THE LEADER IN GLOBAL HEALTHCARE

2024 GC Sustainability Report

GC

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

ABOUT THIS REPORT

Overview

This is the third Sustainability Report published by GC Corp. (hereinafter referred as 'GC (Holding Company)'). The report presents economic, environmental, social and governance performance and plans for major affiliates including GC (Holding Company), GC Biopharma and GC Cell. We continue to communicate transparently with our stakeholders through consistent publishing of the report.

Reporting Period

The report contains the activities on economic, environmental, social and governance aspects for the fiscal year of January 1, 2023 to December 31, 2023. Additionally, it includes some achievements from the first half of 2024. To facilitate time series analysis, quantitative performances data of past three years have been provided.

Reporting Standards

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards, which serves as the standards for sustainability reporting. Furthermore, it reflected the disclosure indicators related to global sustainability initiatives, including the United Nations Sustainable Development Goals (UN SDGs), recommendations from Task Force on Climate-related Financial Disclosures (TCFD), and standards established by Sustainability Accounting Standards Board (SASB).

Reporting Scope

The scope of this report covers major businesses and supply chains of GC (Holding Company), GC Biopharma and GC Cell as well as other affiliates including achievements of major affiliates. Achievements presented in this report pertain for GC (Holding Company), which includes the headquarter, GC Biopharma, which includes the headquarter, 3 manufacturing facilities, a R&D center and 10 sales offices and GC Cell, which includes the headquarter, Cell Center, 47 sales office and a distribution center. Financial performances have been prepared in accordance with the K-IFRS consolidation standards, while the environmental achievements are prepared based on the data collected from the designated sites of GC (Holding Company), GC Biopharma and GC Cell.

Assurance of the Report

To ensure the validity of the procedure adopted to prepare the Sustainable Report and the integrity of the information within, by Korea Management Registrar (KMR), the independent external verification organization, has provided third-party assurance. Please refer to page 150 of the report for the independent assurance statement.

Reports Terminology

The structure of the report follows an integrated format for GC Group's affiliates, such as GC (Holding Company), GC Biopharma and GC Cell. To provide concise ESG information for each affiliate, common information for all affiliates including three mentioned companies is categorized under ‘GC Group’. Specific achievements for each affiliate, are prepared separately by GC (Holding company), GC Biopharma and GC Cell.

Inquiries about the Report

Department | GC ESG TF
Inquiry email | gc_esg@gccorp.com

CONTENTS

04
Introduction
Message from the Chairman 05
Overview 06

21
Sustainable Fundamental
ESG Management Strategy 22
ESG Management Implementation Framework 23
Materiality Assessment 24

25
Focus Area
Area 1. Extending Access to Healthcare 26
Area 2. Customer Safety and Responsibility to Quality 43
Area 3. Corporate Ethics and Compliance 57
Area 4. Responsibility to Environment 71

89
General Disclosure
General 90
Economy 99
Environment 103
Society 108

140
Appendix
GRI Standards Index 141
SASB Index 144
TCFD Index 149
Independent Assurance Statement 150
Greenhouse Gas Verification Statement 151

Navigation

Go to cover page | Table of contents | Previous view

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 ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

Introduction

Message from the Chairman 05
Overview 06

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

2024 MESSAGE FROM THE CHAIRMAN

Dear Esteemed Stakeholders,

I would like to express my deep appreciation for your continuous trust and support in GC. Based on our vision to become a global leader in the healthcare industry and our mission to contribute to the healthy life of humankind, GC continuously establishes strategic directions required for ESG management and implements these to fulfill our economic, social, and environmental responsibilities towards our stakeholders.

Firstly, we have achieved significant results with the goal of improving patients' quality of life in areas such as blood plasma-derived products, vaccines, rare disease treatments, chronic disease treatments, and anti-cancer treatments. Furthermore, we strive to expand healthcare access by providing solutions for the prevention, diagnosis, treatment, and management of diseases, enabling humanity to lead a healthy life. Through R&D innovations, we are committed to developing new medicines, obtaining original technology, and continuously nurturing pharmaceutical and biopharma experts.

We prioritize safety and quality in our management, striving to fulfill our responsibilities in protecting the safety and health of all stakeholders, including customers and patients. To achieve this, we periodically review our quality systems and performances, applying and adhering to stringent quality standards. We are committed to operating a sustainable supply chain and thoroughly performing risk mitigation activities related to it.

GC has practiced ethical management with the belief that righteousness is our only path. We have established ethical standards that all employees must adhere to as the basis for proper behavior and value judgment. Also, we strive to comply with these standards. We engage in various activities to ensure fairness, transparency, and reliability in the pharmaceutical development process.

Furthermore, we adhere to environmental regulations and actively strive to respond to climate change, a global environmental issue. GC is establishing an internal management system that sets specific goals and monitors implementation in order to minimize waste, wastewater, air pollution, and hazardous chemicals generated during corporate activities.

GC designated 2022 as the inaugural year for promoting sustainable management and published its first sustainability report, since then we have been intensifying its focus on ESG management. Moving forward, GC will actively share the content and achievements of its ESG management activities with stakeholders, preparing for the future.

Chairman of GC **Il-Sub Huh**

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW

Company Overview

Since the foundation in 1967, for over half a century, GC has walked the difficult path of developing 'Medicinal drugs that are difficult to make, but essential'. This dedication stems from the vision of creating a society where all individuals can lead healthy, happy lives without suffering from diseases. Our journey has taken us to extraordinary growth. From humble beginnings as a small company with generating KRW 12.8 million sales with about 10 employees, we have evolved into a prominent pharmaceutical and healthcare company in Korea achieving sales of KRW 2.58 trillion (consolidated basis) in 2023. We have consistently pursued the expansion of our international operations, propelling us to become a global enterprise with 44 domestic and overseas affiliates. As we strive to elevate our stature towards establishing ourselves as a leading biotechnology group in 'the global total healthcare', we are actively reorganizing our core business to offer a comprehensive portfolio of products and services that encompass all aspects of disease prevention, diagnosis, treatment and healthcare.

Major Information

(as of December 31, 2023 consolidated basis)

No. of Employees
7,152

Sales
KRW 2.58 trillion

Assets
KRW 3.74 trillion

Affiliates
6 (Listed), 38 (Unlisted)

Business Portfolio

Biopharma & Innovative Tech
- GC Biopharma
- GC Cell
- GC EM
- GC Invacfarm
- GC China
- GC LabTech

Diagnosis
- GC MS
- GC Genome
- GCOL
- Genes Laboratories
- GC Labs
- GREEN VET

Digital Healthcare
- UBcare
- GC Care
- BBROS
- HISTON PROJECT
- JOA
- crenor

Consumer Health
- GC Biopharma
- GC Wellbeing
- GC ¿MED

Management Philosophy

GC aspires to emerge as an entity that stands with the world, spanning a diverse range of pharmaceutical products, medical devices and healthcare services. Our commitment extends to the holistic care of both physical and mental health, encompassing disease prevention, diagnosis, treatment and management.

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

Challenge & Innovation

The source of GC's growth

GC's relentless drive to rise to 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 through greater R&D efforts.

Care & Compassion

The ingrained sprit of GC

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

Transparency & Integrity

Uncompromising commitment to the right path

GC refuses to reach its goals by anything other than the right way. The company has grown with an 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 every life at the root of everything

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

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW

GC History

Passion and Promise for a Healthier Life

GC has been working hard to become more than a pharmaceutical company and make itself a leader of the healthcare industry that realizes the promise of a healthier, happier life for all, based on respect for life and dedication.

1960

1967 Established as Sudo Microorganism Medical Supplies Company
1968 Completion of Singal plant

1970

1971 Name change to Green Cross Producing blood plasma-derived products for the first time in Korea
1973 Obtains product license for Korea's first stroke treatment [Urokinase]
1974 Obtains product license for anti-hemophilic factor [AHF]
1978 IPO

1980

1982 Established Green Cross Labs, Obtains product license for IVIG [I.V.-Globulin]
1983 Becomes third pharmaceutical company in the world to obtain product license for hepatitis-B vaccine [Hepavax-B]
1984 Established Mogam Biotechnology Institute
1987 First in Korea to develop an AIDS diagnostic kit
1988 Becomes first pharmaceutical company in the world to obtain product license for vaccine against hemorrhagic fever with renal syndrome [Hantavax]

1990

1993 Becomes second company in the world to obtain product license for varicella vaccine [Suduvax]
1995 Established GC China, Anhui Green Cross Bio Products Limited. in China Completion of vaccine plant in Indonesia

2000

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

2010

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
Established GC Cell
2013 Begins construction on blood plasma fractionation plant(the blood plasma-derived products facility) in Thailand (with Thai Red Cross)
Completion of Green Cross R&D Center, the largest scale R&D center among pharmaceutical industry 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 [GC FLU Quadrivalent], to pass WHO prequalification
Developed tetanus-diphtheria vaccine for the first time 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

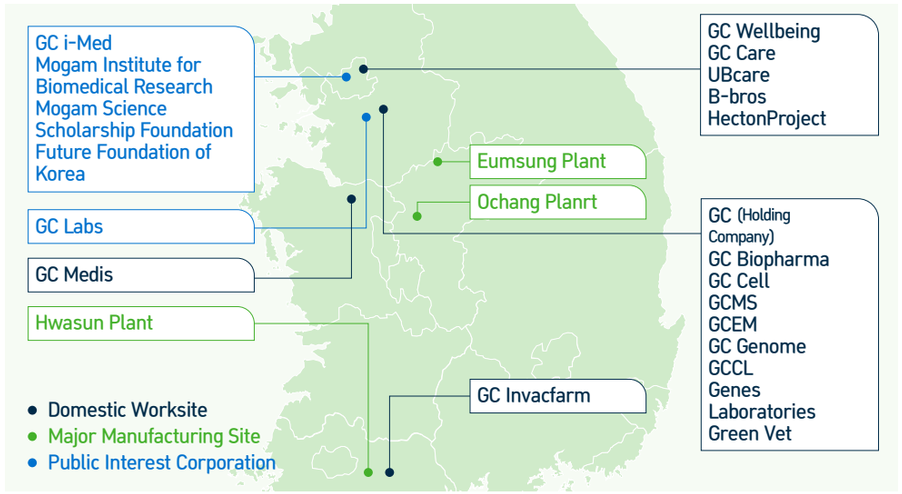
2020 Acquired UBcare (GC Care)
Developed [BARYCELA], the next generation of varicella vaccine
Obtained marketing approval for [Hunterase] in China for Hunter's Syndrome
2021 Obtained marketing approval for [Hunterase ICV] in Japan for severe Hunter's Syndrome, for the first time in the world
Obtained marketing approval for [Green Gene F] in China
Licensed-out CAR-NK technology platform to MSD at KRW 2 trillion-Green Cross Labcell, Artiva
Launched GC Cell, an integrated corporation of GC Green Cross 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
GC Biopharma obtained license approval from the U.S. Food and Drug Administration (US FDA) for the plasma-derived product 'ALYGLO'.
2024 GENECE in USA, LDT for early lung cancer diagnosis to be launched,
GC Labs is scheduled to open a regional branch (Yeongnam, Honam)


Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

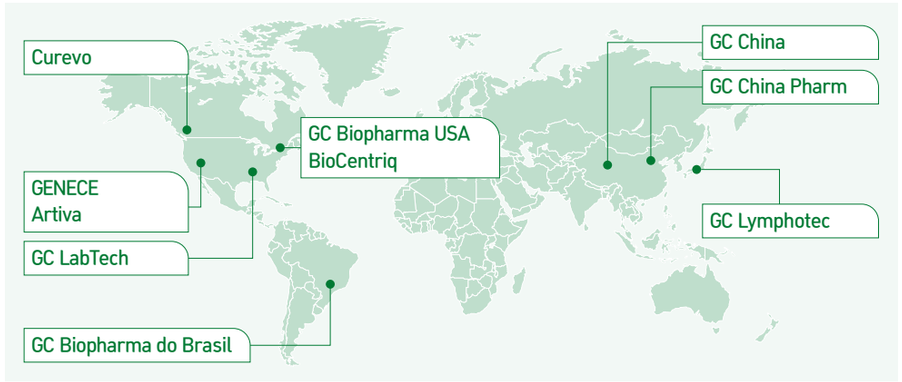
OVERVIEW

Network and Infrastructure

Domestic Network



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 cell·gene therapy
	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
	GCEM	Seongnam, Gyeonggi	Biotech facility engineering and construction services
	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 for animal and animal diagnosis services
	GC Invacfarm	Hwasun, Jeonnam	Production of fertilized chicken eggs for vaccine production
	B-bros	Seoul	Healthcare platform services
Overseas	GC China	Anhui, China	Production of blood plasma derivative 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 cell·gene therapy
	Curevo	Washington, US	Next-generation vaccine development
	GC LabTech	Texas, US	Plasma screening test
	GENECE	California, US	Cancer diagnosis services
	Artiva	California, US	Development of cell therapy
	GC Biopharma do Brasil	Sao Paulo, Brazil	Commercialization of drug products and development of business
	GC Lymphotec	Tokyo, Japan	Research and sales of cell therapy
Other Public Interest Corporations	GC Labs	Yongin, Gyeonggi	Clinical examination
	GC i-MED	Seoul	Integrated health examination
	Mogam Institute for Biomedical Research	Seoul	Research on cancer, vaccines, rare diseases and metabolic diseases
	Mogam Science Scholarship Foundation	Seoul	Support with scholarship programs for students with high levels of talent in science
	Future Foundation of Korea	Seoul	Scholarship program for North Korean refugees

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

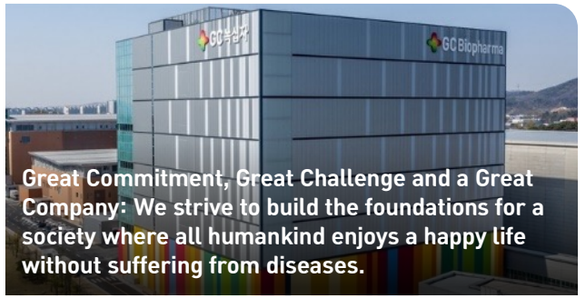
OVERVIEW

GC Corp. (005250)

GC (Holding Company) is accompanied by total of 44 affiliates, comprising 27 domestic and 17 overseas entities. Among these entities, GC Biopharma serves as the flagship affiliate. As the central entity, GC (Holding Company) formulates and coordinates comprehensive strategies for all affiliates, initiate new ventures, and manages investment assets. The affiliates primarily specialize in the production and sales of pharmaceutical products, as well as digital healthcare businesses.

Overview	
CEO	Il-Sub Huh, Yong-Jun Huh
Date Established	1967. 10. 5.
No. of Employees	178
Website	www.gccorp.com
Address	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yongin-si, Republic of Korea

Financial Results (Unit: KRW 100 million)	※ Consolidated basis		
Year	2021	2022	2023
Total Assets	34,968	35,921	37,377
Total Equity	19,107	19,670	18,815
Sales	18,406	20,796	20,579
Operating Income	862	720	(164)



GC Biopharma Corp. (006280)

GC Biopharma has been dedicated to patient care and public health by developing essential medications rooted in expertise on blood plasma-derived products, vaccines, and gene recombinant therapies for rare diseases. We are concentrating on research and development by laying the groundwork for future growth in developing mRNA platform technology and pioneering new treatments for rare diseases. This builds upon our solid technological foundation, which secured us a US FDA license for our immunoglobulin product. Furthermore, we have made significant strides towards becoming a leading global pharmaceutical company, expanding the reach to numerous countries through the export of essential medicines such as flu vaccines, IVIG, and Hunterase.

Overview	
CEO	Eun-Chul Huh
Date Established	1969. 11. 1.
No. of Employees	2,272
Website	www.gcbiopharma.com
Address	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yongin-si, Republic of Korea

Financial Results (Unit: KRW 100 million)	※ Consolidated basis		
Year	2021	2022	2023
Total Assets	24,621	25,255	26,433
Total Equity	14,998	15,666	15,399
Sales	15,378	17,113	16,266
Operating Income	737	813	344

GC Cell Corporation (144510)

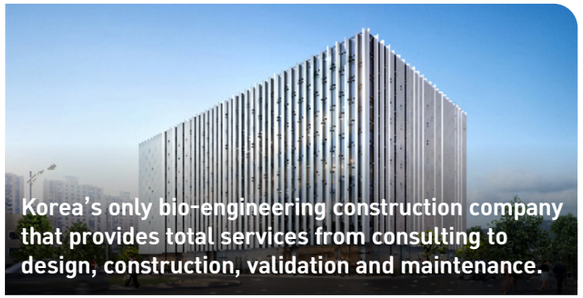
GC Cell is dedicated to the commercialization of autologous T-cell treatment for cancer and intractable diseases. In addition, we are actively enforcing our pipeline for development of innovative new products such as allogenic NK and CAR-NK cells. Furthermore, through our affiliation with BioCentriq, we provide CDMO services for cell and gene therapies in Asia and North America. Through the expansion of indications and global sales for our anti-cancer immunotheraphy Immnuncell-LC, we are poised to usher in a significant leap towards a better future for every patients.

Overview	
CEO	James Jong-Eun Park
Date Established	2011. 6. 21.
No. of Employees	858
Website	www.gccell.com
Address	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yongin-si, Republic of Korea

Financial Results (Unit: KRW 100 million)	※ Consolidated basis		
Year	2021	2022	2023
Total Assets	6,456	6,765	6,652
Total Equity	5,157	5,457	5,415
Sales	1,683	2,361	1,875
Operating Income	363	443	41

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW



GC EM GC Engineering Maintenance Corporation

GCEM has been the nation's only bio-engineering and construction company, offering end-to-end services from design to construction, validation and maintenance, we create customer based on excellent quality, safe construction, and thorough customer care. We are poised 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 Established	2001. 3. 16.
No. of Employees	375
Website	www.gcem.co.kr
Address	8, Gumi-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million) ※ Non-Consolidated basis

Year	2021	2022	2023
Total Assets	817	826	884
Total Equity	419	431	381
Sales	1,259	1,591	1,851
Operating Income	43	53	62

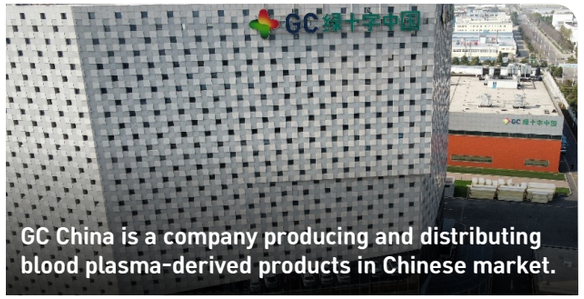
GC Invacfarm GC Invacfarm Corporation

GC Invacfarm has established the country's top-level quarantine and biosecurity system and produces fertilized chicken eggs under stringent quality control standards. Together with poultry farms, we operate the hatchery in compliance with vaccine production, ensuring a reliable supply of high-quality fertilized eggs for vaccine production to contribute to growth of GC Biopharma's flu vaccine business.

Overview	
CEO	In-Gyu Lee
Date Established	2007. 11. 29.
No. of Employees	23
Website	-
Address	40, Sandan-gil, Hwasun-eup, Hwasun-gun, Jeollanam-do, Republic of Korea

Financial Results (Unit: KRW 100 million) ※ Non-Consolidated basis

Year	2021	2022	2023
Total Assets	190	192	191
Total Equity	172	172	176
Sales	215	215	181
Operating Income	9	3	7



GC China GC China Corp.

GC China, GC's global production hub, has been dedicated to producing plasma-derived products with superb production facilities where we obtained on-site certification from China's Ministry of Health in 1998 which was the first in Anhui Province to pass China's GMP certification. GC China Pharm, GC China's affiliate for pharmaceutical sales, has distributed products across China. Furthermore, four blood centers are under direct operation in China to ensure stable supply of blood plasma.

Overview	
CEO	Chang-Sup Kim
Date Established	1995. 7. 1.
No. of Employees	565
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) ※ Non-Consolidated basis

Year	2021	2022	2023
Total Assets	1,391	1,357	1,451
Total Equity	840	727	713
Sales	716	457	670
Operating Income	27	(11)	16

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW

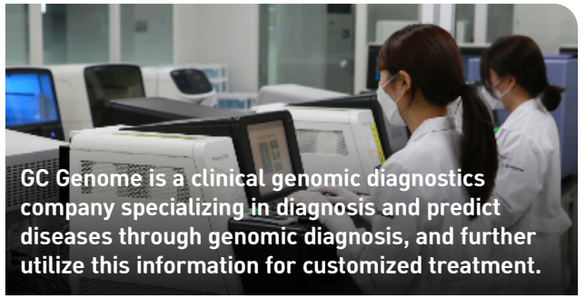
GC MS GC Medical Science Corporation(142280)

Since the blood type diagnostic reagents launched in 1972, GCMS has achieved several milestones, including developing Korea's first AIDS diagnostic reagent in 1987 and a diagnostic reagent for epidemic hemorrhagic fever in 1990. We aspire to enhance the quality of life through precision diagnosis utilizing 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 Established	2003. 12. 29.
No. of Employees	135
Website	www.greencrossms.com
Address	15, Yonggu-daero 2469beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million) ※ Consolidated basis

Year	2021	2022	2023
Total Assets	956	965	905
Total Equity	379	357	369
Sales	1,017	1,131	940
Operating Income	(202)	(13)	18



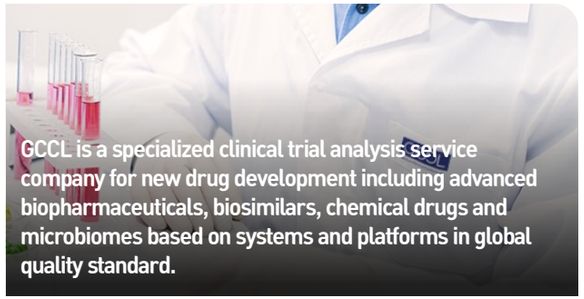
GC Genome GC Genome Corporation

GC Genome delivers essential clinical genomic diagnostic services across medical fields including cancer, rare genetic diseases, prenatal and newborn care, health checkups, and microbiomes. Utilizing state-of-the-art equipment such as Next-Generation Sequencing (NGS), we offer distinguished services with shortened turnaround times and at affordable prices. Our goal is to become a leading company in genomic diagnostics by pioneering new areas in the field of clinical genomic diagnostics.

