training programs- Establishing & implementing annual training plans
5. Establishing the monitoring system – Monitoring expense reports and the expense histories of company cards
6. Sanctions on executives and employees violating legislations - Performing internal audits
7. Establishing the document control system – CP regulations, Ethical Code of the Conduct, revision and establishment of guidelines and SOPs

AREA 3. CORPORATE ETHICS AND COMPLIANCE Prevention of Unethical and Corrupt Behaviors

GC Cell

Compliance Risk Assessments

Corruption Risk Assessments

Classification		Unit	2020	2021	2022
Anti-corruption Risks	Ratio of Workplaces	%	0	0	100
	Number of Workplaces	Places	0	0	50
	Total Number of Workplaces		0	0	50

ISO37001 Certification

GC Cell acquired certification for ISO37001, the international standards for anti-bribery management systems, from KCI (Korea Compliance Initiative) in Apr, 2023. GC Cell's acquisition of this certification demonstrates that we have established a control system to identify corruption risks in advance and a prevention system against illegal/corrupt activities.

ISO37001
- Scope: Entire GC Cell (headquarters, Cell Center, 47 sales offices, logistic centers)
- Effective date: Apr, 3, 2023 - Apr, 2, 2026

Certifications

Classification		Unit	2020	2021	2022
ISO37001 (Anti-bribery management systems)	Overall certification rate	%	0	0	0
	Number of worksites with certifications	Places	0	0	0
	Number of worksites with certifications		0	0	0

Training on Anti-corruption/Compliance (Including Fair Trade/Fair Competition)

GC Cell has established and administered full training plans since Jun, 2022. We performed face-to-face training sessions on the topic of fair competition enforcement and legislations and the internal CP system for the sales team, marketing team, and sales management department. Also, we performed seminar workshops on anti-corruption for executives and anti-corruption management systems for in-house auditors. We plan to reinforce activities to improve compliance based on our training plan in 2023.

Training on Anti-Corruption in 2022

Classification		Unit	2020	2021	2022
Training on Anti-Corruption[1)]	Training Completion Rate	%	0	0	100
	No. of Persons who Completed Training	Persons	0	0	204
	Training Target		0	0	204[1)]

1) For the sales headquarters, in-house auditors and executives

AREA 3. CORPORATE ETHICS AND COMPLIANCE Violation of Research Ethics

GC Biopharma

Research Ethics Policy

GC Biopharma understands the importance of research ethics throughout all research activities and strives to uphold ethics in all its activities. We strictly comply with relevant legislation in every step of research and systemize monitoring of all activities.
We set principles to protect the safety and rights of humans, animals, and the environment as required in each stage of medicine development and approve all research activities and appoint review boards to conduct thorough reviews of all research activities. We work to ensure transparency and reliability of research results by establishing a dedicated department dedicated to managing and supervising the proper performance of approved research activities.

Research Ethics Activities of GC Biopharma

Biosafety Ethics	Animal Testing Ethics	Clinical Trial Ethics
· Series of activities to secure safety for humans and the environment in the bioscience sector	· Activities for protecting animal welfare and protections in the development of medicines and release of products	· Activities to protect the safety and rights of participants in all clinical trial sectors
IBC (Institutional Biosafety Committee)	IACUC (Institutional Animal Care and Use Committee)	GCP (Good Clinical Practice)

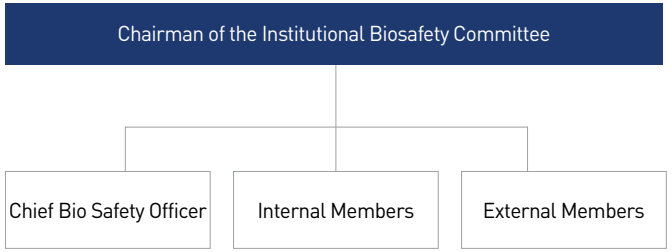
Organization for Biosafety Ethics

To ensure safety in research sites, GC Biopharma's IBC (Institutional Biosafety Committee) is dedicated to evaluating potential risks and biosafety reviews of research conducted within the organization. The committee is establishing biosafety plans and implementing biosafety education and training programs.

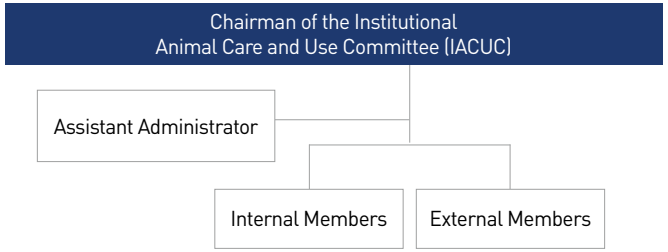
Organization for Animal Testing

GC Biopharma established the IACUC in 2008 based on the Animal Protection Act. Conducting animal experiments for research and preclinical stages of drug development, we support research results in accordance with the basic principles of 5R (replacement, reduction, refinement, relevance, and redundancy avoidance) to support researchers in obtaining necessary research outcomes while ensuring ethical practices.

IBC Organization



IACUC Organization



Organization for Clinical Trial Ethics

GC Biopharma performs clinical trials in accordance with ICH (International Council for Harmonization). All research activities are managed though Standard Operating Procedures (SOPs) and we prevent violations through continuous training of personnel conducting clinical trials. A dedicated department, the Quality Assurance (QA) team, is set up to oversee and supervise research activities in accordance with the clinical trial plan, and monitors the implementation of ethical regulations to protect the safety and rights of clinical trial participants. All data in testing for clinical trials are managed in accordance with relevant laws and regulations, and we follow the principles in the Helsinki Declaration regarding ethical principles for medical research targeting humans.

AREA 3.

CORPORATE ETHICS AND COMPLIANCE

Violation of Research Ethics

GC Biopharma

Animal Experimental Ethics Policy

GC Biopharma is concerned not only for the welfare of humankind but also for the welfare of animals, as they are an important part of this world, and we are making various efforts to promote their welfare. Operational procedures on deliberation and approval by the Institutional Animal Care and Use Committee (IACUC) for using animals in R&D and manufacturing processes have been established. Members of IACUC include external experts with PhDs in veterinary medicine and animal protection organizations. IACUC conducts its roles in accordance with the Animal Protection Act, including ethical reviews and approvals based on the 3R[1] principles regarding the operation of animal tests and surveys.

1) The 3R principles are to avoid animal experiments altogether (replacement) to limit the number of animals (reduction) and their suffering (refinement) in tests to an absolute minimum.

Certification of Animal Testing Facilities

Animal testing for all production sites of GC Biopharma is conducted, integrated and managed comprehensively by the animal laboratory in the Ochang Plant. The animal laboratory obtained full accreditation from AAALAC International[1] in 2011, the first time for South Korean domestic pharmaceutical company. In order to continuously maintain this accreditation, we receive regular due diligence every three years. AAALAC certification demonstrates that our animal laboratory facilities and laboratory management programs meet international standards and that we are committed to the humanitarian management of animals used in experiments. It indicates our ability to maintain and manage animal laboratories in optimal conditions as recognized by global certification institutes.

1) AAALAC (Association for Assessment and Accreditation of Laboratory Animal Care International)

GC Cell

Research Ethics Policy

GC Cell complies with relevant legislations and regulations by establishing a system for fulfilling our ethical responsibilities in all research processes. All our research activities must achieve reliability and objectivity based on integrity and honesty and meet standards for public interest by generating more social benefits based on ethical values and results. Accordingly, researchers in GC Cell prevent cheating and unethical actions and organize research QA and clinical QA teams to secure and operate systems for managing and guaranteeing a global-level of clinical research ethics.

Research Ethics Activities of GC Cell

Biosafety Ethics	Animal Testing Ethics	Clinical Trial Ethics
· Series of activities to secure safety for humans and the environment in the bioscience sector	· Activities for protecting animal welfare and protections in the development of medicines and release of products	· Activities to protect the safety and rights of participants in all clinical trial sectors
IBC (Institutional Biosafety Committee)	**IACUC** (Institutional Animal Care and Use Committee)	**GCP** (Good Clinical Practice)

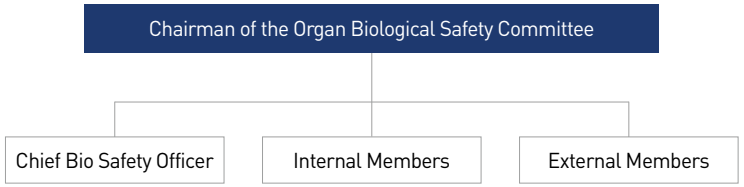
AREA 3. CORPORATE ETHICS AND COMPLIANCE Violation of Research Ethics

GC Cell

Organization for Biosafety Ethics

The IBC (Institutional Biosafety Committee) of GC Cell is responsible of auditing risk assessment and biosafety of research conducted in GC cell to secure safety within research sites. The organization prepare security measures, establish relevant plans, and operate education programs for biosafety.

IBC Organization

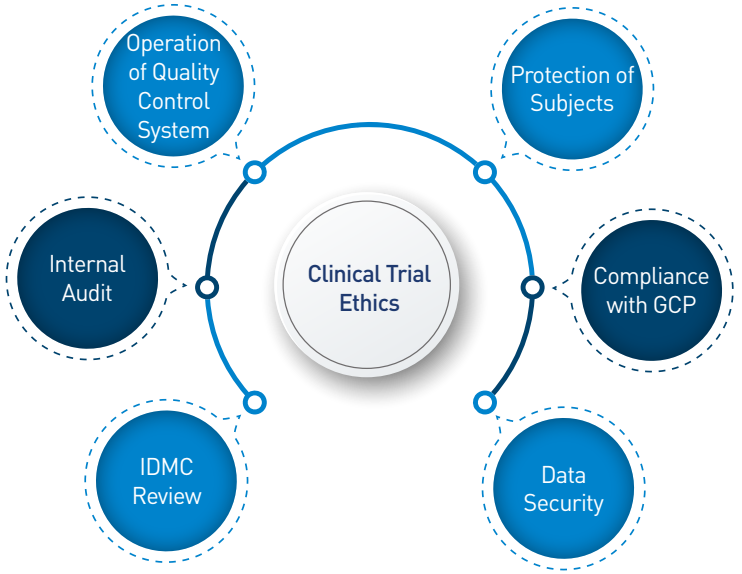


Organization for Animal Testing Ethics

GC Cell operates animal testing ethics by being transferred into GC Biopharma's the Institutional Animal Care and Use Committee (IACUC) in accordance with Animal Protection Act and Laboratory Animal Law.
Researchers in GC Cell sticks to basic ethics principle of animal testing by participating in IACUC with the same roles and responsibilities as committee members in IACUC.

Clinical Trial Ethics

GC Cell provides ethics training courses for researchers to adhere to clinical trial ethics and improve their understanding of relevant work. We ensure transparency and reliability in research through detailed and clear guidelines and thorough clinical trial quality control system.
GC Cell's self-audits are representative monitoring activities that aim to secure the transparency and accuracy of clinical trial results and prevent cheating and fabricated research results. We further strengthen reliability through proper reviews on the handling critical issues and the clinical trial process by the IDMC (Independent Data Monitoring Committee) and auditors. Notably, GC Cell provides research descriptions for participants so that they can communicate with stakeholders transparently and it prevents disclosures of personal information, which is strictly managed. We also actively cooperate with relevant organizations to introduce data management systems and relevant organizations to secure the integrity and security of clinical trial data.



AREA 4. ENVIRONMENTAL RESPONSIBILITY

Management Approach

GC Group strives to minimize wastewater, waste, air pollution, and hazardous chemicals generated during corporate activities, and to manage energy consumption and GHG emissions, which are current global environmental issues. We also pay special attention to creating a safe and healthy working environment for our employees.

GHG Emissions

GC GC Biopharma GC Cell

Our Approach	- We implement an internal system to respond to climate change through activities to reduce GHG emissions in each worksite.
Negative Impact	- There is a greater demand for reducing GHG emissions and implementing a Net-Zero policy, as it is becoming more critical to respond to global climate change and respond to concomitant increases in in costs and risks.
2022 Our Actions	- (GC Holding Company, GC Biopharma, GC Cell) Determined climate change risk factors. - (GC Biopharma) Established the ESG strategy to achieve Net-Zero by 2050, implemented 3rd party verification of GHG emissions and reviewed the reduction in energy usage (conversion to high-efficient facilities, transfer to renewable energy through solar rooftops, state-of-the-art technology for efficient electric energy and ESS installation, etc.). - (GC Cell) Established three-year goals for GHG emissions.

Environmental Pollutant Emissions

GC GC Biopharma GC Cell

Our Approach	- We do our best to comply with environmental regulations, monitor the life cycle for chemical substances and strengthen internal standards for contaminants (air /water quality, etc.).
Negative Impact	- If we fail to control contaminants resulting from corporate activities, this will negatively impact on human and animal health, ecosystem and impose additional costs on the company due to regulatory risks.
2022 Our Actions	- (GC (Holding Company)) Performed risk assessments of the self-regulation prevention system and environmental impact assessments in April 2023. - (GC Biopharma) Performed training on control of hazardous substances. - (GC Cell) Measured the emission of contaminants by facilities emitting air pollutants and water pollutants.

Waste Emissions

GC GC Biopharma GC Cell

Our Approach	- We track and control waste generated during all processes from manufacturing, production and disposal and establish eco-friendly production processes in order to minimize environmental impacts.
Negative Impact	- If waste is not properly handled and disposed legally in our R&D and production processes, this can cause environmental pollution such as soil or water pollution.
2022 Our Actions	- (GC Biopharma) Changes made to recycle all of the landfill waste in Hwasun Plant in 2022.

AREA 4. ENVIRONMENTAL RESPONSIBILITY GHG Emissions

GC Biopharma

Environment, Safety and Health Management Policy

The CEO of GC Biopharma declares its safety and health policy annually at the corporate level to maintain the safety of all stakeholders including employees, customers, partners and local communities in all stages of activities, products and services which significantly affect the environment, safety and health. Based on ISO14001, corporate-level environment, safety and health policy are shared with all employees and each plant establishes detailed plans to implement these policy. We regularly investigate the environmental aspects and impacts of organizational activities, products and services. Prevention, emission and energy usage facilities related to air and water quality, noise, and soil pollution are periodically audited and managed according to operating and management standards in accordance with environmental laws. We also perform history management of environmental laws in 24 sectors such as the Environmental Conservation Act and the Clean Air Conservation Act to renew our review of environmental laws every August.

GC Biopharma's Policy for Environment, Safety and Health

GC Biopharma

- **Sustainable management through ESG management**
  We put in effort to minimize energy use and GHG emissions at each workplace to achieve Net-Zero by 2050. We establish eco-friendly production processes by tracking energy usage and waste generation, etc. for all processes from manufacturing to disposal after production.
- **Compliance with Regulations on Environment, Safety and Health**
  We actively participate in establishing prevention systems especially for self hazard assessments and we comply with internal and external environment, safety and health regulations to implement ISO14001/45001 and root out serious accident.
- **Improvement, Prevention and Control**
  We set goals for environment, safety and health and root out potential risks for accidents relevant to environmental pollution and safety and health through active provision of resources and continuous identification, oversight, assessment and improvements.
- **Communication on Environment, Safety and Health Activities**
  We create a corporate culture that encourages employees to participate in environmental, safety and health activities. We do our best to create a safe environment by efficiently communicating with stakeholders such as employees, partners, local communities etc.

Goals for Environmental Management/Responding to Climate Change

We established a strategy for strengthening ESG and achieving Net-Zero by 2050 through sustainable management.

1. Reduction in GHG emissions to achieve Net-Zero by 2050
2. Strengthening monitoring for life cycles involving chemical substances
3. Strengthening internal standards for pollution emissions
4. Environmental impact assessments once a year

Environment Management Organization

GC Biopharma establishes decision-making and implementation bodies to enhance Health, Safety, and Environment (HSE) management, following a corporate-level HSE policy. The Chief Sustainability and Environmental Officer (CSEO), reporting directly to the CEO, possesses the authority and accountability for making environmental management decisions. The SHE team, operating as an environmental management entity, is dedicated to creating a safer and more environmentally conscious workplace.

1) Chief Safety Environment Officer

AREA 4. # ENVIRONMENTAL RESPONSIBILITY GHG Emissions

GC Biopharma

GHG Emissions Management

GC Biopharma manages GHG emissions by establishing reduction targets for Scope 1 (direct emission) and 2 (indirect emission) in the workplace and monitors quarterly emissions by establishing a management system to reduce energy usage and GHG emissions. GC Biopharma has controlled and monitored direct and indirect GHG emissions in all worksites including our Ochang plant, Hwasun plant, Eumseong plant, headquarters, R&D center, warehouses and sales offices and plans to establish a module to manage energy usage and GHG emissions inside the SHE IT System since 2021.

GHG Emissions

Classification		Unit	2020	2021	2022
Total GHG Emissions (Scope 1+2)		tCO_2eq	64,666[2]	68,166	66,854
Direct GHG Emissions (Scope 1)[2]	Total		12,845	14,362	12,374
	Headquarter/R&D center[1]		963	983	984
	Ochang Plant		5,620	6,809	5,009
	Hwasun Plant		5,627	5,787	5,504
	Eumseong Plant		635	700	792
	Warehouses and Sales Offices		Managed since 2021	80	85
Indirect GHG Emissions (Scope 2)[2]	Total		51,821	53,804	54,480
	Headquarters/R&D center[1]		2,826	2,964	3,238
	Ochang Plant		35,618	36,553	36,703
	Hwasun Plant		12,366	12,623	12,437
	Eumseong Plant		1,011	1,324	1,467
	Warehouses and Sales Offices		Managed since 2021	338	634
Direct/Indirect Emissions Intensity (Scope 1+2)		tCO_2eq/ KRW 100 million	5.267[2]	5.825	5.370
Reduction Performance in KRW Unit, Compared to the Previous Year		%	(16.3)	(10.6)	7.8

1) Announced in the form of an integrated report on specifications for GHG emissions
2) This value reflects the change in distribution criteria by headquarters

Energy Use Management

GC Biopharma does not calculate its energy usage outside its territory.

Energy Usage[1]

Classification		Unit	2020	2021	2022
Total Energy Usage		TJ	1,516.00[2]	1,621.00	1,640.00
General Energy Usage (Direct Energy Source)[2]	Total		244.00	274.00	234.00
	Diesel Usage		22.00	23.00	23.00
	Gasoline Usage		0.00	1.00	1.00
	LNG Usage		222.00	250.00	210.00
General Energy Usage (Indirect Energy Source)[2]	Total		1,272.00	1,347.00	1,406.00
	Electricity Usage		1,083.00	1,124.00	1,138.00
	Heat (Steam) Usage		189.00	223.00	268.00
Intensity of Energy Usage within Basic Unit Organization		TJ/ KRW 100 million	0.123	0.139	0.132

1) Scope: Headquarters, three plants (Ochang, Hwasun, Eumseong), R&D center, 10 sales offices
2) This value reflects the change in distribution criteria by headquarters

Renewable Energy Usage

Classification	Unit	2020	2021	2022
Total Renewable Energy Usage	TJ	0.11	0.04	0.29
Ratio of Renewable Energy Use to Total Energy Use	%	0.01	0.00	0.02
Number of Worksites That Have Introduced Renewable Energy	Places	1	1	1

Efforts for Energy Efficiency

Investment in High-Efficiency Facilities	Investment in Eco-friendly Facilities	Efficiency in the Manufacturing Process	Improvement in Process Facilities
Transition to High-Efficient Transformers, etc.	Facilities for Reducing Fine Dust and Exchanging Filters, etc.	Improvement of the Waste-water Treatment System	Exchange of Process Facilities. etc.

AREA 4. # ENVIRONMENTAL RESPONSIBILITY GHG Emissions

GC Biopharma

Efforts to Reduce GHG Emissions

GC Biopharma Ochang Plant previously relied on liquefied natural gas (LNG) fuel, but since Aug, 2017, we converted our energy sources to steam (heat) supplied from outside. This change in heat source cut our usage of LNG in boilers and reduced GHG emissions by approximately 10,000 tCO_2eq per year. Also, this plant replaced all fluorescent lights with high efficiency LED lights in facilities and equipment.
The Hwasun Plant of GC Biopharma installed ESS (Energy Storage System), an energy smart technology and sought alternative energy sources such as heat to implement efficient boilers (check for steam leaks, timely block of unused boilers) and reduce energy consumption.
GC Biopharma has a plan to convert electricity in workplaces into solar rooftop renewable energy and is reviewing more details to introduce solar panels in rooftops in the second half of 2023 to achieve our Net-Zero target by 2050.

Transition to Renewable Energy

Target	Activities	Exchange amount	Energy reduction
Hwasun Plant	Overall Transition to LED Lights from 2021 to 2022	2,064	96kW
	Control System for Maximum Electric Power in Jun, 2021	75 air conditioners in offices 36 outside units for air conditioners	475kW

Strategy for Responding to Climate Change

GC Biopharma establishes and executes environmental management plans including objectives and subjects, execution and checks, evaluations and improvements, etc. for the management of environmental facilities, reduction in GHG emissions, control of water usage and waste, and the reduction of air contaminants and hazardous chemical substances. In mid and long term, we have goals to expand renewable energy usage and achieve Net-Zero and reduce carbon emissions. We plan to set directions for responding to climate change and establish mid and long-term GHG reduction goals through the ESG committee.

Investigations on Climate Change Risk Factors and Opportunities

GC Biopharma, with GC (Holding Company) and GC Cell participate in responding to climate change through continuous discussion on TCFD recommendations based on climate change risk factors and opportunities through the ESG Council.

GC Biopharma's Climate Change Risk Factors and Opportunities

Classification		Factors		Point of Impact
Risk Factors	Physical Risks (Acute/Chronic)	Sales	Risk of discontinuance in the supply of pharmaceuticals due to abnormal weather conditions	Medium and long term
	Transition Risks	Costs	Increased operation costs due to increased purchases of GHG emission rights	Medium term
		-	Free quotas compared to existing quotas due to stricter regulations on GHG reporting and increased GHG emission reduction targets due to additional quotas reductions	Short and medium term
		Costs	Increasing costs of replacing products and services and transitioning to low-carbon technologies for a low-carbon economy	Medium and long term
		-	Increase in demand for SCOPE 1, 2, 3 Net-Zero as global customer companies focus more on sustainability	Medium term
		Costs	Increase in product production costs due to the increased costs of raw materials/materials	Medium term
		Financing	Strengthening demand for responding to climate change from investors and stakeholders	Short and medium term
Oppor -tunities	Resource Efficiency	Costs	Reduction in water usage due to water management	Short and medium term
	Energy Resources	-	Reduction in GHG emissions and response to relevant GHG regulations through renewable energy	Short and medium term
	Market	Financing	Stronger ability to prepare ESG-relevant capital such as green bonds to implement a low-carbon economy	Medium term
		Sales	Approach to new markets through the manufacturing of new pharmaceutical in response to climate change	Medium term
	Resilience	-	Better corporate image with more investment in renewable energy	Short and medium term

AREA 4. ENVIRONMENTAL RESPONSIBILITY GHG Emissions

GC Cell

Environment, Safety and Health Management Policy

GC Cell recognizes environment, safety and health as top priorities and sets and implements goals according to the policy of the CEO. We are determined to improve the environment by establishing policy based on ISO14001 standards, implementing eco-friendly management and following regulations and minimizing our environmental negative impacts.

GC Cell's policy for Environment, Safety and Health Management

- **Performing Eco-friendly Management**
  We set and implement goals to reduce contaminants (air, water quality, chemical substances, waste etc.) in all processes from manufacturing to disposal after production of biopharmaceutical.
- **Following Environment, Safety and Health Regulations**
  We continue to monitor compliance with internal and external environmental regulations independently by applying strong internal standards.
- **Improvement and Prevention**
  We discover, improve and prevent of the potential risk factors by assessing self-environmental impact and hazard of safety and health. All of these activities are reduced environmental pollution and accidents of safety and health as a result.
- **Communication on Environment, Safety and Health and Activities**
  We improve awareness among employees and partners through their active participation of training programs and communicate with the community through various communication channels to lead progress in environment, safety and health.

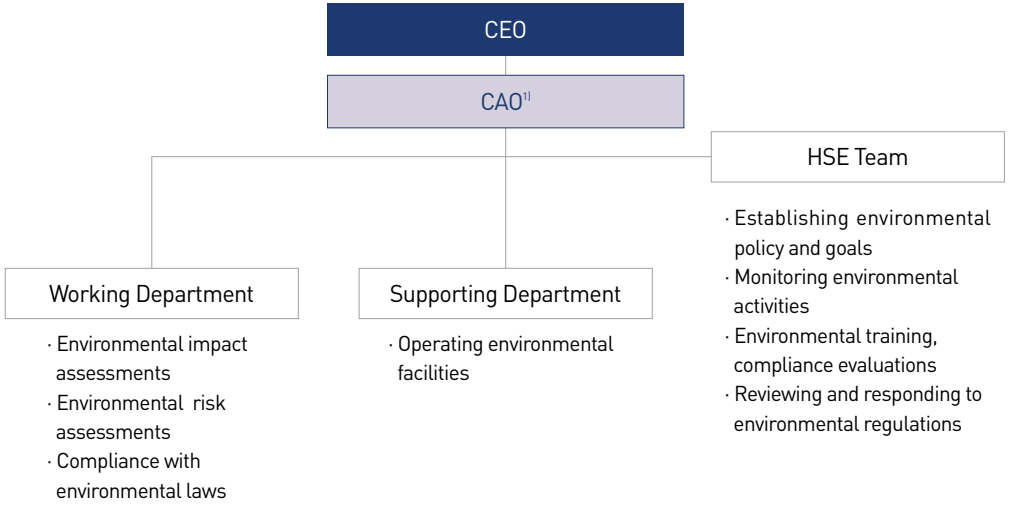
GHG Emission Goals and Performance

GC Cell sets annual goals for GHG emissions. It began collecting GHG emissions data in 2019 and restructured target systems by setting eco-friendly management systems again after the M&A in 2021. It implemented three-year goals in 2023.

Goal for 2023	Goal for 2024	Goal for 2025
Maintaining the GHG reduction rate in 2022	Mid-and-long term GHG reduction plan through the eco-friendly energy management system	Declaration of RE100

Environmental Management Organization

The CAO, directly under the CEO of GC Cell, has decision-making authority and responsibility for environmental management, and the environmental management organization (HSE Team) oversees and manages environment-related tasks.



1) Chief Administration Officer

AREA 4. ENVIRONMENTAL RESPONSIBILITY GHG Emissions

GC Cell

GHG Emissions Management

GC Cell regularly monitors GHG emissions, analyzes root causes, prepares measures and implements reductions.

GHG Emissions

Classification		Unit	2020[1]	2021[1]	2022
Total GHG Emissions (Scope 1+2)		tCO_2eq	3,845	4,567	10,457
Direct GHG Emissions (Scope 1)[2]	Total		1,188	1,654	3,210
	Headquarter		1,188	1,654	3,210
Indirect GHG Emissions (Scope 2)[2]	Total		2,657	2,913	7,247
	Headquarter		2,657	2,913	7,247
Direct/Indirect Emissions Intensity (Scope 1+2)		tCO_2eq/ KRW 100 million	4.844	2.866	4.726
Reduction Performance in KRW Unit, Compared to the Previous Year		%	39.4	40.8	(64.9)

1) Figures were recalculated by adjusting the scope of data collection (All Cell Centers except offices were changed to merger standards including headquarters offices)
2) Based on the amount of electricity usage

Energy Usage Management

Energy Usage

Classification		Unit[2]	2020	2021	2022
Total Energy Usage		TJ	78.98[1]	93.52[1]	214.78
General Energy Usage (Direct Energy Source)	Total		23.45[1]	32.65[1]	63.34
	Diesel Usage		0.01	0.01	0.01
	LNG Usage		23.44[1]	32.64[1]	63.33
General Energy Usage (Indirect Energy Source)	Total		55.52	60.87	151.43
	Electricity Usage		55.52[1]	60.87[1]	151.43
Intensity of Energy Usage within Basic Unit Organization		TJ/ KRW 100 million	0.099	0.059	0.097

1) Figures were recalculated by adjusting the scope of data collection (All Cell Centers except offices were changed to merger standards including headquarters offices)
2) Converted from GJ to TJ for opening to public in order to unify the disclosure units by affiliates

Investigations on Climate Change Risk Factors and Opportunities

GC Cell with GC (Holding Company) and GC Biopharma participate in responding to climate change through continuous discussion on TCFD recommendations based on climate change risk factors and opportunities through the ESG Council.