Overview	
CEO	Chang-Seok Ki
Date Established	2013. 7. 31.
No. of Employees	133
Website	www.gcgenome.com
Address	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yongin-si, Republic of Korea

Financial Results (Unit: KRW 100 million) ※ Non-Consolidated basis

Year	2021	2022	2023
Total Assets	424	489	428
Total Equity	190	266	250
Sales	185	241	273
Operating Income	(21)	(32)	2



GCCL CO., LTD.

GCCL is a specialized clinical trial analysis service company for new drug development that provides central lab service nationwide and internationally. GCCL has obtained Good Clinical Laboratory Practice (GCLP) designation and ISO 15189 certification, meeting international quality standard. GCCL provides comprehensive clinical analysis services across Phase 1 to Phase 4 for new drug development including biopharmaceuticals, chemical drugs, biosimilars and microbiomes and more. Our strength lies in developing and validating analytical methods for early clinical trials and developing biomarkers for new drug development. Building on continuous trust with over 250 new drug developing companies worldwide, we are aspiring to become a global lab through ongoing efforts and enhancing our competence.

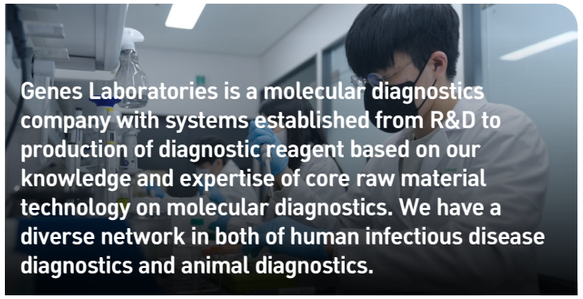
Overview	
CEO	Song-Hyun Yang
Date Established	2019. 8. 1.
No. of Employees	99
Website	www.gccl.co.kr
Address	15, Yonggu-daero 2469beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million) ※ Non-Consolidated basis

Year	2021	2022	2023
Total Assets	160	315	266
Total Equity	99	191	191
Sales	80	151	161
Operating Income	(18)	(8)	3

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW



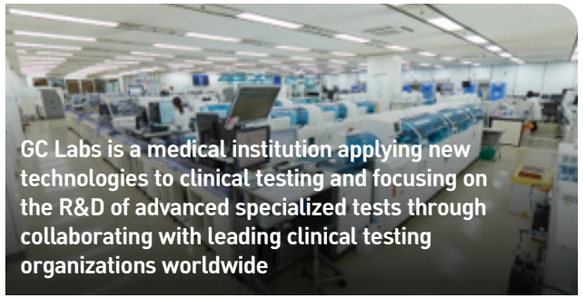
Genes Laboratories

Genes Laboratories has established a full value chain from raw material production to finished product manufacturing (with GMP facilities) through our capability to develop and manufacture Polymerase, a key raw material for PCR diagnostic kits. In the field of animal diagnostics, Genes Laboratories has developed approximately 70 types of animal diagnostic kits, securing references and supplying products to the market. Furthermore, to prepare ourselves in expanding our overseas business to emerging market, we are concentrating our efforts on obtaining CE-IVDR certification and local commercialization to expand into global market.

Overview	
CEO	Byongho Woo
Date Established	2008. 11. 4.
No. of Employees	70
Website	www.geneslabs.com
Address	520Ho, 388, Dunchon-daero, Jungwon-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

Financial Results (Unit: KRW 100 million) ※ Non-Consolidated basis

Year	2021	2022	2023
Total Assets	116	111	110
Total Equity	75	42	(18)
Sales	18	82	97
Operating Income	(31)	(34)	(50)



Green Cross Laboratories(GC Labs)

GC Labs, established in 1982 as a medical institution specializing in clinical trials, conducts approximately 5,000 test items timely and accurately through state-of-the-art automation system and with talented staffs nurtured through our training. GC Labs is the first in the country to obtain ISO9001 Quality Management System and ISO14001 Environmental Management System certification simultaneously. By participating in domestic and international laboratory accreditation such as US CAP, Germany's G-EQUAS, and ISO15189, as well as quality programs, GC Labs has maintained comprehensive test quality management thereby providing clients with reliable test results.

Overview	
CEO	Sang-gon Lee
Date Established	1982. 7. 1.
No. of Employees	581
Website	www.gclabs.co.kr
Address	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yongin-si, Republic of Korea

Financial Results (Unit: KRW 100 million) ※ Non-Consolidated basis

Year	2021	2022	2023
Total Assets	2,128	2,587	2,343
Total Equity	666	1,066	1,033
Sales	4,400	5,219	2,966
Operating Income	897	1,060	(65)

Green Vet

Green Vet is a specialized clinical testing company for pets, providing consulting services for clinical diagnostics and treatment, and to this end, our main services include diagnostic imaging, web-based clinical consulting, health diagnostics and management services. Green Vet aims to offer total healthcare throughout the pet's lifecycle and to set new standards in pet industry. We aspire to achieve global market expansion in the future through enhancing our R&D and business capabilities through consistent investment.

Overview	
CEO	Soon-Young Park
Date Established	2020. 12. 1.
No. of Employees	63
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) ※ Non-Consolidated basis

Year	2021	2022	2023
Total Assets	50	126	186
Total Equity	20	36	28
Sales	15	39	65
Operating Income	(23)	(34)	(53)

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

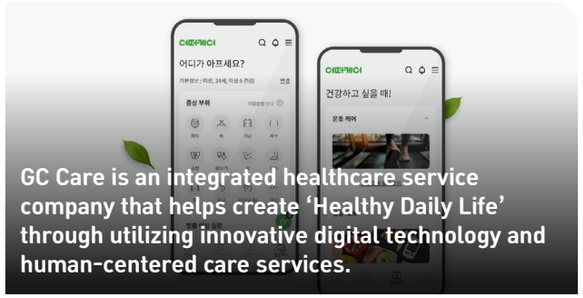
OVERVIEW

UBcare UBCARE CO., LTD.(032620)

UBcare, the first developer of EMRs in Korea, and a leader in domestic EMR market share (according to data from the 1st quarter of 2024 of the Health Insurance Review and Assessment Service) we are constructing the largest domestic medical network including 25,800 hospitals and pharmacies nationwide, along with 38 sales agencies. Moreover, UBcare is dedicated to investing in innovative solutions and services to enhance public health and lower medical costs through expansion of the digital healthcare sector and government support.

Overview	
CEO	Sang-Kyoung Lee
Date Established	1994. 12. 2.
No. of Employees	324
Website	www.ubcare.co.kr
Address	Floor 29, 30, 31, Park One Tower 2, 108, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea

Financial Results (Unit: KRW 100 million)			※ Consolidated basis
Year	2021	2022	2023
Total Assets	1,493	1,619	1,550
Total Equity	1,210	1,235	1,135
Sales	1,118	1,333	1,540
Operating Income	100	75	35



GC Care GC Care Corporation

GC Care provides through the 'HOWCARE' platform the health management services such as mobile self-checks, health screenings, wellness programs, and health challenges to around 600,000 individuals. We also created a partnership network of over 550 affiliated partners including general hospitals and specialized health centers. The company is striving to become a comprehensive healthcare management company that supports the public in maintaining a healthy lifestyle by providing tailored health solutions such as affordable nutritional supplements and providing care services such as health consultations and medical appointment assistance to approximately 3.5 million customers.

Overview	
CEO	Jin-Tae Kim
Date Established	2003. 8. 1.
No. of Employees	346
Website	www.gccare.net
Address	32 floor, Park One Tower2, 108, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea

Financial Results (Unit: KRW 100 million)			※ Consolidated basis
Year	2021	2022	2023
Total Assets	3,889	4,024	4,010
Total Equity	1,736	1,636	1,418
Sales	1,416	1,660	1,917
Operating Income	49	(4)	(27)

Major Overseas Affiliates

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

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

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

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

BioCentriq
· New Jersey, U.S. CDMO for cell and gene therapy

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

GENECE
· California, U.S. liquid biopsy cancer diagnosis services

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

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW

GC Wellbeing aspires to become a medical solution biotech company that ensures a promising future for everyone.

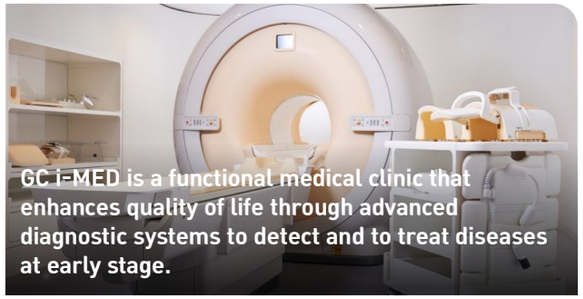
GC Wellbeing GC WellBeing Corporation(234690)

GC Wellbeing is a leading company in the domestic market for nutritional therapy injections. (Based on the National Comprehensive Drug Information System). The company specialize in the development, production, and distribution of a wide range of nutritional injections, including the prescription drug 'LAENNEC' Injection and we are currently venturing into the field of aesthetic injections, further expanding its business horizons. Furthermore, in June 2021, GC Wellbeing finalized the construction of a state-of-the-art manufacturing facilities in Chungbuk Innovation City dedicated to the manufacturing of ampoule and vial injections. Concurrently, the company is engaged in pharmaceutical Contract Manufacturing Organization (CMO) operations. We, as a medical solution biotech company focusing on disease prevention, in addition to providing products, we are dedicated to pioneer the platform that guides individuals towards healthier lifestyles.

Overview	
CEO	Sang-Hyun Kim
Date Established	2004.9.2.
No. of Employees	309
Website	www.greencrosswb.com
Address	33F, Park One Tower 2, 108, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea

Financial Results (Unit: KRW 100 million) ※ Non-Consolidated basis

Year	2021	2022	2023
Total Assets	1,390	1,502	1,566
Total Equity	883	962	1,004
Sales	910	1,097	1,205
Operating Income	78	84	105


GC i-MED is a functional medical clinic that enhances quality of life through advanced diagnostic systems to detect and to treat diseases at early stage.

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

GC i-MED is a comprehensive health screening and functional medical clinic established to create 'Healthpia' where everyone is healthy. Customized diagnostics at each stage of life are provided to ensure healthy lives of each client through advanced diagnostic systems and our team of expert medical professionals with extensive knowledge and experience. GC i-Med strives to become a medical check-up center that provides best solutions to all our clients.

Overview	
CEO	Sang-Man Kim
Date Established	1982.7.1.
No. of Employees	253
Website	www.gcimed.com
Address	Gangnam : 4F~5F Majesta City Tower 1, 12, Seocho-daero 38 gil, Seocho-gu, Seoul Seocho-gu, Seoul, Republic of Korea Gangbuk : 9F ~ 10F East Wing, Eulji Twin Tower, 170, Eulji-ro, Jung-gu, Seoul, Republic of Korea

Financial Results (Unit: KRW 100 million) ※ Non-Consolidated basis

Year	2021	2022	2023
Total Assets	357	425	385
Total Equity	58	75	96
Sales	491	563	621
Operating Income	5	29	21

Other Public Interest Businesses

MOGAM Institute for Biomedical Research

· Mogam Institute for Biomedical Research (Seoul)

A nonprofit research foundation dedicated to seeking solutions for the prevention, diagnosis, and treatment of diseases (Founded in 1984)

MOGAM SCIENCE SCHOLARSHIP FOUNDATION 목암과학장학재단

· Mogam Science Scholarship Foundation (Seoul)

A scholarship foundation to discover and support aspiring scientists through by offering scholarships and research grants and thereby striving to make a meaningful contribution to the advancement of science and technology. (Founded in 2005)

FUTURE FOUNDATION OF KOREA

· Future Foundation of Korea (Seoul)

Providing scholarship programs to empower talented North Korean refugees, nurturing them into future leaders with a strong passion for learning and a hopeful outlook for the era of unification (Founded in 2009)

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW

Business Highlights GC Biopharma Corp.

USD 90 Million Plasma-Derived Product Export Contract to Brazil 5 Year Supply Agreement for IVIG-SN 5%

In June 2023, GC Biopharma signed an export contract of IVIG-SN 5%, an immunoglobulin plasma-derived product with Blau Farmaceutica, a local partner in Brazil. Through this contract, USD 90.48 Million (KRW 119.4 Billion) worth of product will be supplied to Brazil. The contract runs until June 2028 (5 years), with the above-mentioned amount being an estimated figure for supplies until December 2025. IVIG-SN, the flagship product of GC Biopharma, is used in various purposes including congenital immunodeficiency and immune Thrombocytopenia and more, which is produced at the dedicated plasma-derived product manufacturing facility located in Ochang, Chungbuk Province. Brazil is the biggest plasma-derived product market in South America, with immunoglobulin products market size reaching approximately at USD 270 million in 2022. Since 2015, GC Biopharma has been supplying products through pharmaceutical bidding process by Brazil government and through private market. Furthermore, we export 12 plasma-derived products including Albumin to 32 countries worldwide including Argentina, Uruguay and Vietnam. GC Biopharma plans to increase its global market share for plasma-derived products based on the superb quality of our internationally recognized products.

Cholera Vaccine CMO Agreement Signed Contributing to Global Public Health Crisis Response through Cholera Vaccine Supply

In November 2023, GC Biopharma signed a contract with Eubiologics for the Contract Manufacturing Organization (CMO) of Euvichol, an oral cholera vaccine. This follows the agreement signed by both companies in August 2023. Through this contract, GC Biopharma will be responsible for the drug product process manufacturing of Euvichol. The contract runs until 2026, with an initial production volume set at 15 million doses. Euvichol is an oral cholera vaccine jointly developed by Eubiologics and the International Vaccine Institute to prevent cholera, primarily prevalent in developing countries. Currently, this product is responsible for 100% of UNICEF's cholera vaccine supply. This contract will help increase the supply of the vaccine, contributing to the prevention of cholera spread during a time of vaccine shortage due to the rapidly increasing incidence of cholera, as climate change and global warming cause more frequent droughts and floods. GC Biopharma, together with state-of-the-art manufacturing facilities and accumulated experience and expertise in pharmaceutical production for over 50 years, has already established CMO infrastructure at global level. Through this partnership, we are ready to participate in responding to global public health crisis and expanding our CMO business.

Establishment of mRNA Production Facility Expanding into Rare Disease Treatment Beyond Vaccines with Acquiring Proactive mRNA Platform

In November 2023, GC Biopharma complete construction of an mRNA (messenger ribonucleic acid) manufacturing facility in Hwasun, Jeollanam-do, in its own vaccine manufacturing facility. This new pilot-scale GMP manufacturing facility offers an 'all-in-one' system capable of accommodating all phases of mRNA production. In addition, the pilot plant has a 'Single Use' production facility, which minimizes the risk of cross-contamination during material transfer and allows for rapid production responses. GC Biopharma signed a development and option agreement with Acuitas Therapeutics in 2022 for LNP (lipid nanoparticles) and established a new mRNA-LNP platform. We have taken mRNA as a next-generation drug development platform and are actively making efforts in R&D to advance into the clinical stage. Through mRNA platform technology, GC Biopharma aims to accelerate the development of vaccines and innovative new drugs in the fields of rare diseases to secure the drivers of next-generation growth. We will accumulate technology and expertise by evaluating the efficacy and safety of various vaccine and therapeutic candidates at the new mRNA manufacturing facility. Subsequently, we plan to gradually expand our scope of business, starting with the production of clinical trial products through pilot GMP application, and eventually moving towards commercialization and CMO (contract manufacturing) business.

Plasma-Derived Production Facility Construction Begins in Indonesia First Step to Localizing Essential Medicines in Indonesia

In December 2023, GC Biopharma commenced the groundbreaking of a plasma fractionation plant in the Jababeka Industrial Estate near Jakarta, marking the establishment of the first plasma plant in Indonesia. In June 2023, the company successfully obtained final approval from the Indonesian Ministry of Health for the construction of a plasma fractionation plant and technology transfer. Subsequently, a tripartite MOU was signed with the Indonesian Red Cross and a local pharmaceutical company for the project, expediting of construction with robust support from both the Korean and Indonesian governments. The upcoming fractionation plant is situated on a 40,000 square meter site within the Jababeka Industrial Estate, roughly 35 km east of Jakarta, the capital of Indonesia. The plant will have the capacity to process 400,000 liters of plasma annually and is scheduled to commence operations in 2027. Through this plant construction and technology transfer initiative, reflects the Indonesian government's drive for self-sufficiency of vital plasma-derived products, which are currently reliant on imports fully. GC Biopharma is committed to the successful construction of this fractionation plant, marking a historic first step towards the localization of plasma-derived products, a long-awaited goal for the Indonesian people. Furthermore, GC Biopharma plans to expand cooperation and support for the development of Indonesia's healthcare industry.

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW

Business Highlights GC Biopharma Corp.

GC Biopharma Obtains US FDA Approval for Plasma-Derived Product ALYGLO Entering the World's Largest Market with Advanced Plasma-Derived Product Manufacturing Experience

On December 15, 2023 (Local time), GC Biopharma obtained license approval from the U.S. Food and Drug Administration (US FDA) for the plasma-derived product 'ALYGLO'. ALYGLO is a 10% immunoglobulin injection solution used to treat primary humoral immunodeficiency, also known as congenital immunodeficiency. In 2020, GC Biopharma conducted a Phase 3 clinical trial in North America for patients with immunodeficiency, meeting the efficacy and safety evaluation criteria in accordance with FDA guidelines.
Subsequently, the plasma-derived product manufacturing facility in Ochang, Chungbuk province underwent a Pre-License Inspection (PLI) in April 2023, leading to the resubmission of the Biological License Application (BLA). ALYGLO has maximized the product safety by incorporating its novel Cation Exchange Chromatography (CEX) into immunoglobulin purification process. This technology plays an essential role in removing impurities such as coagulation factor (FXIa) to undetectable levels which is identified as a major root cause of the thromboembolic events in patients receiving immunoglobulin infusions. Details related to this have been published in the international journal 'Frontiers in Cardiovascular Medicine'.
GC Biopharma plans to launch ALYGLO in the U.S. market through its affiliate, GC Biopharma USA, in the second half of 2024. This marks the first successful entry of Korean plasma-derived products into the U.S. market. Plasma-derived products require extensive facility investment and advanced production expertise, leading to a limited number of manufacturers worldwide and causes frequent supply shortages.
The immunoglobulin market in the U.S. is estimated to be around KRW 13 trillion (USD 10.4 billion) as of 2022 (MRB). The demand for immunoglobulin in the U.S. continues to grow due to the increase in autoimmune diseases caused by an aging population. With this license approval, GC Biopharma is now able to offer safe and effective treatment options to immunodeficiency patients in the U.S. The company committed to helping patients with rare disease on a global scale, strives to expand our product portfolio globally to establish better treatment environment to patients and healthcare professionals.

Curevo Announces Top-line Results of Phase 2 Clincal Trial for Varicella Zoster "Excellent Tolerability"

In January 2024, Curevo Vaccine (hereinafter referred to as Curevo) a U.S. affiliate of GC Biopharma, announced the positive Phase 2 clinical trial result of the varicella-zoster vaccine 'CRV-101' (active ingredient: amezosvatein). This is a top-line results with head-to-head clinical trial that directly compared CRV-101 with industry's leading vaccine, Shingrix, from GSK. CRV-101 demonstrated non-inferiority to Shigrix as measured by humoral immune response and showed improved tolerability with lower rates of solicited local and systemic adverse events, which meets all primary endpoints. These Phase 2 results provide a basis for dosage selection, and the company will advance amezosvatein into global Phase 3 trials this year. CRV-101 is a premium varicella-zoster vaccine developed using genetic recombination methods, designed to minimize adverse events while inducing an optimal immune response with the use of an adjuvant. According to the global market research firm Evaluate Pharma, the worldwide market for varicella-zoster vaccines, which includes the U.S., is projected to increase from USD 3.7 billion (approximately KRW 4.8 trillion) in 2022 to USD 5.85 billion (approximately KRW 7.6 trillion) by 2028.

curevo VACCINE GC Biopharma

Treatment for Sanfillipo Syndrome has been granted Orphan Drug Designation (ODD) Additional EMA Designation after securing FDA Orphan Drug Designation (ODD) and Rare Pediatric Disease Designation (RPDD) Approval

In January 2024, GC Biopharma in collaboration with Novel Pharma, a bio venture specializing in orphan drugs (CEO Chan-Ho Park) have been granted Orphan Drug Designation (ODD) by European Medicines Agency (EMA) for its intracerebroventricular (ICV) enzyme replacement therapy (ERT) for Sanfilippo Syndrome Type A (mucopolysaccharidosis type IIIA) under conjoint development. This treatment has been also designated as a Rare Pediatric Disease Designation(RPDD) and an Orphan Drug Designation(ODD) by the U.S FDA in January 2023. With this additional grant by the EMA, this treatment is now received total of three designations for orphan and rare pediatric diseases in both the U.S. and Europe. Sanfilippo syndrome Type A (MPS III A) is severe rare disease caused by genetic defect that leads to gradual damage to the central nervous system caused by the accumulation of Heparan sulfate in the central nervous system. Majority of the patients succumb to the disease before the age of 15. GC Biopharma is committed to expeditiously advancing into clinical trials of this pipeline, as the designations further underlines the potentials to addressing the disease pathology in preclinical stages, as recognized in both the U.S. and Europe.