GC Cell's Climate Change Risk Factors and Opportunities

Classification		Factor		Point of Impact
Risk Factors	Physical Risks (Acute/ Chronic)	Sales	Risk of discontinuance of the supply of pharmaceuticals due to abnormal weather conditions	Medium and long term
		-	Due to abnormal climate phenomena, the sophistication of the BCP (Business Continuation Management Plan) setting is required	Short term
	Transition Risks	Costs	Increased costs of purchasing emission rights due to stricter government regulations on GHG emissions	Short term
		-	Increase in the management of various channels since it becomes mandatory to publicize environmental information	Short term
		-	Difficulty for the pharmaceutical industry relatively impacted less by climate change in response to climate change risks	Short term
		Costs	Increase in energy costs due to increasing requests to transit into renewable energy	Medium term
		Financing	Low credibility of customers and investors if stakeholders' expectations fail to be met, decline in profits and rise in the cost of borrowing	Medium and long term
Oppor -tunities	Resource Efficiency	Costs	Possibility of preoccupation due to comparative advantages in the same industry when establishing an eco-friendly logistics system	Long term
		Costs, Assets	Achieving cuts in operational costs by designing energy-efficient buildings when securing infrastructures such as plants	Long term
	Market	Sales	Possibilities for frequent occurrence of infectious pandemics and endemics due to climate change, resulting in increase in new pharmaceutical.	Medium term
		-	Increase in intangible assets such as brand value due to a pre-emptive company image	Medium term

AREA 4. ENVIRONMENTAL RESPONSIBILITY GHG Emissions

GC (Holding Company)

Environment, Safety and Health Management Policy

GC (holding company) declared its commitment to ESG management by establishing a corporate-level HSE policy which includes our intention and strategy of minimizing impacts to the environment due to our corporate activities in 2015, based on ISO14001 standards. This policy applies to all stakeholders including employees, partners and customers in supply chains. Based on this, all of GC's affiliates strengthen the managing system for the environment, safety and health by prioritizing the safety and health of stakeholders. All worksites are doing their best to spread a culture of valuing the environment, safety and health and establish worksite policies to reflect each site's characteristics, harmful and risk factors and size.

The HSE Policy of GC (Holding Company)

GC

- **Development and manufacturing of eco-friendly products**
  We put in effort to minimize contaminants (air, water quality, chemical substances, waste, etc.) in all processes from manufacturing to disposal and develop eco-friendly products.
- **Compliance with laws relevant to the environment, safety and health**
  We continue to improve our environment, safety and health levels by complying with external and internal regulations and strengthening internal standards.
- **Improvement and Preventive Management**
  We set goals environment, safety and health and root out potential risk factors by supplying continuous resources and performing identification, oversight, assessment and improvements.
- **HSE Communication**
  We strengthen the awareness of stakeholders and all employees through active environment, safety and health training and activities and advance our environment, safety and health development through better understanding and communication with partners and local communities to fulfill our social responsibility.

Strategy for Responding to Climate Change

GC (Holding Company) is doing its best to respond to climate change by reducing GHG emissions to minimize environmental negative impacts, cut energy consumption, etc.

Goals for Environmental Management and Climate Change Adaptation

GC (Holding Company) performs PDCA[1] reviews to accomplish management goals and constantly establishes KPI for environment, safety and health.

1) Activities to continuously improve work through Plan, Do, Check, and Action etc.

GC (Holding Company)'s Goals for Environmental Management in 2023

Environment Management Organization

The HSE Team of GC (holding company) performs regular audits in regard to the environment (air and water quality, waste and chemical materials) of 15 affiliates under the group-level environmental management system and implements sustainable management measures (environment and safety) including legal operations and supporting work through audits.

AREA 4. ENVIRONMENTAL RESPONSIBILITY GHG Emissions

GC (Holding Company)

Sustainable Investment in the Environment

GC (Holding Company) continues to invest in eco-friendly energy efficiency through measures such as increasing air conditioning and heating efficiency in facility management teams and reducing the usage of electricity/water and the emission of air pollutants

Eco-friendly Investment Costs

Classification		Unit	2020	2021[1)]	2022[1)]
Investment Execution Rate	Total	%	54.7	203.0	76.8
	Planned Amount	KRW million	25	48	39
	Executed Amount		13	96	30

1) This figure reflects the cost of ISO certification and post audit by the HSE team of GC (Holding Company)

GHG Emissions Management

GHG Emissions

Classification		Unit	2020[1)]	2021[1)]	2022
Total GHG Emissions (Scope 1+2)		tCO_2eq	738	823	872
Direct GHG Emissions (Scope 1)[2)]	Total		120	142	131
	Headquarter		120	142	131
Indirect GHG Emissions (Scope 2)[2)]	Total		618	681	741
	Headquarter		618	681	741
Direct/Indirect Emissions Intensity (Scope 1+2)		tCO_2eq/ KRW 100 million	0.937	1.113	1.305
Reduction Performance in KRW Unit, Compared to the Previous Year		%	50.9	(18.7)	(17.3)

1) This value reflects the change in distribution criteria by headquarters
2) Based on electricity (power) usage

Energy Usage Management

Energy Usage

Classification		Unit	2020[1)]	2021[1)]	2022
Total Energy Usage		TJ	15.1	16.9	17.4
General Energy Usage (Direct Energy Source)	Total		2.24	2.67	2.43
	Diesel Usage		0.02	0.02	0.02
	Gasoline Usage		0.45	0.40	0.49
	LNG Usage		1.77	2.25	1.92
General Energy Usage (Indirect Energy Source)	Total		12.9	14.2	15.0
	Electricity Usage		12.9	14.2	15.0
Intensity of Energy Usage within Basic Unit Organization		TJ/ KRW 100 million	0.02	0.02	0.03

1) This value reflects the change in distribution criteria by headquarters

AREA 4. ENVIRONMENTAL RESPONSIBILITY GHG Emissions

GC (Holding Company)

Investigation on Climate Change Risk Factors and Opportunities

GC (Holding Company) with GC Biopharma and GC Cell participate in responding to climate change through continuous discussion on TCFD recommendations based on climate change risk factors and opportunities through the ESG Council.

GC (Holding Company)'s Climate Change Risk Factors and Opportunities

Classification		Factors		Point of Impact
Risk Factors	Physical Risks (Acute/ Chronic)	Costs	Disruption in purchases in the green supply chain cue to abnormal climate conditions and expected increases in supply unit prices	Short and medium term
		Assets	Physical damage to buildings/real estate owned by GC due to storms and flood disasters	Short term
		Sales	Decrease in cost profitability due to imbalances in supply and demand in the event of a natural disaster, such as an increase in the unit price of raw materials	Short term
	Transition Risks	Costs	Emission debt increase due to increases in GHG credits	Long term
		Costs	Basic operating costs (electricity, gas, constant) are expected to rise when prices for GHG emission trading rise or pan-government reduction targets are increased	Medium and long term
		Costs	Increased investment costs to reduce environmental pollution and handle chemicals when disclosing environmental information, such as strengthening the inventory of GHG for GC rental/owned real estate	Short and medium term
		Costs	Expected increase in the opportunity cost of environmental investment, reflecting the need for products and services for customers with environmental targets	Short term
		Costs	Increase in lawsuit costs for non-compliance with environmental pollution and emission standards, in addition to legal risks	Short term
		Costs	In the event of a serious accident in the safety sector, opportunity costs for safety accidents, such as harm to the corporate image and punitive damages in accordance with domestic laws, are expected to increase	Short term
		Financing	Increase in investment opportunities such as the development of low-carbon medicines in the pharmaceutical industry	Short term
		Costs	Increase in the cost of transition to low-carbon technology	Long term

Classification		Factors		Point of Impact
Risk Factors	Transition Risks	-	Rise in customer expectations and requests for corporations to respond to climate change	Short term
		Costs	Supply chain, green buyers, higher raw material prices	Short and medium term
		Sales	Risks of an insecure supply of raw materials such as imbalances in the supply of raw materials	Medium term
		-	Limitation on the fast development of eco-friendly products in the pharmaceutical industry	Short term
		Sales	Delays in consumer trends and eco-friendly products and a decline of the corporate image in the event of failure to respond	Short term
		-	Negative opinions due to a lack of strategy for responding to requests for compliance with global climate change measures	Short term
Oppor -tunities	Resource Efficiency	Costs	Eco-building, energy recycling (solar/heat, waste heat resource recovery system, excellent recycling), increased investment in low-cost architectural design	Medium term
	Energy Resource	Costs	Offset investment cost due to decreases in GHG credits	Long term
		-	Reducing energy consumption to respond to climate change and the globalization of environmental policies	Long term
		-	Expected improvement in sustainable energy technology	Long term
	Market	Financing	Increasing shareholder value and expanding investment through technology-intensive climate change response and performance	Short term
		-	Creating an environment based on pandemics, natural disasters and warming caused by climate change	Long term
		-	Increase in GC and corporate brand value with a green and eco-friendly corporate image	Medium and long term

AREA 4. ENVIRONMENTAL RESPONSIBILITY Environmental Pollutant Emissions

GC Biopharma

Safe Chemical Substances Management Strategy

All sites handling chemicals in GC Biopharma are committed to protecting the natural environment and the operators and we comply with the relevant laws and regulations such as the Chemical Substances Control Act and the Act on the Registration and Evaluation of Chemical Substances. According to all hazardous chemicals management processes stipulated in the relevant laws, the company conducts risk assessments based on MSDS[1)], establishes appropriate safety management plans, and controls the life cycles from procurement to disposal to prevent safety accidents and environmental pollution. Through these actions, we thoroughly control introduction and disposal of chemical substances to prevent safety accidents and environmental pollution.

1) MSDS (Material Safety Data Sheets) is a document that contains information on the potential hazards (health, fire, reactivity and environment) and how to work safely with chemicals.

Scope of Response to Chemical Regulations

Chemical Substances Control Act	· Hazardous chemical substances · Restricted substances · Prohibited substances	· Substances requiring preparation for accidents · Approved substances
Occupational Safety and Health Act	· Occupational exposure limits for chemical substances · Working environment measurement · Hazardous substances requiring management	· Harmful substances subject to permission · Substances prohibited from manufacturing · Special health examination harmful agents · Special management materials
Act on Safety Control of Hazardous Substances	· Class 1 Oxidizing Solids · Class 2 Combustible Solids · Class 3 Pyrophoric materials and water reactive chemical · Class 4 Flammable liquids · Class 5 Self-reactive substances · Class 6 Oxidizing liquids	

Chemical Substances Management System

GC Biopharma analyzes the harmfulness of hazardous chemical substances which may affect workers and the surrounding environment in the processes of incoming, handling, storage, usage and registration. We appoint responsible personnel to manage chemical substances and conduct reviews before the procurement stage through the CMS system to prevent admission into worksites without the approval of SHE Team.

Process for controlling chemical substances

1. Identification of chemicals	2. Request for review and approval	3. Procurement	4. Storage and use	5. Waste management
· Having MSDS · Registration of chemical substances in electric system	· Process approval (new materials) · Decision to accept new materials by the SHE Team(new materials)	· Review of regulations (present & new materials) · Decision to purchase new materials by the SHE Team	· Checking appropriate handling facilities · Providing personal protective equipment and disaster prevention equipment · Safe training on hazardous chemical substances	· Legal disposal in accordance with relevant laws

Training on Chemical Substance Management

GC Biopharma performs regular safety training for handlers dealing with chemical substance, emergency training on control of facilities for chemical substance and leakage of chemical substance. We manage MSDS including how to handle and store products and materials, name and ingredients of materials, harmfulness, risks and necessary protective equipment and train MSDS for users in order to prevent occupational disease, fire, explosion and accidents. Also, we secure and put up MSDS for all chemical substances and perform safety training for employees including toxic and risk information for materials, handling precautions and emergency measures etc. regularly.

Annual Training Contents for Chemical Substances Management

- Chemical substances handled by each department
- How to understand material safety data sheets (MSDS) and warning signs
- Physical and health hazards of chemicals
- Precautions for handling chemical substances
- Appropriate protective equipment for handling chemical substances
- How to take emergency measures in case of chemical leaks and how to deal with accidents
- Recognition of signs of chemical accidents and how to avoid accidents
- How to report the occurrence of chemical accidents and transmit information about accident situations
- How to take emergency measures when exposed to the human body.

AREA 4. ENVIRONMENTAL RESPONSIBILITY Environmental Pollutant Emissions

GC Biopharma

Air Pollutants Management

We continue to monitor and control the operation and maintenance of air emission facilities to prevent pollution. We check our compliance with emission acceptable levels through outsourcers measuring environment pollution.

Emissions of Air Pollutants

Classification		Unit	2020	2021	2022
Total amount of air pollutants	Total	Ton	13.33	9.59	7.13
	Nitrogen oxide (NOx)		11.87	9.01	6.53
	Sulfur oxides (SOx)		0.34	0.05	0.10
	Fine particle matter (PM)		1.08	0.43	0.27
	Total hydrocarbon (THC)		0.04	0.10	0.23
	Volatile organic compounds (VOCs)		0.00	0.00	0.00

Water Pollutants Management

GC Biopharma efficiently controls water pollutants in worksites in accordance with the emission standards for water pollutants and independently measures water pollution levels twice a month, especially for wastewater in treatment facilities. We measure specific hazardous substances in wastewater treatment facilities and plants twice a year and report the investigations on specific hazardous water substances every March.
GC Biopharma Ochang Plant operates three sedimentation tanks in the wastewater treatment area, where two tanks are utilized 24/7 and the rest is kept idle on standby for use during contingencies. The Ochang Plant of GC Biopharma routinely prepares the latest drawings for the water treatment tank for all worksites to enable efficient water pollution prevention as part of facility management.

Emissions of Water Pollutants

Classification		Unit	2020	2021	2022
Total amount of water pollutants	Total	Ton	8.607	11.271	18.234
	Biological oxygen demand (BOD)		0.944	1.165	0.886
	Chemical oxygen demand (COD)[1)]		3.641	3.843	2.572
	Suspended solids (SS)		1.285	2.164	2.104
	Total nitrogen (T-N)		0.833	2.089	1.030
	Total phosphorus (T-P)		0.252	0.625	1.173
	Others[2), 3)]		1.652	1.385	10.469

1) There were exceptions in the measuring of some worksites due to the revision of the Environmental Conservation Act (change of COD into TOC). Only TOC was measured in 2023
2) Contains n-hexane mineral oils (N-H (light), n-hexane oils (N-H (copper), TOC (total organic carbon), pH, and specific water hazards
3) The pH concentration was calculated as the average of four plants

AREA 4. ENVIRONMENTAL RESPONSIBILITY Environmental Pollutant Emissions

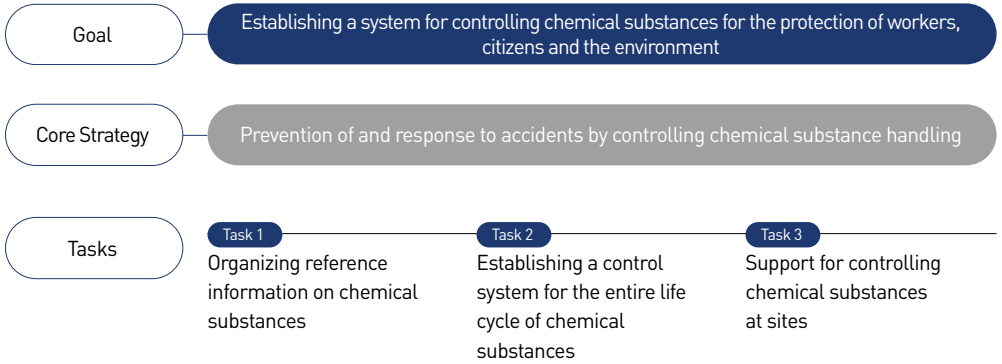
GC Cell

Establishing for the Chemical Substance Management System

GC Cell implements real-time registration of chemical substances, inquiring product hazardous information and MSDS[1] to control chemical substances for the all life cycle. In particular, we perform preliminary approval steps to judge whether a new chemical substance is appropriate for use at the site and only those passing the all life cycle of chemical substances through a review of relevant legislations in 2023 and 3rd party verification to respond to GHS[2], the Chemical Substances Control Act and K-REACH (The Act on Registration and Evaluation, etc. of Chemicals) within the second half of the year.

1) MSDS (Material Safety Data Sheets) is a document that contains information on the potential hazards (health, fire, reactivity and environment) and how to work safely with chemicals
2) GHS (Global Harmonized System): Grade according to the toxicity of chemical substances

Direction and Tasks for Establishing a Chemical Substance Control System



Chemical Substance Management Activities

GC Cell continues to manage inventory information, perform inspections on handling facilities for hazardous chemical substances and collect MSDS data. We also provide on-site personal protective equipment and place disaster prevention equipment for emergency use. In addition, we strive to create a safe environment by measuring worksite environmental conditions and providing special training and special health checkups.

Air Pollutants Management

We minimize nitrogen oxide emissions, the main source of GHG emissions due to the low NOx device of boiler facility. We also manage contaminant emissions by measuring air pollutants every half a year and undergoing boiler safety and performance tests to improve the efficiency of boilers, reduce load factors.

Air Pollutant Emissions

Classification		Unit	2020	2021	2022
Total Amount of Air Pollutant	Total	Ton	0.19	0.25	0.07
	NOx		0.19	0.25	0.07

Water Pollutants Management

To reduce water pollution, bio-wastewater generated during manufacturing is transferred to a kill tank, sterilized with steam, cooled, and discharged into the sewage system. In addition, the level of contamination of water pollutants in discharge facilities is measured (measurement items: BOD, TOC, SS, T-N, and T-P) and monitored quarterly through third-party organizations.

Water Pollutant Emissions

Classification		Unit	2020	2021	2022
Total Amount of Water Pollutants	Total	Ton	0.022	0.063	0.151
	BOD		0.001	0.002	0.001
	COD[1]		0.006	0.029	0.044
	SS		0.001	0.001	0.003
	T-N		0.013	0.028	0.099
	T-P		0.001	0.003	0.004

1) Exception of COD (COD→TOC)due to the revision of the Environmental Conservation Act.

AREA 4. ENVIRONMENTAL RESPONSIBILITY Waste Emissions

GC (Holding Company)

Establishing the Basis for the Chemical Substances Management System

GC (Holding Company) is expected to review possible application of CMS system into GC Biopharma for listed affiliates to establish a basis for GC Group's chemical substances management system.

Air Pollutants Management

Air Pollutant Emissions

Classification		Unit	2020	2021	2022
Total Amount of Air Pollutants	Total	Ton	0.13	0.15	0.11
	NOx		0.13	0.15	0.11
	SOx		Undetected	Undetected	Undetected
	PM		Undetected	Undetected	Undetected
	VOCs		N/A	N/A	N/A

Implementing Environmental Monitoring and Reductions

GC (Holding Company) assigns quantitative goals, such as reducing environmental pollution and improving potential risk factors, to listed affiliates (GC Cell, GCMS, GCWB (GC Cell, GC Green Cross MS, GC Green Cross Wellbeing) and checks the progress every half a year (twice a year). We establish plans for reducing the root causes of 85 risk factors and perform 1st improvement measures through an appointed manager. Thereafter, we continue monitoring whether to the goals for reducing additional potential risk factors are met, in regular meetings with partners and consignors, and systematize regular meetings to review validity checks and prevent recurrences.

GC Group

Waste Management Strategy

GC Group establishes goals for waste emissions and minimizes waste generated across all of its operations. Also, we establish waste control procedures in accordance with waste legislations and safely handle waste, minimize environmental impacts by separately sending out waste and minimizing the amount of waste. In particular, medical waste (quarantined medical waste, hazardous medical waste, and general medical waste) generated due to the nature of the pharmaceutical industry is entrusted to a professional company in accordance with due process, and related information is reported to the competent authority.

GC (Holding Company)

Waste Management

GC (Holding Company) is a worksite that does not send out designated waste and only controls the amount of waste produced in general worksites (waste synthetic resin).

Waste Management and Recycling

Classification		Unit	2020	2021	2022
Amount of Waste	Total	Ton	73	138	164
	General Waste[1)]		73	138	164
Throughput of Waste (Landfill)	Total Amount of Waste	Ton	0	0	0
	Total Percent of Waste	%	0.0	0.0	0.0
Throughput of Waste (Incineration)	Total Amount of Incineration	Ton	60	132	148
	Total Percent of Incineration	%	81.9	95.2	90.3
Throughput of Recycling	Total Recycling Amount of Waste	Ton	13	7	16
	Total Recycling Percent of Waste	%	18.1	4.8	9.7

1) Management including general waste of GC Cell

AREA 4. ENVIRONMENTAL RESPONSIBILITY Waste Emissions

GC Biopharma

Waste Management

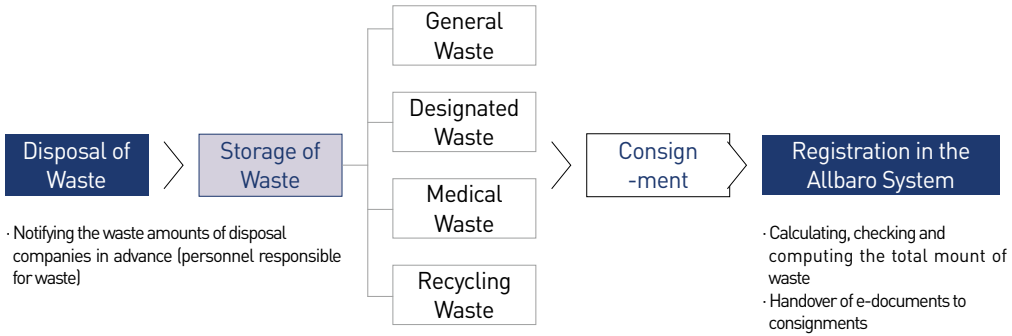
GC Biopharma prevents environmental pollution by maintaining clean living and manufacturing environments through the proper management of waste across all of its operations. Waste is treated by the consignment contract for collecting, delivering and treating waste in accordance with the Chemical Substance Control Act. Only a registered contractor can collect, deliver and treat waste and we minimize waste through recycling.

Waste Management and Recycling

Classification		Unit	2020	2021	2022
Amount of Waste	Total	Ton	3,219	3,322	3,344
	General Waste		2,865	3,072	3,076
	Designated Waste		304	201	151
	Medical Waste		50	49	117
Throughput of Waste (Landfill)	Total Amount of Waste		158	170	0[1]
	Total Percent of Waste	%	4.9	5.1	0.0[1]
Throughput of Waste (Incineration)	Total Amount of Incineration	Ton	1,203	1,174	1,275
	Total Percent of Incineration	%	37.4	35.4	38.1
Throughput of Recycling	Total Recycling Amount of Waste	Ton	1,859	1,978	2,068
	Total Recycling Percent of Waste	%	57.7	59.5	61.8

1) Waste water and landfills in Hwasun Plant were converted to recycling (landfill->recycling)

Waste Treatment Process



GC Cell

Waste Management

GC Cell separately disposes waste, classified into general waste, medical waste and designated waste, generated in our R&D and production sites and offices. Responsible personnel in charge of the environment in GC Cell monitors our performance in the Allbaro System run by the Ministry of Environment and monitors whether all waste is confirmed to be treated legally.

Waste Management and Recycling

Classification		Unit	2020[1]	2021[1]	2022
Amount of Waste	Total	Ton	14	26	89
	Designated Waste		8	6	8
	Medical Waste		6	20	80
Throughput of Waste (Landfill)	Total Amount of Incineration		14	26	89
	Total Percent of Incineration	%	100	100	100
Throughput of Recycling	Total Recycling Amount of Waste	Ton	0	0	0
	Total Recycling Percent of Waste	%	0	0	0

1) Figures were recalculated by adjusting the scope of data collection (All Cell Centers except offices were changed to merger standards including headquarters offices)

GENERAL DISCLOSURE

80 General
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G GENERAL

GRI 2: Organization and Business

Organization Information GRI 2-1 | GRI 2-2 | GRI 2-3 | GRI 2-4 | GRI 2-5 | GRI 2-6

General Disclosures

Index		Remark
Organizational details	Legal name	GC Corp. (Hereafter GC (Holding Company), GC Biopharma, GC Cell
	Nature of ownership and legal form	Refer to Corporation, 'Number of Shares' p. 84
	Location of headquarters	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea
	Countries of operation	Refer to 'Network and Infrastructure' p. 8
Entities included in the organization's sustainability reporting		Major affiliates of GC Group including GC (Holding Company), GC Biopharma, GC Cell
Reporting period, frequency and contact point	Reporting period and frequency	Qualitative data : Jan,1, 2022 ~ Dec, 31, 2022 If necessary, include performance in the first half of 2023 Quantitative data : Three-year data from 2020 to 2022
	Reporting period for financial disclosures	Jan,1, 2022 ~ Dec, 31, 2022
	Publication date	Aug, 29, 2023
	Contact point	GC ESG TF(gc_esg@gccorp.com)
Restatements of information		Changes compared to the previous year are explained in the notes of the information and for changes related to mergers and acquisitions, please refer to our '57th Business Report, I-1. B.' Changes in the consolidated company.
External Assurance		Refer to 'Third-Party Assurance Statement' p. 134

Activities, Value Chain, Other Business Relations GRI 2-7

Businesses

Index		Remark
Activities, value chain and other business relationships	Business sector	Refer to 'Company Overview' p. 6
	Activities, products, services, and markets served	Refer to 'Affiliates' p. 9~14
	Supply chain	Refer to 'Supply Chain ESG Management' p. 50~52 & 'Co-prosperity with Partners' p. 116

GRI 2: Employees

Employees and Workers who are not employees GRI 2-8

Employees (As of Dec, 31, 2022)

Classification					Unit	2020	2021	2022
GC (Holding Company)	Total Employees	Total			Persons	165[1]	146	163
		Gender	Male	Personnel		121[1]	99	102
			Female	Personnel		44[1]	47	61
		Age	Under 30	Ratio	%	17.6	16.4	14.7
			Over 30 and Under 50	Ratio		72.9	76.7	76.7
			Over 50	Ratio		9.7	6.8	8.6
	Number of Employees by Employment Type	Regular Workers	Total		Persons	165	143	160
		Temporary Workers	Total			0	3	3
			Ratio of Temporary Workers		%	0.0	2.1	1.8
GC Biopharma	Total Employees	Total			Persons	2,076	2,187	2,302
		Gender	Male	Personnel		1,589	1,640	1,712
			Female	Personnel		487	547	590
		Age	Under 30	Ratio	%	18.9	15.7[2]	15.8
			Over 30 and Under 50	Ratio		73.3	75.9	75.7
			Over 50	Ratio		7.9	8.4[2]	8.5
	Number of Employees by Employment Type	Regular Workers	Total		Persons	2,042	2,093	2,105
		Temporary Workers	Total			34	94	197
			Ratio of Temporary Workers		%	1.6	4.3	8.6
GC Cell	Total Employees	Total			Persons	445[1]	799[1]	838
		Gender	Male	Personnel		345[1]	521[1]	536
			Female	Personnel		100[1]	278[1]	302
		Age	Under 30	Ratio	%	41.8[1]	45.4[1]	39.0
			Over 30 and Under 50	Ratio		53.0[1]	49.2[1]	56.2
			Over 50	Ratio		5.2[1]	5.4[1]	4.8
	Number of Employees by Employment Type	Regular Workers	Total		Persons	399	728	776
		Temporary Workers	Total			46	71	62
			Ratio of Temporary Workers		%	10.3	8.9	7.4

1) Adjusted and disclosed based on the number of persons in business report on DART
2) This value is reflected by correcting errors that are not under the age of 30 but under the age of 30

G GENERAL

GRI 2: Governance

BOD Composition and Operation GRI 2-9

· Each affiliate of GC Group independently operates board of director.
- Maintain sound governance through responsible management system for individual board of director such as mutual control and balance between board of director and the management

· GC (Holding Company), GC Biopharma operate Management Committee inside BOD
- Establish Management Committee to make a timely decision regularly on critical management issues delivered by BOD
- Management Committee consists of three directors(Inside director) to make quick decision to live up to changing management environment
- Decisions made by Management Committee are shared with BOD members and if necessary BOD discuss those decisions again and make final decisions.