NOVEL PHARMA GC Biopharma

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW

Business Highlights

GC Cell Corporation

GC Cell Hosts "Science Day" with Global Experts in Cell and Gene Therapy

In July 2023, GC Cell established a Scientific Advisory Board comprising of world-renowned scholars in cell and gene therapy including academic pioneers and clinical experts and hosted the inaugural 'Science Day' at the headquarters in Yongin. This event, planned for the first time in 2023, aimed to provide a platform for technological exchange by inviting world-renowned scholars in cell and gene therapy to share the latest research trends and explore future development strategies. Five members of the Scientific Advisory Board has participated as speakers and they shared clinical experiences with early CD19 CAR-T therapies, strategic approaches to next-generation therapies, enhanced CAR-T strategies for solid tumors, and the clinical application possibility and experiences of cell therapies in treating solid tumors such as head and neck cancer and non-Hodgkin's lymphoma.
GC Cell plans to utilize the extensive knowledge and clinical experience of the Scientific Advisory Board in research, clinical and commercialization strategy for cell and gene therapies.

Artiva and GC Cell's Joint Development AB-101 Receives US FDA IND Approval for Phase 1 Lupus Nephritis Clinical Trial

Artiva Biotherapeutics, a U.S. affiliate of GC Cell, has received an Investigational New Drug (IND) clearance by US FDA for 'AB-101' in Phase 1 clinical trial for lupus nephritis. AB-101, an allogenic NK cell therapy developed by GC Cell, consists of off-the-shelf NK cells derived from umbilical cord blood without genetic modification. This therapy has the advantage of providing significant convenience to patients in terms of commercialization perspective because it does not require hospitalization and can be administered via outpatient care. Furthermore, this IND clearance is particularly encouraging as it marks the first clearance of an allogenic CAR-T or NK cell therapy for autoimmune disease.

GC Cell Joins White House-Led Cancer Moonshot Initiative

GC Cell has announced its participation in the U.S. Cancer Moonshot project. The Cancer Moonshot, an initiative by the Biden administration, aims to reduce cancer patient mortality rates by over 50% over the next 25 years, conducted by CancerX the public-private collaboration. CancerX is led by the Moffitt Cancer Center and the Digital Medicine Society, and participated by multinational pharmaceutical companies such as Johnson & Johnson, AstraZeneca, and Takeda, along with prestigious medical institutions, and leading global IT companies specializing in digital healthcare, including Intel, Amazon, and Oracle. Through Cancer Moonshot participation, GC Cell aims to highlight the importance and potential of cell therapy in cancer treatment and engaging in exchanges with global digital healthcare and AI companies.

GC Cell
CANCERX

GC Cell Successfully Concludes "2023 International Symposium on Cancer Immunotherapy"

In November 2023, GC Cell successfully concluded the 2023 International Symposium on Cancer Immunotherapy. This event marked the first symposium hosted since GC Cell's immunotherapy product 'Immuncell-LC' received reapproval as an advanced biopharmaceutical in 2021, specifically for use after the liver cancer surgery. In the symposium, eight experts from academia and industry in immunotherapy, from Korea, Japan and Germany has participated as speakers, and over 150 healthcare professionals participated to share the insights and address the latest development and application of immunotherapy. GC Cell plans to continue hosting such events and build foundation to domestic popularization and globalization of immunotherapy.

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW

Business Highlights

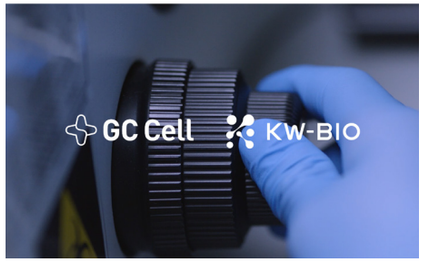
GC Cell Corporation

GC Cell's AB-201, Korea's First CAR-NK Therapy, Receives Simultaneous Phase 1 Clinical Trial Approval in Korea and Australia and Implements AI Platform

GC Cell is set to conduct CAR-NK clinical trial for the first among Korean company. 'AB-201' is a CAR-NK cell therapy targeting solid tumors and received Phase 1 clinical trial approval from both Korean Ministry of Food and Drug Safety (MFDS) and Australian Human Research Ethics Committee in December 2023. GC Cell plans to evaluate safety and anti-cancer activity of AB-201 in 48 patients with HER2 overexpressed breast cancer and gastric/gastroesophageal junction cancer. An AI platform called Lunit Scope will be utilized to enhance the trial. GC Cell plans to further utilize the Lunit Scope in retrospective research of AB-201 to accurately and systematically evaluate HER2 expression, thereby ensuring high quality clinical trial results.

GC Cell Signs CDMO Contract with KW Bio for hiPSC MCB Development and Production

In January 2024, GC Cell signed a Contract Development and Manufacturing Organization (CDMO) contract with KW Bio for the development and production of a human induced pluripotent stem cell (hiPSC) master cell bank (MCB). KW Bio is a company that researches and develops anti-cancer immunotherapy through build of hiPSC and genetic editing from umbilical cord blood the build of hiPSC and genetic editing from umbilical cord blood. Through this contract, GC Cell will produce a MCB, conduct the quality tests for characterization and archive cell therapies to accelerate the development of anti-cancer immunotherapy incorporating hiPSC technology over the next five years. GC Cell plans to continue its CDMO partnerships specializing in cell therapies, providing one-stop total services that include all steps from the production of advanced biopharmaceutical raw materials to manufacturing, quality/analytical testing, and logistics services.



GC Cell's U.S. Affiliate Artiva Receives US FDA Fast Track Designation for Lupus Nephritis Combination Therapy

In February 2024, Artiva Biotherapeutics, a U.S. affiliate of GC Cell, received FDA Fast Track designation for 'AlloNK (AB-101)' in combination with 'rituximab' or 'obinutuzumab'. AB-101, a candidate developed by GC Cell and now licensed to Artiva, received IND clearance from the US FDA last August as the first NK cell therapy for autoimmune disease. AB-101 is an off-the-shelf cell therapy derived from lyophilized umbilical cord blood. It enhances antibody-dependent cellular cytotoxicity (ADCC) and is expected to have higher efficacy when combined with antibodies or engagers that bind well to tumor cells. With this Fast Track designation, AB-101 will receive priority review and support during the development and approval process, potentially providing new treatment options for patients with lupus nephritis more quickly.

GC Cell's U.S. Affiliate BioCentriq Signs Technology Transfer Agreement for "Immuncell-LC" Process

GC Cell has signed a process technology transfer agreement with its U.S. affiliate, BioCentriq, for 'Immuncell-LC'. Immuncell-LC, a flagship immune-oncology cell therapy from GC Cell, has been used by over 10,000 cumulative patients since its launch. Its demonstrated safety and efficacy have attracted interest from numerous pharmaceutical and biotech companies for global licensing and strategic collaborations at the J.P. Morgan Healthcare Conference 2024. Through this technology transfer, GC Cell aims to establish a foundation for advancing Immuncell-LC into the U.S. market.

Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW

Business Highlights GC / Affiliates

GC Conducts Social Contribution Campaign to painting murals "Dream Painting"

GC, together with its affiliates, has been engaged in community volunteering activities and one of them is mural painting. The 'Dream Painting' mural project was initiated to brighten streets and improve environments by donating mural painting talents to underdeveloped areas and school routes. GC and its affiliates have been actively operating various social contribution programs to fulfill corporate social responsibility. These include the 'Reaction campaign', 'Matching Grant', 'monthly salary donations of 1%' at the end of the year, and rounding up salary donations. GC plans to continuously expand community service activities to improve the local environment and foster coexistence with our neighbors.

UBcare Launches "DoctorInfo" Medical Information Platform

UBcare's newly launched 'DoctorInfo' platform is designed to assist patients' medical consultations and prescriptions for users of the 'Ysarang' Electronic Medical Record (EMR) solution. The 'DoctorInfo' platform integrates with the 'Ysarang' EMR to offer various features. Key features of 'DoctorInfo' include providing medical trends based on real data from 'Ysarang', offering drug information content such as new drug and reimbursement guides, schedules for webinars and educational sessions held by domestic and international pharmaceutical companies, and supplying department-specific surveys that users can participate in. UBcare continues to make its best efforts to provide services that support the management and practices of hospitals and clinics.

GC Wellbeing Signs Export Agreement with Yooyoung Pharma for Entry into Chinese Filler Market

GC Wellbeing signed an export contract with Yooyoung Pharma to enter the Chinese filler market. Under the agreement, both companies will collaborate in various areas, including product development, production, sales, and marketing, to penetrate the Chinese market. Further discussions are underway to expand into the Southeast Asian market, starting with China. In 2022, GC Wellbeing signed a supply contract for fillers with GC China Pharm and aims to achieve total sales of KRW 40 billion by 2030.

GCMS Obtains Export Approval for Dengue Rapid Diagnostic Kit

GCMS has obtained export approval from the Korean Ministry of Food and Drug Safety (MFDS) for its rapid diagnostic kits for the dengue virus: 'GENEDIA W Dengue NS1 Ag' for antigen testing and 'GENEDIA W Dengue IgM/IgG Ab' for antibody testing. The newly developed rapid diagnostic kits can diagnose dengue fever within 20 minutes using a collected blood sample and have the advantage of detecting all four types of dengue virus serotypes. Furthermore, internally secured clinical sample tests have shown that the kits have higher sensitivity and accuracy compared to other competitors. To further enhance its diagnostic kit portfolio, GCMS is developing new products for other mosquito-borne infectious diseases.

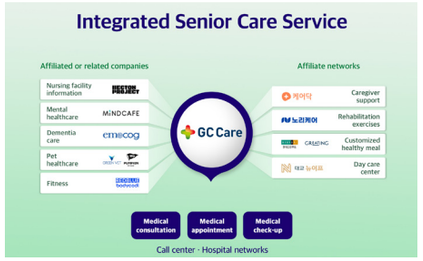
Introduction ▾
• Message from the Chairman
• Overview
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾

OVERVIEW

Business Highlights GC / Affiliates

GC Care Launches Senior Healthcare Service

GC Care launched ‘Senior Care Integrated Service’ to existing healthcare services, expanding the healthcare service offerings to include senior care through partner networks. Key features of this service include professional health consultations, appointment scheduling for medical treatments and check-ups, chronic disease management, support for treating serious illnesses, specialized nutrition and exercise programs, psychological counseling for mental health, preferential access to fitness centers, pet care, cognitive rehabilitation programs, and preferential access to nursing consultations and daycare centers.



GC Genome Introduces 'ai-CANCERCH' for Early Detection of Six Types of Cancer

'ai-CANCERCH' is a premium cancer screening test developed and patented by GC Genome, utilizing an artificial intelligence algorithm. This test can predict the presence and determine the progression stage of six different types of cancers—lung, liver, colorectal, pancreatic-biliary, esophageal, and ovarian—with just a single blood sample. The accuracy and performance of the test have been verified through the analysis of samples from a total of 5,000 individuals, including approximately 3,700 healthy individuals and 1,300 cancer patients. Notably, it demonstrated a sensitivity of 91.1% (at 95% specificity) for detecting stage 1 cancers, which are typically difficult to diagnose. 'ai-CANCERCH' aims to assist patients who face challenges with traditional cancer screenings due to issues such as radiation exposure, adverse reactions to contrast agents, and the preparation required for endoscopy.

GCCL Named Among ‘Top 10 Bioanalytical Services Providers in APAC 2023’

GCCL has been named one of the Top 10 Bioanalytical Service Providers in APAC 2023 by the U.S. biotechnology magazine Life Science Review. Specializing in clinical trial sample analysis, GCCL has built the foundation to grow as a global enterprise by introducing various analytical platforms to cater to the global market beyond Asia. As a GCLP-certified organization, GCCL offers customized analytical services that meet global compliance requirements for all phases of clinical trials. Recently, its global analytical capabilities have been enhanced in areas including dementia, geriatric diseases, biosimilars, and antibody drugs.

GC Labs Establishes Digital Pathology System

GC Labs established a digital pathology system by introducing three high-capacity digital pathology scanners (VENTANA DP 600) and UPath enterprise software. Digitization of pathology department in Korea is challenging, even in general hospitals, due to lack of institutional support and high initial setup costs. Through this digital pathology system introduced, with this new digital pathology system, GC Labs expects that other medical institutions without pathology departments or digital pathology systems will be able to utilize digital pathology data, either directly or indirectly, through consultations.

Introduction ▾
Sustainable Fundamental ▾
• ESG Management Strategy
• ESG Management Implementation Framework
• Materiality Assessment
Focus Area ▾
General Disclosure ▾
Appendix ▾

Sustainable Fundamental

ESG Management Strategy 22
ESG Management Implementation Framework 23
Materiality Assessment 24

Introduction ▾
Sustainable Fundamental ▾
• ESG Management Strategy
• ESG Management Implementation Framework
• Materiality Assessment
Focus Area ▾
General Disclosure ▾
Appendix ▾

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	E S G	G	E
Expand stakeholders' access to healthcare by providing total healthcare solutions	Enforcing supervision of product quality for safety of the product and customers and to prevent ESG risk in the supply chains	Business risk control through ethical management	Setup environmental management framework and respond to net-zero

2024 ESG Report Disclosure Areas

Focus Area 1. Expanding access to healthcare	Focus Area 2. Customer safety and quality responsibility	Focus Area 3. Corporate ethics and compliance	Focus Area 4. Environmental responsibility

GC is dedicated to implement ESG management principles grounded in our ESG commitment

GC ESG Commitment

Environmental
We protect the health of our company, society and the planet through environment, safety and health management.

Social
As a good companion of the society, we fulfill our social responsibilities towards our customers, employees and local communities.

Governance
We commit ourselves to protect the rights of our shareholders and stakeholders through responsible and ethical management.

Introduction ▾
Sustainable Fundamental ▾
• ESG Management Strategy
• ESG Management Implementation Framework
• Materiality Assessment
Focus Area ▾
General Disclosure ▾
Appendix ▾

ESG MANAGEMENT IMPLEMENTATION FRAMEWORK

ESG Management Implementation Framework centered on the Board of Directors (BOD)

To enhance its ESG management strategy, GC Group operates a board-centered ESG Management implementation framework. All affiliates under GC group share the ESG management philosophy and policies through group representative meeting, where ESG collaboration strategies are discussed at group level thereby ensuring swift incorporation of ESG management practices. Each affiliate's ESG department is responsible for managing plans and overall achievements of ESG management. Their duties include managing ESG operation tasks such as identifying ESG risks and opportunities within the organization, data management, ESG information disclosure and responding to external agencies. Furthermore, through the group level ESG Working Council, with ESG departments and related departments from other affiliates share ESG information and discuss major ESG issues and generate tasks to implement each affiliate's ESG strategy.

ESG Management Governance

BOD **Executive Committee**	· Manage and supervise risks and opportunities in major ESG issues, and decision-making · Establish direction for promoting ESG management · Regular discussion and timely response through Management Council (GC (Holding Company), GC Biopharma)
(Group level) CEO meeting	· Monthly regular meetings held by the CEO of affiliates · Discuss collaboration strategies for group-level major management agenda including ESG
Management meeting (GC (Holding Company) : Steering Committee, GC Biopharma : SLT, GC Cell : EC)[1)]	· Occasionally held at least once a month by the CEO and executives · Discuss major management issues and ESG agendas of each company
(Group level) ESG Task Force	· Regular meetings held by each affiliate's ESG department and relevant departments · Discuss major ESG agenda, share ESG information between relevant departments and mutual regulation
ESG Department of GC (Holding Company)	**ESG Department**: - Manage major internal and external ESG issues, collect and manage ESG data, disclose ESG information and respond to external evaluation - Report to board of directors and executive council, support in decision-making
ESG Department of each Affiliate	**ESG Relevant Departments**: - Implement ESG goals and strategies, manage ESG data

1) GC Biopharma: SLT (Senior Leadership Team), GC Cell: EC(Execution Committee)

Introduction ▾
Sustainable Fundamental ▾
• ESG Management Strategy
• ESG Management Implementation Framework
• Materiality Assessment
Focus Area ▾
General Disclosure ▾
Appendix ▾

MATERIALITY ASSESSMENT

GC's Major Issues in 2024

Issue Identification Process

In 2023, it was a year with minimal internal and external environmental change impacting GC's management activities. Therefore, GC continues to enforce management of key issues identified for 2023 GC Sustainability Report and plans to address these same issues in 2024 report. In 2023, key issues have been identified through four-step process in discussion with internal and 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 Groups business
- Derive overall ESG pool of issues linked to the company
  - Review global initiatives (SASB, MSCI, DJSI etc.), ESG issue of the field, ESG trends etc.
- Select 27 priority issues by simple scoring

[Step 2] Impact Identification for each ESG Issue

- Define potential economic, social, environmental and human impact of each issue
- Characterize each impact through policy/legal requirement, shareholder/investor suggestions and media exposure
- Develop assessment criteria and questions for the Impact Materiality Assessment

[Step 3] Impact Materiality Assessment

- Conduct Impact Materiality Assessment for each ESG issue
  - Evaluate with stakeholders including industry experts and internal and expert ESG experts (from Feb.1, 2023 to Feb.7, total 7 days)
  - Consider the magnitude, scale, reversibility and likelihood of impact
- Perform third party verification of the assessment process and the results

[Step 4] Selection of Key Issues and Reporting to BOD

- Select the Material Issue for the Sustainability Report based on the assessment results
- Report the Material Issue results to the board of directors

Key Reporting Topics and Focus Areas

ESG Sector	Report Agenda	GRI Index	Characteristics of the Impact	Target			
				Economy	Society	Environment	Human
Environment	Greenhouse gas emission	305-1~5	Negative			●	
	Environment pollutant emission	303-4, 305-7	Negative			●	
	Waste disposal	306-1~5	Negative			●	
Social	Enforcing product quality and patient safety	416-1	Positive		●		●
	Enhanced accessibility to pharmaceuticals	N/A	Positive		●		●
	Nurturing Pharma/Bio experts	404-1~2	Positive		●		●
	ESG risk management in supply chain	308-1~2, 414-1~2	Positive		●	●	
Governance	Prevention of unethical/corrupted activities	205-1~3, 206-1	Positive	●			●
	Violation of research ethics	N/A	Negative		●		●
Other	R&D Innovation	N/A	Positive	●			●

Focus Area 01.

Extending Access to Healthcare

Enhanced Access to Medicines
R&D Innovation
Nurturing Pharma/Bio experts

Focus Area 02.

Customer Safety and Responsibility to Quality

Enforcing product quality and patient safety
ESG risk management in supply chain

Focus Area 03.

Corporate Ethics and Compliance

Prevention of unethical/corrupted activities
Violation of research ethics

Focus Area 04.

Responsibility to Environment

Greenhouse gas emission
Environment pollutant emission
Waste disposal

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
- Area 1. Extending Access to Healthcare
- Area 2. Customer Safety and Responsibility to Quality
- Area 3. Corporate Ethics and Compliance
- Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

Focus Area

Area 1. Extending Access to Healthcare 26
Area 2. Customer Safety and Responsibility to Quality 43
Area 3. Corporate Ethics and Compliance 57
Area 4. Responsibility to Environment 71

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 1

EXTENDING ACCESS TO HEALTHCARE

Management Approach

To become a global leader in the health industry and to usher in a healthy lives of humankind, GC Group is extending access to healthcare by implementing strategies to enhance the availability of medicines such as expanding domestic and international healthcare services, promoting new drug development through R&D innovation, and nurturing pharmaceutical and biotechnology experts.

Extending Access to Healthcare

* Details of our activities related to 17 UNSDG

Enhanced Access to Medicines

GC GC Biopharma GC Cell

Our Approach

We provide Total Healthcare Solution for prevention, diagnosis and treatment of diseases. Furthermore, we broaden the range of pharmaceutical options and maintain pricing policies that helps reduce economic burden of patients.

Positive Impact

Biopharmaceutical industry's efforts to extend access to medicines address global health issues and meet the healthcare demands of more patients from developed and developing countries.

2023 Our Actions

GC Biopharma

Export contract of 'IVIG-SN 5%' with local Brazilian partner Blau Farmaceutica(June 2023), Obtains US FDA approval for plasma-derived product ALYGLO(Dec. 2023), Grants Orphan Drug Designation (ODD) for treatment of Sanfillipo syndrome by EMA(Dec. 2023), Construction commenced for Indonesia's first plasma fractionation plant (Dec. 2023)

GC Cell

Technology transfer agreement signed with BioCentriq, a U.S. affiliate, for Immuncell-LC (Feb. 2024)

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

Through R&D management, we producing high-quality medicines in a timely manner. We enforce our pipeline and extend access to by producing low-cost, high-quality pharma production.

2023 Our Actions

GC Biopharma

Establishment of mRNA production facility within the vaccine manufacturing site in Hwasun, Jeollanamdo (Nov. 2023), Top-line result announced for positive Phase 2 result of 'CRV-101' the varicella zoster vaccine under development by Curevo Vaccine, a U.S. affiliate of GC Biopharma (Jan. 2024)

GC Cell

Artiva, a U.S. affiliate of GC Cell Receives US FDA IND Approval for Phase 1 of Lupus Nephritis treatment 'AB-101' (Aug. 2023)

Nurturing Pharma/Bio experts

GC GC Biopharma GC Cell

Our Approach

We strive to nurture pharmaceutical/bio experts by offering various training program and network to enhance job competency and professional expertise.

Positive Impact

Training pharmaceutical/bio experts and securing talents contribute to not only enhancing competitiveness of a company but also contribute to expansion of the pharmaceutical industry thereby enhance national competitiveness.