· BOD in GC Group is operated in accordance with the article of incorporation and regulations for BOD and Management Committee .
- GC (Holding Company)'s articles of incorporation Shortcut, GC Biopharma's articles of incorporation Shortcut, GC Cell's articles of incorporation Shortcut

BOD Composition (As of Mar, 31, 2023)

Classification		Name	Gender	Term	Position	Educational Background and Career
GC (Holding Company)	Inside director	Il-Sub Huh	Male	2023.3~2025.3	Chairman & CEO	· Ph.D. in Business Administration (Houston University) · Member of Management Committee
		Yong-Jun Huh	Male	2023.3~2025.3	CEO	· Chairman of BOD · Chairman of Management Committee
		Yong-Tae Park	Male	2023.3~2025.3	Vice Chairman	· Member of Management Committee
	Independent director	Suk-Wha Kim	Male	2022.3~2024.3	-	· Ph.D. in Medical Science (SNU) · Professor of Bundang Cha Hospital · Former professor at Seoul National University Medical School
GC Biopharma	Inside director	Eun-Chul Huh	Male	2022.3~2024.3	CEO	· Ph.D. in Science (Cornell University) · Chairman of BOD · Chairman of Management Committee
		Hyun Namkoong	Female	2022.3~2024.3	Head of sales department	· Pharmacist · Member of Management Committee
		Seung-Ho Lim	Male	2023.3~2025.3	Head of production department	· Member of Management Committee
	Independent director	Choon-Woo Lee	Male	2022.3~2024.3	-	· Ph.D. in Business Administration (SNU) · Professor of management at University of Seoul
GC Cell	Inside director	James Park Jong-Eun	Male	2023.3~2025.3	CEO	· Chairman of BOD
		Soon-Young Park	Male	2023.3~2025.3	CSO	· M.A of business administration (Korea University)
		Ho-Won Kim	Male	2023.3~2025.3	CTO	· Ph.D of Biochemistry (UCLA)
	Independent director	Hong-Gi Bae	Male	2023.3~2025.3	-	· Representative of Seohyun Accounting Firm · Accountant

BOD Composition Rate

Classification				Unit	2020	2021	2022
GC (Holding Company)	Composition	Total Number of Persons		Persons	4	4	4
		Independent Director (Non-standing)	Ratio of Independent Director	%	25	25	25
		Female Director	Ratio of Female Director		0	0	0
GC Biopharma	Composition	Total Number of Persons		Persons	4	4	4
		Independent Director (Non-standing)	Ratio of Independent Director	%	25	25	25
		Female Director	Ratio of Female Director		25	25	25
GC Cell	Composition	Total Number of Persons		Persons	4	7	4
		Independent Director (Non-standing)	Ratio of Independent Director	%	25	28.6	25
		Female Director	Ratio of Female Director		25	14.3	0

Board Member Competence Matrix

Classification	Competence	Il-Sub Huh	Yong-Jun Huh	Yong-Tae Park	Suk-Wha Kim
GC (Holding Company)	Management	◎	◎	◎	
	Industrial Expertise (Medical)				◎

Classification	Competence	Eun-Chul Huh	Hyun Namkoong	Seung-Ho Lim	Choon-Woo Lee
GC Biopharma	Management	◎			◎
	Industrial Expertise (R&D)	◎			
	Industrial Expertise (Marketing)		◎		
	Industrial Expertise (Production)			◎	
	Industrial Expertise (Medical)		◎		

Classification	Competence	James Jong-Eun Park	Soon-Young Park	Ho-Won Kim	Hong-Gi Bae
GC Cell	Management	◎		◎	
	Accounting / Finance				◎
	Industrial Expertise (R&D)			◎	
	Industrial Expertise (Sales)	◎	◎		

G GENERAL

GRI 2: Governance

BOD Composition and Operation GRI 2-9

BOD Operation

Classification				Unit	2020	2021	2022
GC (Holding Company)	Operation	Attendance Rate of BOD	Total	%	100	100	100
			Independent Director (Non-standing)		100	100	100
		BOD Meetings Held		Times	7	7	7
		The Number of Agendas	The Number of Overall Meetings (Report and Decision)	Cases	15	18	24
			The Number of ESG Agendas		2	2	6
			The Number of Correction/Rejection Agendas by Independent Director		0	0	0
GC Biopharma	Operation	Attendance Rate of BOD	Total	%	100	100	100
			Independent Director (Non-standing)		100	100	100
		BOD Meetings Held		Times	6	6	7
		The Number of Agendas	The Number of Overall Meetings (Report and Decision)	Cases	16[1)]	15[1)]	24
			The Number of ESG Agendas		3	4	6
			The Number of Correction/Rejection Agendas by Independent Director		0	0	0
GC Cell	Operation	Attendance Rate of BOD	Total	%	76	70	80
			Independent Director (Non-standing)		56	47	65
		BOD Meetings Held		Times	9	13	9
		The Number of Agendas	The Number of Overall Meetings (Report and Decision)	Cases	9[1)]	28	24
			The Number of ESG Agendas		0	2	3
			The Number of Correction/Rejection Agendas by Independent Director		0	0	0

1) Adjusted based on the business report on the DART

BOD Transparency GRI 2-15 | GRI 2-16 | GRI 2-17

· In order to prevent transactions that pursue private interests of directors, executives, or major shareholders, GC Group systematically blocks the possibility of conflicts of interest by making the approval of transactions between major shareholders, directors, etc. and the company a special resolution of BOD.
  - Directors who have a special interest in the agenda of BOD are restricted from exercising their voting rights.
· Management Committee decisions are notified to each director within 5 business days.

Nomination and Selection of Directors and Chairman of BOD GRI 2-10 | GRI 2-11

· GC (Holding Company), GC Biopharma, GC Cell
  - Directors are appointed at the general shareholders' meeting with the recommendation of BOD.
  - In accordance with the Commercial Act and related laws, independent directors are appointed after deliberation by BOD on the suitability of performing duties as an independent director, targeting candidates who have not had any transaction with the largest shareholder or related parties for the past three years

Performance

Revision of Articles of Incorporation

· GC Group revised its Articles of Incorporation at the general shareholders' meeting in March 2022 to appoint the chairman of BOD from among the directors, allowing the CEO and chairman of BOD to be separated
  - Establish basis for strengthening independence and management transparency of BOD

Strengthening Independence of BOD

· GC Group checks the interests required by related laws, such as the criteria for judging independence under Article 382 of the Commercial Act, from the stage of appointing independent directors so that independent directors can supervise and support the company's management in an independent position from management
· Limiting the number of concurrent positions of outside directors to two or less in accordance with legal standards
· Appointing independent director, check concurrent positions in another company through the 'Confirmation of Qualifications for Outside Director', improve expertise and responsibility by appointing a person as independent director with long experience and expertise in the company's business field.
· Support various business for independent directors for their efficiently performing their roles.
  - Support them through the BOD department
  - Regulations such as rights to request information etc. (Ensure rights for independent directors to request information to GC, if necessary, they can get training and assistance from experts outside the company.)

G GENERAL

GRI 2: Governance

BOD's Role GRI 2-12 | GRI 2-13 | GRI 2-14

▶ ESG Management Implementation System(Refer to p.23)

- GC Group's BOD shall perform and supervision of agenda items such as general shareholders' meeting, management (including ESG), finance, investment and expenditure, sales and production, appointment of directors, and establishment and operation of committees within the board of directors
- In particular, some management agendas are delegated to Management Committee for timely response and critical maters are decided and presented again to BOD.

Evaluation of BOD's Performance and Compensation GRI 2-18 | GRI 2-19 | GRI 2-20

▶ Management's key performance indicators (KPIs)(Refer to p.96)

- When their tenure is over, determining reappointment in the board meeting at the end of their tenure based on the evaluation of directors
- Based on attendance rate of BOD and performance(Achieving company's management goals and enhancing corporate image etc.).
- The compensation of directors is appropriately decided within the limits of the compensation granted by the resolution of the general shareholders' meeting, taking into account the duties, roles and responsibilities of the directors.
  - Independent directors are not paid additional performance-based compensation to ensure independence.
- How to evaluate performance : Revenue, financial statement such as net profit during the term and whether to achieve KPIs etc.

Compensation of Management

Classification			Unit	2020	2021	2022
GC (Holding Company)	Total Amount of BOD Compensation	Total	KRW million	2,479	2,660	2,459
		Inside Director		2,443	2,624	2,423
		Independent Director (Non-standing)		36	36	36
GC Biopharma	Total Amount of BOD Compensation	Total		1,569	1,970[1)]	1,698
		Inside Director		1,533	1,934	1,662
		Independent Director (Non-standing)		36	36	36
GC Cell	Total Amount of BOD Compensation	Total		697	1,399	1,775
		Inside Director		673	1,349	1,706
		Independent Director (Non-standing)		24	50	69

1) The amount after subtracting the severance pay for one resigned director from the total compensation of KRW 2.66 billion in the business report

Audit

- GC(Holding Company), GC Biopharma and GC Cell have a full-time auditor, and there is no obligation to establish an Audit Committee under the Commercial Act since the total assets are less than KRW 2 trillion on a separate basis.

Performance

Audit Organization

- Operate a full-time audit that conducts audits while working full-time at the company based on Article 542-10 (1) of the Commercial Act
  - Improve transparency in corporate management, such as soundness of accounting and financial activities and internal control system evaluation.
- The appointment of auditors meets the qualifications under relevant statutes, such as the Commercial Act, and secures independence and expertise by appointing experts with long experience in finance, accounting, and management.
- Providing proper compensation decided by general meetings of shareholders considering works and responsibilities of auditors to secure work fidelity.

External Auditor

- Securing objectivity and transparency for financial information through regular audits by independent external auditor
  - 'Qualified' of 2022's fiscal year independent auditor's review for GC (Holding Company), GC Biopharma, GC Cell
- The external auditor attends the general shareholders' meeting and explains and responds to questions from shareholders regarding the audit report submitted.

Internal Control Organization

- Established internal accounting control regulations and operating an organization dedicated to internal accounting control In order to write and disclose reliable accounting information.
- After evaluating the operation of the internal accounting control system every year, CEO reports the results to BOD and general shareholders' meeting to enhance the transparency and reliability of accounting information.
- The Audit Team, an internal audit department, strives for effective internal control by establishing and approving audit plans, conducting regular and occasional audits, and preventing risks in advance.

G GENERAL

GRI 2: Governance

Shareholder-Friendly Policy

- GC Group stipulates that one vote per one share in the articles of incorporation to grant voting rights fairly for shareholder.
- GC Group understands that shareholders' rights cannot be deprived or restricted, respects shareholders' rights in accordance with laws and articles of incorporation, and decides to protect and guarantee the rights through AGM.
- Shareholders of GC Group may propose an agenda at the AGM in accordance with the Commercial Act and related laws (the right to propose to shareholders in Article 363-2 of the Commercial Act) and have the right to inquire about the agenda and demand for an explanation.

Performance

Shareholder Return Policy

- GC Group aims for a stable dividend policy based on company management performance
  - The top priority is to increase shareholders value and expand shareholders return.
- Provide annual dividends for shareholders to return management performance by considering forecast earning and financial solvency within net profit.
- Annual dividend scale is decided by BOD every year and is informed to all shareholders before AGM is held.
- After AGM's decision, dividends are provided for shareholders within one month.

Communication with Shareholders

- GC Group shares the company's management performance and major issues with shareholders through AGM, provides them with a free opportunity to speak and provides a sufficient explanation for shareholders' questions.
- In order to secure corporate transparency and confidence, NDR (Non-Deal Roadshow) is held for institutional investors, and various IR activities are conducted, such as participating in Corporate Day and conferences held by stock firms.
- Also, the company's business contents, financial statement, and management performance are disclosed transparently through the website and the Financial Supervisory Service's electronic disclosure system, DART (Data Analysis, Retrieval and Transfer System).

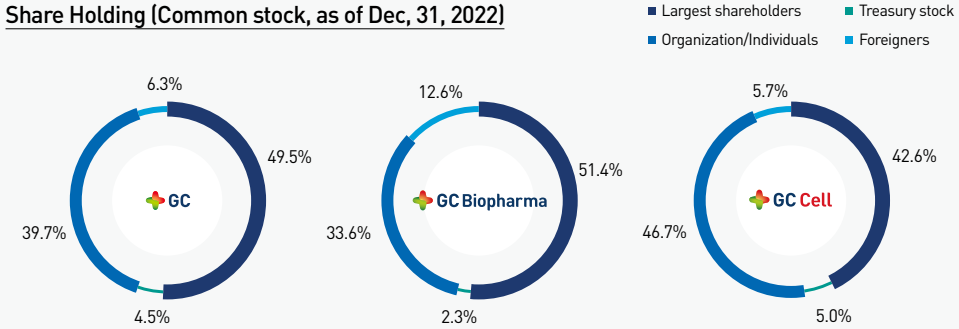
Increase Shareholder Value

- GC Group's listed affiliates scheduled our regular AGM with different date to the opening date designated by the Financial Supervisory Service
- Implementing the safety management of participants in the AGM in accordance with the government's quarantine management guidelines for COVID-19.
- Notification of the date, time, place, and purpose of the meeting has been made no later than two weeks before the date of the AGM.
  - The business report and the audit report are disclosed one week before the AGM to review the management performance and key status in advance.
- Electronic voting system was introduced and operated to enhance shareholder convenience

Implementation System for Recommendation of Proxy Solicitation

- GC (Holding Company) and GC Biopharma implement system for recommendation of proxy solicitation from 2022's AGM based on Capital Market Act so that shareholders can express their various decision rights.

Share Holding (Common stock, as of Dec, 31, 2022)



G GENERAL

GRI 2: Governance

Shareholder-Friendly Policy

Shareholder and Dividend

Classification			Unit	2020	2021	2022
GC (Holding Company)	Major dividend indicator	Face Value of Stock	KRW	500	500	500
		Net Profit	KRW million	170,960	55,270	32,823
		Earnings per Share	KRW	3,793	1,222	727
		Total Amount of Cash Dividend	KRW million	22,702	18,162	13,622
		Cash Dividend Payout Ratio	%	13.3	32.9	41.5
		Cash Dividend Yield Ratio		1.4	1.5	1.7
		Cash Dividend Per Stock	KRW	500	400	300
	Issued stocks	Total Amount of Possibility of Issue	Stock	150,000,000	150,000,000	150,000,000
		Total Amount of Issued Stocks		49,543,070	49,543,070	49,543,070
		Treasury Stock		4,141,339	4,141,339	4,141,339
		Number of Shares Ready to Trade		45,401,731	45,401,731	45,401,731
GC Biopharma	Major dividend indicator	Face Value of Stock	KRW	5,000	5,000	5,000
		Net Profit	KRW million	81,049	123,212	65,453
		Earnings per Share	KRW	7,101	10,796	5,735
		Total Amount of Cash Dividend	KRW million	17,120	22,826	19,973
		Cash Dividend Payout Ratio	%	21.1	18.5	30.5
		Cash Dividend Yield Ratio		0.4	0.9	1.3
		Cash Dividend per Stock	KRW	1,500	2,000	1,750
	Issued stocks	Total Amount of Possibility of Issue	Stock	30,000,000	30,000,000	30,000,000
		Total Amount of Issued Stocks		11,686,538	11,686,538	11,686,538
		Treasury Stock		273,360	273,360	273,360
		Number of Shares Ready to Trade		11,413,178	11,413,178	11,413,178
GC Cell	Major dividend indicator	Face Value of Stock	KRW	500	500	500
		Net Profit	KRW million	4,095	30,064	24,169
		Earnings per Share	KRW	394	2,785	1,664
		Total Amount of Cash Dividend	KRW million	1,055	0	5,256
		Cash Dividend Payout Ratio	%	25.4	0	21.8
		Cash Dividend Yield Ratio		0.2	0	0.7
		Cash Dividend Per Stock	KRW	100	0	350
	Issued stocks	Total Amount of Possibility of Issue	Stock	50,000,000	50,000,000	50,000,000
		Total Amount of Issued Stocks		10,554,054	15,800,344	15,800,344
		Treasury Stock		0	783,492	783,692
		Number of Shares Ready to Trade		10,554,054	15,016,852	15,016,652

GRI 2: ESG Management Strategy, Risk Management

Compliance with Laws and Regulations GRI 2-27

· Each subject's compliance of GC Group is disclosed.
· Financial loss is KRW 0 due to lawsuit within reporting period.

▶ Violation of Environmental Regulations (Refer to p. 96)
▶ Violation of Information Security Regulations(Refer to p. 127)
▶ Violation of Regulations related to Information Provision and Labelling (Refer to p. 46, 49)
▶ Violation of Regulations related to Anti-corruption/Fair trade (Refer to p. 87)

Membership Associations GRI 2-28

· GC Group communicates with various stakeholders and get necessary information.

Performance

GC (Holding Company)'s Association Membership (As of Apr, 2023)

· Korea Industrial Safety Association
· Korea Institute of Urban Planners (KIUP)
· Korea Listed Companies Association
· Korea Environmental Engineers Association

GC Cell's Association Membership (As of Apr, 2023)

· Korea National Enterprise for Clinical Trials (KoNECT)
· Pharma Specialists Association (PhaSa)
· Council for Advanced Regenerative Medicine(CARM)
· Korea IR Association
· Korea Association of Referral Laboratories (KOARL)
· Korea Biomedicine Industry Association(KOBIA)
· Korea Industrial Technology Association (KOITA)
· Korea Institute of Drug Safety & Risk Management(KIDS)
· Korea Society for Clinical Development (KSCD)
· Korea Pharmaceutical and Bio-Pharma Manufacturers Association (KPBMA)
· Korean Society of Pharmaceutical · Medicine(KSPM)
· Korea Integrated Logistics Association(KiLA)
· Korea Innovative Medicines Consortium (KIMCo)
· World Cargo Alliance(WCA)
· Korea International Trade Association
· International Air Transport Association(IATA)

G GENERAL

GRI 2: ESG Management Strategy, Risk Management

Membership Associations GRI 2-28

Performance

GC Biopharma's Association Membership (As of Apr, 2023)

- Developing Countries Vaccine Manufacturers Network (DCVMN International)
- Fair Competition Federation
- Assessment and Accreditation of Laboratory Animal Care International(AAALAC International)
- International Vaccine Institute (IVI)
- Korea Association of Emergency Planners
- Korea Industrial Safety Association
- Korea Chamber Of Commerce And Industry
- Women Corporate Directors Korea(WCD)
- International Federation of Pharmaceutical Manufacturers and Associations(IFPMA)
- Member Association for Sincere Reporting of Medicines
- The Federation of Korean Industries
- Korean Security Agency of Trade and Industry(KOSTI)
- Pharma Specialists Association (PhaSa)
- Pharmaceutical Bio CSR Research Society
- Korea Pharmaceutical Patent Institution
- Chungbuk Enterprises Federation
- Chungbuk Economic Forum
- Pandemic Influenza Preparedness Framework(WHO, PIP Framework)
- Korea Health Functional Food Association(KHFF)
- Korea Management Association(KMA)
- Korea International Trade Association(KITA)
- Korea Biomedicine Industry Association (KOBIA)
- Korea Pharmaceutical and Bio-Pharma Manufacturers Association
- Korea Industrial Technology Association(KOITA)
- Korea Fire Safety Institute
- Korea Food Industry Association(KFIA)
- Korea Drug Research Association(KDRA)
- Korea Energy Engineers Association
- Korea Pharmaceutical Traders Association
- Korean Medical Library Association
- Korean Personnel Management Association (KPI)
- Korea Electric Engineers Association
- Korea Pharmaceutical and Bio-Pharma Manufacturers Association (KPBMA)
- Korea Intellectual Property Association (KINPA)
- KEPA(Korea Environmental Preservation Association)

Overall Risk Management

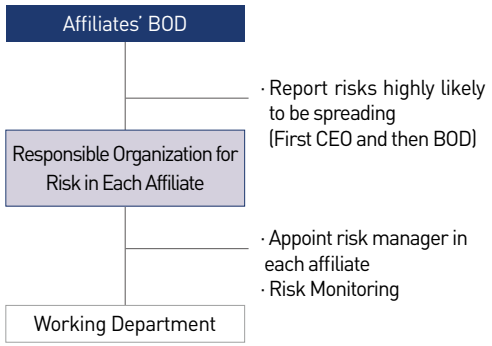
Performance

Risk Management System

- GC Group continuously identify risks and monitors risks and opportunities to prevent and manage risk factors.
  - risk management relevant to manufacturing, sales, provision of products and service emergency response and service potential emerging risk which is threating management activities
- 'GC Risk Management and Crisis Response Manual'
  - It is to minimize first damage due to risks and secondary impact.
  - All employees are responsible for responding timely and systematically to risks by sharing information through the reporting system presented in the manual as soon as they identify them

Risk Management Organization

- We appoint risk managers for each affiliate and GC (Holding company) plays a role as integrated risk management control tower
  - Integrated risk manager: Head of GC (Holding Company)'s Office of Business Admin & Coordination Department
  - Affiliate's risk manager: Head of GC Biopharma's Office of Business Admin & Coordination Department, GC Cell's CAO
- We report risks by managers' decision on risks depending on whether they can spread or not
  - Issues that are less likely to escalate to a crisis are managed through consultation and coordination with relevant departments
  - Issues that are highly likely to escalate to a crisis are reported to the CEO immediately and depending on the matter, BOD is reported to respond at corporate level
- Responsible organization performs monitoring before and after risks and take measures depending on types of risks
  - (ex) GC Biopharma operates a permanent organization and personnel committee for custom of labor relations



G GENERAL

GRI 2: ESG Management Strategy, Risk Management

Performance

Risk Identification and Classification

· Risk is classified into internal risk (financial, law, business operation, and strategy) and external management environmental risk and detailed types of risk are defined and managed systematically

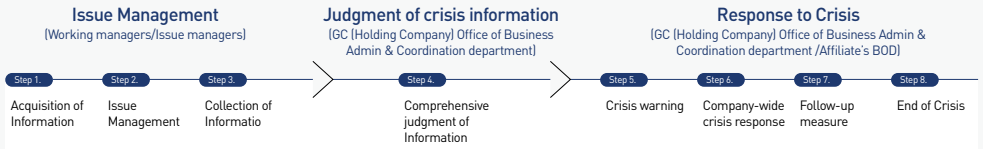
GC Group's Risk Classification System

Internal Risk				External Risk	
Finance	Market	Credit	liquidity	External Issue	Management & Environment Politics Customer Change Government Policy Public Relations Competitors Nation Natural Disasters Appearance of New Technology Pandemic
	Tax	Profit & Loss	Disclosure		
Regulations	Illegality	Compliance			
	Lawsuit/Dispute	Liability of compensation	Agreement		
Business Operation	Supply Chain	IT	Technology		
	Quality	Approval	Partners		
	Security	Development	Project		
	Environment/ Climate Change	Human Rights	Safety		
Strategy	Strategic Direction	The Management			
	M&A	Overseas Investment	New Business		

Risk Response

· We monitor various risks in advance, check work procedures for risk control, and conduct regular reviews on actual operation status.

Risk Response Process



Legal Actions for Anti-competitive Behavior, Anti-trust, and Monopoly Practices GRI 206-1

Legal Actions for Anti-competitive Behavior, Anti-trust, and Monopoly Practices

Classification			Unit	2020	2021	2022
GC (Holding Company)	Violation of Regulations	Number of cases in which executives and employees have been fired or disciplined during corruption cases	Number	0	0	0
		Number of cases of corruption in which contracts with business partners have not been terminated or renewed		0	0	0
		Corruption-related lawsuits against companies and executives and employees		0	0	0
		Legal sanctions related to fair trade		0	0	0
GC Biopharma	Violation of Regulations	Number of cases in which executives and employees have been fired or disciplined during corruption cases		0	0	0
		Number of cases of corruption in which contracts with business partners have not been terminated or renewed		0	0	0
		Corruption-related lawsuits against companies and executives and employees		0	0	0
		Legal sanctions related to fair trade		1[1)]	0	0
GC Cell	Violation of Regulations	Number of cases in which executives and employees have been fired or disciplined during corruption cases		0	0	0
		Number of cases of corruption in which contracts with business partners have not been terminated or renewed		0	0	0
		Corruption-related lawsuits against companies and executives and employees		0	0	0
		Legal sanctions related to fair trade		0	0	0

1) Charged with violation of the Fair Trade Act related to bidding (2nd trial currently in progress)

G GENERAL

GRI 2: Stakeholders

GRI 2: Stakeholders GRI 2-29

Approach to Stakeholder Engagement

Stakeholder	Main Concerns	Communication Channel	Cycle
Customer	Customer satisfaction activities, quality management, and sales/ marketing activities	Website	Regularly
		Customer counseling center	Regularly
Shareholders & investors	Minimization of management risk, sharing of management activity information and plans, and protection of shareholder interests	Board of Directors	4 times a year, when necessary
		Shareholders' meeting	Once a year, when necessary
		Business report, governance report	Once a year
		Disclosure on the DART	When necessary
Partner	Fair trade and shared growth	Discussion meeting (Shared Growth Partners Day)	Once a year
		Whistleblowing system	Regularly
		Procurement information system	Regularly
		Internal e-mail	When necessary
Executives & employees	Welfare benefits, organizational culture, and HR system	In-house bulletin board	Regularly
		Grievance handling channel	Regularly
		Solution Center (Suggestion Square)	Regularly
		Employee survey	When necessary
Local communities	Social contribution, contribution to local economy, and environmental protection	Social contribution activities	When necessary
Government, local autonomous governments	Legal compliance, policies, and response to regulations	Discussion meeting, website of local governments	When necessary

Collective Bargaining Agreements GRI 2-30

Collective Bargaining Agreements

Classification			Unit	2020	2021	2022
GC (Holding Company)	Labor Union	Ratio of Membership	%	N/A	N/A	N/A
		Percent of Applying Collective Agreement[1)]		86	81	83
GC Biopharma	Labor Union	Ratio of Membership		10.3	21.2	26.2
		Percent of Applying Collective Agreement[1)]		97	94	90
GC Cell	Labor Union	Ratio of Membership		N/A	N/A	N/A
		Percent of Applying Collective Agreement[1)]		88	88	90

1) Subject to employment rules

GRI 202: Market Presence

· GC Biopharma has several labor unions, GC (Holding Company) and GC Cell has no labor unions and selects union heads by executives and employees and performs discussion on collective agreement and working conditions through labor relations council.

Performance

Labor Relations Council

· GC (Holding Company)
- Selected union heads and heads of users regularly hold meetings every three month to discuss enhancing productivity, performance dividends, hiring and training and better system for human resources management and better welfare for workers.
- In 2022, they came to agreement for welfare(Health examination, shuttle bus etc.) training(Online course), and hub offices etc.

· GC Cell
- Regular meetings are held every three months with the participation of elected workers and employers
- 2022's performance: six major critical decisions (Improvement of employment rules) are reflected 100%

Employment Welfare GRI 202-1

Employment Welfare

Classification				Unit	2020	2021	2022
GC (Holding Company)	Compare to the Legal Minimum Wage Ratio	Salary Rate for New Employees	Male	%	176.0	173.4	165.0
			Female		171.7	169.1	161.0
		Legal Minimum Wage		KRW million	23	24	25
GC Biopharma	Compare to the Legal Minimum Wage Ratio	Salary Rate for New Employees	Male	%	167.5	164.8	158.2
			Female		163.0	160.4	158.2
		Legal Minimum Wage		KRW million	23	24	25
GC Cell	Compare to the Legal Minimum Wage Ratio	Salary Rate for New Employees	Male	%	129.0	137.0	130.0
			Female		129.0	132.0	141.0
		Legal Minimum Wage		KRW million	23	24	25

E ECONOMY

GRI 201: Economic Performance

Consolidated Statement of Financial Position GRI 201-1

Financial Statement - GC (Holding Company)

Classification		Unit	2020	2021	2022
Assets	Total	KRW million	3,241,202	3,496,834	3,592,061
	Current assets		1,535,804	1,424,864	1,261,978
	Cash and cash equivalents		447,572	335,569	208,637
	Trade and other receivables		460,734	465,586	474,563
	Other financial assets		62,352	62,825	31,341
	Amounts due from customers for contract work		3,581	29,082	9,305
	Inventories, net		489,145	506,995	505,086
	Derivative assets		4,875	1,231	5,235
	Other current assets		25,675	17,908	27,512
	Disposal assets held for sales		41,870	5,668	299
	Non-current assets		1,705,398	2,071,970	2,330,082
	Long-term trade and other receivables		22,878	22,512	30,867
	Other non-current financial assets		163,762	145,704	125,579
	Investment in associates		128,297	164,290	242,233
	Property, plant and equipment, net		971,837	1,068,971	1,109,123
	Intangible assets, net		313,945	533,245	666,154
	Investment properties		61,356	79,725	62,594
	Right-of-use assets		18,702	20,493	39,196
	Derivative assets		891	153	1,964
	Invested asset for postemployment benefit		-	10,128	16,412
	Other non-current assets		3,031	4,704	3,818
	Deferred tax assets		20,699	22,045	32,142

Financial Statement – GC (Holding Company)

Classification		Unit	2020	2021	2022
Liabilities and Equity		KRW million	3,241,202	3,496,834	3,592,061
Liabilities	Total		1,567,701	1,586,105	1,625,017
	Current liabilities		1,102,777	925,913	1,052,354
	Trade and other payables		267,810	274,259	293,318
	Short-term borrowings		735,176	509,432	603,010
	Lease liabilities		3,493	6,345	11,655
	Amounts due to customers for contract work		3,906	7,530	15,232
	Income tax payables		21,780	44,390	19,118
	Derivative liabilities		8,576	5,253	22,352
	Provisions		20,091	29,801	31,484
	Other current liabilities		32,418	48,873	56,185
	Disposal liabilities held for sales		9,527	30	-
	Non-current liabilities		464,924	660,192	572,663
	Long-term trade and other payables		14,590	13,163	21,765
	Long-term borrowings		324,779	508,783	448,359
	Lease liabilities		23,360	21,223	34,848
	Derivative liabilities		-	1,421	3,758
	Net Defined benefit liabilities		8,511	1,856	3,381
	Provisions		1,252	3,234	3,228
	Other non-current liabilities		13,600	24,590	22,693
	Deferred tax liabilities		78,832	85,922	34,630
Equity	Total		1,673,501	1,910,729	1,967,043
	Equity attributable to the owners of the parent		919,301	1,025,425	1,037,734
	Issued capital		26,579	26,579	26,579
	Share premium		9,321	60,291	51,065
	Other components of equity		(18,289)	(18,289)	(18,289)
	Accumulated other comprehensive income (loss)		(4,584)	11,690	19,228
	Retained earnings		906,274	945,154	959,150
	Non-controlling interests		754,200	885,304	929,309

E ECONOMY

GRI 201: Economic Performance

Consolidated Statement of Financial Position GRI 201-1

Financial Statement - GC (Holding Company)

Classification	Unit	2020	2021	2022
Operating revenue	KRW million	1,719,326	1,840,558	2,079,560
Finished goods and merchandise		1,495,925	1,437,867	1,573,241
Services		153,366	305,901	378,089
Real-estate sales		-	-	-
Construction		53,759	78,309	110,581
Rental		8,766	7,723	4,985
Dividends		5,349	6,328	7,609
Others		2,161	4,430	5,055
Operating expenses		1,648,594	1,754,314	2,008,400
Cost of finished goods and merchandise sold		1,030,410	964,950	1,056,439
Cost for services		108,689	173,042	219,895
Real-estate costs		-	-	-
Cost for construction		49,936	74,025	104,889
Selling, general and administrative expenses		459,559	542,297	627,177
Operating profit		70,732	86,244	71,159
Other income		38,972	29,688	63,011
Other expenses		39,284	12,952	27,822
Finance income		70,103	57,807	33,981
Finance costs		47,348	48,891	76,027
Share of profit to subsidiaries		21,960	-	-
Share of profit (loss) to associates		(7,216)	68,117	(34,673)
Profit before tax		107,919	180,013	29,629
Income tax expense		37,558	52,355	(29,268)
Profit (loss) from continuing operation		70,361	127,658	-
Profit (loss) from discontinued operations, net of tax		109,635	-	-
Profit (loss) for the year		179,996	127,658	58,897

Financial Statement - GC (Holding Company)

Classification	Unit	2020	2021	2022
Other comprehensive income (loss)	KRW million	-	-	-
Other comprehensive income to be reclassified to profit or loss in subsequent periods (net of tax)		(8,471)	13,112	25,493
Net gain (loss) on equity adjustments of investments in associate		(1,551)	4,091	12,869
Foreign currency translation of foreign operations		(6,920)	9,021	12,623
Other comprehensive income not to be reclassified to profit or loss in subsequent periods (net of tax):		13,170	14,439	(3,780)
Re-measurement gain (loss) on defined benefit plans		7,702	(1,978)	(1,800)
Fair value gain (loss) on financial assets at FVOCI		4,764	16,403	(1,979)
Net gain (loss) on equity adjustments of investments in associate		704	14	-
Other comprehensive income (loss) for the year, net of tax		4,699	27,550	21,713
Total comprehensive income (loss) for the year, net of tax		184,695	155,208	80,610
Profit (loss) for the year attributable to		-	-	-
Equity holders of the parent		170,960	55,270	32,823
Non-controlling interests		9,036	72,388	26,074
Total comprehensive income (loss) for the year attributable to		-	-	
Equity holders of the parent		171,939	78,107	45,892
Non-controlling interests		12,756	77,101	34,719
Earnings per share:	KRW	-	-	-
Continuing operation		1,578	1,222	727
Discontinued operation		2,215	-	-
Old preferred stock 1 holders of the parent		1,115	790	360
Old preferred stock 2 holders of the parent		1,110	785	355

E ECONOMY

GRI 201: Economic Performance

Operation of Employee Pension GRI 201-3

· GC (Holding Company), GC Biopharma and GC Cell operate defined benefit (DB) system.

Retirement Pension System[1]

Classification			Unit	2020	2021	2022
GC (Holding Company)	Defined Benefit(DB)	Financial Operation	KRW million	13,970	15,331	17,407
		Number of People with Membership	Persons	144	135	135
GC Biopharma	Defined Benefit(DB)	Financial Operation	KRW million	98,740	122,740	132,865
		Number of People with Membership	Persons	1,814	1,901	2,045
GC Cell	Defined Benefit(DB)	Financial Operation	KRW million	10,811	20,478	24,667
		Number of People with Membership	Persons	433	795	827

1) Separate basis

GRI 203: Indirect Economic Impacts

Indirect Economic Impacts GRI 203-1 | 203-2

Indirect Economic Impacts1[1]

Classification				Unit	2020	2021	2022
GC (Holding Company)	Value Distri -bution	Total		KRW million	203,926	252,775	227,624
		Partners	Purchasing cost		137,275	206,114	199,158
		Employees and Executives	Total		18,346	17,604	18,464
			Employee Paycheck[2]		17,677	17,006	17,674
			Training Expenses		156	162	179
			Welfare Expenses		513	436	611
		Shareholders and Investors	Total		30,810	25,845	23,423
			Total amount of Dividends		22,702	18,162	13,622
			Interest Cost		8,108	7,683	9,801
		Government	Corporate Tax		17,480	3,185	(13,448)
		Local Community	Donations[4]		15	27	26

GRI 203: Indirect Economic Impacts

Indirect Economic Impacts[1]

Classification				Unit	2020	2021	2022
GC Biopharma	Value Distri -bution	Total		KRW million	1,054,427	940,840	945,167
		Partners	Purchasing Cost		829,958	692,499	685,614
		Employees and Executives	Total		183,110	197,498	206,237
			Employee Paycheck[2]		158,241	170,107	170,290
			Training Expenses[3]		1,667	1,934	2,732
			Welfare Expenses		23,202	25,457	33,215
		Shareholders and Investors	Total		26,482	33,168	31,489
			Total amount of Dividends		17,120	22,826	19,973
			Interest Cost		9,362	10,342	11,516
		Government	Corporate Tax		7,242	14,817	16,307
		Local Community	Donations[4]		7,680	2,857	5,521
GC CELL	Value Distri -bution	Total			39,274	76,551	110,289
		Partners	Purchasing Cost		9,834	24,574	28,067
		Employees and Executives	Total		26,990	38,036	53,336
			Employee Paycheck[2]		24,008	34,804	55,357
			Training Expenses		48	141	202
			Welfare Expenses		2,970[5]	7,025[5]	8,115
		Shareholders and Investors	Total		1,188	416	7,419
			Total amount of Dividends		1,055	0	5,256
			Interest Cost		133	416	2,163
		Government	Corporate Tax		1,665	9,578	11,071
		Local Community	Donations[4]		11	13	58

1) Separate basis
2) Recalculated to the amount including wages and retirement benefits, retroactively applied to 2020 and 2021
3) Apply based on financial statements
4) Including matching grant, year-end donation, and participatory social contribution donation
5) Re-established and reflected in the amount including welfare expenses and welfare promotion expenses

E ECONOMY

GRI 203: Indirect Economic Impacts

Indirect Economic Impacts GRI 203-1 | GRI 203-2

Performance

Direct & Indirect Investment to Activate the Healthcare Industry Ecosystem

· GC (Holding Company)
- GC (Holding Company) builds an ecosystem where the technology of innovative companies can help improve the quality of human life.

GC Group's Main Investment Area

Classification	Investment Target	Description
Direct Investment	Humanscape	Provide Digital Healthcare Service
	KANAPH	Developing next generation therapeutics for oncology and autoimmune diseases
	Redblue	Fitness CRM and O2O platform
	Atommerce	Online and Offline Psychological Counseling Platform
	VUNO	Medical artificial intelligence platform
	Cyrus Therapeautics	Development of anticancer drugs and metabolic disease treatments
	Genecast	Liquid biopsy cancer diagnosis
	Genoplan	Analysis of genetic information
	Kittenplanet	Digital Dental Care Platform
	Emocog	Digital dementia treatment
	DoingLAB	Artificial intelligence diet nutritional information platform
	GravityLabs	M2E (Move to Earn) based on blockchain
	Pumpkincorp	Specialized IOT in on-offline companion animal
Indirect Investment	Stonebrigde-Highland Healthcare Fund	-
	Futureplay Innovation Solution Fund	-

Direct & Indirect Investment to Activate the Pharmaceutical and Vaccine Industry Ecosystem

· GC Biopharma, GC Cell
- GC Biopharma & GC Cell participate and cooperate in Biomedicine union cooperation and association 'Business to support and activate raw materials for Biomedicines" for domestic ecosystem mainly full of overseas biomedicine raw materials companies.

GC Biopharma & GC Cell's Main Investment Area

· Business to support commercialization of raw materials of biomedicine


- Incheon Metropolitan City/KoBIA(Connected with Ministry of Trade, Industry and Energy)
- Business Implementation date: From 2022 to 2025
- Working Expense: KRW 9.5 billion
- Participating Organizations: 24 persons from 20 companies including GC Biopharma in the bio industry
- How to participate: As a selection and evaluation committee

· Biomedicine union cooperation and association


- Ministry of Trade, Industry and Energy/Ministry of Health and Welfare/Korea Biotechnology Industry Organization
- Business Implementation date: From 2022 to2024
- Working Expense: : KRW 85.7 billion
- Participating Organizations: : 9 companies including GC Biopharma and GC Cell (3, 4 departments)
- How to participate: As a buyer

Strategic Investment

Humanscape PUMPKIN KANAPH redBLUE MINDCAFE VUNO Cyrus future play KITTEN PLANET GENECAST Genoplan emocog GRAVITY LABS

E ECONOMY

GRI 204: Procurement Practices

Proportion of Spending on Local Suppliers GRI 204-1

Procurement Cost

Classification		Unit	2020	2021	2022
GC (Holding Company)	Procurement Cost for Local Suppliers	KRW million	133,879	197,883	192,903
	Total Expenses for Suppliers		137,275	206,114	199,158
	Percent of Total Expense	%	97.5	96.0	96.9
GC Biopharma	Procurement Cost for Local Suppliers	KRW million	435,135	568,361	567,698
	Total Expenses for Suppliers		829,958	692,499	685,614
	Percent of Total Expense	%	52.4	82.1	82.8
GC Cell	Procurement Cost for Local Suppliers	KRW million	8,988	22,650	24,004
	Total Expenses for Suppliers		9,834	24,574	28,067
	Percent of Total Expense	%	91.4	92.2	85.5

GRI 207: Tax Policy

Tax Risk Management GRI 207-1 | GRI 207-2 | GRI 207-3 ▶ Risk Identification and Classification(Refer to p.87)

· GC Group manages risks by performing before-and-after tax review through consultation with accounting firms and has a discussion with them regarding tax issues in advance.

E ENVIRONMENT

GRI 303: Water and Effluents

Effort to Reduce Water and Data Management GRI 303-3 | GRI 303-4 | GRI 303-5

· GC Cell installs operates water recycling facilities in R/O system to reduce water usage.
- Efficiently reuse wastewater from R/O system(UV/Activated carbon filter) as domestic water and cooling water and discharge it.

· Calculation scope of water data
- GC (Holding Company) : Headquarter
- GC Biopharma : Headquarter, three plants(Ohchang, Hwasun, Eumseong), R&D Center, 10 worksites
- GC Cell : Headquarter, Cell center

Water Management

Classification			Unit	2020	2021	2022
GC Biopharma	Total Amount of Water Withdrawal	Total	Ton	951,117[1]	967,822[1]	986,726
		Groundwater		0	0	0
		Utility Water		858,168	847,246	903,706
		Others		89,358	117,910	79,961
	Total Water Consumption			345,442	425,318	399,669
	Total Amount of Effluents (Discharge)		Ton	605,675	542,504	587,058
	Water Consumption Intensity		Ton/KRW 100 million	28.136[1]	36.342[1]	32.104
GC Cell	Total Amount of Water Withdrawal	Total	Ton	27,124[2]	29,536[2]	70,283
		Utility Water		27,124	29,536	70,283
	Total Water Consumption	Total		32,006[2]	46,789[2]	107,272
	Total Amount of Effluents (Discharge)			27,124[2]	29,536[2]	70,283
	Water Recycling	Water Recycling		4,882[2]	17,253[2]	36,989
		Water Recycling Rate	%	15.3	36.9	34.5
	Water Consumption Intensity		Ton/KRW 100 million	40.324[2]	29.365[2]	48.478
GC(Holding Company)	Total Amount of Water Withdrawal	Total	Ton	7,138[1]	6,540[1]	7,147
		Utility Water		7,138[1]	6,540[1]	7,147

E ENVIRONMENT

GRI 303: Water and Effluents

Effort to Reduce Water and Data Management GRI 303-3 | GRI 303-4 | GRI 303-5

Water Management

Classification		Unit	2020	2021	2022
GC (Holding Company)	Total Water Consumption	Ton	7,138[1]	6,540[1]	7,147
	Total Amount of Effluents (Discharge)		7,138[1]	6,540[1]	7,147
	Water Consumption Intensity	Ton/ KRW 100 million	0	0	0

1) This value reflects the change in distribution criteria by headquarters
2) Figures were recalculated by adjusting the scope of data collection (All Cell Centers except offices were changed to merger standards including headquarters offices)

Management of Water Discharge-related Impacts GRI 303-1 | GRI 303-2

· GC Biopharma, GC cell consider environmental impact of discharging and use of wastewater treatment for manufacturing process based on legal standards.
  - The headquarters (Yongin, Gyeonggi-do), Worksites (Ochang and Eumseong, Chungcheongbuk-do / Hwasun, Jeollanam-do), and Cell Center (Yongin, Gyeonggi-do) do not affect water sources, but impact management in connection with community water resources is necessary
· GC Biopharma, GC Cell treat wastewater based on relevant regulations, SOP for emission of environmental pollutants and GMP standards.
· GC (Holding Company) is not legally subject to wastewater management.

GRI 308: Supplier Environmental Assessment

New Suppliers that were Screened using Environmental Criteria GRI 308-1

New Suppliers that were Screened using Environmental Criteria

Classification		Unit	2020	2021	2022
GC Biopharma	Ratio of New Suppliers Conducting Environment Criteria Among All	%	100	100	100
	Number of New Suppliers	Places	17	13	9
	Number of New Suppliers Conducting Environment Criteria		17	13	9

GRI 308: Supplier Environmental Assessment

· GC Biopharma applies ESG code of conduct for all partners so that we can deal with only partners who pass environment audit.
· For new suppliers, a pledge is requested and replaced before signing a transaction

ESG Monitoring for Supply Chain GRI 308-2

· GC Biopharma performs monitoring on partners whether they follow Pledge of Compliance with Code of Conduct, Fair Trade Due Diligence Assessment
  - Monitoring target: Partners of general materials(Raw materials, subsidiary materials and packaging materials)

ESG Monitoring for Supply Chain

Classification		Unit	2020	2021	2022
GC Biopharma	Ratio	%	36.0	35.0	72.5
	Number of Partners Required for Monitoring	Partners	60	59	121
	Total Number of Partners		165	169	167

GRI 301: Materials

Raw Material Usage GRI 301-1

Raw Material Usage

Classification		Unit	2020	2021	2022
GC Biopharma	Raw Material Usage (Human plasma)	L	727,484	380,793	469,584
	Production of Products Using Raw Materials (Human plasma)		175,441	195,928	170,588
GC Cell	Raw Material Usage (Human plasma)[1]		N/A	758	613
	Production of Products Using Raw Materials (Human plasma)[1]		N/A	2,166	1,752

1) Raw material of 'Immuncell-LC' applied after 2021 merger

E ENVIRONMENT

Circulation Economy

Resource Circulation

· With chemical management, waste management, and water (waste) management system centered on GC Group's affiliate manufacturing plant, the company is promoting the construction and upgrading of a circulating economy
- GC Biopharma's manufacturing site: Ochang Plant, Hwasun Plant, Eumseong Plant
- GC Cell's manufacturing site: Cell Center

· GC Biopharma's Eumseong Plant plants to use packaging with FSC marks for OTC medicine in the second half of 2023.

Performance

Use Eco-friendly Packaging Materiall and 3R Concept

· GC Biopharma has used materials with FSC marks since June, 2023.

· In developing new products, 3R(Reduce input resources, size and packaging materials, replace present system with eco-friendly and high-efficient system, eco-friendly design and establishing recycling system).
- 5,000~17,000 sheets of paper usage per year and transportation/storage energy reduction (as of 2022) by reducing the size of the logistics box from Mar, 2021
- About 2 times per year by improving the injection plastic bottle net (including hanger function) from Jun, 2021 Reduced plastic consumption by 1 million pieces (as of 2022)
- Reduced paper consumption by 2,400 sheets per year through barcode conversion of Hunterase ICV product manuals from Aug, 2022 (as of 2022)
- Saved paper consumption by 90,000 sheets and transportation/storage energy through reducing the size of GCFlu PFS economical packaging from Feb. 2023 (as of 2022)

Resource Circulation Management

· GC Biopharma's Ochang Plant establishes goals for achieving resource circulation and manages implementation performance for each goal.

· Environmental performance result of 2022 (released in March 2023)
- We achieved 21.1% of the final disposal rate target of 33.4% and 35.8% of the circular utilization rate target of 15.6%

Resource Circulation Goal Performance in 2022

Classification		Unit	Performance in 2022
Resource Circulation (Waste[1] amount)	Amount of Resource	Ton/Year	1,199.79
	Final Amount of Disposal		253.77
	Final Rate of Disposal	%	21.1
	Amount of Resource Circulation	Ton/Year	429.34
	Rate of Resource Circulation	%	35.8

1) Waste includes all solid and liquid substances such as halogen waste organic solvents, waste oil paints, and tissue waste

Environment Management

Environmental Impact Assessment and Monitoring

· GC (Holding Company)
- Perform regular audit for the environment(Air, water quality, waste, chemical substance, etc.) of all affiliates (15 sites)
- Operation of the environmental regulation management system, such as preventive inspection activities for environmental accidents and monitoring changes in environmental laws and regulations
- Allocate quantitative goals such as reducing environmental pollutions and improving potential risk factors for listed affiliates (GC Cell, GCMS, GCWB) and perform monitoring to check whether they are implemented or not(First half/second half, twice a year)

· GC Biopharma
- Perform environmental audit for all worksites regularly to monitor whether to improve the environment and compliance.
- Find factors to impact the environment targeting all working departments(Find serious environmental impact of factors input/discharged during the life cycle[1] through environmental impact assessment)
- Consider critical environmental impact when establishing environmental policies, goals/detailed goals and use them to communicate with stakeholders.
- Set environmental goals for departments impacted by the environment which implement improvement

· GC Cell
- HSE Team takes the lead to review and apply regulations to manage risk
- Find impact factors through environmental impact assessment for all working
- Departments impacted by environmental impact can set environmental goals and implement improvement
- Perform internal audit and assess compliance regularly
- Personnel responsible for the environment inspect performance of Allbaro system by Ministry of Environment and monitor compliance.

1) Sampling, production, distribution, installation and disposal of raw materials

Performance

Result of Internal Environmental Impact Assessment and Compliance in 2022

Classification	Unit	GC (Holding Company)	GC Biopharma	GC Cell
Number of Improvement Proposals	Cases	5	62	12
Number of Improvement Completion		5	62	12
Improvement Rate	%	100	100	100

E ENVIRONMENT

Environment Management

KPI Operation GRI 2-18

· GC Biopharma and GC cell reflect KPI into ESG tasks and set KPI for each individual and department to improve environmental performance.
- Energy reduction, waste reduction and extension of resource circulation etc.
· We evaluate achievement rate for applicable tasks every year and use this data to evaluate and reward the management and employees so that they are encouraged to produce better environmental performance.

Major ESG Performance Index by Position to Internalize Environmental Management

Classification	Position	ESG Performance Index
GC Biopharma	Ochang Plant Manager	Reduction in energy cost considering downtime of worksites, reducing waste volume, and enhancing operational efficiency
	Hwasun Plant Manager	Reduction in reused package by improving system and minimizing product disposal (Less than two times a year) etc.
	Eumseong Plant Manager	More usage of eco-friendly materials and reduction in size of packaging containers manufactured automatically (Reduction in consumer waste) and decrease in usage of purified water etc.
GC Cell	CCO[1)]	Strengthening water resources management through minimizing amount of water usage (4% reduction in 2022)

1) Chief Commercial Officer

Violation of Environmental Regulations GRI 2-27

Violation of Environmental Regulations

Classification			Unit	2020	2021	2022
GC (Holding Company)	Environmental Regulations	Number of Violation	Cases	0	0	0
		Total Amount of Related Fines	KRW million	0	0	0
GC Biopharma	Environmental Regulations	Number of Violation	Cases	0	0	0
		Total Amount of Related Fines	KRW million	0	0	0
GC Cell	Environmental Regulations	Number of Violation	Cases	0	0	0
		Total Amount of Related Fines	KRW million	0	0	0

ISO14001 Certification

· GC (Holding Company) is actively promoting the development of environmental policies and systems by supporting the maintenance and acquisition of environmental management system certifications for its subsidiary listed companies.
· ISO 14001 (Environmental Management System): GC Biopharma maintains certification, while GC Cell has obtained certification.

ISO14001 Certification

Classification			Unit	2020	2021	2022
GC (Holding Company)	Acquisition of Certification	Ratio	%	0.0	100	100
		Number of Worksites of Acquisition of Certification	Places	0	1	1
		Number of Worksites Required for Acquisition of Certification[1)]		1	1	1
GC Biopharma	Acquisition of Certification	Ratio	%	100	100	100
		Number of Worksites of Acquisition of Certification	Places	4	4	4
		Number of Worksites Required for Acquisition of Certification[2)]		4	4	4
GC Cell	Acquisition of Certification	Ratio	%	0.0	0.0	100
		Number of Worksites of Acquisition of Certification	Places	0	0	1
		Number of Worksites Required for Acquisition of Certification[3)]		1	1	1

1) Headquarter
2) Ochang plant, Hwasun plant, Eumseong plant and R&D center
3) Cell Center

ISO14001

· Certification Scope: Ochang plant, Hwasun plant, Eumseong plant and R&D center
· Effective Date:
Aug, 31, 2021 - Aug, 30, 2024

ISO14001

· Certification Scope: Cell Center
· Effective Date :
Oct, 1, 2022 - Sep, 30, 2025

E ENVIRONMENT

Environment Management

Environmental Training

· GC (Holding Company) prepares SOP for environmental management for all employees and executives and employees of partners to perform training
  - Enhancing awareness of the environment, prevention, management and improvement of surrounding environmental factors
· A dedicated legal manager in GC Biopharma conduct introduction training and maintenance training once a year or once every three year. GC Biopharma conducts training on environmental impact to improve awareness of environment management system for supervisors in each departments annually from 2023.

Environmental Training[1)]

Classification		Unit	2020	2021	2022
GC (Holding Company)	Training Completion Rate	%	0.0	100	100
	Number of Employees Completing Training	Persons	0	1	3
	Number of Training Target		0	1	3
GC Biopharma	Training Completion Rate	%	100	100	100
	Number of Employees Completing Training	Persons	1,204	1,335	1,303
	Number of Training Target		1,204	1,335	1,303
GC Cell	Training Completion Rate	%	100	100	100
	Number of Employees Completing Training	Persons	1	2	1
	Number of Training Target		1	2	1

1) Environmental technicians (Air, water quality), personnel in charge of hazardous chemical substance (Workers, persons in charge of handling, technical personnel and managers), waste disposal personnel and personnel in charge of medical waste

S SOCIETY

GRI 401: Employment

Securing and Maintenance of Talents GRI 401-1

Hiring New Employees

Classification				Unit	2020	2021	2022
GC (Holding Company)	New Hiring	Total		Persons	46	26	38
		By Gender	Male		25	17	19
			Female		21	9	19
		By Age	Under 30		14	7	8
			Over 30 and Under 50		32	19	28
			Over 50		0	0	2
GC Biopharma	New Hiring	Total		Persons	119[1)]	185[1)]	180
		By Gender	Male		70[1)]	116[1)]	101
			Female		49[1)]	69[1)]	79
		By Age	Under 30		30[1)]	49[1)]	60
			Over 30 and Under 50		82[1)]	129[1)]	117
			Over 50		7[1)]	7[1)]	3
GC Cell	New Hiring	Total		Persons	106	248	190
		By Gender	Male		83	150	118
			Female		23	98	72
		By Age	Under 30		72	202	120
			Over 30 and Under 50		30	41	67
			Over 50		4	5	3

1) Adjusted and disclosed based on the business report on the DART (Data analysis, Retrieval and Transfer System)

· GC (Holding Company)
  - Excluding all discrimination factors such as gender, age, where applicants come from, other personal factors etc. which are regardless of individuals' capabilities, give everyone equal rights and respect their human rights in all hiring process
  - Hiring new employees and experienced employees for applicable positions to secure talents in various areas
  - Contribution to creating new jobs and job security by hiring 98% Of regular employees

S SOCIETY

GRI 401: GRI 401: Employment

Securing and Maintenance of Talents GRI 401-1

· GC Biopharma
- In the recruitment process, a policy that strengthens fairness based on compliance with the current Employment Procedure Act and the Personal Information Protection Act was established
- Continuous management of whether minimum matters are being implemented to prevent the occurrence of illegal employment issues for contract workers, which should also be observed from the perspective of the Employment and Labor Act
- Detailed job description to prevent errors caused by interviewers (level of job qualifications required by internal job experts)
- Short-interview of 60 job descriptions in 'GC People' in recruitment websites for GC's affiliates

· GC Cell
- In order to protect the human rights of applicants and comply with the Recruitment Procedure Act when hiring human resources, the interviewer is separately informed about the interview process

Performance

Strategy for Securing Talents to Secure Core Capability in the Future

· GC Biopharma operates strategies for securing talents to expect demand for recruitment and develop new talents by strengthening current cord business(blood plasma-drived products, vaccines etc.) to become a global company in order to propel core business[1)]

· GC Cell is participating in pharmaceutical bio Job Fair and conducting target recruiting activities to secure key talent

1) Research of mRNA, AI, CMO, strengthening strategies, expanding Global Market etc.