2023 Our Actions

GC Biopharma

Partnership with domestic universities and provide training specialized in pharma industry to nurture global bio talents

GC Cell

Degree support program for R&D positions, offering professional biopharma training courses in basic statistics, DoE, and QbD.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 1

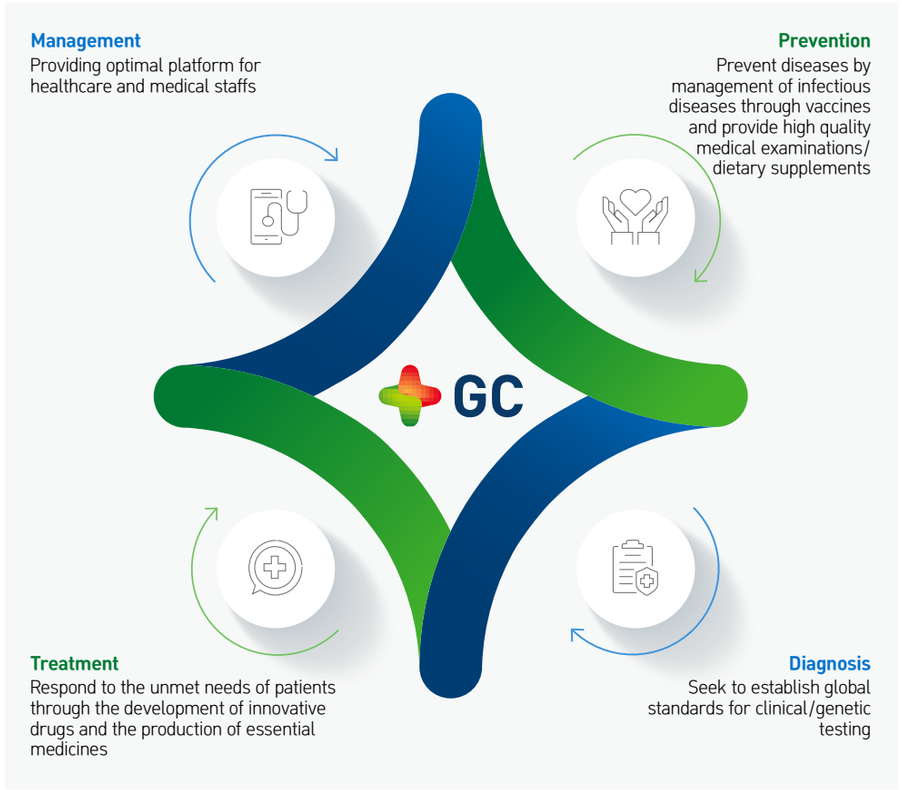
EXTENDING ACCESS TO HEALTHCARE

GC Group

Strategy to Expand Healthcare Pipeline

GC Group has achieved significant strides in improving patients' quality of life in the treatment areas of plasma-derived products, vaccines, rare disease treatment, chronic disease treatment, anticancer drug. We aspire to evolve into a provider of Total Healthcare Solution offering encompassing services in prevention, diagnosis and treatment and control.

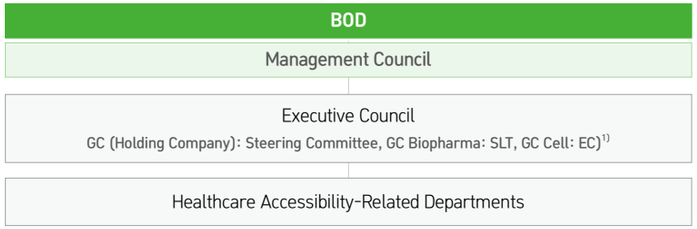
To Become a Total Healthcare Solution Provider



Governance in Healthcare Accessibility Management

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 areas, sales market, these discussions are continued at the BOD of each affiliate to be discussed in-depth. For examples of a specific agenda would include 'Business status and mid-to-long term plans of North American affiliates', 'Investment plans for North American affiliates' and 'Investment plans for joint research and development'.

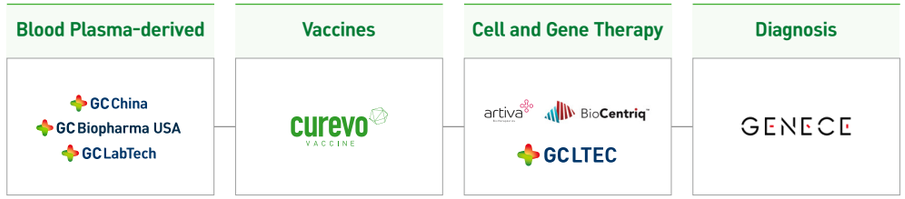
Healthcare Access Management System



1) GC (Holding Company): Steering Committee, GC Biopharma: SLT (Senior Leadership Team), GC Cell: EC(Execution Committee)

Participation in Global Initiatives and Building Network

To expand our treatment and diagnosis services, we have established overseas affiliates and are increasing accessibility through localization and R&D. To enhance our R&D capabilities, we participate in initiatives like the Cancer Moonshot in the U.S. Additionally, we collaborate with public organizations such as the Korea International Cooperation Agency (KOICA) and the Korea Foundation for International Healthcare (KOFIH) to drive Official Development Assistance (ODA) projects, aiming to strengthen healthcare capabilities in developing countries.



Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Policy for Enhanced Access to Medicines

Since the foundation, GC Biopharma dedicated to produce essential yet difficult to make pharmaceuticals. Driven by this belief, we strived for pharmaceutical sovereignty by nationalizing plasma-derived products and vaccines those have been previously reliant on imports. Additionally, we developed and supplied treatments for hemophilia and Hunter's syndrome to offer more options and to reduce economic burden to patients who are suffering from rare diseases. Incorporating this foundation, we supply pharmaceutical products to approximately 40 countries worldwide, focusing not only on the domestic market, but also on developing countries as well. GC Biopharma is establishing and marketing diverse portfolio in the area of disease treatment and vaccines to help more patients to usher a healthy life. Furthermore, we are preparing for the future by developing innovative new drugs and a mRNA platform aimed at advancing vaccine and rare disease treatment field.

Access to medicines of GC Biopharma

GC Biopharma

Blood Plasma-derived Products	OTC Drugs	Metabolic and Cardiovascular Diseases
· Albumin · Human Immunoglobulin G · Human Hepatitis B Immunoglobulin (HBIG), and 10 Others	· Vitamins · Analgesic	Treatment for · High blood pressure · Dyslipidemia · Diabetes

Rare Diseases	Tumor	Vaccines
Treatment for · Hunter's syndrome · Hemophilia A/B · Alagille syndrome	· Severe neutropenia treatment	· Flu Vaccine · Varicella Vaccine · Td Vaccine and 5 others

Pricing policy

GC Biopharma,which hasthe highest proportion of pharmaceutical product sales, is significantly impacted by the domestic pharmaceutical market where the sales pricesare determined by national drug pricing policies. In contrast, pricing policies for export are set at reasonable levels, taking into account global price trends and financial impacts, to ensure the smooth supply of essential pharmaceutical products to international organizations and national bidding sectors.
GC Biopharma's ability to supply vaccine at affordable prices to developing countries and emerging countries is supported by continuous discussion among decision-makers and management, considering economic and social aspects. As a result, GC Biopharma maintains the top market share in influenza vaccine bidding market managed by the Pan American Health Organization (PAHO), an organization under the World Health Organization (WHO).

Direction to Expand the Market

To support the healthy lives of nationals, GC Biopharma has been engaged primarily within the domestic market. With this foundation, we diversified overseas business centered around the emerging markets, and in 2014, through expanding exports in plasma-derived products and vaccines, we became the first company in industry to achieve USD 200 million in export. Furthermore, we established local affiliates in the U.S. and Brazil and focusing on tech development and business competence to enter the advanced market. Starting with the launch of immunoglobulin (IVIG), we will operate our business in the U.S., the largest global market, and further expand through subsequent pipelines.

Dedicated Organization

GC Biopharma establishes management systems centering around the Board of Directors (BOD) to enhance healthcare accessibility for patients. When matters are deemed critical in areas such as product sales, production, R&D and business strategies, they are presented to the BOD and Management Committee for decision-making through discussion. Chief Officers of each department manage important issues at the corporate level, leveraging their expertise in their respective areas.

Board of Directors

Management Committee (Committee president: CEO)

Sales Division	Production Division	R&D Division	Management Division
Agenda			
· Introducing new products · Customer service · Marketing	· Quality responsibility · Supply chain issues	· Drug development · Pharmaceutical patents · Clinical trials	· Business strategies · Major investments · Laws/regulations

Performance for Healthcare Access

Pricing Access Management

(Unit :Each)

Classification	2021	2022	2023
The Number of items target for Equitable Pricing Policy	3	3	3

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

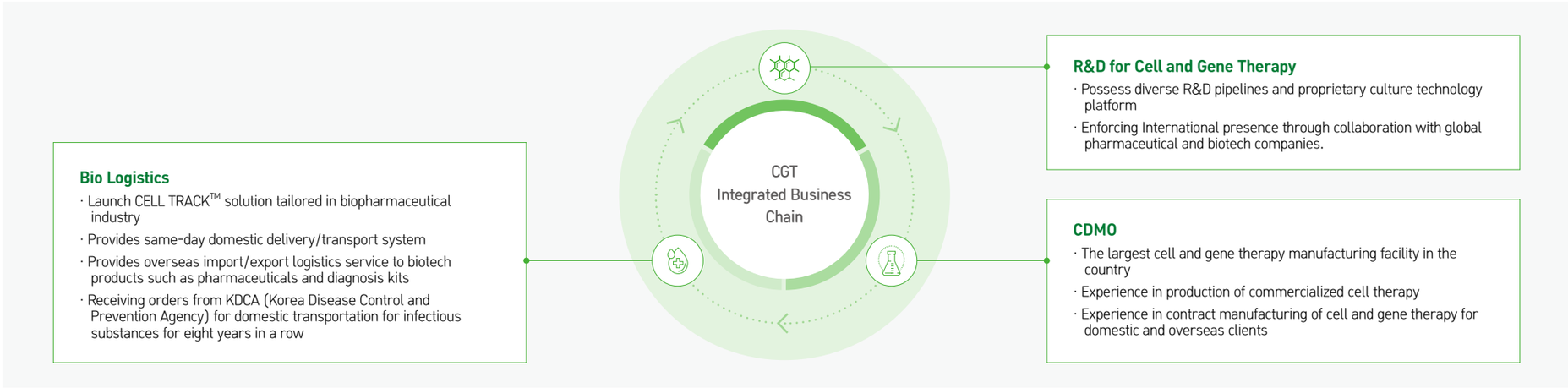
Policy for Enhanced Access to Medicines

GC Cell contributes to realization of social value of improving quality of life by providing a complete value chain for cell and gene therapy to cancer and rare disease patients that encompasses to R&D, production, commercialization and logistics. 'Immuncell-LC', world's only approved autologous T-cell therapy for hepatocellular carcinoma (HCC) has reached more than 10,000 of accumulated patient treated and an annual injection average 11,000 cases as of 2023. Continuous R&D in progress to expand indications by utilizing investigator-initiated trials and real-world clinical data for treating more patients. GC Cell's R&D pipeline of NK and CAR-NK, along with high-yield, large-scale cell culture platform provides patients breakthrough opportunities and will serve as a driving force to overcome high cost of existing treatments. Furthermore, based on our experience in CGT contract manufacturing for domestic and overseas clients at the largest facility in the country, GC Cell also performs CMO business of CGT for biopharmaceutical companies which shares GC Cell's value. Since the foundation, GC Cell has been engaged in logistics of biopharmaceuticals and launched CELL TRACK™ in February 2024. This system focuses on customization and regulatory compliance of biopharmaceuticals and ensures swift and accurate logistics for patient treatment and clinical trial schedules thereby contributing to extending the accessibility of pharmaceuticals.

Direction to Expand the Market

GC Cell sets a direction for expanding global markets and established mid-to-long term strategies with based on the experience in domestic market growth of 'Immuncell-LC', the first autologous T-cell therapy. In 2024, based on cell therapy R&D, production capability and oncology commercialization capability, GC Cell is in progress of pushing for insurance coverage of Immuncell-LC and acceleration of global expansion. Discussions on licensing out and collaboration for 'Immuncell-LC' has been started with North America region and expanding to 40 different companies from Middle East/South East Asia, China and Central and South America.

Access to medicines of GC Cell



Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 1

EXTENDING ACCESS TO HEALTHCARE

Enhanced Access to Medicines | R&D Innovation | Nurturing Pharma/Bio experts

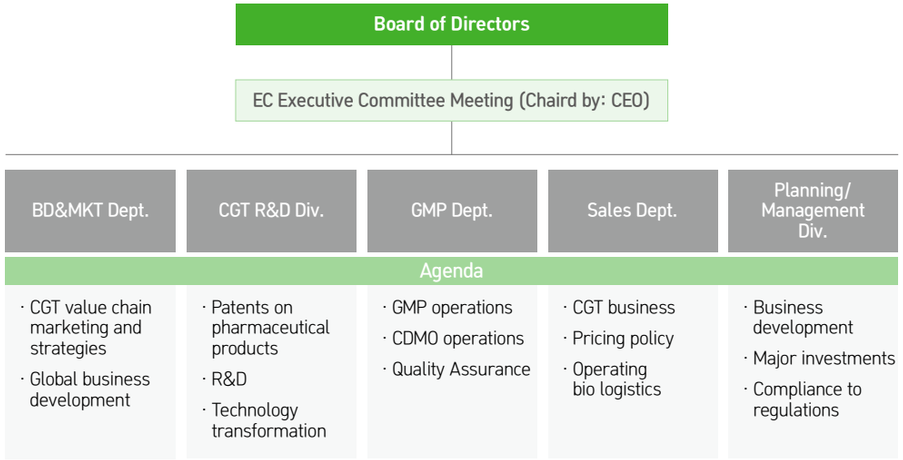
GC Cell

Pricing Policy

GC Cell refrains a price competition to ensure that the cancer patients in need of 'Immuncell-LC' do not terminate or postpone the treatments due to economic reasons. However, when price adjustments are unavoidable, we thoroughly review their appropriateness considering the overall societal aspects in collaboration with our management. GC Cell makes every effort to maintain the stable pricing through continuous work efficiency efforts even in the time of rising raw material and quality control cost due to worldwide inflation, thereby keeping the price unchanged since its launch.

Dedicated Organizations

Under the oversight of the CEO, GC Cell periodically reviews strategic directions and implementation plans for healthcare accessibility through a dedicated meeting committee. Major risks and proposed resolutions are then presented to the Board of Directors for discussion and decision-making.

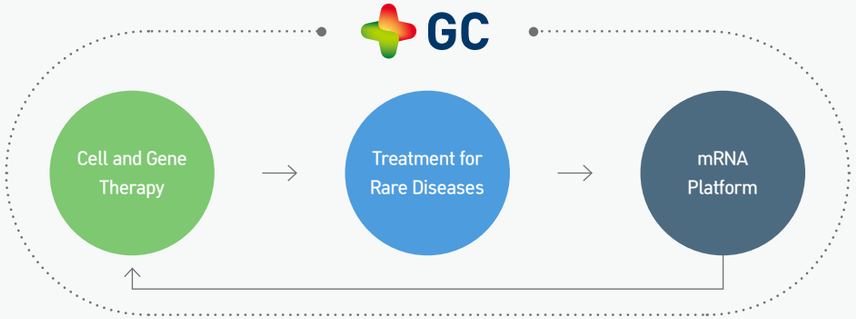


GC Group

R&D Innovation

Traditionally, GC Group has specialized in plasma-derived products and vaccines. We are now focusing on developing treatments for rare diseases, mRNA platforms, and cell and gene therapies to secure new growth drivers. The pharmaceutical business can generate high added value if new products are successfully developed; however, this process typically takes over 10 years and requires substantial investment with a very low probability of success. Despite these challenges, GC Group has been making extensive R&D investments, leading the domestic industry with the belief that "R&D is the future revenue and driving force for growth." Moreover, we are dedicated to securing talented researchers and strengthening our core capabilities. We strive to become a leader in life sciences, contributing to the healthy lives of humankind through relentless innovation and active investment in new drug development and biopharmaceuticals.

Core Research Area



Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 1

EXTENDING ACCESS TO HEALTHCARE

GC (Holding Company)

R&D Innovation Performance

Domestic and Overseas Healthcare Patents

(Unit: Cases)

Classification		2021	2022	2023
Domestic	Patent registered (Accumulated)	10	10	10
	Patent pending	1	2	2
Overseas	Patent registered (Accumulated)	41	52	54
	Patent pending	12	8	6
	Voluntary non-exclusive patent / products registered	0	0	0

R&D Investments

R&D to revenue ratio (Non-consolidated basis) GC Biopharma

(Unit: KRW Million)

Classification	2021	2022	2023
R&D Cost	135,642	142,977	150,132

2021 11.6% → 2022 11.5% → 2023 12.4%

R&D Workforce(as of March 2024)

Total 450 persons

Master's / Doctorate	300 persons
Bachelor's	95 persons
Others	55 persons

R&D to revenue ratio (consolidated basis) GC Cell

(Unit: KRW Million)

Classification	2021	2022	2023
R&D Cost	19,235	32,142	28,876

2021 12.1% → 2022 14.5% → 2023 16.9%

R&D Workforce(as of March 2024)

Total 94 persons

Master's / Doctorate	76 persons
Bachelor's	16 persons
Others	2 persons

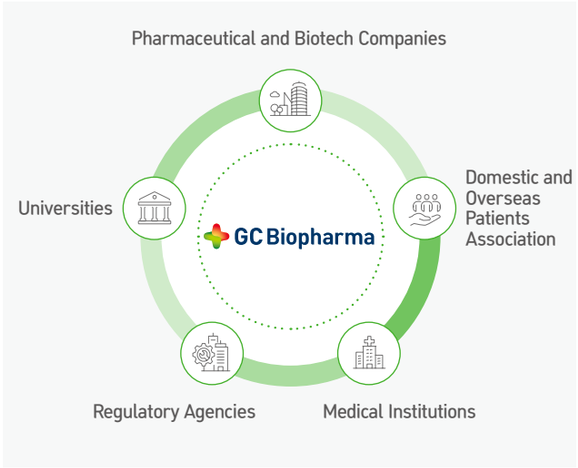
Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Strategies to develop Innovative Drugs

GC Biopharma designated entry into advanced market for plasma-derived products, developing premium vaccines and innovative new drugs for rare diseases as core R&D areas,focusing the corporate level capabilities and resource to these priorities.
Furthermore, to accelerate these goals, continuous improvement of internal R&D is prioritized. Additionally, in collaboration with partners, patient association and medical institution, we are developing new customized innovative drugs for patient groups with high unmet medical needs. Various types of open innovation are in progress. For example, through patient association, we hear direct voices of patients and incorporating patient feedback into clinical trial design in cooperation with medical institutions and regulatory agencies.
We are committed to take a significant leap forward to become a global pharmaceutical company through early successful development of strategically competitive products.

GC Biopharma Networks and Cooperations



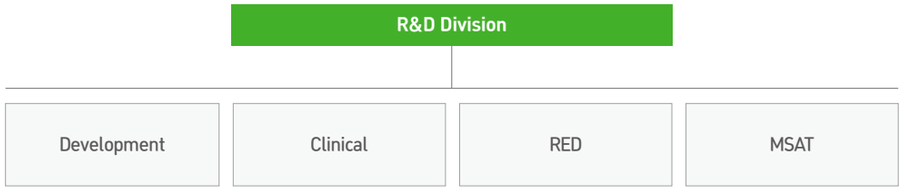
R&D Pipeline

Type	Project	Indication	Research	Preclinical	Phase I	Phase II	Phase III	Approval	Collaboration	Remark
Plasma-Derived Products	GC5107B	Congenital immunodeficiency syndrome(IVIG-SN 10%)					License approved			Obtained US FDA approval (December 2023), preparing for launch
	GC5107D	Congenital immunodeficiency syndrome (IVIG-SN 10%, Infants)								
	GC5125A	von Willebrand Disease								
Vaccines	GC501/ GC3110	Seasonal influenza					Commercialized			Obtained approval from 25 countries including domestic and WHO (Obtained for Taiwan in March and Egypt in July 2023)
	MG1111	Varicella					Commercialized			Obtained WHO PQ and commercialized in 7 countries
	GC3107A	Tuberculosis					In progress			Domestic approval in progress
	GC3111A	Tetanus, Diphtheria, Pertussis								
	GC1109	Anthrax					In progress			Domestic license in progress
	MG1120A (CRV-101)	Shingles							curevo VACCINE	R&D pipeline for the affiliate
	GC4002B	mRNA Flu								
Innovative Drugs for Rare Diseases	GC1111F	Hunter syndrome					Commercialized			Obtained domestic formal license approval and sales in 12 countries including Korea
	GC1123A	Hunter's syndrome (ICV)					Commercialized			Obtained approval in Japan, domestic clinical trial Phase 1 in progress
	GC1101D	Hemophilia A					Commercialized			License obtained for domestic and China
	GC2127A	Alagille syndrome					License approved		mirum	License obtained completed and preparing for launch
	GC1138A (MarzAA)	Glanzmann Thrombasthenia (GT)								Incorporated into R&D pipeline in Feb. 2023
	MG1113A	Hemophilia A/B								
	GC1126A	Acquired Thrombotic Thrombocytopenic Purpura								Grants ODD by US FDA in 2023
	GC1130A	Sanfilippo syndrome type A							NOVEL PHARMA	Grants ODD and RPDD by US FDA, and grants ODD by EMA in January 2024
	GC1134A	Fabry disease							Hanmi	
	GC4003A	Succinic Semialdehyde Dehydrogenase deficiency (SSADHD)							Sperage	
	GC2126A	Gangliosidosis							順天大学 Sunchon University	
	GC2119A	Hunter's syndrome (PO)								

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

R&D Organization



R&D Innovation Performance

Domestic and Overseas Healthcare Patents

(Unit : Cases)

Classification		2021	2022	2023
Domestic	Patent registered (Accumulated)	69	72	55
	Patent pending	47	31	34
Overseas	Patent registered (Accumulated)	186	192	202
	Patent pending	274	286	219
	Voluntary non-exclusive patent / products registered	0	0	0

Developing Global New Drug for Rare Diseases

GC Biopharma is committed to developing new drugs for rare diseases to obtain next-generation growth driver and provide patients with new treatment options.