Major Pipeline to Secure Talents of GC Biopharma

New Employee	Experienced Employee
1. Related departments, research note contest (Sungkyunkwan University) 2. Collaboration with government agencies to secure manpower at production bases (Chungbuk Bio-Health Industry Innovation Center) 3. Recruitment Briefing Session for Outstanding Universities in Korea 4. Online Recruitment Briefing Session using Metabus 5. Hiring pre-emptive internship system 6. Recruiting overseas((KASBP, NEBS, RWTH Aachen) 7. Sponsored by domestic academic societies and attended job fairs (Bioengineering Society)	1. Extension of scale of Direct Sourcing of experienced employee 2. Recommendations of talents by employees and executives 3. Activation of in-house public offering system

Internship Program

· GC Group actively operates internship programs to provide career design opportunities for young people, and to recruit excellent and verified talents

· During the internship period, we provide opportunities for practical work experiences, evaluate through assignments, and recruit as our full-time employee for interns with satisfactory evaluation results.

· GC Group(Including affiliates)
- As of 2022, No. of interns: 85, No. of people convert to regular employees: 26 (Conversion ratio 30.6%)

· GC Biopharma
- As of 2022, No. of interns: 26, No. of people convert to regular employees: 16 (Conversion ratio 61.5%)

· GC (Holding Company)
- As of 2022, No. of interns: 3, No. of people convert to regular employees: 1(Conversion ratio 33.3%)

On-boarding Program

· GC Biopharma
- Operating 'Preliminary Online Communication' for soft-landing of prospective employees
- Providing step-by-step packages such as 'Welcome Kits' to improve organizational understanding from the time of confirmation of employment to the first day of work
- Providing various training/networking programs for new employees: Introductory training and workshop etc.
- Providing training for new employees who have worked in GC for one to two year

· GC Cell
- Understanding of company, etiquette training, job training conducted by in-house lecturers and affiliates tour etc.
- Giving a sense of belonging to new employees on their 1st working day with 'Welcome Kits' gift

Off-boarding Process

· The respect for the human rights of employees is extended to the off-boarding process at the end of the employee life cycle

· Retirement is as cumbersome and complex as hiring, but we are going through an off-boarding process to minimize negative experiences.
- In addition, we analyze employee experience based on retirement surveys and interviews and utilize to enhance an employee-friendly condition

S SOCIETY

GRI 401: Employment

Securing and Maintenance of Talents GRI 401-1

Performance

Industry-Academic Internship

- GC (Holding Company) hires interns through industry-academic internship structure to activate industry-academic relations with various universities
- GC Biopharma strengthens industry-academic collaboration activities which could lead to industry-academic internship structure by singing MOU with various universities
- GC Cell gradually expands industry-university cooperation activities between schools to secure excellent human resources in the production and bio service areas

Industry-Academic Internship Structure

Re-employment Support Services

- GC Biopharma provides re-employment support services to involuntary retirees over the age of 50, as a company with more than 1,000 employees in accordance with the Elderly Employment Act.

Turnover GRI 401-1

Employee Turnover

Classification				Unit	2020	2021	2022
GC (Holding Company)	Turnover	Total		Persons	18	19	26
		Gender	Male		15	15	17
			Female		3	4	9
		Turnover Rate		%	10.9	13.0	16.0
	Voluntary Turnover	Number of Voluntary Turnover		Persons	18	19	25
		Voluntary Turnover Rate[3]		%	10.9	13.0	15.3
	Involuntary Turnover	Number of Involuntary Turnover		Persons	0	0	1
		Involuntary Turnover Rate		%	0.0	0.0	0.6
GC Biopharma	Turnover	Total		Persons	110	125	140
		Gender	Male		72	84	99
			Female		38	41	41
		Turnover Rate		%	5.3	5.7	6.1
	Voluntary Turnover	Number of Voluntary Turnover		Persons	107	122	133
		Voluntary Turnover Rate[3]		%	5.2	5.6	5.8
	Involuntary Turnover	Number of Involuntary Turnover		Persons	3	3	7
		Involuntary Turnover Rate		%	0.1	0.1	0.3
GC Cell	Turnover	Total		Persons	100[1]	108[1]	178
		Gender	Male		68[1]	82[1]	126
			Female		32[1]	26[1]	52
		Turnover Rate		%	22.5[2]	13.5[2]	21.2
	Voluntary Turnover	Number of Voluntary Turnover		Persons	100[1]	108[1]	178
		Voluntary Turnover Rate[3]		%	22.5[1]	13.5[2]	21.2
	Involuntary Turnover	Number of Involuntary Turnover		Persons	0	0	0
		Involuntary Turnover Rate		%	0	0	0

1) Adjusted and disclosed based on the business report on the DART
2) This value was re-calculated and reflected according applying how to calculate
3) The number of turnover due to personal circumstances, including movement between affiliates, excluding retirement recommendations or retirement, is calculated as total executives and employees

S SOCIETY

Work-Life Balance

Various Work Plans

· GC Group has established various work plans to support continuous work and work-life balance to improve employees' quality of life.
- Employees are able to work at flexible hours, given with options to work from home. Also, they are able to manage or being compensated with their vacations to support continuous work performances. Also, recently, we have set up hub offices to support long distance commuters and facilitate outside meetings to change the way we work and work efficiently. We provide family-friendly working environment

Performance

GC Group's Flexible Work System

Classification	Explanation
Work from home	Working without time and place constraints
Flex-time work	Different commuting time while complying with legal working hours
Flexible working hours	Complying with the average working hours for three months in accordance with legal requirement
Discretionary working hours	Working hours and methods are entrusted to the discretion of workers in light of job characteristic
Holiday replacement	Substitution of working days with holidays based on agreement with employees
Compensation leave	Compensation of vacation for overtime or holiday workers

GC Biopharma's Own System

Classification	Explanation
Optional working hours	Working flexibly in within the specified working hours and core-time policy per month
Compensation leave for overseas business trips	Targeting employees going to overseas business trip, 0.5-day compensation leave per 4 days for recognizing 8 hours of work per day during overseas business trips
PC On/Off	It is a system that specifies PC hours for headquarters, factories (management), and branches (8:30-17:30), and clearly operates working hours

Hub Office

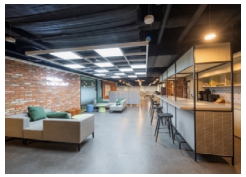
· Prepare hub office for smart work to support those with long commuting hours and outside meetings

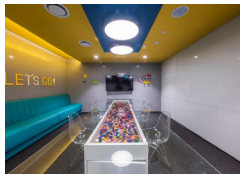
Implementation of Smart Office

Performance

Remodeling of GC (Holding Company) and GC Biopharma's Headquarter

· GC provides a pleasant office environment for employees through remodeling of the existing headquarters building.
· The keywords of office space to become a happy workplace: Equality, flexibility and communication contain horizontality, flexibility, and communication.


Serendipity Lounge

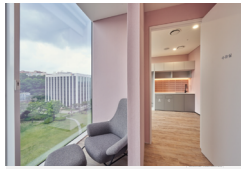

Smart Meeting Room


Multi Office


Share Commonspace

GC Cell's Remodeling of Office

· GC Cell provides various office environment which meets various workstyle through remodeling of the office space at the headquarters and Cell Center.
· Implementation of refreshing smart office to improve work efficiency, efficient communication and smart office



S SOCIETY

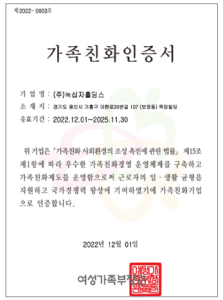
Work-Life Balance

Implementation of Smart Office

Performance

Selected as a Family-friendly Company GC (Holding Company)', GC Biopharma

· Selected as a Family-friendly company by Ministry of Gender Equality and Family in Dec, 2022


가족친화인증서

기 업 명 : (주)녹십자홀딩스
소 재 지 : 경기도 용인시 기흥구 이현로30번길 107 (보정동) 복정빌딩
유효기간 : 2022.12.01~2025.11.30

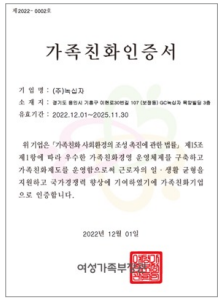
위 기업은 「가족친화 사회환경의 조성 촉진에 관한 법률」 제15조 제1항에 따라 우수한 가족친화경영 운영체계를 구축하고 가족친화제도를 운영함으로써 근로자의 일 · 생활 균형을 지원하고 국가경쟁력 향상에 기여하였기에 가족친화기업으로 인증합니다.

2022년 12월 01일

여성가족부장관

Certificate as selected as a Family-friendly company GC (Holding Company)

· Effective date:
Dec, 1, 2022 – Nov, 30, 2025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기 업 명 : (주)녹십자
소 재 지 : 경기도 용인시 기흥구 이현로30번길 107 (보정동) GC녹십자 복정빌딩 3층
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2022년 12월 01일

여성가족부장관

Certificate as selected as a Family-friendly company (GC Biopharma)

· Effective date:
Dec, 31, 2022 – Nov, 30, 2025

Maternity and Parental Leave GRI 401-3

Maternity and Parental Leave

Classification				Unit	2020	2021	2022
GC (Holding Company)	Number of Employees Who Took Maternity Leave	Total		Persons	3	5	6
		Number of employees	Males		0	1	1
			Females		3	4	2
	Ratio of Employees Who Returned After Maternity Leave	Ratio	Males	%	100	100	100
			Females		100	100	100
	Number of Who Took Parental Leave[2]	Total		Persons	3	3	3
		Number of employees	Males		0	0	0
			Females		3	3	3
	Employees Who Returned After Parental Leave[3]	Ratio	Males	%	0.0	0.0	0.0
			Females		100	100	100
	Ratio of Employees With At Least 12-month Working After Returning From Parental Leave[4]	Ratio	Males	%	0.0	0.0	0.0
			Females		100	100	100
GC Cell	Number of Employees Who Took Maternity Leave[2]	Total		Persons	32	25	28
		Number of employees	Males		25	18	22
			Females		7	7	6
	Ratio of Employees Who Returned After Maternity Leave	Ratio	Males	%	100	100	100
			Females		100	100	100
	Number of Who Took Parental Leave[2]	Total		Persons	7	5	16
		Number of employees	Males		1	0	3
			Females		6	5	13
	Employees Who Returned After Parental Leave[3]	Ratio	Males	%	100	100	0.0
			Females		71.4	100	100
	Ratio of Employees With At Least 12-month Working After Returning From Parental Leave[4]	Ratio	Males	%	0	100	100
			Females		80.0	80.0	100

S SOCIETY

Work-Life Balance

Maternity and Parental Leave GRI 401-3

Maternity and Parental Leave

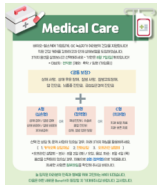
Classification				Unit	2020	2021	2022
GC Biopharma	Number of Employees Who Took Maternity Leave[1]	Total		Persons	66	124	88
		Number of employees	Males		48	99	50
			Females		18	25	38
	Ratio of Employees Who Returned After Maternity Leave	Ratio	Males	%	100	100	100
			Females		100	100	100
	Number of Who Took Parental Leave[2]	Total		Persons	41	45	63
		Number of employees	Males		9	8	14
			Females		32	37	49
	Employees Who Returned After Parental Leave[3]	Ratio[2]	Males	%	100	87.5	77.8
			Females		100	91.7	100
	Ratio of Employees With At Least 12-month Working After Returning From Parental Leave[4]	Ratio[2]	Males	%	-	100	71.4
			Females		-	83.9	75.8

1) Recipients of childbirth celebrations, including maternity leave for spouses
2) Value re-calculated by changing parameter criteria (total number of people on parental leave in the current year)
3) Return rate = Re-calculated as returnees in the relevant year / returnees expected to return *100
4) Retention rate = Re-calculated as employee in the current year / returnees in the previous year *100

Performance

GC Biopharma's Welfare System

· GC Biopharma contributes to employee's welfare and quality of lives by operating welfare system such as employee's healthcare, accident insurance and Refresh.
· Providing leave for long-term service
- Provide refresh leave for those who work long time
- It is not one-time leave but it is accumulating for working period to next Refresh. (It is designed to improve productivity of employees.)



Welfare System GRI 401-2

· GC Childcare Center
- A nursery room equipped with various teaching materials, a multipurpose hall for group activities, a special activity room for diverse experiences, a safe and sophisticated dining area, an outdoor garden for activities, a rooftop garden where children can play freely, and a children's playground where they can spend time with friends, are all provided.
- Total of five classes from the age of 1 to 5 years old.

· In-House Fitness Center 'GYM'
- The GYM, which consists of two floors above the ground and with one basement floor, is freely available throughout the day, as well as on weekends and holidays. (Early in the morning~after work)
- Provided body composition measuring devices, aerobic equipment and weight lifting exercise machine
- Professional qualified trainers reside in the GYM to help employees exercise safely and effectively

· GC Group's In-house Welfare
- Family-friendly: In-house wedding hall, college Scholarships, Financial support / flower to congratulate and to express condolences, gifts on holidays, foundation anniversaries, and Labor Day, gifts for wedding and childbirth
- Life stability: Office supplies support, free cafeteria, free shuttle bus, home purchase loan
- Leisure: In-house clubs, In-house Café, corporate condominium, support for education expenses, In-house library
- Healthcare : Health checkup, outside counseling system, anti-cancer treatment support, free flu vaccine

Performance

Service Extension of In-House Fitness Center 'GYM'

· Providing G.X(Group Exercise) and P.T.(Personal Training) in the second half of 2022
- Changing programs and hiring additional trainers by reflecting's employees' feedback.

· Adjust operating hours so that employees can use gym in summer and winter vacation.
· Open GYM in fifth floor of Guseong Campus so that employees can use this facility in Jan, 2023.

S SOCIETY

Work-Life Balance

Grievance Handling(Including Human Rights)

Performance

Grievance Handling System

· We operate online communication system and a report center to make sure anonymity and safety.
· We make an effort to improve grievance immediately after we listen to grievance through grievance channel.
  - If it is not resolving immediately, we try to deliver measure plans within deadline.
· We outsource to operate GC Helpline and secure anonymity by applying security technology which leaves no IP.

Grievance Handling Process

1. Receiving Grievance	2. Check and Review Grievance	3. Deliver Review Results	4. Handling Grievance
· Receive grievance through grievance handling channel	· Check grievance and whether it is based on truth. · Protection of informers · Review measures	· Deliver review results and listen to attackers' opinion.	· Depending on matters, punishment, personnel transfer and training to stop reoccurrence.

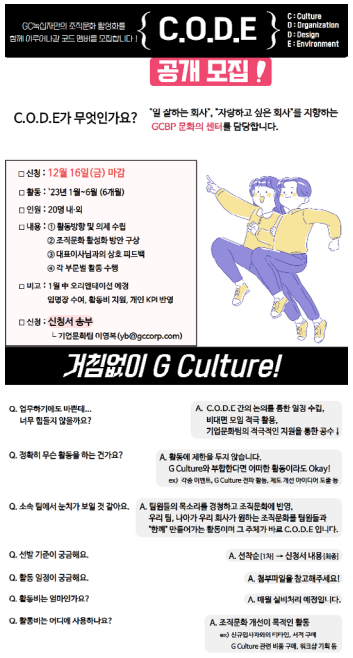
Grievance Channel for Human Rights Issue

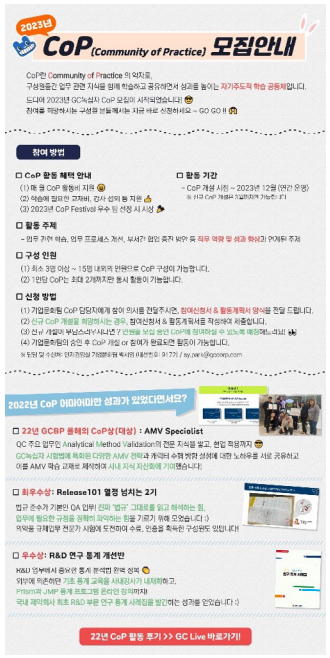
Channels	Contents
GC Helpline (Shortcut)	A space where you can report ethical values, integrity, and actions contrary to compliance management, or anonymously express suggestions or opinions on employee grievances
Counselling Cafe	A space where various grievances arising in the company, such as workplace bullying, sexual harassment, job/work environment, and conflict, can be resolved through in-house counseling
Suggestion Square	All executives and employees are free to participate and communicate on free topics such as suggestions and grievances
Change Agent	It is an organization composed of working-level officials representing the unit organization to listen to and communicate with the actual opinions of the members. Monthly regular meetings to discuss key issues and present ideas
Communication Survey	In order to establish a desirable organizational culture, anonymous surveys are conducted annually for all GC and affiliates' executives and employees to check the organizational atmosphere and working conditions
Town-hall Meeting	A space where all executives and employees communicate horizontally and freely, such as sharing the company's strategic direction once a quarter

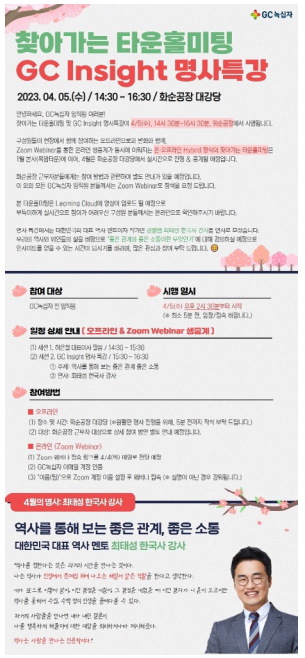
Grievance Handling System[1]

Classification		Unit	2020	2021	2022
GC Biopharma	Rate of Employee grievances treated	%	100	100	100
	Employee grievances reported	Cases	3	8	5
	Employee grievances treated		3	8	5

1) GC (Holding Company) and GC cell received zero case of employee grievance handling system from 2020 to 2022







S SOCIETY

Communicative Organization Culture

Performance

Strategy for How to Operate Organization Culture

· GC Group selects and operate change management managers mostly working employees and operates official communication channels and junior board so that employees can actively participate in operating business
- We discuss major agendas such as how to operate and form organization culture and suggest new ideas

Role of GC Group's Change Manager

Roles	Contents
Observation and induction of changes in organizational culture	· Observation of organization culture and behavior change of employees based on Ground Rule · Planning of revitalization of organization culture
Establishing and participation of Junior Board	· Establishing and operation of Junior Board to discuss major agendas related to operating organization and system

Change Agent 'C.O.D.E'

· GC Biopharma operates C.O.D.E(Culture. Organization. Design. Environment)
- Rejection of top-down and one-way organization culture and finding improvement points in organization culture in each part.
- Providing all-around communication infrastructure to get common ground for company's strategy and directions.

Establishing CoP System

· GC Biopharma provides a venue for communication by establishing CoP (Community of Practice) system by independent participation of employees to improve job-related knowledge and work efficiency.

Town Hall Meeting

· GC Biopharma's town hall regular meeting held by CEO is a venue for more communication among employees and executives
- GC Biopharma runs town hall meeting quarterly to support real-time communication between the management and employees.

G-Culture to Establish Digital Culture

· GC Biopharma spreads 'G-Culture'.
- Re-establishment of how to work for employees for brining better innovative value for customers
- Basis on storytelling especially for employees in digital-conversion era for business success.
- Suggest ways for work 'Fast, Young and Strong' for team managers and team members

· We put more effort to spread G-Culture in not one-way but communicative way with employees
- Using various methods such as cue sheets by team, board game, remote workshop, team consulting.
- Improve effectiveness and efficiency through online Learning Cloud system.



Employee's Satisfaction Survey

· Performing annual employee satisfaction survey
- Getting honest feedback from executives and employees
- Identify areas that need to be improved and seek directions for improving organizational culture satisfaction and implementing mitigation measures for each risk factor related to labor practices (employment policy, labor-management relations, human resource management, worker welfare, etc.)

· GC Biopharma (Participation rate 72.1%)
- Online diagnosis is conducted for all GC Biopharma executives and employees, excluding employees within one month of joining the company (Jul, 4, 2022 - Jul, 20, 2022)
- Overall 2022 Satisfaction Score 3.4/Out of 5 (0.1 improvement compared to last year)

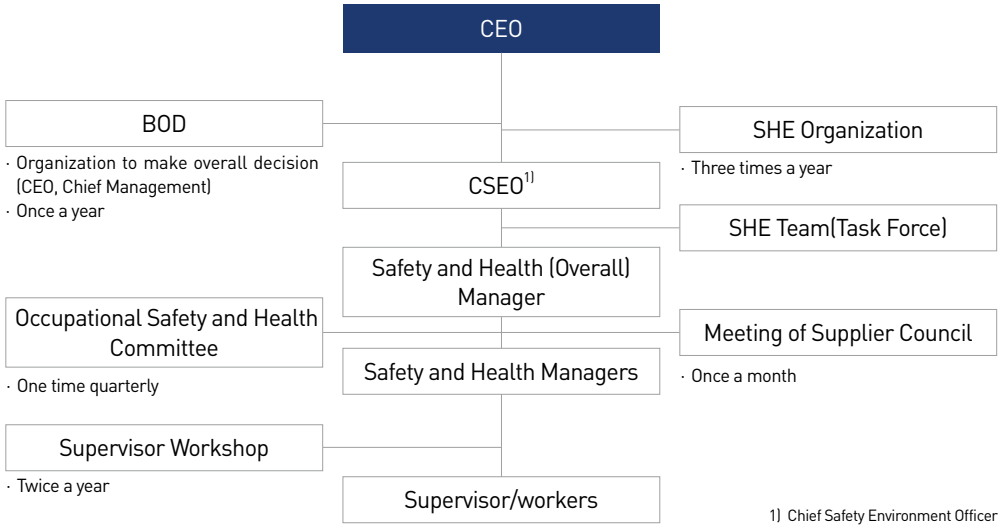
S SOCIETY

GRI 403: Occupational Health and Safety

Safety and Health Management System GRI 403-1 | GRI 403-8

- GC Group established the managment team system accordingly with international standards ISO45001 (Health and Safety Management System) and Process Safety Management (PSM) so that all employees and executives work in safe and health conditions.
- Safety and health management system apply not only to all employees and executives in worksites and all suppliers and partner companies.
- We operates SHE organization for safety and health to prevent major industrial accidents and CSEO manages necessary human resource and expenses to prevent accidents.
- We regularly operates SHE meeting to share plan and performances of safety and health plans and make decisions on safety strategies and issues.

GC Biopharma's Safety Health Organization System



1) Chief Safety Environment Officer

- GC Group discloses SHE policies as safety & health management policies.
  - GC (Holding Company)'s Policy Shortcut, GC Biopharma's Policy Shortcut, GC Cell's Policy Shortcut

Performance

Health and Safety Plan and Goal Establishment

- GC (Holding Company)
  - Responsible department for preventive management for all affiliates' HSE Audit.
  - We operate management of no-injury worksites through 2022's audit and improvement activities on 15 affiliates once a year.
  - From 2023, we change this audit into the one which meet government's safety management directions and training system for affiliates from 2023. (The number of audit cycles are expanded from once to twice a year and converted focus on specific-auditing 3 types of accident, 8 factors of hazard[1])
  - We are reviewing audit plans for global worksites due to relief of pandemic. (GC China)
- GC Biopharma
  - We establish 'Plans for safety and health' whose performance and plans are reviewed/approved by BOD (Review of safety and health management policies, safety and Health organization, budgets, goals and tasks etc.)
- GC Cell
  - 2022's safety and health performance and 2023's safety and health plan are reported to BOD and BOD approves them.
  - Based on risk assessment of safety and health, we establish safety and health plans.

1) Types of accident (8 factors of hazard) : Fall (scaffold, roof, ladder, mobile elevated work platform), constriction (safe device, Lock-out, Tag-out), collision (mixed work, collision protection)

GC (Holding Company) Safety and Health Management Policy Goals in 2023

1 Establishment of HSE legal risk prevention management system for all affiliates

2 Securing competitiveness in a sustainable and safe environment in response to roadmap for reducing serious accidents

3 Zero for (industrial accidents, fire accidents and environmental accidents) by strengthening the safety capabilities of all affiliates

S SOCIETY

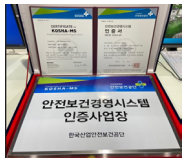
GRI 403: Occupational Health and Safety

Safety and Health Management System GRI 403-1 | GRI 403-8

Performance

GC Biopharma's Safety and Health Management Goals	Goals for 2023 Advance in IT System Achievement of PSM 'P level'	Goals for 2024 Advance in SHE Management System(RBPS)	Goals for 2028 Achievement of self-safety level
GC Cell Health and Safety Management Policy Goal	Goals for 2022 Obtain ISO45001 certification	Goals for 2023 Stabilization and advancement of the HSE system	Goals for 2024 Obtained additional HSE certification

Acquisition of KOSHA-MS (Safety Health Management System) Certification



KOSHA-MS
- Certification Scope: GC Biopharma Ochang Plant
- Effective Date: May, 18, 2023 - May, 17, 2026

Decision-Making Organization for Occupational Safety and Health GRI 403-4

· GC Group operates decision-making organization for occupational safety and health to review and make decisions on occupational safety and health of workers such as Occupational Safety and Health Committee and Research Center Safety Management Committee.

Performance

Occupational Safety and Health Committee

· The Occupational Safety and Health Committee for each workplace is operated under Occupational Safety and Health Act.
- Agenda is the establishment of industrial accident prevention plan, revision of safety and health management rules, safety and health training of workers, audit and improvement of worksites.

· GC Biopharma & GC Cell
- GC Biopharma & GC Cell operate Occupational Safety and Health Committee with same number of seats for laborer side and company side to make major decision on safety & health management measures for workers to prevent risk and health hazard
- We run Occupational Safety and Health Committee quarterly.
- As of 2022, 14 deliberation resolutions were implemented, and pending issues were completed within 2022 through improvement activities

Decision-Making Organization for Occupational Safety and Health Committee GRI 403-4

Operating R&D Safety Management Committee

· GC Cell additionally organizes safety management committee for its R&D Center and operates it just like Occupational Safety and Health Committee.