Designated as Orphan Drug Designation (ODD) and Rare Pediatric Disease Designation (RPDD)

In January 2023, the treatment of Sanfilippo Type A has been designated as an Orphan Drug Designation (ODD) and a Rare Pediatric Disease Designation (RPDD). Furthermore, in January 2024, an additional ODD designation was obtained in Europe, bringing the total to three ODD and RPDD designations for the treatment of Sanfilippo Type A. Additionally, in October 2023, the treatment for thrombotic thrombocytopenic purpura was designated as an ODD in the U.S. We are dedicated to developing innovative drugs to provide patients with new treatment options.

Conducting Clinical Trials for Rare Disease

Clinical trials are in progress for successful development of global new drugs for rare diseases. In end of April 2022, Phase 1 clinical trials has been approved by domestic agency for ICV dosage form of Hunter's syndrome treatment. In 2024, IND application is in progress for Phase 1 global clinical trials of Sanfilippo syndrome treatment and Fabry's treatment.

License Approval of rare Diseases Treatments

In February 2023, GC Biopharma obtained domestic approval for Livmarli(Maralixibat chloride), a treatment for Alagille syndrome, a rare pediatric disease. In November, the review of the Phase 3 clinical trial results and the inspection for compliance with clinical trial management standards for the treatment of Hunter syndrome, a conditionally approved product, were completed, resulting in formal license approval. In December, immunoglobulin solution ALYGLO, a treatment for primary humoral immunodeficiency, also known as a congenital immunodeficiency, received a US FDA product license approval, marking the first achievement of domestically produced plasma-derived product to enter the U.S. market.

Furthermore, we strive to become a global pharmaceutical company by internalizing mRNA technology which is the next-generation new drug modality, securing platforms and establishing manufacturing facilities for extend our scope beyond vaccines to further include rare disease treatments.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

Driving Global New Drug Development in the Field of Cell and Gene Therapy

GC Cell aims to contribute to humankind by overcoming intractable diseases through cell-based and genetic modification technology. We focus on cell therapies and gene modified cell therapies and drive global new drug development in the field of cell and gene therapy.

Cell therapy

Through Artiva, GCC4001 (AB-101), the natural killer (NK) cell therapy derived from umbilical cord blood, received a Fast Track designation from the US FDA in December 2020 for Phase 1/2a clinical trial, targeting B-cell lymphoma patients in combination with Rituximab. In August 2023, GCC4001 also received IND clearance from the US FDA for Phase 1/2 clinical trial in lupus nephritis to expand an indication to autoimmune diseases. Furthermore, in May 2023, GCC4001 in combination with AFM13 was also cleared for a Phase 2 clinical trial targeting relapsed and refractory Hodgkin lymphoma and was designated for a Fast Track status in September 2023.

Gene modified cell therapy

In September 2022, GC Cell received IND clearance and Orphan Drug Designation (ODD) by US FDA through Artiva for Phase 1/2a clinical trial of progressive HER2-positive breast cancer or gastric/gastroesophageal junction cancer. In December 2023, the clinical trial was also approved in both Australia and South Korea. We focus on R&D to develop subsequent pipelines and obtain platform technology and our efforts include activities to discover candidates through target discovery in the field of oncology and immunological diseases.

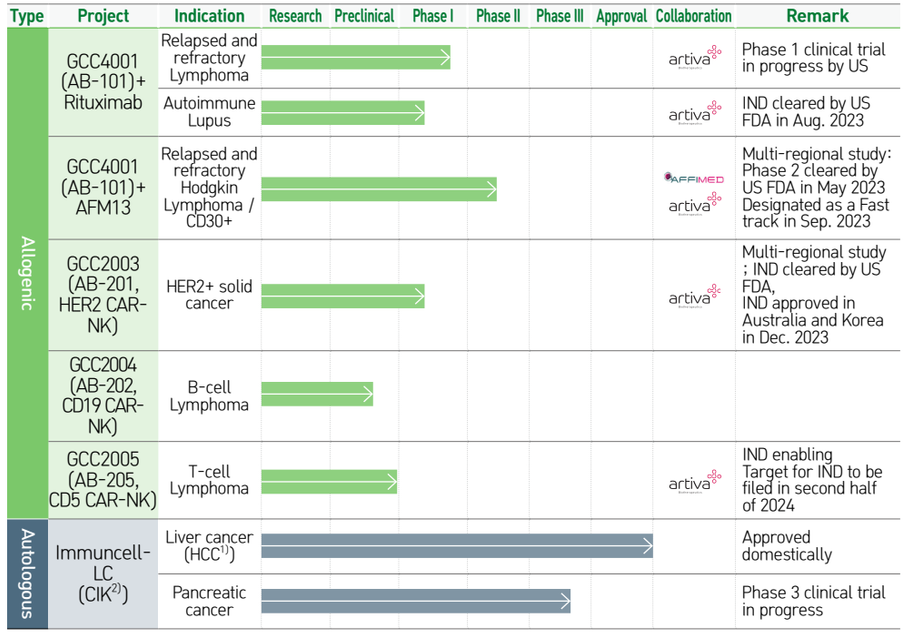
R&D Innovation Performance

Domestic and Overseas Healthcare Patents

(Unit : Cases)

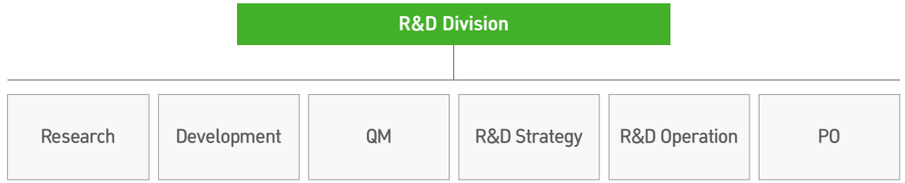
	Classification	2021	2022	2023
Domestic	Patent registered (Accumulated)	15	19	20
	Patent pending	2	4	15
Overseas	Patent registered (Accumulated)	30	35	30
	Patent pending	16	6	58
	Voluntary non-exclusive patent / products registered	0	0	0

R&D Pipeline



1) HCC (Hepatocellular Carcinoma), 2) CIK (Cytokine Induced Killer cell)

R&D Organization



Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Group

Strategy for Nurturing Pharma/Bio Experts

GC Group provides various education and networking opportunities to help employees to adapt to the organization and their assigned tasks. This includes offering training courses to improve job skills closely related to their tasks and attending domestic and international academic seminars and conferences to enhance expertise in the field of pharma/biotechnology. Additionally, a smart learning platform has been established to support digital-curation based personalized self-directed learning.

Supporting in Attainment of Degrees and Certifications

All members of the GC Group are provided with various education and training opportunities to develop job competencies. Members recognized for their excellence will have opportunities to further enhance their skills through educational programs offered by domestic and international schools and professional training institutions.
In particular, GC Group operates a support program for the attainment of degrees and certifications to develop the professional competencies of next-generation leaders. Selected members recognized for their excellence through a fair and transparent selection process can participate in in-house MBA programs, part-time domestic MBA programs, and master's/doctorate programs. GC Group supports the tuition fees for these courses, degrees, and certificates.

GC Group Affiliate News

Training Program on Responding to Infectious Diseases for Developing Countries

Since 2021, GC Labs, together with Korea Foundation for International Healthcare (KOFIH), is engaged in an Official Development Assistance (ODA) project aimed towards developing countries.
In October 2023, ‘Capabilities Building Program for Ukraine Pulmonary Tuberculosis and Nontuberculous Mycobacterial Lung Disease Diagnosis and Treatment’ took place. In collaboration with Korea International Cooperation Agency (KOICA), ‘Capabilities Building Program for Ukraine Tuberculosis and NTM DIAGNOSIS AND Treatment’ was also conducted. Furthermore, we conducted a remote training course to 20 local doctors and clinical laboratory scientists and we plan to host a similar program for the same number of participants by inviting them to visit Korea in 2024. GC Group will continue to make best efforts to improve level of global healthcare and will correspondingly enhance international operational capabilities.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Pharma/Bio Talent Development System

GC Biopharma defined tasks/leadership capabilities and developed a training system for systematic nurturing of talents. This training system is based on required job competencies based on 'G Culture', 12 principles in working. Firstly, job capabilities are defined through 200 on-site SMEs and identified 60 types of job expertise and necessary capabilities. More than 300 course profiles have been established for enhance in those capabilities. Also, based on individual analyses, 7 job levels are established to enhance training efficiency and this system is continuously refined to reflect the organizational and strategic changes. GC Biopharma conducts in-house online job training courses twice a year comprised of lectures required for each job level and job expertise type.

Additionally, GC Biopharma operates an academic certification system (K-certi system) for domestic sales division to develop individual capabilities for medical representatives (MR). Attainment of this certification has been used to evaluate job expertise as an indicator in the Career Development Program (CDP) of employees who wishes to transfer to sales division. In 2023, total of 291 MRs attained K-certi certification and for tasks difficult to train in-house, external outsourced training is provided to enhance job capabilities in partnership with educational institutions including 'Korea Production Center (KPC)' and 'Parenteral Drug Association (PDA)'.

To enhance leadership capability development, GC Biopharma defined roles and required competencies of self-leader, future leader and leaders through processes of looking into status of roles by position, trend research and on-site interviews in 2022. Based on these definition, personalized training programs are under implementation. Firstly, for self-leader training, 18 online and offline training courses are offered to new employees immediately upon entry to ensure smooth integration and competency development. Furthermore, to sustain effective onboarding, a retention training program is systematically offered one year after their entry. Training courses are provided to future leaders to learn mindsets to grow into a leader, and in-house MBA trainings are offered to selected employees who are chosen through in-house process. Each year, GC Biopharma holds Leadership Workshop participated by approximately 200 leaders at team lead level and above, including the CEO, to discuss the company's strategies and strategic directions and enhance leadership capabilities. Furthermore, through Self-Development Plan (DP), we establish individual competency enhancement plan and provide opportunities to grow into job experts and leaders in Careers Development Plan (CDP) aspects. This invigorates the corporate culture through internalizing how-to-work. This talent nurturing system is managed and developed in real-time through Learning Management System (LMS) established in the Success Factor.

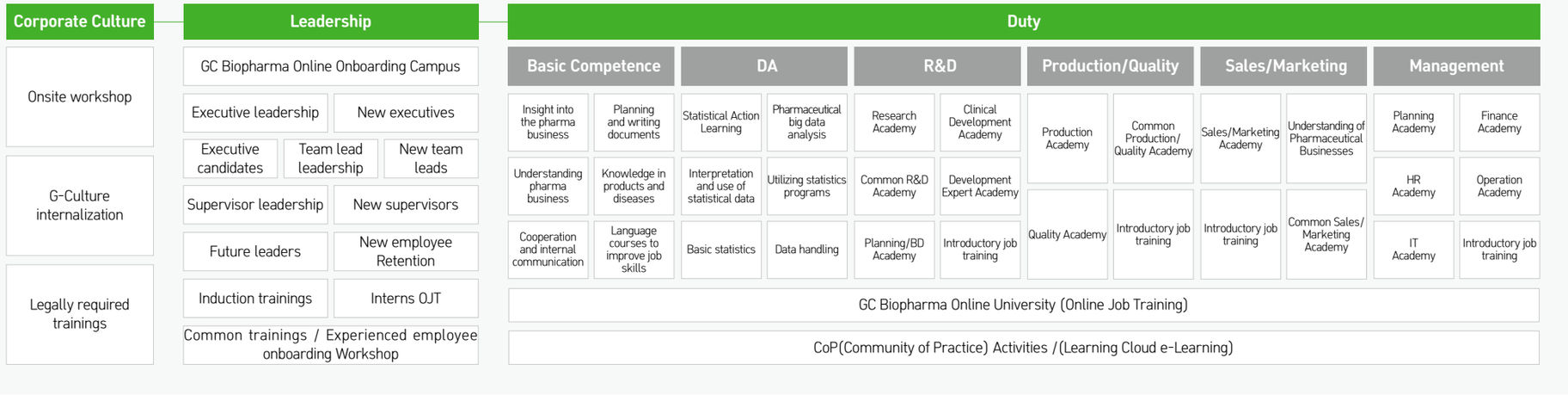
Annual average training hours per executive and employees

42 Hours

Annual average training cost per executive and employees

KRW 1.2 Million

GC Biopharma's Talent Development System



Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

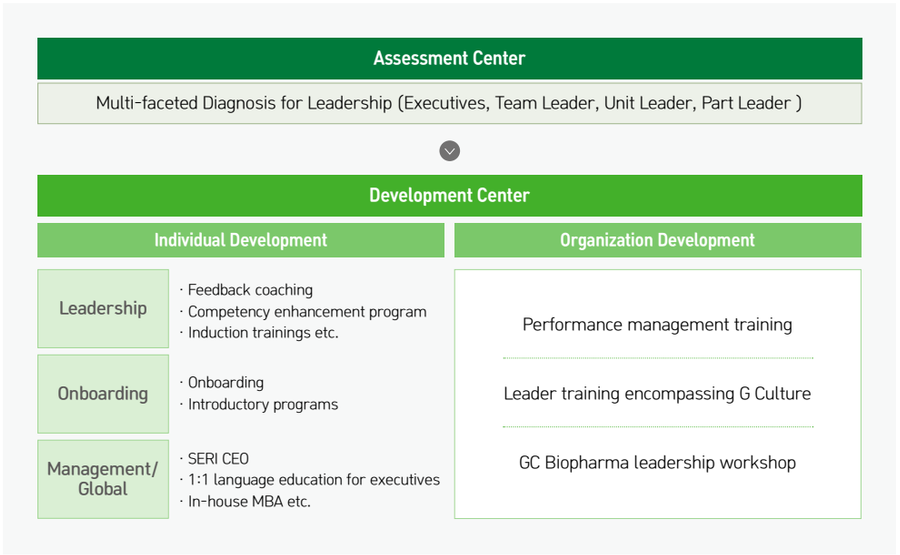
GC Biopharma

Leadership Enhancement Program

To pursue expansion of insights through executives networking, GC Biopharma holds Pharma Leadership Team (PLT) meetings quarterly. During this meeting, all executives convene to discuss specific agenda and establish corporate level strategic direction. Additionally, GC Biopharma supports leaders to participate in Korea Management Association (KMA) Executives' Breakfast Meeting, Leaders' Morning Forum and SERI CEO (established by Multi Campus) to foster a broader perspective beyond the pharmaceutical industry. Furthermore, 1:1 language course offered to enhance global competency and special invitational lectures are provided in areas such as history, culture, health, and trends to develop diverse knowledge and incorporate it into management.

Each year, executives and team leaders are diagnosed for competencies and personal characteristics required for their roles. We support leadership development based on the self-evaluation and awareness by providing debriefing and coaching sessions for results of the diagnosis. Additionally, we provide online/offline trainings in-house/external outsourcing and language programs to improve leadership and global competencies simultaneously.

GC Biopharma's Leadership Diagnosis and Development Program



Supporting in Attainment of Degrees and Certifications

All members of GC Biopharma including contract workers are provided with a variety of training opportunities for the development of competencies required in their jobs. Members recognized for their excellence will have opportunities to further enhance their skills through educational programs offered by domestic and international schools and professional training institutions. In particular, GCBiopharma operates a support program for the attainment of degrees and certifications to develop the professional competencies of next-generation leaders. Selected members recognized for their excellence through a fair and transparent selection process can participate in in-house MBA programs, part-time domestic MBA programs, and master's/doctorate programs with support of tuition fees by GC Biopharma. There are accumulated 37 persons who attained Master's/Doctorate/MBA from the beginning of 2004 to 2023 and there are 21 (including 2 candidates) persons who are receiving this support as of June 2024.

Selection criteria and performance

Qualification	Worked in GC Biopharma for more than five years, High performer (above E in average for more than three years)
Evaluation Criteria	Contribution (past), Utilization for Achieving Business Strategy (future), Growth Potential (Individuals)
Application ratio	Master's/Doctorate 53.8%, External MBA 47.2% (as of March 2024)
Accumulated participants	Total 53 persons (since 2004)

MBA Support program (2 Track Selection Process)

Executive candidates	Selected through degree selection process to meet the immediate business strategy
Team leader candidates	Select candidates for in-house MBA (Excellence recognized) for core talent retention.

Partnership agreement signed for Nurturing Global Bio Talents

To extend accessibility to healthcare through nurturing Pharma/Bio experts, GC Biopharma signed a new partnership agreement with Yonsei University's K-NIBRT project team at the Graduate School of Integrated Science and Technology in 2022, and with Seoul National University in 2023. Under these agreements, GC Biopharma will jointly pursue diverse research and projects aimed to develop new drugs and will develop educational programs pertinent to domestic biopharmaceutical processes.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Effectiveness Review of Training Programs

GC Biopharma runs a feedback process on training operation, lecturer and pertinency of training environment by conducting a satisfaction survey on all employees participated in the training courses. For job training contents available in GCBP University, measures understanding of the learners are post-course assessment. Employees who passed the evaluation criteria and completed the course is 71% (2023 enrollment: 517, completed: 367). Job training courses are also available in offline courses which include pharma-specific courses such as basic statistics and DOE trainings. After the course, post-course assessment takes place to evaluate the pertinency.

In addition to measuring effectiveness of the training programs through evaluations, GC Biopharma enhances job capabilities and course comprehension through in-house trainer development courses. In this course, learners go through training sessions then evaluated in mock-training sessions as a trainer to utilize the knowledge educated. The effectiveness of this is shown as highly significant as it encourages employees in self-directed learning and is directly contributing to performance improvement of organization and enhancement of personal accomplishment. High training satisfaction score of 4.71 (out of 5) has been observed among employees who participated in in-house trainer development courses in 2023.

Furthermore, in-house MBA course program in GC Biopharma incorporates action-learning process where participants apply the knowledge gained through online courses to solve real-world business issues. Participants apply diverse methodologies to address real-world business issues, and they present their solutions to the management, enhancing their problem-solving skills and maximize the learning outcomes. Employees who demonstrate excellent learning outcomes are given opportunities to pursue external MBA programs.

GC Biopharma offers various programs to enhance employees' job competencies and collects feedback and comments through satisfaction surveys on training courses conducted. In 2023, overall training satisfaction score was 4.42 out of 5 and we will continue to improve satisfaction through incorporating feedback and improvement tasks.

GC Biopharma's Evaluation Steps for Training

Reaction	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 Performance

Training Effectiveness

(Unit : point)

Classification	Score
Training Satisfaction	4.42 (Out of 5)

Education and Training Status

Education and Training of Executives and Employees

Classification			Unit	2021	2022	2023
Total Education/Training Hours			Hours	81,229	105,651	95,998
Average Education/Training Hours per Annum			Hours /person	37.1	45.9	42.3
Average Education/ Training Hours per Person	Gender	Male		33	39	35
		Female		49	48	58
	Job	Sales / Marketing		31	34	38
		R&D		46	70	72
		Production		37	34	28
Total Education/Training cost			KRW Million	1,934	2,732	2,790
Average Education/Training Cost Per Annum			KRW Million /person	0.9	1.2	1.2
Employee Education/ Training Ratio	Ratio		%	100	100	100
	Receiving Education/ Training		Persons	2,187	2,302	2,272
	Total Executives and Employees			2,187	2,302	2,272[1)]

1) Excludes 2023 former employees

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

Pharma/Bio Talent Development System

GC Cell operates various training programs for all employees to foster growth based on excellent competencies and knowledge possessed by our members. GC Cell systematically supports common trainings at each step of their career and personalized job trainings including introductory training, language courses, job trainings, new leader training and leadership trainings. In particular, contract workers and dispatched employees are included in subjected to job trainings to enhance knowledge and skills. In addition to the courses mentioned above, regularly accessible training platforms are also available to provide employees with self-directed learning opportunities. Furthermore, talents are strategically allocated in the right positions through internal job posting to support long-term career development of the members and to ensure that the individual capabilities and knowledge are circulated thereby enhancing the expertise of the organization.

Annual average training hours per executive and employees
32 Hours

Annual average training cost per executive and employees
KRW **0.3** Million

GC Cell's Talent Development System

Positions		Assessment		Individual: Leadership development	Individual: Knowledge and skills		Organization: Enhancing Execution	Legally Required Trainings: Common	Legally Required Trainings: Job-specific
Executives		Multi-faceted leadership assessment		Feedback Coaching (Personal)	SERI CEO		Performance Management	Industrial Safety	GMP and Pharma Manufacturing Management
				New Executive Training				Sexual Harassment and Bullying Prevention	Sample Management and Safe Transport of Infectious Substances
Staffs	Head of Unit	Engagement Survey	Multi-faceted leadership assessment	Feedback Coaching (Group)	GC University(e-Learning)	Degree attainment support (MBA& Masters and Doctorate)		Workplace Disabilities Awareness	Laboratory Safety and Bioethics
	Team Leader			Leadership Capability Enhancement	Language competency course (Phone and virtual)			Information Protection & Retirement Plan Partcipant& CP	
	Supervisor			New Manager training	External job training (For job-related knowledge and skills)	Induction training		Pharmacovigilance (PV)	
	L4			Leadership training for promoted employees					
	L3								
	L2								
	L1			Self-Leadership					

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

Leadership Development Program

GC Cell operates leadership development program for each position from new employees to executives to enhance awareness and competencies on roles of individuals. The program includes self-leadership, promotion training, new manager training, manager leadership enhancement training, new executive training. For managers above team leader level, leadership evaluation takes place annually and feedback coaching and specialized competency enhancement training takes place based on the result of the evaluation.

Tailored Job Training Program

To nurture professional biopharma/tech research and development talent, GC Cell provides training courses in basic statistics, Design of Experiments (DoE), Quality by Design (QbD), as well as specialized training programs for biopharma/tech project managers. Additionally, we enhance our bio networks by participating in domestic and overseas conferences and seminars. As for production and quality division, GMP job training has been internalized to develop in-house experts and training courses are regularly performedto enhance the expertise. Furthermore, various job trainings are also offered as on-site and external courses on sales, planning and management too.