Activities by Safety Health Committee

· As of 2022: Pharmaceutical companies' safety health committee[Corporate-level], safety health committee in Cheongju city
  – Committee member [Ochang Plant], PSM Committee in Cheongju city [Ochang Plant], Chemical Substance Management Council in Cheongju city
  – Chairmen association of Ochang and Oksan Industrial Complex[Ochang Plant], Chemical Substance Association around Ochang area [Ochang Plant], Ochang Scientific Industrial Complex Association(Fire protection) [Ochang Plant], Industrial Safety Council in North Chungcheong Province [Eumseong Plant], Plant Industrial Complex Association(Fire protection)

S SOCIETY

GRI 403: Occupational Health and Safety

Employee's Health and Safety and Health GRI 403-3 | GRI 403-6

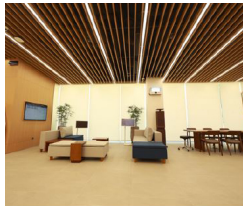
· GC Group operates various health support programs in order to maintain employees' health.
- Support health check-up once a year for employees and their spouses.
- Provide flu vaccine for all employees and their families.
- Provide special health check-up and regular monitor working environments for persons including irregular workers handling hazardous chemical substances (Special work)

· We operate hospitals and gyms for physical and psychological well-being of employees and provide psychology consultation service.

· Strick disinfection measure for all workplaces after emergence of COVID-19.
- Protection of employee health from infectious diseases.

· In-House Clinic "Dr.GC"
- Medical experts' consulting on health risk such as disease treatment, obesity/fatigue/stress etc.
- We put more effort for employees to have healthier lifestyles and manage health in order to prevent diseases.
- GC Group provides more systematic healthcare for group products and solutions.





Performance

Effort to Make a Safe Working Environment

· Safety goggles, safety shoes, gas masks, safety gloves, etc. are provided as protective equipment for laboratory workers

· Possession of laboratory safety and emergency response facilities and supplies such as chemical storage facilities, emergency shower facilities, and fume hood emergency items

· Safely handling of laboratory waste boxes only for its use

· Monitoring laboratory working environment twice a year

Performing Safety Health Risk Assessment GRI 403-2

· We implement regular safety check and risk assessment for worksites' facilities and equipment mostly by department dedicated to Health and Safety
- Regular compliance evaluation on whether to implement safety health plans (Monitoring and face-to-face talk)
- Assessment on supervisor's regular health and safety half a year
- Perform safety check and inspection on worksites including depot once a quarter

· Establishing emergency response system by implementing emergency drills regularly with participation of all employees such as fire drills.

· We thoroughly identify a disasters and serious accidents due to various risk of raw materials and products etc. and plant to strengthen measures in company-wide to reduce these risks.

Performance

Hazard Assessment by Each Worksites

· GC Biopharma
- 16 out of 16 improvement points at the Ochang plant have been completed (100%) and 77 out of 77 improvement points at the Hwasun plant have been completed (100%)
- 46 out of 46 improvement points in Eumseong plant have been completed (100%) and 7 out of 7 improvement points in R&D center have been completed (100%)

· GC Cell
- GC Cell performs hazard assessment independently through brainstorming by supervisor and worker based on SOP of Department dedicated to Health and Safety
- Use of hazard assessment : Hazard information at worksites, identification of harmful hazard factors, and finding of improvement points
- 810 improvement points in all worksites including Cell Center have been completed (100%)

Obtaining Process Safety Management(PSM) 'S' Grades by the Ministry of Employment and Labor and Process Safety Management and Korea Occupational Safety & Health Agency

· GC Biopharma Ochang Plant obtained 'S' grades from the Ministry of Employment and Labor and Process Safety Management (PSM) as a result of our efforts to improve safety management, including continuous training, intensive inspection and audit.

Promotion of Safety and Health Activities for the Value Chain (Including Partners)

· GC (Holding Company) supports and inspects 40 partners for win-win growth (handling partners' grievances, safety management)

· GC Biopharma and GC Cell conduct the SHE training, culture campaigns and safety audit, etc for partners whose safety management level is insufficient due to a lack of safety and health experts.

S SOCIETY

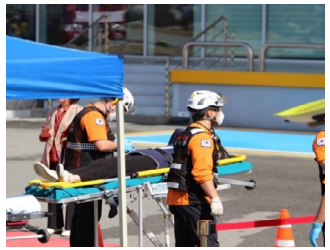
GRI 403: Occupational Health and Safety

Emergency Drills GRI 403-7

· GC Group operates various emergency drills
· GC Biopharma
- GC Biopharma conducted joint drills together with community in 2022 to respond to mass casualty incidents (Response to complex disasters such as earthquake/decay/hazardous chemical leakage/fire)
- A total of 190 people from 15 emergency rescue-related organizations, including Cheongju Fire Station, will conduct joint training








Worker Training on Occupational Health and Safety GRI 403-5

· It is not mandatory for GC (Holding Company) but we perform training on occupational safety health for workers
- Managerial position: 6 hours per person/year
· GC Biopharma and GC Cell sets the completion time of training on occupational safety health per job group
- R&D, production position: 24 hours/year per person, sales/management position: 12 hours/year per person
- New employees: Training on the installation and management of safety facilities by job, material safety and health data sheet (MSDS), occupational disease prevention measures, first aid in daily life, job stress management, etc..
- Performing specific training on occupational safety health for supervisor
· Performing training on occupational safety health for all in-house outsourced contractors

Worker Training on Occupational Health and Safety[1]

Classification			Unit	2020	2021	2022
GC (Holding Company)	R&D, Production Positions Sales/ Management Position	Training completion rate	%	100	100	100
		Number of employees completing training	Persons	311	288	308
		Number of training target		311	288	308
GC Biopharma	R&D, Production Positions Sales/ Management Position	Training completion rate	%	100	100	100
		Number of employees completing training	Persons	2,036	2,132	2,215
		Number of training target		2,036	2,132	2,215
GC Cell	R&D, Production Positions Sales/ Management Position	Training completion rate	%	100	100	100
		Number of employees completing training	Persons	445	799	838
		Number of training target		445	799	838

S SOCIETY

GRI 403: Occupational Health and Safety

ISO45001 Certification

· GC (Holding Company) and GC Biopharma maintained and GC Cell acquired ISO 45001 certification in 2022.

ISO45001 Certification

Classification			Unit	2020	2021	2022
GC (Holding Company)	Percent of worksites with certification	Percent	%	0	100	100
		Number of worksites with certification[1]	Place	0	1	1
		Number of worksites expected to have certification		1	1	1
GC Biopharma	Percent of worksites with certification	Percent	%	100	100	100
		Number of worksites with certification[2]	Place	4	4	4
		Number of worksites expected to have certification		4	4	4
GC Cell[3]	Percent of worksites with certification	Percent	%	0.0	0.0	100
		Number of worksites with certification[3]	Place	0	0	1
		Number of worksites expected to have certification		1	1	1

1) Headquarter
2) R&D Center, Ochang Plant, Hwasun Plant, Eumseong Plant
3) Obtaining certification in Oct, 2022(Certification Organization: DQS)

ISO45001
· Certification Scope: R&D Center, Ochang Plant, Hwasun Plant, Eumseong Plant
· Effective Date :
Aug, 31, 2021 - Aug, 30, 2024

ISO45001
· Certification Scope: Cell Center
· Effective Date :
Oct, 1, 2022 - Sep, 30, 2025

Industrial Accident GRI 403-9 | GRI 403-10

Management of Worksites where Industrial Accidents Occurred

Classification			Unit	2020	2021	2022
GC (Holding Company)	Worksites	Ratio of worksites where industrial accidents occurred	%	0	0	0
		Total number of worksites	Places	1	1	1
GC Biopharma	Worksites	Ratio of worksites where industrial accidents occurred	%	6.3	6.7	6.7
		Total number of worksites	Places	16	15	15
GC Cell	Worksites	Ratio of worksites where industrial accidents occurred	%	0	0	0
		Total number of worksites	Places	32	44	50

· Occupational diseases in the GC Group include infectious diseases, chemical factors, and musculoskeletal disorders
· Scope of business-related disaster data calculation
- GC (Holding Company) : Headquarter
- GC Biopharma : Headquarter, three plants (Ochang, Hwasun, Eumseong), R&D Center, 10 worksites
· GC Cell : Headquarter, cell center, 47 worksites, logistics center

SHE

Classification			Unit	2020	2021	2022
GC (Holding Company	Work-related Industrial Accidents	Number of industrial accident victims	Cases	0	0	0
		Industrial accident victims	Persons	0	0	0
		Number/ratio of work-related fatalities (for all employees)		0	0	0
		Number/ratio of work-related injuries (for all employees, excluding fatalities)		0	0	0
		Industrial accident rate	-	0	0	0
		LTIFR[1]		0	0	0
		Lost time incident	Cases	0	0	0

S SOCIETY

GRI 403: Occupational Health and Safety

Industrial accident GRI 403-9 | GRI 403-10

SHE

		Classification	Unit	2020	2021	2022
GC Biopharma	Work-related Industrial Accidents	Number of industrial accident victims	Cases	2	1	1
		Industrial accident victims	Persons	2	1	1
		Number/ratio of work-related fatalities (for all employees)		0	0	0
		Number/ratio of work-related injuries (for all employees, excluding fatalities)		0	0	0
		Industrial accident rate	-	0.10	0.05	0.04
		LTIFR[1]		0.40	0.19	0.18
		Lost time incident	Cases	5	2	6
GC Cell	Work-related Industrial Accidents	Number of industrial accident victims	Cases	0	0	0
		Industrial accident victims	Persons	0	0	0
		Number/ratio of work-related fatalities (for all employees)		0	0	0
		Number/ratio of work-related injuries (for all employees, excluding fatalities)		0	0	0
		Industrial accident rate	-	0	0	0
		LTIFR[1]		0	0	0
		Lost time incident	Cases	0	0	0

1) Number of industrial accident victims / total working hours per year*1,000,000 hours

GRI 404: Employee's Performance Management

Employee's Performance Assessment GRI 404-3

- Regular assessment on work performance and career development is for performed for full-time employees.
- Performance assessment is performed in considers both mid- to long-term goal management and short-term performance.

Employee's Performance Management

	Classification	Unit	2020	2021	2022
GC (Holding Company)	Ratio of Employees Subject to Performance Evaluation	%	90.3	95.8	91.3
GC Biopharma	Ratio of Employees Subject to Performance Evaluation		97.7	94.7	96.6
GC Cell	Ratio of Employees Subject to Performance Evaluation		80.5[1]	80.9[1]	78.9

1) Adjusted and disclosed based on the business report on the DART

Performance

Training on Performance Management

- GC (Holding Company) strengthens employee's performance management through annual performance management training and improves effectiveness of performance management
- 3 hours of training per employee and 23 hours per team leader as of 2022.

2022's Training on Performance Management

Subject	Training Target	Number of Training	Trainees	Training Completion	Completion Rate
Training on Performance Management	Regular Employees	Four times a year	139 Persons	139 Persons	100%

Satisfaction Survey on Performance Assessment

- GC Biopharma conducted satisfaction survey on performance assessment annually after they complete year-end performance assessment
  - Performance management system, satisfaction of evaluators, fairness of assessment, changing trend in annual and reporting results to CEO
  - In case of changes in performance system, it actively reflects on survey results
  - 2022 satisfaction survey results 3.32 points (out of 5 points). Improved satisfaction compared to the previous year (3.15 points)

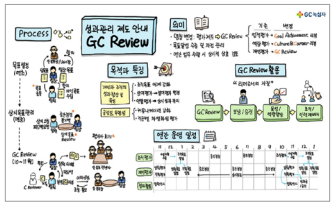
S SOCIETY

GRI 404: Employee's Performance Management

Employee's Performance Assessment GRI 404-3

Performance

Continuous Performance Management



- GC (Holding Company) focuses on using performance management as a 'tool to help create performance' rather than a 'evaluation tool' by continuing and repeating the communication cycle from goal setting to task performance review and process.
  - To establish clear and challenging goals for each individual, we focuses on alignment of goals as a company, a group, and as an individual from our mission and vision.
  - A development-oriented performance management system based on absolute evaluation is being established and implemented.
  - Especially, by utilizing the newly introduced cloud-based data sharing performance management system, we can support the achievement of goals through real-time feedbacks.
- GC Biopharma operates absolute evaluation to meet goals for sound performance management culture.
  - Individual goal sharing sessions in starting early year, and performing evaluation session with evaluators in each part at the end of years.
  - Performance management through regular activity management in the mid of year and feedbacks
  - In 2022, Success Factors' PMGM Module base on SAP's Cloud System that meet global standards had been build up.
- GC Cell operates a KPI system for performance management and links company-sector-team-individual KPIs to ensure that individual KPI achievement contributes to the achieving the company's overall goals.

Employees' Compensation GRI 405-2

- GC Group provides Fair and reasonable reward systems based on individual performance
  - Financial Reward: Financial reward including basic pay and performance-based pay
  - Non-financial Reward: Emphasize autonomy, growth, recognition and diverse feedbacks and motivation
- The performance-related pay system applies to all employees in GC (Holding Company), GC Biopharma and GC Cell

Employee's Compensation GRI 405-2

Employee's Compensation

Classification				Unit	2020	2021	2022
GC (Holding Company)	Average Salary per Person			KRW million	85[1]	85[1]	82
	Average Salary	By Gender	Male		90	91	92
			Female		71	73	65
		Ratio of Basic Salary and Remuneration of Female to Male		%	78.9	80.2	70.7
GC Biopharma	Average Salary per Person			KRW million	68	71	69
	Average Salary	By Gender	Male		71	73	72
			Female		62	62	61
		Ratio of Basic Salary and Remuneration of Female to Male		%	87.3[2]	84.9[2]	84.7
		By Position	Total	KRW million	69	71	69
			Sales/Management		77	81	81
			R&D		72	72	75
			Production		60	63	58
GC Cell	Average Salary Per Person			KRW million	46[2]	37[2]	52
	Average Salary	By Gender	Male		47[2]	44[2]	57
			Female		41[2]	26[2]	43
		Ratio of Basic Salary and Remuneration of Female to Male		%	87.2[2]	59.1[2]	75.4
		By Position	Total	KRW million	45[2]	39[2]	53
			Sales/Management		43[2]	48[2]	56
			R&D		61[2]	50[2]	60
			Production		N/A[3]	13[2]	45

1) The figures were adjusted by excluding auditors, advisors, and independent directors
2) Adjusted and disclosed based on the business report on the DART
3) Prior to merger in 2021, no subject to evaluation

S SOCIETY

GRI 405: Diversity Management

Diversity of Employees GRI 405-1 | GRI202-2

- GC Group discloses detailed composition ratios of female employees, female executives, etc. and helps all employees work in an equal environment without gender/race discrimination
- GC (Holding Company), GC Biopharma and GC Cell all show an increase in ratio of female employees for the last three years

Performance

Policy for Employee Diversity and Supervision

- GC Group considers securing employee diversity from the moment of hiring and makes sure that female employees take leave of absence for child care, such as maternal protection.

Ratio of female employees (As of 2022)

25.6%

Ratio of female executives (As of 2022)

8.0%

Employee Diversity

Classification					Unit	2020	2021	2022
GC (Holding Company)	Female Employee Status	Female Executives			Persons	0	0	0
		Non-standing Female Executives				0	0	0
		Female experts				10	10	10
		Other female employees				34	37	51
	Disabled Employee Status	Number of disabled employees[1]				1	0	0
		Disabled employment rate			%	0.6	0.0	0.0
	Foreign Employee Status	Indoor worksites	Total		Persons	2	3	3
			Ratio		%	1.2	2.1	1.8
			Nation	The U.S	Persons	0	1	1

1) Korea Employment Agency for Persons with Disabilities Reporting Criteria

GC Biopharma's Diversity Goals in 2023 Target of Hiring More Than **10** People with Disabilities

Diversity of Employees

Classification					Unit	2020	2021	2022
GC (Holding Company)	Foreign Employee Status	Indoor worksites	Nation	The U.K	Persons	0	0	0
				Australia		1	1	1
				Canada		1	1	1
		Overseas worksites				4	4	7
GC Biopharma	Female Employee Status	Female Executives			Persons	2	3	2
		Non-standing Female Executives				0	0	0
		Female experts				174	200	215
		Other female employees				311	345	374
	Disabled Employee Status	Number of disabled employees[2]				18	16	17
		Disabled employment rate			%	0.9	0.7	0.7
	Foreign Employee Status	Indoor worksites	Total		Persons	9	8	6
			Ratio		%	0.4	0.4	0.3
			Nation	The U.S	Persons	1	2	1
				The U.K		1	0	0
				Canada		3	2	2
				Germany		0	1	1
				Belgium		1	1	1
				China		2	1	0
				Russia		1	1	0
				Others		0	0	1
			Job	Sales		1	1	1
				Production		2	2	2
				R&D		5	5	3
				Management		1	0	0
		Overseas worksites				0	0	0

1) Adjusted and disclosed based on the business report on the DART
2) Korea Employment Agency for Persons with Disabilities Reporting Criteria

S SOCIETY

GRI 405: Diversity Management

Diversity of Employees GRI 405-1 | GRI202-2

Diversity of Employees

Classification				Unit	2020	2021	2022
GC Cell	Female Employee Status	Female Executives		Person	1	1	1
		Non-standing Female Executives			0	0	0
		Female Experts			23[1]	51[1]	57
		Other Female Employees			77[1]	227[1]	245
	Disabled Employee Status	Number of Disabled Employees[2]			8	10	11
		Disabled Employment Rate		%	1.8	1.3	1.3
	Foreign Employee Status	Indoor Worksites	Total	Person	0	0	0
			Ratio	%	0.0	0.0	0.0
		Overseas Worksites		Person	0	0	0

1) Adjusted and disclosed based on the business report on the DART
2) Korea Employment Agency for Persons with Disabilities Reporting Criteria

Performance

Achievement of Goals for Mandatory Hiring of Disabled Employees

· GC Biopharma makes an effort to create social value by creating and extending job opportunities for disabled people and
- Performing job consulting in cooperation with Korea Employment Promotion Agency for the Disabled in 2022.
- Searching for talents appropriate for production, equipment maintenance and IT.
- For recruitment, we get recommendations from Korea Employment Promotion Agency for the Disabled or announce recruitment notice of preferential benefits for disabled employees.

· GC Biopharma's achieved 23% of mandatory recruiting target for disabled employees in 2022 and plans to achieve 50% in 2023
- Creating an environment for disabled employees to work in various jobs.

Job Extension for Disabled Employees

· GC Biopharma
- We extend training programs for improving language through hiring disabled employees language course/textbook development since 2023.
- Encouraging them to use flexible working hours for their convenience.

Diversity of Governance Bodies and Employees GRI 405-1

Diversity of Governance Bodies and Employees

Classification					Unit	2020	2021	2022
GC (Holding Company)	Management Status	Executive	Total		Persons	11	11	12
			Male			11	11	12
			Female			0	0	0
		Non-Executive	Total		Persons	1	1	1
			Male			1	1	1
			Female			0	0	0
	Manager Status	By Gender	Male	Total	Persons	39	32	37
				Ratio[1]	%	84.8	82.1	75.5
			Female	Total	Persons	7	7	12
				Ratio[1]	%	15.2	17.9	24.5
		By Position	G3	Ratio	%	100	100	100
			G2	Ratio		0	0	0
			G1	Ratio		0	0	0
	Expert Status	By Gender	Male		Persons	7	4	6
			Female			10	10	11
GC Biopharma	Management Status[1]	Executive	Total		Persons	25	27	25
			Male			23	24	23
			Female			2	3	2
		Non-Executive	Total		Persons	1	1	1
			Male			1	1	1
			Female			0	0	0
	Manager Status (Cont'd)	By Gender	Male	Total	Persons	702	778	800
				Ratio[1]	%	80.1	79.6	78.8
			Female	Total	Persons	174	200	215
					%	19.9	20.4	21.2

1) Adjusted and disclosed based on the business report on the DART

S SOCIETY

GRI 405: Diversity Management

Diversity of Governance Bodies and Employees GRI 405-1

Diversity of Governance Bodies and Employees

Classification					Unit	2020	2021	2022
GC Biopharma (Cont'd)	Manager Status	By Position	(S)GL5	Ratio	%	15	14	14
			(S)GL4	Ratio		27	27	28
			(S)GL3	Ratio		58	59	58
			(S)GL2	Ratio		0	0	0
			(S)GL1	Ratio		0	0	0
GC Cell	Management Status	Executive	Total		Persons	4	9	10
			Male			3	8	9
			Female			1	1	1
		Non-Executive	Total		Persons	2	2	1
			Male			2	2	1
			Female			0	0	0
	Manager Status	By Gender	Male	Total	Persons	98	149	148
				Ratio[1]	%	80.3	74.1	71.8
			Female	Total	Persons	24	52	58
				Ratio[1]	%	19.7	25.9	28.2
		By Position	L4	Ratio	%	25	19	18
			L3	Ratio		75	81	82
			L2	Ratio		0	0	0
			L1	Ratio		0	0	0

1) This is a value recalculated by changing the parameter for the ratio of managers by gender in 2020 and 2021 from the total number of managers by gender to the total number of managers

Human Rights Management

Human Rights Management Policy - GC Human Rights Charter

· GC Group is committed to implement human rights management to mitigate risks of human rights that might be occurred throughout our business management
- Obedience of human rights &labor relevant international standards and guideline: the Universal Declaration of Human Rights (UDHR), the UN Guiding Principles on Business and Human Rights (UNGPs), the UN Convention on Child Rights, the International Labor Organization Core Convention, and the OECD Due Diligence Guidance for Responsible Business Conduct.
- Compliance with labor and human rights regulations in individual countries and regions where the business is operated

· We disclosed 'GC Human Rights Charter Shortcut' to reflect international principles and guidelines on human rights and labors. To prevent any violation to human rights within the business sites or with our business relations, and various policies including ethical norm and business partner's code of conduct have been also established and strictly adhered to in our management activities.

· Except as otherwise expressly provided for in the articles of incorporation or regulations of the State or organization, all executives and employees of GC Group shall perform their duties in accordance with the Charter of Human Rights.

· GC (Holding Company)
- GC (Holding Company) discloses policies for human-right management and the Charter of Human Rights in its website.
- Scope of applying the Charter of Human Rights: All stakeholders including employees (including executives, employees, and temporary employees), partners and workers in special employment types in community when operating business.

· GC Biopharma
- GC Biopharma operates policies for human-right management by applying GC Group's Charter of Human Rights
- Scope of applying the Charter of Human Rights: All stakeholders including employees (including executives, employees, and temporary employees), partners and workers in special employment types in community when operating business

· GC Cell
- GC Cell operates policies for human-right management by applying GC Group's Charter of Human Rights
- Scope of applying the Charter of Human Rights: All stakeholders including employees (including executives, employees, and temporary employees), partners and workers in special employment types in community when operating business

S SOCIETY

Human Rights Management

Human Rights Management Policy - GC Human Rights Charter

GC Human Rights Charter

No Discrimination
GC does not discriminate on the basis of gender, age, religion, social status, region of origin, level of education, school of origin, marriage, pregnancy, childbirth, or medical history in recruiting and hiring employees, wages and benefits, education and training, job placement, transfer, promotion, off-boarding, dismissal, and retirement.

Prohibition of Child Labor
GC prohibits all forms of child labor, and checks the age of applicants in the process of employment and other labor contracts. When hiring underage workers, we comply with the laws and regulations of each country in the business area, and strictly prohibit for any restrictions on educational opportunities of underage workers doe to their works.

Compliance with Working Conditions
GC complies with the legal working hours defined by each country and provides reasonable overtime compensation to the extent prescribed by law. GC complies with the legal minimum wage and operates various welfare systems to create a sustainable working environment for employees, including social insurance support for the country that runs the business. In addition, we provide an appropriate working environment and a flexible working form for employees.

Freedom of Association and Collective Bargaining
GC guarantees freedom of association and collective bargaining. We ensure members' rights to unite, collective bargaining, and collective action, and employees are not subject to employment disadvantages for participating in legitimate bargaining activities.

Humanitarian Treatment
GC protects the privacy and personal information of all employees and strictly prohibits any form of bullying including mental and physical violence among employees. In particular, all verbal actions of coercion, abuse, and unreasonable treatment of bullying, sexual harassment, sexual violence, etc. are strictly prohibited, and necessary measures are taken and supports are provided to affected stakeholders.

Assurance of Occupational Safety
GC actively supports employees to work in a safe and hygienic work environment. In addition to complying with the national occupational safety regulations, risk factors are identified and prevented in advance through workplace risk assessment, and training is provided to enhance employees' safety awareness.

Prohibition of Forced Labor
GC prohibits all forms of forced labor and labor against the will of employees. Employees are not forced to work by assault, intimidation, confinement, or other acts against their will and the labors are not supplied from the companies involved in these activities. GC also does not keep identification cards and corresponding documents that may constrain employees' behavior.

Human Rights Protection of Local Residents
GC does not violate the environment, safety, and health of local communities and residents in the process of operating workplace, construction of new facilities, and expansion of the current facilities.

Grievance Handling
GC operates a constant grievance handling channel to listen to our stakeholders. We secure the anonymity of grievance informers and confidentiality of the personal information and the information being provided. We are at our best effort take necessary action at timely manner and provide responses to the results of our review and the actions taken.

Human Rights Governance

· GC Group recognizes human rights risk factors such as potential human rights risks, human rights issues through 'ESG Management Council' and makes sure that critical human rights issues are reported to BOD.

Risk Management of Human Rights Violation

· GC Group prohibits any form of human rights violations and applies the principle of zero tolerance to actors
· We perform continuous monitoring to prevent recurrence based on regular analysis and inspection
· We plan to promote human-right issue management by strengthening human-right audit process to comply with social responsibilities and rules and achieve high-level of human protection
· GC Cell conducted human rights audit in 2022 (1 time), observation of 2 improvement and completed 2 actions (action rate: 100%)
· GC (Holding Company) and GC Biopharma manages the number of human rights violation through monitoring
  - GC (Holding Company): As of 2022, the number of human rights violations was zero
  - GC Biopharma: As of 2022, the number of human rights violations was zero

Potential Risk by Stakeholders

Stakeholders	Potential Risk Management	Scope
Employees and Executives, Partners and Workers in Special Employment Types	· Improvement capability in labor management such comply working hours · Protecting workers from unfair behaviors and unreasonable request · Addressing safety issues that pose a physical threat to occupational safety and health · Information security and privacy	· GC (Holding Company) · GC Biopharma · GC Cell
Local Community	· Helps manage and report related issues to avoid human rights issues in the community	· GC (Holding Company) · GC Biopharma · GC Cell

Human Rights Audit Process

1. Receipt of Violation Case and Protection of Victims	2. Understanding Case and Driving Risk	3. Committee Deliberation	4. Report Results to BOD	5. Follow-up Measure
· Receipt of human-right violation · Measure to report to victims	· Investigation on case whether it is based on truth · Check potential human-right risks	· Deliberation based on result of audits · Decision-making whether to report BOD or not	· Report critical human-right issues to BOD · Prevent recurrence through sharing results inside and outside	· Establishing tasks for improvements · Monitoring whether these tasks are implemented

S SOCIETY

Human Rights Management

Human Rights Education GRI 410-1

- Targeting all employees and executives(Domestic worksites) of all GC's affiliates and GC operates three hours training on human rights education per person from 2022.
  - We provide training on labor rights to all employees, such as prevention of sexual harassment, workplace harassment and improving awareness of the disabled.
- We will continue to make efforts to protect human rights in the workplace by providing various human rights education
- Education on human rights policies and procedures is replaced by the distribution of the 'GC Human Rights Charter'

Human Rights Education

Classification			Unit	2020	2021	2022
GC (Holding Company)	Sexual Harassment Prevention/Improving Awareness of Disability/ Workplace Bullying Prevention	Training Completion Rate	%	100	100	100
		Number of People Completing Course	Persons	170	151	163
		Number of People Targeting		170	151	163
GC Biopharma	Sexual Harassment Prevention	Training Completion Rate	%	100	100	100
		Number of People Completing Course	Persons	2,055	2,099	2,212
		Number of People Targeting		2,055	2,099	2,212
	Improving Awareness of Disability	Training Completion Rate	%	99.9	100	98.7
		Number of People Completing Course	Persons	2,055	2,099	2,212
		Number of People Targeting		2,058	2,099	2,242
	Workplace Bullying Prevention	Training Completion Rate	%	100	95.0	100
		Number of People Completing Course	Persons	2,081	2,051	2,194
		Number of People Targeting		2,081	2,159	2,194
GC Cell	Sexual Harassment Prevention/Improving Awareness of Disability/ Workplace Bullying Prevention	Training Completion Rate	%	100	100	100
		Number of People Completing Course	Persons	445	799	838
		Number of People Targeting		445	799	838

Co-prosperity with Partners

Policy for Co-prosperity with Partners

- Through compliance with fair trade principles and related laws, GC Group is establishing transparent and fair business relationships with our partner to build a sustainable business ecosystem.
- In order to supply and provide high-quality medicines and services, GC Biopharma operates a supply chain based on Win-Win management and shares prosperity with our partners in the entire production and quality process.