Supporting in Attainment of Degrees

GC Cell operates support program for competent researchers in R&D divisions to attain master's or doctoral degree. This program provides researchers with a vision for growth, enabling them to become experts in their fields. Additionally, R&D capabilities are enhanced through learning and research in business-linked technologies. To receive the support in degree attainment, employee must meet the required years of employment, obtain a recommendation of the department head, and pass the evaluation of Degree Support Committee. During the evaluation, the committee reviews the study plan to assess for its alignment with R&D's long-term technical development directions and relevance between the major and project of the applicant.

Effectiveness Review of Training Programs

GC Cell enhances the quality of the trainings by measuring the effectiveness of the training and incorporating feedbacks through satisfaction surveys after the training course is completed. In the training satisfaction surveys conducted in first half of 2024, we received 97% positive answers on the question on whether the training helped enhancing employees' competencies.

Training Effectiveness

(Unit : point)

Classification	Score
Training Satisfaction	4.5 (Out of 5) ●●●●◐

Education and Training Status

Education and Training of Executives and Employees

Classification			Unit	2021	2022	2023
Total Education/Training Hours			Hours	28,494	27,705	27,176
Average Education/Training Hours per Annum			Hours /person	35.7	33.1	32
Average Education/ Training Hours per Person	Gender	Male		38	33	31
		Female		31	33	33
	Job	Sales / Administrative		39	29	29
		R&D		42	54	45
		Production		25	32	34
Total Education/Training cost			KRW Million	141	202	235
Average Education/Training Cost Per Annum			KRW Million /person	0.2	0.2	0.3
Employee Education/ Training Ratio	Ratio		%	100	100	100
	Receiving Education/ Training		Persons	799	838	858
	Total Executives and Employees			799	838	858

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC (Holding Company)

Pharma/Bio Talent Nurturing System

The employee competency enhancement program of GC (Holding Company) focuses on proactively nurturing future leaders by considering the direction of the business and the characteristics of the industry. To this end, our focus is on developing competency and careers of executives and employees, including contract workers. We operate various training programs tailored to employees' career life cycles, such as leadership development for managers and strategy workshops for executives.
We conduct onboarding trainings annually or semi-annually to new employees, promoted employees and new managers during their transitioning period. Satisfaction scores obtained for these trainings are 4.7 out of 5. We support expertise enhancement by providing year-round external specialist training where employees are trained for 20 hours on average. Furthermore, to enforce global competencies, we offer monthly one-on-one language training programs for applicants. In 2023, we opened a communication enhancement programs for all employees and special lectures took place to enhance communication skills and these programs obtained satisfaction scores of 4.7 out of 5.

Annual average training hours per executive and employees
30 Hours

Annual average training cost per executive and employees
KRW 1.1 Million

The Number of courses readily available through Smart-Learning
3,147 courses (38,186 contents available)

GC (Holding Company)'s Talent Development System

Corporate Culture	Leaders		Hierarchical Leadership		Job Skills	Global		Common
Vision / Core Values	Future Executives	In-house venture	Special lecture for executives	Team leader competency enhancement	Cafeteria-style job training	1:1 coaching	Intensive language course	e-Academy
Working Method	Master's and doctorate/ Management Strategy Expert		Executive competencies (Leadership diagnosis, 1:1 coaching)		On-the-job training	In-house language course		Special lecture on liberal art
			Position-specific training	Introductory course	In-house trainer development			
Communication Workshop	Executive candidates	Team leader candidates	New executive course	Onboarding program	AI digital competency enforcement	Reserved expatriates	Global expert	Legally required trainings

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC (Holding Company)

Supporting in Attainment of Degrees and Certifications

All members of the GC (Holding Company), including contract workers, are provided with various training programs tailored to their career life cycles to develop their competencies and careers without discrimination. Among them, those recommended as outstanding talents are granted high-level educational opportunities to further enhance their competencies through domestic and international universities and specialized educational institutions, allowing them to attain degrees and certifications. Since 2004, the GC Group has supported more than 40 exceptional individuals in pursuing master's, doctoral, and MBA degrees, nurturing their development as long-term key talents. Recently, we have been considering the establishment of new project-based specialized courses and related degree support programs to nurturing talents in advanced digital specialties.

Systematic Leadership Development Through on a Leadership Nurturing Framework

GC Group nurtures next-generation leaders through collaborations with professional leadership training institutions, various external expert groups and renowned leadership/corporate culture diagnosis institutions. Based on the Leadership Nurturing Framework established, we diagnose leadership competencies and corporate culture regularly and support leadership enhancement accordingly with the result of the diagnosis including debriefing, online/offline training courses, group coaching, 1:1 coaching and self-awareness and evaluation process. To support the growth of global leaders, we provide continuous opportunities for network expansion and insight development through onsite/offsite training, language programs, CEO breakfast meetings and special lectures by famous speakers.
Moving forward, GC Group will strive to enhance the competencies of our employees but also to nurture leaders with smooth communication skills for engaging with various stakeholders, thereby practicing 'sustainable management'.

Supporting Pharma/Bio Talent Nurturing in Developing Countries

GC Labs, an affiliate of GC, strives to enhance the competencies of medical professionals in developing countries through expertise and experience in global diagnostic testing company. From February to April 2023, diagnostic testing experts conducted successful training sessions on diagnostic testing to total of 38 doctors and clinical laboratory technicians. Additionally, we frequently hold workshops and online training sessions to further develop diagnostic testing skills in developing countries.

Education and Training Status

Education and Training of Executives and Employees

Classification			Unit	2021	2022	2023
Total Education/Training Hours			Hours	5,100	5,824	5,281
Average Education/Training Hours per Annum			Hours /person	34.9	35.7	29.7
Average Education/ Training Hours per Person	Gender	Male		34	34	31
		Female		32	31	28
Total Education/Training cost			KRW Million	162	179	188
Average Education/Training Cost Per Annum			KRW Million /person	1.1	1.1	1.1
Employee Education/ Training Ratio	Ratio		%	100	100	100
	Receiving Education/ Training		Persons	146	163	178
	Total Executives and Employees			146	163	178

Effectiveness Review of Training Programs

Training Effectiveness

(Unit : point)

Classification	Score
Training Satisfaction	4.7 (Out of 5)

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
- Area 1. Extending Access to Healthcare
- Area 2. Customer Safety and Responsibility to Quality
- Area 3. Corporate Ethics and Compliance
- Area 4. Responsibility to Environment

General Disclosure ▾
Appendix ▾

AREA 2 CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

Management Approach

We promote ESG management primarily driven by GC Biopharma and GC Cell, our pharmaceutical manufacturers with special attention to our responsibility for customer safety and quality. Recognizing our responsibility to protect safety and health of all stakeholders, including customers and patients, we perform comprehensive risk prevention activities in advance to ensure quality assurance and a sustainable operation of our supply chain.

Responsibility for Customer Safety and Quality

* Details of our activities related to the 17 UNSDG

Strengthening Product Quality and Patient Safety

GC Biopharma GC Cell

Our Approach

We prioritize safety and quality as our prioritized value in management for satisfaction of all customers and stakeholders to fulfill our social responsibility.

Positive Impact

Strengthen customer safety by conducting thorough quality control throughout the entire process from drug development to production, storage, distribution, and sales.

2023 Our Actions

GC Biopharma

Established contingency plan/mitigation control system, training conducted to marketing staffs on quality management/pharmacovigilance/product information, Ochang plant obtain cGMP certification by US FDA

GC Cell

'Pharmacovigilance' training conducted to entire employees, quality control test conducted to 10,025 batches of 'Immuncell-LC', Cell Center obtained GMP certification

ESG Risk Management on Supply Chain

GC GC Biopharma

Our Approach

For sustainable expansion of industry ecosystem, we conduct direct and indirect investment on our supply chain and manage ESG risks on supply chains in pursuit of mutual growth.

Positive Impact

Operate and manage sustainable supply chains by pre-checking and preventing possible quality, environmental and human rights risks in the supply chain.

2023 Our Actions

GC (Holding Company)

Issued revised version of GC Green Book (July 2023), evaluation completed for supply chain including 75 business partners.

GC Biopharma

Various training sessions on GMP, intensive reading, group training and OJT(On-the-Job Training) conducted to suppliers

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 2

CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Group

Pharmaceutical Quality Management System

Providing high quality products and service to customers is an essential factor for corporate sustainable growth. In particular, since pharmaceutical business is directly connected to public safety, quality and safety management of pharmaceutical products we produce is the most important matter in the perspective of public safety and health. GC Biopharma issued Corporate Quality Manual (CQM) that defines consistent and standardized quality levels in an effort to quality system ensures the quality, efficacy, and safety of all products and services while meeting domestic and international regulatory requirements. All affiliates of GC Groups comply to this CQM, defining their responsibilities for quality management in all aspects related to the products and services they provide.

GC Group's quality strategy is to ensure customer safety, sustainable supply of products and services in consistent quality by focusing on consistent quality and regulatory compliance through oversight and periodic review on quality system and quality performance and fostering a culture of quality management learning. To this end, we apply and adhere to stringent quality standards with policies and procedure established to identify, measure, control and maintain quality excellence.

GC Biopharma Corporate Quality Policy (CQP)

GC Biopharma Quality Management Systems	Quality System	Change Management/Risk Management/ Deviation Management/Document Management/ Training Management/Data Trending Management
	Regulatory Management	Market Authorization/Inspection Handling/ Data Integrity Management
	Raw Material Management	Supplier Management/Raw Material Management
	Facility & Equipment Management	Facility Management/Equipment Management/ Utilities Management/Qualification Management/ Computerized System Management
	Manufacturing Management	Production Management/Contamination Control/Validation Management/Intermediate / Finished Product Management/ Contract Operation Management
	Laboratory Management	Laboratory Material Management/Sample Management/ Analytical Process Management/Out Of Specification Management
	Packaging & Distribution Management	Product Release Management/Retuned Product Management/ Recall Management/Product Complaint Management/ Non-conformance Management

Quality Policy

We devote ourselves to provide reliable products and services to customers by establishing a quality system that ensures quality, efficacy and safety in compliance with domestic and international regulations.

Quality Management Governance

Quality management organizations of GC group affiliates involved in pharmaceutical manufacturing are under operation independently, and their tasks include planning, approving, implementing and monitoring of various tasks related to all systems.

Quality management organization is responsible for establishing standards to ensure that the production, testing, product release and distribution comply with the regulations. The organization is dedicated to meet the GxP[1)] requirement and to continuously improve those standards.

Additionally, the organization provides employees with pertinent and continuous trainings on GxP thereby promoting accurate and effective job done in compliance with the predefined standards. This training applies to all employees and experienced operators are qualified and training effects are monitored through job qualifications.

1) GxP(Good X Practice) is a good practice applied to various regulated industries including pharma and medical devices, and X can represent concepts such as M for Manufacturing, S for Supplying, C for Clinical, and L for Laboratory etc.

Certification of Quality Management (GMP Certification)

Classification	Certification Type	GC Group's Pharma Production Plants
Ministry of Food and Drug Safety (MFDS)	Pharmaceuticals 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 (Sungnam plant)
	Production of in Vitro Diagnostic Medical Devices and Quality Control Standards	GCMS (Eumseong plant)

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 2

CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Biopharma

Quality Management Strategy

Quality Management System of GC Biopharma is designed and under operation in accordance with ICH Q10 (International Council on harmonization, Pharmaceutical quality system). We comply with cGMP[1)] and laws and regulations of each country and actively responding to regulatory agency quality evaluation and inspections. Also, we consistently monitor for product safety and quality related issues. Quality Management organizations are under operation independently ensuring ongoing compliance to GxP[2)] and makes continuous effort to improve these standards. As a foundation, under the company's mission and vision, we defined quality mission, vision and core values as follows.

- Quality Mission: Customer Satisfaction through Excellent Product Quality
- Quality Vision: Leading the Health Industry by Continuous Quality Culture Improvement
- Quality Core Value: Quality Leadership, Patient Prioritization, Continual Improvement, Sufficient Resources, Quality based Communication

Quality, production, R&D and logistics departments in GC Biopharma are under close cooperation to sustainably supply safety-assured pharmaceutical products to patients who are in need of medicines. For a product release, pertinency of the production process, quality control tests and quality system are comprehensively reviewed and only products those have gone through the extensive product release approval process can be delivered to the patient.

Three manufacturing plants operated by GC Biopharma has been certified for their Quality Management System by Ministry of Food and Drug Safety (MFDS) in Korea. We acknowledge the importance of quality culture beyond the process capabilities and product quality, and we focus on continuous improvement in this quality culture.

We go through regular certification processes by Korean Ministry of Food and Drug Safety (MFDS), World Health Organization (WHO), US Food and Drug Safety (FDA) and performs cross-audits between manufacturing plants and report the results to the management.

Furthermore, we integrate various IT systems with our quality system to effectively manage knowledge and quality risks. Our recent achievements is to establish DI governance management organization for enforcing Data Integrity by evaluating data integrity and performs periodic trend analysis thereby enhancing the system continuously.

1) cGMP(Current Good Manufacturing Practice): US FDA recognized GMP and quality management standards
2) GxP(Good X Practice) is a good practice applied to various regulated industries including pharma and medical devices, and X can represent concepts such as M for Manufacturing, S for Supplying, C for Clinical, and L for Laboratory etc.

Major Agency Certification Status for Each Plant

Ochang plant	Hwasun plant	Eumseong plant
Korea MFDS, WHO, US FDA	Korea MFDS, WHO	Korea MFDS

Quality Policies

- Commit ourselves to meeting all regulatory requirements, implementing and maintaining a quality management system compliant with Korean Law and US FDA Regulations and laws enforced by the Code of Federal Regulations.
- Continually develop and improve our Quality Management System and compliance with regulatory requirements, thereby ensuring that we always strive to meet our Customers and Stakeholders current and future needs in an effective, efficient and compliant manner.
- Invest in our people and our facilities to achieve a quality culture and environment in which we are all proud to contribute and that delivers high quality products.
- Deliver our commitments to our Customers, on time and to specification.
- Develop our technology, through effective realization of our intellectual property, and partnerships with industry.
- Ensure that we maintain our high international reputation, through partnerships and collaborations.

Overseas GMP Certification Status

Plant	Certification Type		Countries and Organizations
Ochang plant	Drug Products	32 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, Paraguay, Pakistan, Peru, Philippines, Türkiye, the United States
		1 Organization	WHO
Hwasun plant	Drug Products	12 Countries	Taiwan, Malaysia, Vietnam, Ukraine, Iran, Indonesia, Thailand, Colombia, Philippines, Brazil, Argentina, Saudi Arabia
		1 Organization	WHO

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 2

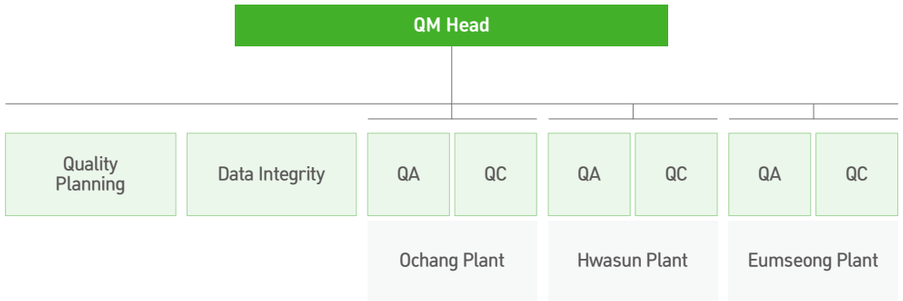
CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Biopharma

Quality Review by Management

Each month, the Quality Council reviews whether the quality system, policies, and procedures are operating as intended. Key quality indexes are reported to management, for decision-making. Risks considered to be critical, which may pose a threat to product safety, quality and efficacy etc., are reported to CEO through the escalation process. CEO, as the chair of Quality Management Review meetings, determines the suitability and effectiveness of the quality management system.

GC Biopharma Quality Management Organization



Inspection by Regulatory Agencies

GC Biopharma operates an integrated quality system under the leadership of the Office of Quality Management and has received certification from the Korea Ministry of Food and Drug Safety (MFDS) for all commercial manufacturing facilities. Beyond the Korean certification, we have attained manufacturing and quality control certifications from international regulatory agencies for five years including those in the U.S., Ukraine, Belarus, Taiwan, Brazil, Saudi Arabia, Egypt, Indonesia, Türkiye, Russia, Japan and WHO.

Domestic and International Regulations on Pharmaceutical Manufacturing

Domestic
· 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

International
· U.S.: The Food, Drug and Cosmetic Act, the Code of Federal Regulations · Europe: EU European Medicine Agency Pharmacovigilance legislation(Regulation(EU) No 1235/2010, Regulation(EU) No 1027/2012 etc) · ICH(The International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use) · World Health Organization Guideline · GMP (Good Manufacturing Practice) regulations of each country and enforcement decrees, enforcement rules, public notices, guidelines, etc.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 2

CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Biopharma

Contingency Plan/Mitigation Control System

GC Biopharma established business continuity strategy based on the evaluation of potential risks across all processes, including raw material procurement, production, and distribution. This ensures a sustainable supply of pharmaceutical products required for patients.

Overall resource management is executed through Enterprise Resource Planning (ERP) and integrated with other specialized systems. The demand and supply plan is confirmed every 18 months through Smart SCM and is updated weekly by reflecting any changes. Based on the production plan, we establish raw material procurement plan by using Material Requirements Planning (MRP) and key materials used in the productions are procured from dual vendors. Raw material inventory is managed through a system called Warehouse Management System (WMS). Additionally, we implement preventive measures through the maintenance program proactively on regular calibration of gauges connected to approximately 2,300 pieces of equipment, addressing any potential issues prior to occurrence.

For ensure production continuity, we maintain a pool of substitute operators for production and quality control analyses to enable shift work. Additionally, major production equipment and analytical instruments are connected to an Uninterruptible Power Supply (UPS) and a back-up generator to prevent any production suspension during power blackouts. For effective operation of the overall quality system, production and quality control documents are managed through an Electronic Document Management System (EDMS) and for any changes, events, or actions related to quality are documented in Quality Management System (QMS).

Automatic data back-up system is in place to protect key production and quality control data, enabling data retrieval in case of disasters. The data server is duplicated, and each back-up server is in physically separate location. Biopharmaceuticals, the key product of GC Biopharma, are produced across multiple manufacturing plants. Additionally, we have signed contract manufacturing agreement, allowing pharmaceutical products to be manufactured through Contract Manufacturing Organizations (CMOs) in addition to GC Biopharma's facilities.

During product distribution, the quality of the product is maintained by adhering to a cold-chain. In the case of unexpected events such as cold chain system failures or traffic accidents during distribution between the logistics center, depot and customer, transportation vehicles and drivers will be dispatched in accordance with the predefined procedures, and distribution will continue after the handover. Additionally, in response to unexpected increase in quantity of products to be distributed, qualified vehicles from the distribution contractor will be dispatched as needed.

Type of emergency cases and risks

Natural Disasters (Earthquakes)	Infectious Disease (Influenza)	Key equipment and Facility Breakdown	RISK
Discontinuation of Raw Materials supply	Utility Supply Disruption (including power outage)	Occurrence of operator vacancies	Transportation Accidents

Conducting Quality Control

GC Biopharma designs our product through Risk-based quality by design considering potential risks that may pose to the patients. Prior to manufacturing commercial product, we confirm that the high-quality products are produced consistently and pertinently through validation of equipment, analytical methods and processes. Additionally, contamination control strategies are established considering the balance between the designed product's safety[1] and efficacy[2] to prevent cross-contamination and reduce risks thereby ensuring the manufacturing of high-quality pharmaceutical products. GC Biopharma established quality specifications for all samples, including raw materials, in-process materials, APIs, finished products and stability test samples. Quality control tests are based on these established quality specifications and are conducted stringently throughout the entire pharmaceutical manufacturing processes. This ensures a top-notch production infrastructure, maintained through periodic sampling and specification tests. As of 2023, quality control tests have been conducted using approximately 1,900 test methods and 800 analytical instruments. Additionally, safe production environment, a foundation of pharmaceutical production is established through monitoring of production environment, water, gas, and clean steam systems. Non-viable particles, viable air samples, settle plates and contact plates are tested for the production environments and conductivity, microbial limit, total organic carbons (TOC), endotoxin, nitrate and visual inspection is tested for the utilities. All quality control tests are managed through Laboratory Information Management System (LIMS) and the test procedures and records are systematically and comprehensively stored and archived.

1) Safety test: Sterility, microbial limit, endotoxin, pyrogen, leakage, heavy metals, visible particulates, sub-visible particles, impurities, moisture content
2) Efficacy test: Content, potency osmolality, pH, conductivity, appearance, content uniformity, dissolution and disintegration

Impact Assessment[1] on Products and Services

Classification		Unit	2021	2022	2023
Impact Assessment on Health & Safety	Ratio	%	100	100	100
	Number of Products Assessed for Health & Safety Impact	EA	239	213	214
	Total Number of Products and Services	EA	239	213	214

1) All products undergo a quality evaluation and assurance process conducted by the Quality organization. Blood-plasma derived products and vaccines are released only after passing the national release tests mandated by the regulatory agencies of each respective country.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 2

CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Biopharma

Quality Management Training

GC Biopharma's employees, including regular employees and interns, as well as partner employees such as contract workers, consultants, and part-time employees, receive induction training followed by mandatory GMP training tailored to the characteristics of each site. Afterward, employees attain job qualification through job-specific training to perform their duties. Once qualified, employees are responsible for maintaining their 100% qualification status. The training status of employees is monitored by the employees themselves, their supervisors, and the GMP system. If an employee fails to complete the required training, their GMP qualification will be automatically revoked, and they will be restricted from performing their work.

An annual training plan is established to define and develop employee competencies. Onboarding programs are in place for new employees to help them adjust to their new roles, and periodic training sessions are conducted for all employees. Training methods include on-the-job training, e-learning, trainer-led sessions, and more. Additionally, when procedures change, training is provided to ensure that employees perform their tasks correctly and comply with GMP standards during the manufacturing of pharmaceutical products.

As of 2023, approximately 3,000 training subjects are available for around 1,000 key roles, all trainings are managed through an electronic Learning Management System (LMS). All training records and results are retained and utilized as evidence during regulatory agency inspections and customer audits.

2023 Annual GMP Trainings

(Unit : Persons, Persons, %)

Titles	Target Trainees	Trained	Completed	Completion Rate
GMP Regulation	Employees, partner employees	3,045	3,045	100
Quality Systems		2,932	2,932	100
Data Integrity		3,572	3,572	100
Hygiene Control		1,019	1,019	100
Microbiology		1,025	1,025	100
Aseptic Processes		313	313	100
Processes and analytical methods		782	782	100
Department job training		9,811	9,811	100

Good Distribution Practice

Stringent quality control is in place for distribution steps to provide patients safe pharmaceutical products. Particularly, biological drugs require particular caution due to their sensitivity to temperature. GC Biopharma established internal logistics center and systems to ensure the safe distribution of pharmaceutical products to patients, utilizing decades of accumulated know-how in global cold chain operation. Additionally, shipping processes have been validated to mitigate foreseeable risks. As a contingency measure, the logistics warehouse has been duplicated to ensure operational sustainability. Real-time distribution information, including temperature monitoring, is managed through integrated control system. In 2022, GC Biopharma was selected as a partner for national distribution project of Covid-19 vaccines and played a leading role in overcoming challenges during the pandemic.

Pharmacovigilance System

GC Biopharma maintains a pharmacovigilance system including a safety database, which adheres to global standards through standardized procedures. Additionally, Pharmacovigilance System Master File are maintained, which is established in compliance with European Good Pharmacovigilance Practice (GVP) regulations.

In 2016, GC Biopharma established an advanced pharmacovigilance system by implementing the Oracle Argus Safety Database, a most widely used database in the world. Subsequently, the data base was upgraded to the latest version and through qualification and validation of its specification and performance was conducted. The Validated Safety Database complies with ICH E2B (R3) guidelines and ensuring efficient and prompt management and submission of individual safety reports to regulatory authorities, as required by domestic and international regulations.

Organization Specific to Pharmacovigilance

GC Biopharma established an organization specifically dedicated to monitoring and analyzing safety information throughout the entire lifecycle of pharmaceutical products, from development to post-approval marketing.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
- Area 1. Extending Access to Healthcare
- Area 2. Customer Safety and Responsibility to Quality
- Area 3. Corporate Ethics and Compliance
- Area 4. Responsibility to Environment

General Disclosure ▾
Appendix ▾

AREA 2

CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Biopharma

Global Pharmacovigilance Agreement

GC Biopharma collects safety information on our products from around the world through safety information exchange agreement and pharmacovigilance agreements with partner companies and domestic and international business partners who may come into contact with the safety information of our products.

We ensure the timely delivery of safety information and compliance with government reporting through periodic reconciliations with each business partner. Partners are periodically verified that the operation of pharmacovigilance system is in compliance with regulations of each country. Additionally, we obtain regulatory information on pharmacovigilance of each country through international partners for enhancing our regulatory intelligence thereby ensuring prompt and effective responses to demands from international regulatory agencies. Particularly, when submitting individual safety information reports, recent safety reports and risk management plans and more, GC Biopharma, as the global product license holder, provides necessary materials to partners to comply with each country's regulation. Through such frequent and close communication with the partners, we support prompt and pertinent measures in the event of product related safety issues.

Internal Pharmacovigilance Audits

To ensure the high-quality of our advanced pharmacovigilance system, GC Biopharma periodically conducts internal audits. When an opportunity for improvement is identified in a procedure, we analyze for the root causes and implement corrective and preventive actions to establish and maintain procedures and systems that meet the stringent pharmacovigilance requirements of global regulatory agencies.

Conducting Benefit-Risk Assessments

Based on the reporting frequency and predictability of accumulated safety information in the safety database, GC Biopharma periodically searches for any signals. In compliance with domestic and international regulation, we regularly analyze and evaluate benefits and risks of our products, and submits latest comprehensive safety report to regulatory authorities. We make significant efforts to safe use of our products by establishing and implementing risk management plans designed to minimize product risks.

Safety Information Management

To ensure the safe usage of our pharmaceutical products, vaccines and medical devices, GC Biopharma collects safety information through unplanned collection systems such as voluntary reports, literature data, governmental reports, and through planned collection systems such as non-interventional/ observational studies. Our pharmacovigilance team controls the routes which the safety information is being collected and conducts periodic reconciliation to ensure all safety information is collected to pharmacovigilance team without any data omission. All safety information collected is accumulated in our safety database through standardized procedures on data collecting and processing based on the International Council for Harmonization (ICH) guidelines. (including data entry, comparison with original data, medical coding, medical assessment and final approval by the safety manager)

Pharmacovigilance Training

All employees of GC Biopharma are to complete pharmacovigilance training within 2 months from employment and undergo refresher training sessions more than once a year thereby fulfilling employees' obligation to immediate reporting of any safety information regarding our products to our pharmacovigilance team upon recognition. Additionally, employees with job characteristics those are likely to obtain safety information, receives additional face-to-face or remote pharmacovigilance training sessions to ensure that all safety information is reported without any omission.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Policy on Responsible marketing, and advertising, and ethical promotion

GC Biopharma provides pharmaceutical information based on the accurate and scientifically proven contents, in compliance with relevant laws and regulations. This policy is implemented through our Code of Conduct and regulations on interactions with healthcare professionals (HCPs). Furthermore, we established CP operation procedure to govern printed materials used in the Marketing and Sales that contain pharmaceutical information to be reviewed by academic team prior to production.

Take a look at our regulations on interactions with healthcare professionals

Click to read GC Biopharma's Code of Conduct

Audit/control procedures on responsible marketing for Pharmaceutical Information

Request to review medical regulations and dossiers — Marketing Team

↓

Review of medical and pharmaceutical regulations and dossiers — Academic team

↓

Request for legal review — Marketing team

↓

Legal review — Ethic Management team

↓

Final Approval — Decision-makers

↓

Utilize the information as external materials

Trains employees on responsible marketing and advertising practices

GC Biopharma conducts biannual compliance training sessions on sales activities, including product presentations, for employees in sales and marketing each year. In 2023, all 418 employees in sales and marketing participated in the training. Additionally, for employees in sales and marketing who interact with healthcare professionals (HCP), training sessions on 'Regulations on Interactions with Healthcare Professionals (HCP)' and 'Guidelines and Case Studies on Pharmaceutical Advertisement' are conducted at least once a year to ensure proper promotional activities.

Course Name	Date	Description
Periodic Compliance Training	Biannually	Applicable laws and internal regulations including Fair Trade Act, Pharmaceutical Affairs Act and Fair Competition Act
Guidelines and Case Studies for Pharmaceutical Advertising	November 6, 2023	Applicable laws and guidelines, case studies for pharmaceutical advertising
Regulations for Interactions with Healthcare Professionals	May 2, 2023 to May 26, 2023	Applicable scopes and principles

Violation of Relevant Marketing Regulations on Product, Service and Labeling

Classification		Unit	2021	2022	2023
Violations	The Number of actions leading to raids, seizures, arrests or criminal charges related to counterfeit drugs	Cases	0	0	0
	Total monetary loss caused by legal process related to false marketing	KRW Million	0	0	0
	The Number of incidents resulting in fines and penalties for regulatory violation	Cases	0	0	0
	The Number of incidents resulting in warning for regulatory violation	Cases	0	0	0
	The Number of incidents on violating Voluntary Code	Cases	4[1)]	1[2)]	0

1) This can be found in the announcement on recall of pharmaceuticals/medical devices (in GC Biopharma website) (Product: WoohwangCheongsimwon Suspension, Cell-cultured Japanese Encephalitis Vaccine, Neocande, Hyalobarrier Gel Endo)

2) This can be found in the announcement on recall of pharmaceuticals/medical devices (in GC Biopharma website) (Product: TyrannoGold Plus Chewable Tablets)

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 2

CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Cell

Quality Management System

To ensure quality assurance and safety, GC Cell conducts quality management activities encompassing the entire processes including resource management on facilities, equipment, and personnel, sample collection and testing results, product release, and handling complaints, in compliance with the 'Good Manufacturing Practice (GMP) for Advanced Biopharmaceuticals' and 'Good Manufacturing Practice (GMP) for Pharmaceutical Products'. Quality Management is operating accordingly with our document system based on GMP standards that includes Quality Manual, Quality Standards, Managing Standard Operating Procedures, and Working Standard Operating Procedures.

Quality Assurance

GC Cell undergoes regulatory inspections by Ministry of Food and Drug Safety (MFDS) at the frequency of every three years adhering to the Pharmaceutical Inspection Co-operation Scheme (PIC/S) regulations on manufacturing facilities of investigational product and Immuncell-LC. In March 2023, we successfully renewed our GMP compliance certification. Additionally, we have maintained ISO9001 QMS certification since 2017 to assure the service quality of distribution step for main raw material and product.

Furthermore, we adhere to and manage our operation to be compliant with US FDA guidelines for overseas CDMO businesses and we continuously enhance our quality management through quality assessment and system audits from our clients.

GMP compliance certification

ISO9001 QMS certification

Organization Specific to Quality Management

GC Cell operates Quality Management System by assigning quality specialists throughout entire stages of R&D, manufacturing and distribution of pharmaceutical products in accordance with GxP[1] standards.

1) GxP(Good X Practice) is a good practice applied to various regulated industries including pharma and medical devices and X can represent concepts such as M for Manufacturing, S for Supplying, C for Clinical, and L for Laboratory etc

Contingency Plan/Mitigation Control System

Through risk assessments of processes, facilities, and operator safety that may impact the production of Immuncell-LC, GC Cell identifies abnormal and emergency situations. For abnormal situations, such as deviations, control measures and improvement metrics are established and managed periodically. Emergency situations are handled through a preparedness and response system. In 2023, the emergency situations identified through risk management included hazardous material leaks and fire accidents in the Cell Center. Each scenario has been tested once through simulations to assess the effectiveness of the emergency response system.

Conducting Quality Control

GC Cell continues to make efforts to ensure quality safety for customers to use our products safely by updating risk management plans and safety reports through regular checks and evaluations on safety information.

All raw materials necessary for pharmaceutical manufacturing are qualified and supplied through approved suppliers. Upon receipt of raw materials, internal quality control tests are conducted to ensure only approved materials are used in the manufacturing processes. Additionally, before the product release, internal quality control tests on the products are conducted ensuring only products meeting quality specifications are released under the approval of head of quality assurance.

In 2023, total of 10,025 batches of 'Immuncell-LC' have been released (approximately 835 batches per months). Each batch was released through analytical methods verified by the Ministry of Food and Drug Safety (MFDS) and administered to patients. The quality control tests conducted by QC department on raw materials and products are regulated based on the specifications and test methods listed in the 'Product License for Manufacturing (Importing) Advanced Biopharmaceutical Products' and entire steps from test request to test result determination adheres to the predefined procedures.

Impact Assessment on Products and Services

Classification		Unit	2021	2022	2023
Impact Assessment on Health & Safety	Ratio	%	100	100	100
	The Number of Products Assessed for Health & Safety Impact	EA	1	1	1
	Total Number of Products and Services		1	1	1

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 2

CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Cell

Quality Management Training

GC Cell conducts mandatory training sessions as per annual training plan for all employees in production, quality control activities and their support tasks to enhance production capabilities and GMP operation and management. The effectiveness of the training is evaluated through theoretical assessment.

The training system is comprised of regular training, induction training, job-specific training and special job training[1)].

Regular training is a mandatory training conducted at least quarterly for all employees within the GMP organization, utility managers and IT managers. The regular training includes manufacturing and quality control of pharmaceutical products, GMP operation and regulations, data integrity management, and aseptic process guidelines (actions). Induction training is intended for new employees in each department and the induction training includes GMP orientation and mandatory courses selected by the Quality assurance department. Job-specific training is conducted to perform a new task independently or to perform changed tasks. Completion of these training sessions are required for the job qualification. Special job training is comprised of theoretical education and practical training conducted prior to job qualification of a special job roles. This training takes place in accordance with Standard Operating Procedures on job qualification for special job roles. Additionally, trainings for change, spontaneous needs and contract job roles are offered as required.

1) Special job role: Aseptic operators, quality control managers (analysis), visual inspectors, sample collecting operators, and in-process control (IPC) operators

GMP Trainings

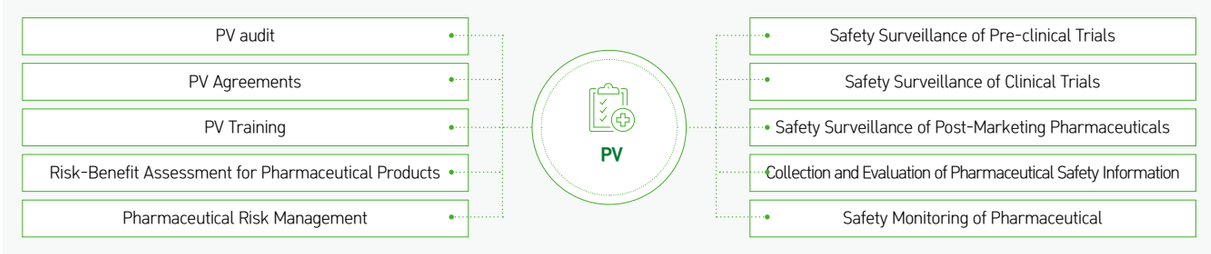
(Unit : Times)

Training Types	2021	2022	2023
Regular trainings for all employees	4	6	7
Regular trainings within the department	37	37	40
New Employees trainings	32	16	14
Job-specific trainings	156	230	141
Change trainings	462	592	452
Other trainings	237	420	275
Total	928	1,301	929

Pharmacovigilance System

GC Cell is in compliance with reporting obligations by related to adverse events associated with pre/post-marketing and investigational products thereby adheres to pharmacovigilance regulations of regulatory agencies. We continue to develop and revise our Standard Operating Procedures (SOP) to manage safety information in more systematical manner. Additionally, GC Cell is enhancing PV system and PV quality management procedures to meet both domestic and international regulations which complies with European Good Pharmacovigilance Practice (GVP) and ICH guidelines.

Safety Surveillance for Pharmaceutical Product Lifecycle



Pharmacovigilance Organization

GC Cell operates a Pharmacovigilance team (PV team) for monitoring, analysis and evaluation of safety information over the entire lifecycle of pharmaceutical products from investigational products under development to post-approval commercialized products.

Management of Safety Information

To ensure the safe usage of our pharmaceutical products, particularly anticancer drugs, GC Cell collects safety information through unplanned collection systems such as voluntary reports, literature data, and governmental reports, as well as through planned collection systems such as non-interventional/observational studies. Additionally, based on our internally developed safety information reporting system, adverse events related to investigational products under development and post-approval commercialized products can be easily reported. The collected safety information is managed to be utilized as significant data for safety analysis through risk-benefit assessments.

Pharmacovigilance Training

GC Cell conducts mandatory training sessions in pharmacovigilance annually for all employees. Considering the characteristics of advanced biopharmaceuticals, we offer pharmacovigilance training in video form. Through the pharmacovigilance training, we aim to enhance understanding of drug safety information and its reporting procedures for all employees including new employees.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 2

CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Cell

Trains employees on responsible marketing and advertising practices

GC Cell conducted training sessions on ethics and compliance for marketing and communication departments to ensure compliance to law. To verify compliance with fair competition codes, advertising and promotional activities are carried out in consultation with our CP team as part of our chain of approval. Training has been conducted to Sales division on 'CP Guidelines and Pharmaceutical Fair Competition Code' for emphasizing the importance of responsible marketing.

Violation of Relevant Marketing Regulations on Product, Service and Labeling

Classification		Unit	2021	2022	2023
Violations	The number of actions leading to raids, seizures, arrests or criminal charges related to counterfeit drugs	Cases	0	0	0
	Total monetary loss caused by legal process related to false marketing	KRW Million	0	0	0
	The number of incidents resulting in fines and penalties for regulatory violation	Cases	0	1[1)]	0
	The number of incidents resulting in warning for regulatory violation	Cases	0	0	0
	The number of incidents on violating Voluntary Code	Cases	0	0	0

1) Administrative action due to 'failure to submit self-recall/disposal' and 'noncompliance to operator SOP' on nonconformance in quality specification (sterility test).

GC Group

Purchasing Policy: GC Green Book

To uphold responsible supply chain practices, GC Group established the 'GC Green Book' on GC Purchase Regulations, which incorporates the common goals and principles set by PSCI[1)] and outlines published policies and regulations on purchasing activities for partners of all affiliates. Through this, we expressed our commitment to co-prosperity with our partners by promoting proper 'Purchasing Guidelines' and defining the code of conduct that our partners should follow through the 'Code of Conduct of Partners'. This initiative helps us to manage our operation in pursuance of co-prosperity with partners and to establish and maintain sustainable relationships with partners based on fair deals and enhanced competence.

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

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 Purchase Regulation

Mission	· Sustainable profits for GC through co-growth with partners
Vision	· Contribution to organizational goals to become a global leader
Core Value	· Clean and transparent deals based on basic principles, Improving competitiveness and purchasing capability
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: Substance over form, action over reporting, practicality over justification

Classification	Contents
ESG Supply Chain Management	· Advancement in purchasing policy and partner management systems · Enhancing competitiveness in supply chain through partner ESG performance evaluation
Co-growth With Partners	· Listening to VOC through regular and ad-hoc partner meetings · Minimizing potential risk by sharing the code of conducts with partners
Eco-friendly Purchasing	· Identifying environmental hazards in advance and share with stakeholders · Prioritize usage of eco-friendly materials or products from environmentally responsible companies.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 2 CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Group

Compliance with the Nagoya Protocol[1)]

GC Group supports the Nagoya Protocol, which seeks to preserve biodiversity and 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

Supply Chain Governance

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

Major Area	Procurement Department	Quality Management Department
Supply Chain Selection	· Evaluate partner registration · Change partner types · Approve partner registration · Provide partners the paper audit documents	· Audit partners for quality · Provide evaluation results
Supply Chain Evaluation	· Manage partner performance and perform comprehensive evaluation in Quality, Cost, Delivery, Risk, Management (QCDRM) perspective · Comprehensive evaluation and final decision-making on partner entry and exit · Guiding partners in improving capabilities	· Evaluate in quality perspective and respond to GMP audits · Respond to quality-related issues and guide in quality improvements

GC (Holding Company)

Revision of GC Purchasing Policy

In July 2023, GC (Holding Company) issued and distributed revised version of GC Green Book. This edition encompasses partner evaluation and management standards, the scope of the purchasing activities, details on material types of affiliates, and purchasing regulations that incorporate ESG management evaluation criteria. Additionally, compliance-related content, including the Supplier Payment Linkage System, will be included in an update scheduled for 2024.

GC (Holding Company) Purchasing Guidelines

GC (Holding Company)
· Compliance to Ethics Norm
· Fair Trade
· Sustainable Purchasing

Assessment of Supply Chain

GC (Holding Company) has established a fair and consistent operating system for the selection, support, and compensation of partners through regular assessmentsbased on with in-house evaluation standards.

The partners subjected to evaluation are the top 75 suppliers, representing 90% of the total domestic and international purchase amount. The evaluation method consists of a basic assessment (weighted at 80%) and an ESG assessment (weighted at 20%).

Based on the evaluation results, support activities, including environmental safety inspections for contractors and partners, are conducted. In 2023, 4 out of 75 partners failed to meet the requirements, and corrective actions were recommended. These partners have been informed that they will be re-evaluated in 2024. Through such evaluation activities, we provide multifaceted support to our partners, encouraging them in continuous improvement and enhancing their capabilities to achieve mutual prosperity.

For the supply chain environment domain, we manage supply chain environmental risk through our ESG purchasing regulations. For the labor domain, we actively encourage partners to follow principles by presenting partner labor related items within the 'Human Rights and Ethics Code' of our partner ethics compliance. Furthermore, we expand our partner evaluation scope to include quality and environment, and social aspects that directly impacts our reputations on GC affiliates' products and services.

Items for Supply Chain ESG Risk Assessment

Management of Parner's ESG Activities

GC (Holding Company) aims to supply highly reliable products while minimized the potential for ESG related to environmental impact, quality, safety, human rights and ethics. To achieve this, we have developed an in-house ESG evaluation management system for partners to systematically assess and manage their ESG risk and status. Starting from 2024, we will distribute online training materials to our partners, to actively conduct training activities.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
- Area 1. Extending Access to Healthcare
- Area 2. Customer Safety and Responsibility to Quality
- Area 3. Corporate Ethics and Compliance
- Area 4. Responsibility to Environment

General Disclosure ▾
Appendix ▾

AREA 2

CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Biopharma

Purchasing Policy

GC Biopharma declared policy and regulations on procurement through 'Green Book' in 2010 and its 'Purchasing Guidelines 2.0' in 2020 for responsible supply chain practices in 2020.

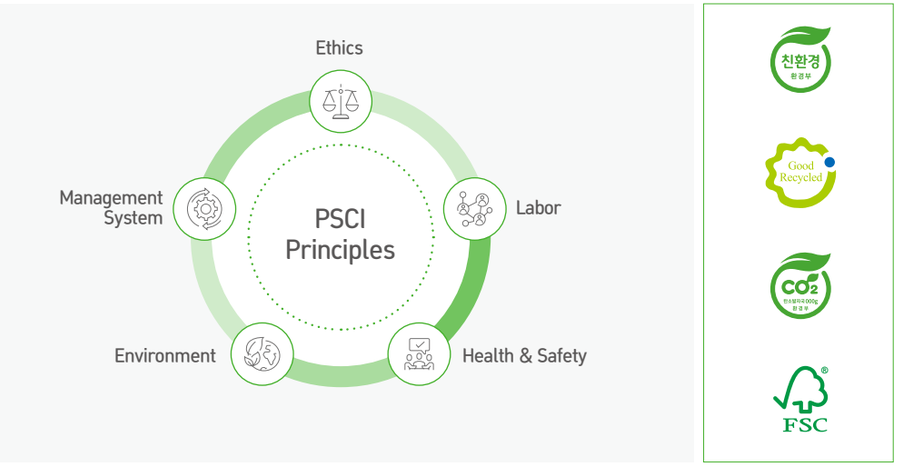
Through this framework, we declared our will achieve legal compliance, social responsibility, green purchasing, fair trade and mutual prosperity with partners. Our annual Partners' Day event disseminates our action guidelines including communication with partners and training on Fair Trade Act. Through these efforts, we are committed to practicing co-prosperity management by building sustainable relationships with our partners, promoting fair trade and supporting competency building thereby achieving mutual growth.