Performance

Strengthening HSE Supporting System for Partners

- GC (Holding Company)
  - Share GC policies and directional vision for a sustainable future environment, including environmental compliance, safety and health regulations, and environmental pollution reduction activities for approximately 40 partners in the first and second half of the year
  - In the long run, the company will introduce a regular environment and safety and health education system to share the future value of environmental safety of partners

Establishing Supporting System to Strengthen Safety and Health for Partners

- GC Cell established SOP for 'Consignors and outsourced contractors' to operate system for GC Cell and partners' safety and health activities.
  - Conducting tour inspections of partner companies and joint quarterly tour inspections.
  - Ask for taking measures for findings in monthly committee meeting and continuous action to help consignors comply with safety and health measures.
- GC Cell conducts musculoskeletal hazard investigation on employees of 10 partner companies in Jun, 2022
  - Sharing investigation results with partners through committee meetings.
  - Request to promote education and improvement activities by providing best exemplary training plans and materials to seven partners in need of improvement.
- In 2023, we will provide guidance and advice on improvement implementation activities by providing training and evaluation forms on how to assess the risks of GC Cells to partners who have difficulty in self-regulated risk assessment.

Partners Day for Co-prosperity

- Partners are invited once a year to promote ethical standards and internal reporting systems to be provided with lectures by experts. Meetings are also available to listen to the voices of our partners too since 2019
- It was difficult to have face-to-face meetings due to COVID-19 from 2020, we alternatively distribute data such as GC Biopharma's ethical standards and subcontracting laws to partner companies and operates alternatively

S SOCIETY

Information Security and Personal Information Protection Policy

Information Protection Policy and Goals

· The GC Group thoroughly complies with personal information protection laws such as 'Act on Promotion of Information and Communication Network Utilization and Information Protection', and the 'Personal Information Protection Act', and establishes and operates separate guidelines for each affiliate
- Information protection policy can is applied to all person including employees and partners who access personal information.
· Information security investment budget and execution performance in 2022 totaled KRW 440 million, investment budget KRW 710 million in 2023 (based on GC Biopharma)

GC Group's Goals for Information Security and Personal Information Protection

More than **70%** of security training completion for all executives and employees (Regular workers, contract workers, dispatched workers)

· GC (Holding Company)
- We have established 'Information Security Management Guidelines' to protect our intellectual assets of research capabilities, and manage to prevent infringement of customers' personal information
· GC Biopharma
- 'Information Security Management Regulations (1) and Guidelines (13) are established and operated, and the level of information protection is continuously improved and service stability is secured through periodic review at least once a year
- We operate Information protection policy and personal information projection policy in accordance with GC Biopharma's Information Protection Policy

GC Biopharma's Information Protection Policy

GC Biopharma

Article 7 Information Protection Policy

1. The company shall document related guidelines, etc. for establishing information protection policies and implementing policies and publish them to executives and employees.
2. Information protection policies shall be approved by CISO upon enactment or amendment...(abbreviated) ...

Article 37 Personal Information Protection

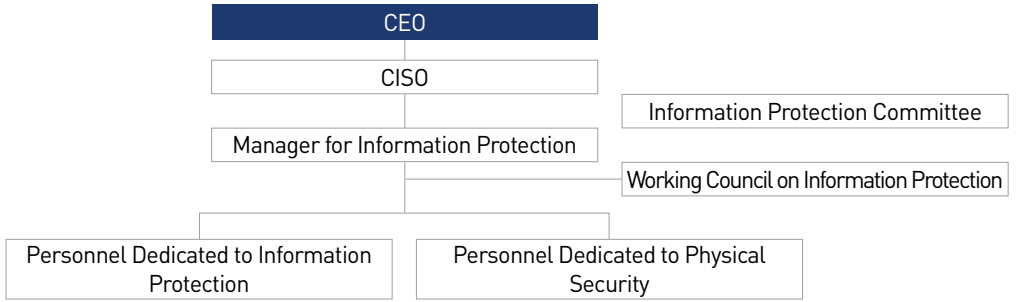
1. Personal information shall be collected and managed at a minimum based on necessary purpose.
2. The Personal information should be protected so that only authorized personnel can access it ...(abbreviated) ...

· GC Cell
- We have established a personal information handling policy in accordance with related laws and regulations, and we are doing our best to protect the rights and interests of users by posting the personal information processing policy on the website
- In order to comply with GMP and logistics business regulations, computer system security management methods and information operation guidelines are established and operated, and information is protected by regulating backup and recovery procedures

Information Protection Governance

· GC Group appoints Chief Information Security Officer (CISO) required by information network law and performs relevant works to protect information
· CISO complies with information network law and CISO's qualification is those with more than M.A in information technology and information protection
- GC Biopharma's CISO has more than 20 years of experience in information protection and technology
· Management reporting and decision-making processes on key issues related to information protection are operated, and reporting to the board of directors in case of critical issues.

Information Protection Organization System



S SOCIETY

Information Security and Personal Information Protection Policy

Training on Information Protection (Training on Data Safety and Security)

· GC Group's information protection training is conducted for all executives and employees (regular workers, contract workers, and dispatched workers)
· GC Biopharma conducts total three trainings on information protection in 2022
- One personal information security training session for company employees, one training session for new and experienced employees, and one training session for company-wide information security video session
- Training contents: Effective ways to response to internal/external security threats and security compliance by employees and executives etc.

Training on Information Protection

Classification		Unit	2020	2021	2022
GC (Holding Company)	Training Completion Rate	%	100	100	100
	Number of Employees Completing Training	Persons	155	137	159
	Number of Training Target		155	137	159
GC Biopharma	Training Completion Rate	%	100	100	100
	Number of Employees Completing Training	Persons	2,046	2,050	2,226
	Number of Training Target		2,046	2,050	2,226
GC Cell	Training Completion Rate	%	83.8	95.1	98.8
	Number of Employees Completing Training	Persons	320	750	817
	Number of Training Target		382[1)]	789[2)]	827

1) Excluding those on leave of absence, contract workers, executives and advisors
2) Excluding those on leave of absence

Performing IT Security Audit

· GC Biopharma conducts audit on IT policy and security to strengthen information security and personal information protection policy once a year
- Check on compliance in personal information

Improvements From IT Security Audit

Classification		Unit	2020	2021	2022
GC Biopharma	Number of Suggestions for Improvement	Cases	N/A	100	100
	Number of Completion of Improvement		N/A	13	5
	Improvement Rate	%	N/A	13	5

ISO Certification and Monitoring

· GC (Holding Company), GC Biopharma
- Obtaining ISO27001 (Information Protection Management System)

ISO27001 Certification

Classification			Unit	2020	2021	2022
GC (Holding Company), GC Biopharma	Ratio of systems obtaining certification	Ratio	%	0	100	100
		Number of systems with certification[1)]	EA	0	141	141
		Number of systems targeting to get certification		0	141	141

1) It means the number of servers used, and GC Biopharma has obtained certification for system of GC (Holding Company), GC Biopharma


DNV
MANAGEMENT SYSTEM CERTIFICATE
GC Pharma Corporation

ISO27001

· Certification Scope: GC (Holding Company), GC Biopharma
· Information security management system for planning, operation, development and maintenance of IT system
· Effective Date : 28 Dec, 2021 ~ 27 Dec, 2024

S SOCIETY

Information Security and Personal Information Protection Policy

Risk management of Information Security and Personal Information Protection

Information Security and Personal Information Protection Policy

Classification		Unit	2020	2021	2022
GC (Holding Company)	Number of Violation of Personal Information and Leakage of Information	Cases	0	0	0
GC Biopharma	Number of Violation of Personal Information and Leakage of Information		0	0	0
GC Cell	Number of Violation of Personal Information and Leakage of Information		0	0	0

· GC Group recognizes cyber crime, leakage of personal information as information protection risks
· GC (Holding Company) & GC Biopharma
- Establish manuals to respond of information information infringe and define reporting system and procedures by type of infringe
- Establish information protection system and operate security control tower on a regular basis to prevent personal information leakage such as intrusion and internal information leakage etc.
- Security covenants are being sought for outsourced personnel
· GC Cell
- Establish data leakage prevention system and document centralization to prevent intrusion and internal information leakage etc.
- System access and authorization are regularly performed and monitored.

Effectiveness Assessment for Measures to Recognize and Alleviate Major Risk Factors

· In 2022, information protection system levels for GC Biopharma were evaluated for 12 weeks.
- Performing administrative, technical, and physical diagnostics based on ISO27001 (Information Protection Management System)
- Security governance, cyber risk management, system security, internal information leakage, diagnosis by physical security management area
· Background
- Increased importance of internal and external information, such as R&D and sales information related to pharmaceutical industry.
- Prevent indirect damage, such as direct damage to the company's information assets and damage to its image and to prevent information leakage
· Establish tasks to recover vulnerability found in diagnosis and perform mid-term master plan for three years

Effectiveness Metrics

GC Biopharma

· Targeting department: All departments
· Assessment period: Jan, 1 2022- Dec, 16, 2022
· Index(Examples): Information Protection Day Department diagnosis average score, number of security audits pointed out, employee security training completion rate, outsourced personnel security pledge rate, vulnerability diagnosis result implementation rate, failure occurrence management rate

Roadmap toward Improvement of Information Security and Personal Information Protection

2022
· Organizing security organization
· Performing cyber drills
· Standardization of procedures etc. for IT system development/ operation security management

2023
· Establishing standards for information asset management and strengthening risk assessment
· Establishment of a personal information life cycle management system, etc.

After 2024
· Advance in SIEM/security system
· Actualization of audit/ management system and periodic management etc.

S SOCIETY

Social Contribution

GC Group's Policy and Goals for Social Contribution

- GC Group categorizes 3 key areas setup goal for social contribution in three categories as Start Together, Share Together, Support Together with the slogan 'Good Companion' in 2022.
- Establish systematic strategies to strengthen CSR promotion inward and outward continuously in 2022.
- With new keynote of Fun+Donation and growth together with local community, we add new charity program 'Environmental Protection Reaction(In 2022) and 'Wall Painting(in 2023)'
- From 2023, we run face-to-face activities again with 54 charity clubs contributing to society more than one time each

GC Group's Key Area and Activities

Little love goes a long way

Start Together

- Roundup Donation
- End of Year 1% Donation

Local communities

Share Together

- GC Matching Grant
- GC Volunteer Group
- Love Neighbors Day
- GC Charity Bazaar
- Wall Painting

Health and environment

Support Together

- GC Walk Together (Walking donation)
- GC Plogging
- End of Year GC Donation
- Blood Donation of Love
- Donating Medicines
- Environmental Protection Reaction

GC Group's Direction for Social Contribution in 2023

Good Companion

Detailed direction for contribution activities based on growth together with community

Fun+Donation

Fun donation in daily lives

Face to Face

Securing face-to-face social contribution activities due to alleviation of COVID-19 pandemic and continuous exchange with local community

GC's Goals for Social Contribution in 2023

1 Raising a total of more than KRW 5.5 billion in 2023 (including employee fundraising and company donations)

2 Participation social contribution activities targeting more than 1,000 employee's participation (GC Walk Together, Environmental Protection Reaction, Wall Painting, GC plugging)

3 GC Brand image awareness to make better world

Social Contribution

Classification		Unit	2020[1]	2021[2]	2022[3]
GC (Holding Company)	Ratio of Social Contribution	KRW million	15	27	26
	Number of Employees Participating	Persons	183	200	206
	Service Hours per Employee	Times/Persons	1.0	8.0	6.1
GC Biopharma	Ratio of Social Contribution	KRW million	7,680	2,857	5,521
	Number of Employees Participating	Persons	2,787	2,717	2,839
	Service Hours per Employee	Times/Persons	1.0	8.0	5.0
GC Cell	Ratio of Social Contribution	KRW million	11	8	7
	Number of Employees Participating	Persons	95	364	373
	Service Hours per Employee	Times/Persons	1.0	8.0	6.8

1) Blood Donation, Matching Grant, End of Year 1% Donation, Roundup Donation(But GC Cell excludes Matching Grant)
2) Plogging, Walking Donation, Matching Grant, End of Year 1% Donation, Roundup Donation Donation(But GC Cell excludes Matching Grant)
3) Plogging, Environmental Protection Reaction, Blood Donation, Walking Donation, Matching Grant, End of Year 1% Donation, Roundup Donation Donation(But GC Cell excludes Matching Grant)

S SOCIETY

Social Contribution

Start Together – Little Love Goes A Long Way

Performance

Roundup Donation & End of Year 1% Donation

· 'Roundup Donation' is monthly voluntary donation of less than KRW 1,000 (KRW 1 to 999) from employee's end digits of monthly salary and 'End of Year 1% Donation' is voluntary donation of 1% of monthly salary in December each year.

Share Together – Local Community & Neighbors

Performance

GC Matching Grant

· GC Matching Grant is a 1:1 partnership system with donors to provide continuous sponsorship to the underprivileged in the community such as senior citizens who lives alone and a child head of household in conjunction with regional agencies for areas where the headquarter and manufacturing sites. At this time, the company supports the equal amount of the donation made by employee.
· Find senior citizens who lives alone and a child head of household and support them in cooperation with regional agencies for areas and NGOs such as Yong-in Social Welfare Center, Community Chest of Korea and Child Fund Korea etc.
· In addition to financial supports, we also visit senior citizens living alone, which are sponsored through the matching grant system, replace old wallpapers and floorboards, and serve as companions.

GC Volunteer Group

· Due to COVID-19, all activities were temporarily stopped but it is expected to be up and resume GC Volunteer's activities by encourage participation volunteer activities of headquarters and local worksites continuously.
· GC Volunteer Group continuously communicates with local cooperation organizations for social contribution.

Love Neighbor Day & GC Charity Bazaar

· 'Love Neighbor Day' is a program for volunteering for local neighbors in need of help with families of employees and executives and all family members together are visiting welfare center and making Kimchi together etc.

· 'GC Charity Bazaar' has been GC's representative social contribution for the last 30 years and major event in GC social contribution that has been conducted for over 30 years to help neighbors in need with the proceeds from the sale of the goods donated by employees.

· In addition to supporting social welfare facilities related to the GC Volunteer Group, we are trying to provide practical help to neighbors in need, such as supporting living expenses for senior citizens, foreign workers, and North Korean refugees and supporting children's tuition fees for neighbors in need.

GC Biopharma, Running Campaign for 'World Hemophilia Day' and 'Rare Disease Day'

· Present images to commemorate 'World Hemophilia Day' in Media-Façade of R&D Center in Yongin, Gyeonggi-do.
· Campaign with images with 'Rare Disease Day, February 28, 2022! #LightUpForRare' with official slogan 'Light Up for Rare' to participate in the last event of Feb for 'Rare Disease Day' set by European Organization for Rare Diseases, EURORDIS
· Slogan has messages to light patients with rare diseases

S SOCIETY

Social Contribution

Share Together – Local Community & Neighbors

Performance

'Wall Painting'

· We plan to perform 'Wall painting(working title)' which is a new participation volunteering activity in 2023.
· GC's employees and their families volunteer to participate in wall painting in face-to-face social contribution activities and we expect environmental improvement and co-prosperity with neighbors through talent donation, and internally increase cooperation and achievement.

Support Together – Health and Environment Performance

Performance

Year-end GC Donation and Pharmaceutical Donation

· KRW 200 million was donated to social welfare facilities and the Korean Red Cross to help neighbors at the end of the year to support vulnerable groups such as rare patients (GC Biopharma)
  - Donations (KRW 100 million) for social welfare institutions across the country, helping the underprivileged and patients with rare diseases
  - Donations (KRW 100 million) to the Korean Red Cross, which is carrying out disaster relief projects and various welfare programs for the elderly, the disabled, and children and adolescents
· We delivered 3,000 Novalac, premium baby formula 'stage1'·'stage2' to the underprivileged (GC Biopharma)
  - We donated 2,000 to 'G-Foundation', a social welfare organization for the underprivileged and 1,000 to 'Wooyang Foundation'.
  - Baby formula was delivered to the underprivileged such as single moms, single-parent families and children's facilities through network of each organization.

Blood Donation of Love

· As a company specialized in manufacturing of blood plasma-derived products, we are conducting a 'Blood Donation of Love' to contribute to the national blood donation project.
  - Three times a year, delivery of blood donation cards donated to patients.
· As of 2022, 211 GC employees and executives participated in this event. (As of June 2022, 107 and as of Dec, 2022, 104)
· Awarded a plaque of appreciation by the Korean Red Cross (June 2022)

GC Plogging

· We have performed 'GC Plogging', environmental protection activities since 2021.
  - Plogging is a combination of Swedish word 'plocka up' English word 'jogging', an environmental protection movement that picks up trash while jogging
· Aim to protect the environment, to promote health, and to make donation through plogging activities.
  - As of 2022, 213 GC employees' participation and a donation of KRW 11million

New Program 'Environmental Protection Reaction'

· We have performed active social contribution activities by employees called 'Environmental Protection Reaction' since 2022.
· We participate in environmental protection with three reactions such as Remind(Rethink), Reduce(Reuse) and Recycle etc.
  - 'Remind(Rethink)' stage: Re-consider environmental awareness, protection activities.
  - 'Reduce(Reuse)' stage: Reuse of containers and reduction in usage of disposables
  - 'Recycle' stage: Make recycling a part of daily lives.
· Encourage participation in environmental pledges, reducing use of disposable products, and recycling properly by writing a pledge for environmental protection
· After we complete environmental protection reaction, we raised a donation which are given to those vulnerable to environmental contamination
  - As of 2022, we raised a donation of KRW 8 million.

S SOCIETY

Social Contribution– Public Foundation

Mogam Institute for Biomedical Research

· The Mogam Institute for Biomedical Research (MIBR) is a public foundation established in May 1984
· Its purpose is to build a foundation for sustainable research environment in biotechnology and to contribute to the development of science and technology through research progress made in the field of biotechnology. Through the research progress, revenue has been created and used in contribution to society and to invest back into research. This led to our achievements in development of medicines and vaccines for prevention, diagnosis and treatment of diseases.
· We do our best to develop new drugs so that we contribute to society and better health of humankind
- Achievements in development of medicines and vaccines which are world's first vaccine for hemorrhagic fever with renal syndrome, world's second varicella vaccine, quadrivalent flu vaccine, and the treatment of neutropenia
· As we develop new drug research with AI technology, we try to hire relevant experts and actively cooperate with academics, industries and relevant parts

Mogam Science Scholarship Foundation

· The Mogam Science Scholarship Foundation was established in 2005 for supporting young scientist, and began the scholarship project since 2006.
· We select scholarship recipients with financial difficulties from international students, researchers and university students from freshmen to senior majoring in the field of medicine, engineering, and science who are Korean citizen. We plan to operate various scholarships which meet social change.
· We have funded a total of KRW 4.38 billion worth of scholarships and research funds to a total of 424 people on a cumulative basis until 2021.

Main Business

Classification		Contents
Overseas Scholarship	Target	Scholars with confirmed acceptance to overseas universities (in bachelor's degree, master's degree, PhD, or post-doctoral researchers) or currently attending who holds Korean citizenship
	Scholarship Amount	About USD 10,000 per person
Domestic Scholarship	Target	Undergraduate students attending selected universities in Korea in the current year(Those who meet qualifications)
	Scholarship Amount	KRW 10 million per person

Future Foundation of Korea

· Future Foundation of Korea is a public foundation established in 2009
· It operates scholarship project and to help North Korean refugees grow into leaders in the era of unification with a passion for learning and hope for the future
· Performance as of 2022
- [Scholarship] Total of 270 recipients of scholarship (cumulated from 2011 ~ 2022), Funded scholarship at KRW 3.34 billion
- [Mental and physical healthcare] Total of 2,719 hours, total of 993 helps
- [Support in job search] Total training 2,100 hours, 95 recipients
- [Study on settlement improvement] Four academic research achievements (2014~2022)

Main Business

Classification		Contents
Scholarship	Target	Granted for university students (From 1st year to 4th year) who are North Korean refugee
	Supports	Scholarship, Education, Coaching, Counseling, etc
Mental and Physical Healthcare	Target	Care provided for students and adults who are North Korean refugees
	Supports	Scholarship includes school visits, professional psychological counselling and comprehensive health checkups
Support in Job Search	Target	Supports provided for North Korean refugees in the local communities
	Supports	Training on starting business and vocational competency
Study on Settlement Improvement	Supports	Studies for innovative settlement supporting business Supports for research projects discovery and academic research funds

APPENDIX

125 GRI Standards 2021 Index

128 SASB Index

133 TCFD Index

134 Third-Party Assurance Statement

135 Assurance Statement on GHG Emissions

135 Initiative

GRI STANDARDS 2021 INDEX

GC Group

Classification	GRI Standards 2021	Remark
GRI 1: Foundation	Evidence of actual use	GC Group reports information from Jan, 1, 2022 to Dec, 31, 2022 in accordance with GRI Standards 2021.
	Used GRI 1	GRI 1: Foundation 2021
	Applicable GRI Sector Standards	As of Aug, 2023, SOP for Pharmaceuticals Sector applicable to GC Group was not published.

Classification		Index	Reporting page
GRI 2: General Disclosures (The Organization and Its Reporting Practices)	2-1	Organizational details	p. 80
	2-2	Entities included in the organization's sustainability reporting	p. 80
	2-3	Reporting period, frequency and contact point	p. 80
	2-4	Restatements of information	p. 80
	2-5	External assurance	p. 80
	2-6	Activities, value chain and other business relationships	p. 80
GRI 2: General Disclosures (Activities and Workers)	2-7	Employees	p. 80
	2-8	Workers who are not employees	p. 80
GRI 2: General Disclosures (Governance)	2-9	Governance structure and composition	pp. 81-82
	2-10	Nomination and selection of the highest governance body	p. 82
	2-11	Chair of the highest governance body	p. 82
	2-12	Role of the highest governance body in overseeing the management of impacts	p. 83
	2-13	Delegation of responsibility for managing impacts	p. 83
	2-14	Role of the highest governance body in sustainability reporting	p. 83
	2-15	Conflicts of interest	p. 82
	2-16	Communication of critical concerns	p. 82
	2-17	Collective knowledge of the highest governance body	p. 82
	2-18	Evaluation of the performance of the highest governance body	p. 83
	2-19	Remuneration policies	p. 83
	2-20	Process to determine remuneration	p. 83
	2-21	Annual total compensation ratio	Confidential and no disclosure
GRI 2: General Disclosures (Strategy, Policies and Practices)	2-22	Statement on sustainable development strategy	p. 23
	2-23	Policy commitments	p. 23

Classification		Index	Reporting page
GRI 2: General Disclosures (Strategy, Policies and Practices)	2-24	Embedding policy commitments	p. 23
	2-25	Processes to remediate negative impacts	p. 54
	2-26	Mechanisms for seeking advice and raising concerns	p. 54
	2-27	Compliance with laws and regulations	p. 85
	2-28	Membership associations	pp. 85-86
GRI 2: General Disclosures (Stakeholder Engagement)	2-29	Approach to stakeholder engagement	p. 88
	2-30	Collective bargaining agreements	p. 88
GRI 3: Material Topics 2021	3-1	Process to determine material topics	p. 24
	3-2	List of material topics	p. 24
	3-3	Management of material topics	p. 27, 40, 53, 65
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	pp. 89-90
	201-2	Financial implications and other risks and opportunities due to climate change	p. 68, 70, 73
	201-3	Defined benefit plan obligations and other retirement plans	p. 91
	201-4	Financial assistance received from government	Refer to each affiliate's business report for governmental subsidy for R&D cost (GC (Holding Company) 57th Business Report p. 64, GC Biopharma's 54th Business Report p. 50, GC Cell 's 12thBusiness Report p. 29)
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	p. 88
	202-2	Proportion of senior management hired from the local community	GC (Holding Company) & GC Biopharma: 100%, GC Celll: 75% (Based on Korean)
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	pp. 91-92
	203-2	Significant indirect economic impacts	pp. 91-92

GRI STANDARDS 2021 INDEX

GC Group

Classification		Index	Reporting page
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	p. 93
Prevention of Unethical/Corrupt Behaviors			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 53
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	p. 58, 61
	205-2	Communication and training about anti-corruption policies and procedures	pp. 57-61
	205-3	Confirmed incidents of corruption and actions taken	The number of corruption cases and legal actions identified during the reporting period of GC Group were all zero.
GRI 206: Anti-Competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	p. 87
GRI 207: Tax(2019)	207-1	Approach to tax	p. 93
	207-2	Tax governance, control, and risk management	p. 87, 93
	207-3	Stakeholder engagement and management of concerns related to tax	p. 93
	207-4	Country-by-country reporting	Based on the reporting scope of this report, GC Group is not eligible for overseas tax payment
GRI 301: Materials 2016	301-1	Materials used by weight or volume	p. 94
	301-2	Recycled input materials used	Raw materials (phospholipids) used in the manufacture of GC Biopharma and GC Cell medicines are non-recyclable and recycled paper cannot be used for primary packaging materials in terms of safety considering characteristics of medicines
	301-3	Reclaimed products and their packaging materials	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	p. 67, 70, 72
	302-2	Energy consumption outside of the organization	GC (Holding Company), GC Biopharma and GC Cell do not calculate energy consumption outside of the organization
	302-3	Energy intensity	p. 67, 70, 72
	302-4	Reduction of energy consumption	p. 67, 70, 72
	302-5	Reductions in energy requirements of products and services	p. 67, 70, 72
Environmental Pollutants Emission			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 65
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	pp. 93-94
	303-2	Management of water discharge-related impacts	pp. 93-94
	303-3	Water withdrawal	pp. 93-94
	303-4	Water discharge	pp. 93-94
	303-5	Water consumption	pp. 93-94

Classification		Index	Reporting page
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	N/A
	304-2	Significant impacts of activities, products and services on biodiversity	The GC Group supports the Nagoya Protocol on raw materials and use used in the manufacture of medicines, and complies with due process when disposing of waste, considering that environmental pollution caused by waste drugs can affect biodiversity
	304-3	Habitats protected or restored	N/A
	304-4	IUCN Red List species and national conservation list species with habitats in	
GHG Emission & Environmental Pollutants Emission			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 65
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	p. 67, 70, 72
	305-2	Energy indirect (Scope 2) GHG emissions	p. 67, 70, 72
	305-3	Other indirect (Scope 3) GHG emissions	GC (Holding Company), GC Biopharma and GC Cell are not target for Other indirect (Scope 3) GHG emissions
	305-4	GHG emissions intensity	p. 67, 70, 72
	305-5	Reduction of GHG emissions	p. 67, 70, 72
	305-6	Emissions of ozone-depleting substances (ODS)	GC does not produce ozone-depleting substances (ODS)
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	p. 75, 76, 77
Waste Emission			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 65
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	p. 77, 78
	306-2	Management of significant waste-related impacts	p. 77, 78
	306-3	Waste generated	p. 77, 78
	306-4	Waste diverted from disposal	p. 77, 78
	306-5	Waste directed to disposal	p. 77, 78
Management of ESG Risks in the Supply Chain			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 40
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	p. 94
	308-2	Negative environmental impacts in the supply chain and actions taken	p. 94
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	p. 98, 99
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	pp. 100-102
		Parental leave	pp. 101-102

GRI STANDARDS 2021 INDEX

GC Group

Classification		Index	Reporting page
GRI 402: Labor Management Relations 2016	402-1	Minimum notice periods regarding operational changes	GC Group uses joint labor-management conference and communication channels to share a change in systems etc. in real time with employees.
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	pp. 105-106
	403-2	Hazard identification, risk assessment, and incident investigation	p. 107
	403-3	Occupational health services	p. 107
	403-4	Worker participation, consultation, and communication on occupational health and safety	p. 107
	403-5	Worker training on occupational health and safety	p. 108
	403-6	Promotion of worker health	p. 107
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	p. 107
	403-8	Workers covered by an occupational health and safety management system	p. 105
	403-9	Work-related injuries	p. 109-110
	403-10	Work-related ill health	p. 109
Nurturing Pharmaceutical/Bio Talents			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 27
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	p. 35, 36, 39
	404-2	Programs for upgrading employee skills and transition assistance programs	pp. 34-39
	404-3	Percentage of employees receiving regular performance and career development reviews	p. 110
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	pp. 112-114
	405-2	Ratio of basic salary and remuneration of women to men	p. 111
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	GC Group is not applicable to report this within the reporting period.
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	GC Group is not applicable to report this within the reporting period.
GRI 408: Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	GC Group is not applicable to report this within the reporting period.
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	GC Group is not applicable to report this within the reporting period.

Classification		Index	Reporting page
GRI 410: Security Practices 2016	410-1	Security personnel trained in human rights policies or procedures	GC Group's human rights policy is based on the 'GC Human Rights Charter' and replaces training on human rights policies and procedures by distributing human rights charter to executives and employees of all affiliates of GC Group, including security personnel
GRI 411: Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples	GC Group is not applicable to report this within the reporting period.
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	Even though GC Group is not applicable to report this within its reporting period, we perform continuously monitoring for risk prevention.
	413-2	Operations with significant actual and potential negative impacts on local communities	Even though GC Group is not applicable to report this within its reporting period, we perform continuously monitoring for risk prevention.
Management of ESG Risks in the Supply Chain			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 40
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	p. 94
	414-2	Negative social impacts in the supply chain and actions taken	pp. 50-52, 94
GRI 415: Public Policy 2016	415-1	Political contributions	GC Group's political contribution during the reporting period is zero.
Strengthening Product Quality and Patient Safety			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 40
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	p. 44, 48
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	p. 46, 49 GC Group 's non-compliance concerning the health and safety impacts of products and services during the reporting period is zero.
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	p. 46, 49 Refer to reporting page for GC Biopharma and GC Cell . GC (Holding Company)'s non-compliance of relevant regulations during the reporting period .
	417-2	Incidents of non-compliance concerning product and service information and labeling	
	417-3	Incidents of non-compliance concerning marketing communications	
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	GC Group has zero number of violation of relevant information security regulations during the reporting period.

SASB INDEX

GC (Holding Company)

Accounting Metrics (Financial Sector, Asset Management & Custody Industries)

Topic	SASB Code	Index - Asset Management & Custody Activities	Unit	2020	2021	2022	Remark
Transparent Information & Fair Advice for Customers	FN-AC-270a.1	(1) Number and (2) percentage of covered employees with a record of investment-related investigations, consumer-initiated complaints, private civil litigations, or other regulatory proceedings	Person, %	(1) 0,(2) 0	(1) 0,(2) 0	(1) 0,(2) 0	We have zero number of lawsuits .
	FN-AC-270a.2	Total amount of monetary losses as a result of legal proceedings associated with marketing and communication of financial product related information to new and returning customers and operating assets	KRW million	0	0	0	
	FN-AC-270a.3	Description of approach to informing customers about operating assets, products and services	N/A	Refer to 'Shareholder-Friendly Policy' in p. 84			
Employee Diversity & Inclusion	FN-AC-330a.1	Percentage of gender and racial/ethnic group representation for (1) executive management, (2) non-executive management, (3) professionals, and (4) all other employees	%	(1) Male 100, Female 0, (2) Male 100, Female 0, (3) Male 5.8, Female 22.7, (4) Male 73.3, Female26.7	(1) Male 100, Female 0, (2) Male 100, Female 0, (3) Male 4.0, Female 21.3, (4) Male 67.8, Female 32.2	(1) Male 100, Female 0, (2) Male 100, Female 0, (3) Male 5.9, Female 18.0, (4) Male 62.6, Female 37.4	(3) Professionals are for those who hold qualifications such as lawyers, accountants, and Ph.D
Incorporation of Environmental, Social, and Governance Factors in Investment Management & Advisory	FN-AC-410a.1	Amount of assets under management, by asset class, that employ (1) integration of environmental, social, and governance (ESG) issues, (2) sustainability themed investing, and (3) screening	KRW million	0	0	0	We do not possess the applicable asset.
	FN-AC-410a.2	Description of approach to incorporation of environmental, social, and governance (ESG) factors in investment and/or wealth management processes and strategies	N/A	Not Applicable.			
	FN-AC-410a.3	Description of proxy voting and investee engagement policies and procedures		Refer to 'Shareholder-Friendly Policy' in p. 84			
Business Ethics	FN-AC-510a.1	Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations	KRW million	0	0	0	We have zero number of lawsuits .
	FN-AC-510a.2	Description of whistleblower policies and procedures	N/A	Refer to 'Protection of Reporters' in p. 54			
Risk Management System	FN-AC-550a.1	Percentage of open-end fund assets under management by category of liquidity classification	%	0	0	0	We do not possess applicable funds and products.
	FN-AC-550a.2	Description of approach to incorporation of liquidity risk management programs into portfolio strategy and redemption risk management	N/A	Refer to 'Risk Response' in p. 87			
	FN-AC-550a.3	Total exposure to securities financing transactions	KRW million	0	0	0	
	FN-AC-550a.4	Net exposure to written credit derivatives		0	0	0	

Activity Metrics

Topic	SASB Code	Index - Asset Management & Custody Activities	Unit	2020	2021	2022	Remark
-	FN-AC-000.A	(1) Total registered and (2) total unregistered assets under management (AUM)	KRW million	(1) 3,241,202 (2) 0	(1) 3,496,834 (2) 0	(1) 3,592,061 (2) 0	-
	FN-AC-000.B	Total assets under custody and supervision		0	0	0	-

SASB INDEX

GC Biopharma

Accounting Metrics (Healthcare, Biotechnology & Pharmaceuticals)

Topic	SASB Code	Index- Biotechnology & Pharmaceuticals	Unit	2020	2021	2022	Remark
Safety of Clinical Trial Participants	HC-BP-210a.1	Discussion, by world region, of management process for ensuring quality and patient safety during clinical trials	N/A	Refer to 'Strengthening Product Quality and Patient Safety' in p. 41-46			
	HC-BP-210a.2	Number of FDA Sponsor Inspections related to clinical trial management and pharmacovigilance that resulted in: (1) Voluntary Action Indicated (VAI) and (2) Official Action Indicated (OAI)	Unit	(1) 0, (2) 0	(1) 0, (2) 0	(1) 0, (2) 0	N/A
	HC-BP-210a.3	Total amount of monetary losses as a result of legal proceedings associated with clinical trials in developing countries	KRW million	0	0	0	We have zero number of lawsuits.
Access to Medicines	HC-BP-240a.1	Description of actions and initiatives to promote access to health care products for priority diseases and in priority countries as defined by the Access to Medicine Index	N/A	Refer to 'Policy for Strengthening Access to Medicines' pp. 28-29			
	HC-BP-240a.2	List of products on the WHO List of Prequalified Medicinal Products as part of its Prequalification of Medicines Programme (PQP)		None of our products is registered in this applicable system.			
Affordability & Pricing	HC-BP-240b.1	Number of settlements of Abbreviated New Drug Application (ANDA) litigation that involved payments and/or provisions to delay bringing an authorized generic product to market for a defined time period	Times	0	0	0	We have zero number of lawsuits .
	HC-BP-240b.2	Percentage change in: (1) average list price and (2) average net price across U.S. product portfolio compared to previous year	%	0.1	0.9	3.6	This is based on our internal and external major sales record and refer to 54th Business Report
	HC-BP-240b.3	Percentage change in: (1) list price and (2) net price of product with largest increase compared to previous year		-	-	-	Confidential and no disclosure
Drug Safety	HC-BP-250a.1	List of products listed in the Food and Drug Administration's (FDA) MedWatch Safety Alerts for Human Medical Products database	N/A	None of our products is registered in this applicable system.			
	HC-BP-250a.2	Number of fatalities associated with products as reported in the FDA Adverse Event Reporting System	Persons	N/A	N/A	N/A	N/A
	HC-BP-250a.3	Number of recalls issued, total units recalled	Cases, Number	N/A	N/A	N/A	
	HC-BP-250a.4	Total amount of product accepted for take back, reuse, or disposal	Number	N/A	N/A	N/A	
	HC-BP-250a.5	Number of FDA enforcement actions taken in response to violations of current Good Manufacturing Practices (cGMP), by type3	N/A	We have zero violation and N/A			
Counterfeit Drugs	HC-BP-260a.1	Description of methods and technologies used to maintain traceability of products throughout the supply chain and prevent counterfeiting		Refer to 'Policy on the Responsible Marketing of Medicines' in p. 46			
	HC-BP-260a.2	Discussion of process for alerting customers and business partners of potential or known risks associated with counterfeit products		Refer to 'Policy on the Responsible Marketing of Medicines' in p. 46			
	HC-BP-260a.3	Number of actions that led to raids, seizure, arrests, and/or filing of criminal charges related to counterfeit products	Cases	0	0	0	N/A
Ethical Marketing	HC-BP-270a.1	Total amount of monetary losses as a result of legal proceedings associated with false marketing claims	N/A	We have zero number of lawsuits and financial loss amount is zero.			
	HC-BP-270a.2	Description of code of ethics governing promotion of off-label use of products		Refer to 'Ethical Management Policy' in p. 55			

SASB INDEX

GC Biopharma

Accounting Metrics (Healthcare, Biotechnology & Pharmaceuticals Industries)(Cont'd)

Topic	SASB Code	Index- Biotechnology & Pharmaceuticals	Unit	2020	2021	2022	Remark
Employee Recruitment, Development & Retention	HC-BP-330a.1	Discussion of talent recruitment and retention efforts for scientists and research and development personnel	N/A	Refer to 'Nurturing Pharmaceutical/Bio Experts' in p. 35-37 and 'Securing and Maintenance of Talents' in P. 98-99			
	HC-BP-330a.2	(1) Voluntary and (2) involuntary turnover rate for: (a) executives/senior managers, (b) mid level managers, (c) professionals, and (d) all others	%	(1) 5.2 -(a) 0.1,(b) 0.1, (c) 1.7, (d) 3.3, (2) 0.1 -(a) 0, (b) 0, (c) 0.1, (d) 0	(1) 6.4[1] -(a) 0.1,(b) 0.4,(c) 2.6, (d) 3.3, (2) 0.1 -(a) 0,(b) 0,(c) 0.1, (d) 0	(1) 5.6 -(a) 0.3, (b) 0.3,(c) 2.5, (d) 2.6, (2) 0.3 -(a) 0, (b) 0.0, (c) 0.3, (d) 0	Calculated value based on the total number of executives and employees
Supply Chain Management	HC-BP-430a.1	Percentage of (1) entity's facilities and (2) Tier I suppliers' facilities participating in the Rx-360 International Pharmaceutical Supply Chain Consortium audit program or equivalent third party audit programs for integrity of supply chain and ingredients	%	(1) 0, (2) 0	(1) 0, (2) 0	(1) 0, (2) 0	For supply chain safety, we have signed GDP certification, safety information exchange agreements, and drug monitoring agreements to manage and monitor our supply chain safety
Business Ethics	HC-BP-510a.1	Total amount of monetary losses as a result of legal proceedings associated with corruption and bribery	N/A	We have zero number of lawsuits and financial loss amount is zero.			
	HC-BP-510a.2	Description of code of ethics governing interactions with health care professionals		Refer to 'Ethical Management Policy' in p. 55			

1) Value that is re-calculated and reflected as a change in calculation method (variable based on the total number of executives and employees' parameters)

Activity Metrics

Topic	SASB Code	Index- Biotechnology & Pharmaceuticals	Unit	2020	2021	2022	Remark
-	HC-BP-000.A	Number of patients treated	Persons	N/A	N/A	N/A	Impossible to calculate and no disclosure
	HC-BP-000.B	Number of drugs (1) in portfolio and (2) in research and development (Phases 1-3)	Number	(1) 96, (2) 15	(1) 87, (2) 11	(1) 83, (2) 11	-

SASB INDEX

GC Cell

Accounting Metrics (Healthcare, Biotechnology & Pharmaceuticals Industries)

Topic	SASB Code	Index- Biotechnology & Pharmaceuticals	Unit	2020	2021	2022	Remark
Safety of Clinical Trial Participants	HC-BP-210a.1	(1) Number and (2) percentage of covered employees with a record of investment-related investigations, consumer-initiated complaints, private civil litigations, or other regulatory proceedings	N/A	Refer to 'Strengthening Product Quality and Patient Safety' in p. 47-49			
	HC-BP-210a.2	Total amount of monetary losses as a result of legal proceedings associated with marketing and communication of financial product related information to new and returning customers	Cases	(1) 0, (2) 0	(1) 0, (2) 0	(1) 0, (2) 0	N/A
	HC-BP-210a.3	Description of approach to informing customers about products and services	KRW million	0	0	0	We have zero number of lawsuits.
Access to Medicines	HC-BP-240a.1	Percentage of gender and racial/ethnic group representation for (1) executive management, (2) non-executive management, (3) professionals, and (4) all other employees	N/A	Refer to 'Policy for Strengthening Access to Medicines' in p. 30			
	HC-BP-240a.2	Amount of assets under management, by asset class, that employ (1) integration of environmental, social, and governance (ESG) issues, (2) sustainability themed investing, and (3) screening		None of our products is registered in this applicable list.			
Affordability & Pricing	HC-BP-240b.1	Description of approach to incorporation of environmental, social, and governance (ESG) factors in investment and/or wealth management processes and strategies	Times	0	0	0	We have zero number of lawsuits.
	HC-BP-240b.2	Description of proxy voting and investee engagement policies and procedures	%	N/A	N/A	N/A	N/A
	HC-BP-240b.3	Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations		N/A	0	0	We sell single products.
Drug Safety	HC-BP-250a.1	Description of whistleblower policies and procedures	N/A	None of our products is registered in this applicable list.			
	HC-BP-250a.2	Percentage of open-end fund assets under management by category of liquidity classification	Persons	N/A	N/A	N/A	N/A
	HC-BP-250a.3	Description of approach to incorporation of liquidity risk management programs into portfolio strategy and redemption risk management	Cases, Number	N/A	N/A	N/A	
	HC-BP-250a.4	Total exposure to securities financing transactions	Number	N/A	N/A	N/A	
	HC-BP-250a.5	Net exposure to written credit derivatives	N/A	We have zero violation and N/A			
Counterfeit Drugs	HC-BP-260a.1	Description of methods and technologies used to maintain traceability of products throughout the supply chain and prevent counterfeiting		N/A			
	HC-BP-260a.2	Discussion of process for alerting customers and business partners of potential or known risks associated with counterfeit products		N/A			
	HC-BP-260a.3	Number of actions that led to raids, seizure, arrests, and/or filing of criminal charges related to counterfeit products	Cases	0	0	0	N/A
Ethical Marketing	HC-BP-270a.1	Total amount of monetary losses as a result of legal proceedings associated with false marketing claims	N/A	We have zero number of lawsuits and financial loss amount is zero.			
	HC-BP-270a.2	Description of code of ethics governing promotion of off-label use of products		Refer to 'Ethical Management Policy' in p. 56			

SASB INDEX

GC Cell

Accounting Metrics (Healthcare, Biotechnology & Pharmaceuticals Industries)(Cont'd)

Topic	SASB Code	Index- Biotechnology & Pharmaceuticals	Unit	2020	2021	2022	Remark
Employee Recruitment, Development & Retention	HC-BP-330a.1	Discussion of talent recruitment and retention efforts for scientists and research and development personnel	N/A	Refer to 'Nurturing Pharmaceutical/Bio Experts' p.38 and 'Securing and Maintenance of Talents' in p. 98-99			
	HC-BP-330a.2	(1) Voluntary and (2) involuntary turnover rate for: (a) executives/senior managers, (b) mid level managers, (c) professionals, and (d) all others	%	(1) 22.5[1]-(a) 0, (b) 1, (c) 2, (d) 19, (2) 0[1]-(a) 0, (b) 0, (c) 0, (d) 0	1) 13.5[1]-(a) 0.1, (b) 0.6, (c) 0.9, (d) 12, (2) 0[1]-(a) 0, (b) 0, (c) 0, (d) 0	(1) 21.2-(a) 0.5, (b) 1.3, (c) 1.8, (d) 18 (2) 0[1]-(a) 0, (b) 0, (c) 0, (d) 0	Calculated value based on the total number of executives and employees
Supply Chain Management	HC-BP-430a.1	Percentage of (1) entity's facilities and (2) Tier I suppliers' facilities participating in the Rx-360 International Pharmaceutical Supply Chain Consortium audit program or equivalent third party audit programs for integrity of supply chain and ingredients		(1) 100, (2) 100	(1) 100, (2) 100	(1) 100, (2) 100	We manage safety of supply chain through MFDS GMP audit.
Business Ethics	HC-BP-510a.1	Total amount of monetary losses as a result of legal proceedings associated with corruption and bribery	N/A	We have zero number of lawsuits and financial loss amount is zero.			
	HC-BP-510a.2	Description of code of ethics governing interactions with health care professionals		Refer to 'Ethical Management Policy' in p. 56			

1) Value that is re-calculated and reflected as a change in calculation method (variable based on the total number of executives and employees' parameters)

Activity Metrics

Topic	SASB Code	Index- Biotechnology & Pharmaceuticals	Unit	2020	2021	2022	Remark
-	HC-BP-000.A	Number of patients treated	Person	-	2,124	1,728	Based on the number of patients injected with 'Immuncell-LC'.
	HC-BP-000.B	Number of drugs (1) in portfolio and (2) in research and development (Phases 1-3)	Number	(1) 0, (2) 2	(1) 1, (2) 4	(1) 1, (2) 3	Detailed clinical information can be seen in Shortcut

TCFD INDEX

Classification	TCFD's Recommendations	GC (Holding Company)	GC Biopharma	GC Cell
Governance	a) Description of BOD's activities relevant to climate change risk and opportunities	pp. 86-87 BOD's management and supervision on high-risk environment/climate change	pp. 86-87 BOD's management and supervision on high-risk environment/climate change	pp. 86-87 BOD's management and supervision on high-risk environment/climate change
	b) Description of roles of the management to evaluate and manage risks and opportunities of climate change	pp. 86-87 The management got reports for risks and performed risk management and reported them to BOD	pp. 86-87 The management got reports for risks and performed risk management and reported them to BOD	pp. 86-87 The management got reports for risks and performed risk management and reported them to BOD
Strategy	a) Description of risks and opportunities of climate change in short-and-medium term	Refer to 'Climate change Risk Factors and Opportunities' p. 73	Refer to 'Climate change Risk Factors and Opportunities' p. 68	Refer to 'Climate change Risk Factors and Opportunities' p. 70
	b) Description of impact of how climate change risks affect organization's business, strategies and financial plans	N/A	N/A	N/A
	c) Description of flexibility of strategies in consideration of various climate-related scenarios including 2°C or less scenarios	N/A	N/A	N/A
Risk Management	a) Description of process for identifying and evaluating climate change risks	p. 87 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 87 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 87 Refer to 'Risk Response Process' (Company-wide risks including climate change)
	b) Description of process to manage climate change risks	p. 87 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 87 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 87 Refer to 'Risk Response Process' (Company-wide risks including climate change)
	c) Description of how process for identifying, evaluating and managing climate change risks is integrated into risk management system	p. 87 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 87 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 87 Refer to 'Risk Response Process' (Company-wide risks including climate change)
Index and Goals	a) Disclosure of index to evaluate risks and opportunities of climate change	N/A	N/A	N/A
	b) Disclosure of emission amount of Scope 1, Scope 2 and Scope 3 (If applicable)	p. 72 Disclosure of Scope 1, Scope 2	p. 67 Disclosure of Scope 1, Scope 2	p. 70 Disclosure of Scope 1, Scope 2
	c) Description of goals for managing risks, opportunities and performance of climate change	p. 71 Refer to 'Goals for Environmental Management/ Response to Climate Change'	p. 66 Refer to 'Goals for Environmental Management/ Response to Climate Change'	p. 69 Refer to 'Goals for Environmental Management/ Response to Climate Change'

THIRD-PARTY ASSURANCE STATEMENT

Dear Management and Stakeholders of GC

Introduction

Korea Management Registrar (KMR) was commissioned by GC to conduct an independent assurance of its Sustainability Report (the "Report"). The data and its presentation in the Report is the sole responsibility of the management of GC. KMR's responsibility is to perform an assurance engagement as agreed upon in our agreement with GC and issue an assurance statement.

Scope and Standards

GC described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the AA1000AS v3 and KMR's assurance standard SRV1000. We are providing a Type 2, moderate level assurance. We evaluated the adherence to the AA1000AP (2018) principles of inclusivity, materiality, responsiveness and impact, and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index provided below. The opinion expressed in the Assurance Statement has been formed at the materiality of the professional judgment of our Assurance Team.

Confirmation that the Report was prepared in accordance with GRI standards 2021 was included in the scope of the assurance. We have reviewed the topic-specific disclosures of standards which were identified in the materiality assessment process.
· GRI Sustainability Reporting Standards 2021
· Universal standards
· Topic specific standards

- GRI 205 : Anti-corruption
- GRI 206 : Anti-competitive Behavior
- GRI 303 : Water and Effluents
- GRI 305 : Emissions
- GRI 306 : Waste
- GRI 308 : Supplier Environmental Assessment
- GRI 404 : Training and Education
- GRI 414 : Supplier Social Assessment
- GRI 416 : Customer Health and Safety

As for the reporting boundary, the engagement excludes the data and information of GCs' partners, suppliers and any third parties.

KMR's Approach

To perform an assurance engagement within an agreed scope of assessment using the standards outlined above, our Assurance Team undertook the following activities as part of the engagement:
· reviewed the overall Report;
· reviewed materiality assessment methodology and the assessment report;
· evaluated sustainability strategies, performance data management system, and processes;
· interviewed people in charge of preparing the Report;
· reviewed the reliability of the Report's performance data and conducted data sampling;
· assessed the reliability of information using independent external sources such as Financial Supervisory Service's DART and public databases.

Limitations and Recommendations

KMR's assurance engagement is based on the assumption that the data and information provided by GC to us as part of our review are provided in good faith. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. To address this, we referred to independent external sources such as DART and National Greenhouse Gas Management System (NGMS) and public databases to challenge the quality and reliability of the information provided.

Conclusion and Opinion

KMR's assurance engagement is based on the assumption that the data and information provided by GC to us as part of our review are provided in good faith. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. To address this, we referred to independent external sources such as DART and National Greenhouse Gas Management System (NGMS) and public databases to challenge the quality and reliability of the information provided.

Inclusivity
GC has developed and maintained different stakeholder communication channels at all levels to announce and fulfill its responsibilities to the stakeholders. Nothing comes to our attention to suggest that there is a key stakeholder group left out in the process. The organization makes efforts to properly reflect opinions and expectations into its strategies.

Materiality
GC has a unique materiality assessment process to decide the impact of issues identified on its sustainability performance. We have not found any material topics left out in the process.

Responsiveness
GC prioritized material issues to provide a comprehensive, balanced report of performance, responses, and future plans regarding them. We did not find anything to suggest that data and information disclosed in the Report do not give a fair representation of GCs' actions.

Impact
GC identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

Reliability of Specific Sustainability Performance Information

In addition to the adherence to AA1000AP (2018) principles, we have assessed the reliability of economic, environmental, and social performance data related to sustainability performance. We interviewed the in-charge persons and reviewed information on a sampling basis and supporting documents as well as external sources and public databases to confirm that the disclosed data is reliable. Any intentional error or misstatement is not noted from the data and information disclosed in the Report.

Competence and Independence

KMR maintains a comprehensive system of quality control including documented policies and procedures in accordance with ISO/IEC 17021:2015 - Requirements for bodies providing audit and certification of management systems. This engagement was carried out by an independent team of sustainability assurance professionals. KMR has no other contract with GC and did not provide any services to GC that could compromise the independence of our work.

June 2023 Seoul, Korea

KMR 한국경영인증원 Korea Management Registrar SRV1000 Sustainability Committee Assurance AA1000 Licensed Report 000-129/V3-WKZ0Y

CEO E. J Hwang

ASSURANCE STATEMENT ON GHG EMISSIONS (GC BIOPHARMA)

Third Party's Verification Statement on 2022 GHG Emission Report [GC Biopharma]

Verification Target

Korean Foundation for Quality (hereinafter "KFQ") has conducted the verification of "2022 Report on Quantity of emitted Greenhouse gas and Energy Consumption"(hereinafter 'Inventory Report') for GC Biopharma.

Verification Scope

KFQ's verification was focused on all the facilities which emitted greenhouse gas during the year of 2022 under operational control and organizational boundary of GC Biopharma.

Verification Criteria

To conduct verification activities, verification team applied verification standards and guidelines. The standards and guidelines are as follows.

- Rules for emission reporting and certification of greenhouse gas emission trading scheme(Notification No.2022-279 of Ministry of Environment)
- Rules for verification of operating the greenhouse gas emission trading scheme(Notification No. 2021-112 of Ministry of Environment)
- KS Q ISO 14064-1,2,3 : 2006

Verification Opinions

Based on verification process according to the Scheme, KFQ obtained reasonable basis to derive following conclusion on the GHG emission data in the Inventory Report.

1) The Inventory Report was documented in accordance with "Rules for emission reporting and certification of greenhouse gas emission trading scheme" and "KS Q ISO 14064-1,2,3 : 2006" run by the government.
2) The result of Material discrepancy satisfied the criteria for an organization that emits less than 500,000 tCO_2eq shall not exceed 5% from total emission as per "Rules for verification of operating the greenhouse gas emission trading scheme"
3) In 2022 GC Biopharma's GHG emission Report, no significant errors, omissions, or inappropriate matters were found except for emission sources that were not considered in the relevant GHG gas calculation guidelines.
4) Thus, KFQ concludes that following emissions data are correctly calculated and stated.

(Unit: ton CO_2-eq)

Year	GHG Emissions			
	Plant	Scope 1	Scope 2	Total
2022	Ochang	5,009	36,703	41,712
	Hwasun	5,504	12,437	17,941
	Eumseong	792	1,467	2,259
	Headquarter etc. (R&D center)	1,069	3,872	4,939
	Total	12,374	54,480	66,851

※Note: Total emission is calculated as round down below the decimal point.

April 24th, 2023

Ji Young Song

CEO **Ji-Young Song**
Korean Foundation for Quality (KFQ)

INITIATIVE

GC (Holding Company)

Classification		2020	2021	2022
KCGS	ESG Integrated Rating	B	B+	B+
	Environmental Rating	CCC	B+	B
	Social Rating	B+	B+	A
	Governance Rating	B	B+	B+
MSCI		CCC	CCC	CCC

GC Biopharma

Classification		2020	2021	2022
KCGS	ESG Integrated Rating	B+	B+	B+
	Environmental Rating	B	B+	B
	Social Rating	A	B+	A
	Governance Rating	B	B+	B
MSCI		B	CCC	CCC

GC Cell

Classification		2020	2021	2022
KCGS	ESG Integrated Rating	C	C	B+
	Environmental Rating	D	D	B
	Social Rating	B	C	A
	Governance Rating	B	B	B+
MSCI		CCC	CCC	CCC