Additionally, we aim to comply with the PSCI[1] principles on ethics, labor, health and 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 established standards for eco-friendly procurement of products and services in 2023. We contribute to reducing environmental impact of our supply chain by using FSC certified materials and prioritizing government-certified green products.



Assessment of Supply Chain

GC Biopharma evaluates suppliers regularly on their price, quality, delivery, production, general management, technical skills, business cooperation and production environment. Based on the results of the evaluation, follow-up environmental safety inspections and supporting activities[2] takes place. Among the evaluation criteria, quality area that is directly related to quality of the pharmaceutical products, Quality Assurance department takes the lead. The Quality assurance developed supplier quality management policies in accordance with the Corporate Quality Manual (CQM) and further developed supplier evaluation system through comprehensive supplier management and supplier audits.

Considering various factors, including supply scope and product impact, risk assessments are conducted. Supplier evaluations are then carried out based on the results of these risk assessment. When evaluating suppliers of materials that makes direct, indirect, or no contact with the pharmaceutical product, quantitative assessments are conducted in the following areas: quality systems, equipment and facility systems, material systems, production systems, packaging and labeling systems, and laboratory systems. Risk levels are calculated based on severity and likelihood. Various audit methods are utilized including site visits, remote audits and desk audits. For suppliers with high risk levels, on-site audits are conducted. The initial supplier qualification, including the audit, evaluates whether the supplier's quality level meets GC Biopharma's standards.

Continuous monitoring on suppliers take place through periodic re-evaluation, audits and test results review on supplied materials. Additionally, quality agreements are established to ensure notification of any quality changes or deviations. Feedback and improvement suggestions are provided to suppliers to encourage continuous improvements. We support suppliers in multiple ways, to enhance their capabilities and to promote mutual growth.

2) Products and services provided by the supplier: Raw materials, contract manufacturing and testing, maintenance, and subcontracting.

Supply Chain Evaluation Process

Initial Assessment	Periodic Assessment	For-cause Assessment	Corrective Action and Improvement, Monitoring
· Supplier Qualification on new supplier	· Periodic requalification on qualified supplier	· Conduct For-cause assessment on partners for nonconformities that seriously impacts product quality or product complaint received due to supplied items.	· Share reviewed improvement requirements · Encourage continuous improvements and provide trainings

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 2

CUSTOMER SAFETY AND RESPONSIBILITY TO QUALITY

GC Biopharma

Supporting in Expansion of Supply Chain ESG Management

GC Biopharma manages and supervises sustainability of the partners through our own quality management policy and evaluation process for the entire production steps. To enhance the awareness of the members of the partners, we periodically check whether the internal training has been conducted to adhere to Good Manufacturing Practice (GMP). Additionally, we conduct training sessions to suppliers and contractors in the same manner as GC Biopharma employees in accordance with annual training plan. The training sessions is comprised of GMP mandatory training, intensive reading, group training and On-the-Job Training (OJT). Services are only provided by supplier employees who completed the training. In the ESG domain, we provide procurement direction to suppliers through our ESG purchasing policy and introduces ESG evaluation criteria to promote ESG management practices.

Partner Application of ESG Code of Conduct

Classification	Unit	2021	2022	2023
Ratio	%	100	100	100
Number of Partners	Companies	169	167	168
Total Number of Partners	Companies	169	167	168

GC Cell

Supply Chain Evaluation and Management

GC Cell evaluates and verifies whether all suppliers of GMP raw materials comply with documented procedures in accordance with manufacturing and quality control standards. We register and manage suppliers of raw materials used in GMP-controlled batches.

Each December, based on the results of previous audits, supplier monitoring, and annual evaluations, we establish the next year's supplier evaluation plan and conduct evaluations accordingly.

During on-site audits of suppliers, any violations of relevant regulations or activities that may result in defects in product quality or service are promptly identified and corrective actions are requested immediately. In cases where on-site audits are not feasible, we conduct desk-top audit by reviewing the supplier's self-assessment of their quality system, corrective actions from previous audits and any changes that have been implemented. Issues found during the audit are classified as Critical, Major and Minor, and corrective actions are required and the completed corrective actions are reviewed and evaluated as 'satisfactory', 'conditionally satisfactory' and 'unsatisfactory'.

Quality agreements are signed with suppliers to define the responsibilities and obligations of each party's quality organization involved in the products and services. Additionally, evaluation procedures for safety, health, and environmental standards are followed during the selection of suppliers. Suppliers are evaluated biannually to ensure proper management on their adherence to safety, health, and environmental standards, as well as GC Cell's procedures.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
- Area 1. Extending Access to Healthcare
- Area 2. Customer Safety and Responsibility to Quality
- **Area 3. Corporate Ethics and Compliance**
- Area 4. Responsibility to Environment

General Disclosure ▾
Appendix ▾

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 uphold our ethical practices reflecting our respect for life to ensure fairness, transparency, and reliability.

Corporate Ethics and Compliance

* Details of our activities related to the 17 UNSDG

Prevention of Unethical/Corrupted Activities

GC · GC Biopharma · GC Cell

Our Approach

We established an 'Ethical Standard' as a basis for correct behavior and value judgment that all employees must comply with. We strive to adhere to these standards, promote a continuous culture of ethical management, and prevent potential risks through regular audits.

Positive Impact

Transparent and incorruptible ethical management, including bribery prevention and anti-corruption efforts, contributes to sustainability and stakeholder trust. It also helps maintain a balance between the economical and social interests of various stakeholders.

2023 Our Actions

GC (Holding Company)

Conducted 5 regular audits and 9 sporadic audits and corrective actions have been implemented. Obtained ISO37301 (Compliance Management System) certification (September 2023)

GC Biopharma

Training session on Anti-corruption and compliance conducted for entire employees including contract workers. Processed 10 cases received from ethical management whistleblowing system. Identified and evaluated total of 1,087 compliance risks

GC Cell

Obtained integrated certification of ISO37301 (Compliance Management System) and ISO37001 (Anti-bribery management system) (April 2024). Implemented ethical management practice programs such as 'Ethics Compliance in Daily Life', 'Ethics Quiz', and 'My Personal Integrity Score'

Violation of Research Ethics

GC Biopharma · GC Cell

Our Approach

To protect safety and rights of people, animals and environment during pharmaceutical development, a dedicated management and oversight department has been established. This department continuously monitors regulatory compliance and ensures the transparency and reliability of research results.

Negative Impact

Violations on research ethics during the pharmaceutical development process can directly impact public health and development of high-quality medicines as well as harming human and animal rights.

2023 Our Actions

GC Biopharma **GC Cell**

Operating the Institutional Biosafety Committee (IBC), and the Institutional Animal Care and Use Committee (IACUC)

GC Biopharma

AAALAC International certification for the animal laboratory facility

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

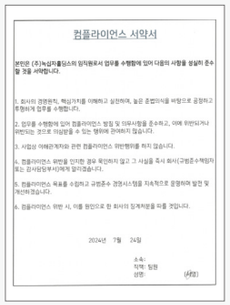
AREA 3

CORPORATE ETHICS AND COMPLIANCE

GC Group

Ethical Management Policy: GC Ethical Standards

GC Group declared 'Ethical Standards' Shortcut, approved by the CEO in May 2023, as the foundation for proper behavior and value judgment that all employees must follow. Based on these standards, we promote and conduct various activities. GC Group's 'Ethical Standard' is intended for all employees, as well as third parties including partners, agents, temporary employees and contractors. All employees of GC Group are required to sign the 'Pledge for Ethics' annually to gain a thorough understanding of the 'Ethical Standards' and to actively participate in the company's commitment to ethical management. GC Group's 'Ethical Standards' are regularly reviewed and revised as necessary to reflect timely issues. Revisions are approved by the CEO.


컴플라이언스 서약서

Pledge for Ethics

- All employees sign 'Pledge for Ethics' each year
- Pledges to adhere to the Code of Ethics and support the company's ethical management

Ethical Management Whistleblowing System

GC Group operates a whistleblowing system for unethical behavior to reinforce ethical management. Stakeholders such as employees, partners can use 'Ethical Management Whistleblowing' Shortcut channel on the website without any restrictions on time and place. The unethical behaviors subjected for reporting include bribery, personnel solicitation, fraud, workplace sexual harassment and bullying, power abuse, and unfair practices. The reporting can be made anonymously, and the identity of person reporting is protected in accordance with our 'Internal Reporting System Regulation'. Shortcut

Reporting Process

Reporting and receiving (Through reporting channel website)	· Anonymous Reporting · Reporting Channel ⟶ K- Whistleblowing Center Shortcut ⟶ Counselling Center
Review reports, Decision-making on investigation	· GC (Holding Company): Audit & Consulting Team
Investigate and respond to unethical practices	· Correction Order or take legal action through judicial authorities to employees involved, depending on the severity. · Respond to reporting channel with the results
Follow-up Actions	· Conduct training and monitoring for all employees to prevent recurrence

Spreading the Culture of Ethical Management

GC Group conducts training and promotional activities for ethical management by posting training materials (Ethical Management Briefs) on the intranet shared with affiliates, including GC (Holding Company), GC Biopharma and GC Cell.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 3

CORPORATE ETHICS AND COMPLIANCE

GC (Holding Company)

Ethical Management Policy

GC (Holding Company) is fostering ethical awareness among our employees through establishing GC Ethical Standard and Charter of Human Rights. GC Ethical Standard is accessible to all employees through the company intranet (G-net).

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

1. **Respect to Customer** We will do our utmost to happiness and satisfaction of our customers.
2. **Protection of Company and Investors** We enhance corporate value and protect shareholders and investors.
3. **Respect to Employee** We encourage growth of our employees and contribute to improve their quality of life.
4. **Fair Trade** We respect the order of free competition market and lead the development of healthy pharmaceutical industry.
5. **Anti-corruption** We prevent corruption such as bribery and improper advantages and foster a clean corporate culture.
6. **Environmental Preservation** We make every effort to preserve the environment and comply with environmental protection laws and regulations.
7. **Social Responsibility** We fulfill our social responsibilities in contribution to the development of the nation and local communities.

GC Charter of Human Rights We respect the human rights of all stakeholders, including employees, in all our management activities.

Ethical Management Organization

Audit & Consulting Team in GC (Holding Company) operatesas an organization dedicated to ethical management. We strive to establish a culture of ethical and compliance management. In September 2023, we obtained ISO37301 (Compliance Management System) certification, and we report to our Board of Directors on our activities on compliance support and ISO37301 (Compliance Management System) certification renewal.

Protection of Whistleblowers

GC (Holding Company) receives reports on unethical conducts and violations to law through the internal reporting system and processes these reports in accordance with the predefined procedures. The internal reporting system ensures the anonymity of internal and external whistleblower and provides legal protection to the whistleblower through entrusting third party contractor and operating IP tracking blocking system.

Ethical Management Whistleblowing System

GC (Holding Company) received a total of zero case reports in 2023.

Reports in Whistleblowing System[1)]

Classification		Unit	2021	2022	2023
Reports	Process Rate	%	100	100	100
	Number of Reported	Cases	0	0	0
	Number of Processed	Cases	0	0	0

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

Inspecting Ethical Awareness of Employees and Internal Audits

Each year, regular and occasional ethical awareness inspections are conducted, and the results are utilized for improvement. For Issues that require further actions are resolved through consultation with related departments. Regular ethical awareness inspection is conducted together with Audit team's regular audits for compliance and ethical management. In 2023, total of 5 regular audits were conducted.

Results of Audits Performed

2021	2022	2023
Regular (6 cases), Occasional (17 cases)	Regular (7 cases), Occasional (14 cases)	Regular (5 cases), Occasional (9 cases)

Spreading the Culture of Ethical Management

GC (Holding Company) conducts various promotional activities to foster the culture of ethical management. Through activities include quizzes, ethical flower pot events, distributing promotional materials, creating posters, and promoting internal reporting system. These initiatives encourage employees to actively participate in corporate ethical management efforts.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Ethical Management Policy

GC Biopharma established eight Codes of Conduct based on our GC Ethical Standards and GC Charter for Human Rights aimed at customers, corporations and investors, employees, partners, and local communities. Alongside the 'Code of Conduct' approved by CEO in April 2023, we have introduced additional policies on 'Anti-Corruption,' 'Gifts, Entertainment, and Hospitality,' 'Conflict of Interest,' and 'Third-Party Management Regulations'. These policies have been published on the company website, and distributed to our employees and stakeholders. To facilitate understanding, we included examples and Q&A sections. Continuous trainings on the Code of Conduct and these policies are provided.

Ethics Management Organization

GC Biopharma's board of directors has appointed a compliance officer (responsible for anti-corruption activities and compliance) and a compliance supporter to implement ethical management and efficiently operate corporate compliance policies. Regular ethics and compliance training sessions are conducted to ensure adherence to compliance control standards. Additionally, we have an ethics management team that performs practical ethical management tasks, supporting the compliance officer and compliance supporters under the direct supervision of the CEO.

Protection of Whistleblowers

GC Biopharma receives reports on unethical conducts and violations to law through the internal reporting system and processes these reports in accordance with the predefined procedures. The internal reporting system ensures the anonymity of internal and external whistleblower and provides legal protection to the whistleblower through entrusting third party contractor and operating IP tracking blocking system.

Ethical Management Whistleblowing System

In 2023, a total of 10 cases were reported through the anonymous reporting system. All cases were handled in accordance with the operating regulations Shortcut of the internal reporting processes such as investigations, transfer to other departments, requests for additional data.

Reports in Whistleblowing System[1)]

Classification		Unit	2021	2022	2023
Reports	Process Rate	%	100	100	100
	Number of Reported	Cases	10	5	10
	Number of Processed	Cases	10	5	10

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

'Ethics Day' Campaign for Executives and Employees

GC Biopharma continuously operates a program that demonstrates our commitment to ethical management, encourages ongoing interest, and promotes active participation of employees in establishing a corporate culture that adheres to ethics and compliance. We are promoting the instillation of global-level ethical awareness through various campaigns, such as 'U-Quiz E (Ethics) Quiz' quiz competition using the metaverse, 'Ethical Plant' and 'Sand Art' event, 'Ethical Rice Cake Sharing', and production of Code of Conduct promotional videos to enhance employees' ethical awareness.

Ethics Training

GC Biopharma continuously conducts ethics trainings for all employees, including contract workers, to implement the company's ethical values.

Ethics Training Completion in 2023

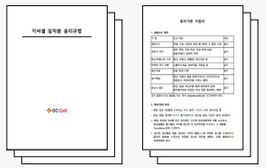
Training Name	Training Target	Target No.	Completion No.	Completion Rate
Ethical Management and Anti-graft Law	All employees including contract workers	2,235persons	1,847persons	82.6%

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

Ethical Management Policy

GC Cell established ethical norms on 'Presentation of Ethical Conduct Standards', 'Prohibition of Receiving Gifts and Entertainment', and 'Reporting System for Convenience Offers' based on our GC Ethical Standards and GC Charter for Human Rights. These ethical norms are approved by the CEO and published on the company intranet page. Additionally, we publicly announce our responsibilities and obligations through 'Statement of Ethical Management' Shortcut towards our customers, employees, shareholders and the national and local communities.



Ethical norms

Ethical Management Organization

To implement ethical management, GC Cell established a Compliance Team under the direct supervision of CEO and appointed a compliance officer through the board of directors. The Compliance Committee meets every quarter to develop and implement policies and regulations to achieve ethical management goals.

Protection of Whistleblowers

GC Cell ensures the anonymity of internal and external whistleblower and provides legal protection to the whistleblower through entrusting third party contractor and operating IP tracking blocking system.

Ethical Management Whistleblowing System

In 2023, a total of 1 case was reported through the anonymous reporting system. The case was handled in accordance with the operating regulations of the internal reporting processes such as investigations, transfer to other departments, requests for additional data.

Reports in Whistleblowing System[1)]

Classification		Unit	2021	2022	2023
Reports	Process Rate	%	100	100	100
	Number of Reported	Cases	1	1	1
	Number of Processed	Cases	1	1	1

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

Spreading the Culture of Ethical Management

GC Cell conducts programs and trainings to all employees including contract workers for instilling ethical management culture. In 2023, four ethical management practice events took place including 'Ethics Compliance in Daily Life', 'Ethics Quiz', and 'My Personal Integrity Score', participated by 1,087 employees (including repeat participants).
Additionally, themed trainings are conducted on 'Proper Job Ethics' and 'Creating a Corruption-free Organization' and job-specific ethics trainings for each employee level are conducted to include new hires and marketing representatives.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Group

Compliance

GC Group implements essential compliance management subjects that must be adhered to in all business sectors by establishing eight mandatory compliance unitsconnected to the GC Ethical Standards and Charter of Human Rights. Each unit contains all potential issues that may arise in all business sectors.

Eight Mandatory Compliance Units

Respect to Customers
- Internal Issues
- Major Stakeholders: Customers

Protection of Company and Investors
- Internal and external issues
- Major stakeholders: Investors, independent directors etc.

Respect to Employees
- Internal Issues
- Major Stakeholders: employees

Fair Trade
- External Issues
- Major Stakeholders: Partners, CROs

Anti-corruption
- Internal and External Issues
- Major Stakeholders: Government workers, HCPs

Environmental Preservation
- External Issues
- Major Stakeholders: Environment conservation organizations, government

Protection of Human Rights
- Internal and External Issues
- Major Stakeholders: Customers, employee, human rights organizations

Social Responsibility
- External Issues
- Major Stakeholders: Relevant ESG

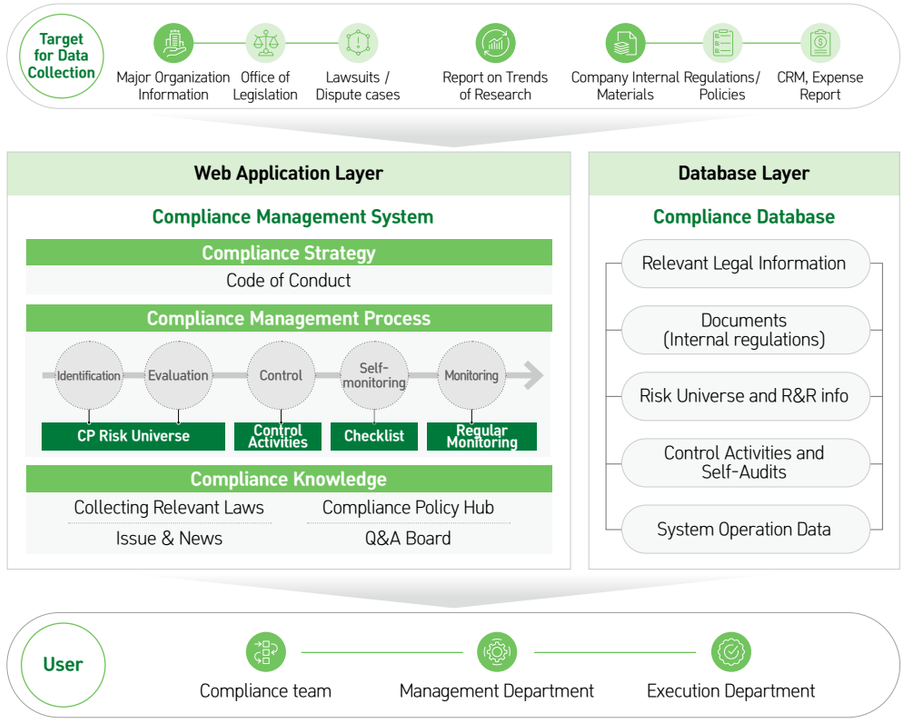
Internal Control Governance

The GC Group's Compliance Organization reports major compliance management activities and future plans to the CEO. Major agenda reported in 2023 include 'Plans and Reports on Introducing ISO37301 (Compliance Management System)', and 'Report on Compliance Management Review'.

Compliance Program

GC Group oversees management and supervision to ensure adherence to fair trade compliance standards. GC (Holding Company), GC Biopharma and GC Cell collaborate to promote fair and transparent competition by establishing additional specialized compliance organizations and implementing comprehensive compliance program and anti-corruption systems. All marketing and sales activities are conducted through prior consultation and review by Compliance department of each affiliate. Robotic Process Automation (RPA) is utilized to monitor for any omissions in corporate card usage and expense report monthly. Additionally, we post-evaluate to ensure no violation to relevant laws during marketing and sales activities.

GC Group Compliance Management System



Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC (Holding Company)

Anti-Corruption Policy

GC (Holding Company)'s 'Anti-Bribery and Corruption Policy' and regulation on fair trade compliance included in the Ethical Standards posted on the intranet. We continuously monitor compliance to laws and regulations through special audits (based on reports received) or regular audits, (including Ethical Standards). In 2023, we obtained ISO37301 (Compliance Management System) certification.

Conducting Preventive Audits and Compliance Risk Assessments

GC (Holding Company) conducts a preliminary evaluation of risks present in each affiliate, including fair trade and unfair competition risks. Based on the assessment results, we establish annual audit plan and conduct preventive audits. To ensure that the process is continuously managed, we request for corrective actions to verify that the preventive audit findings are addressed in practice.

Corruption Risk Assessments

Classification		Unit	2021	2022	2023
Anti-corruption Risks	Ratio of Workplaces	%	100	100	100
	Number of Workplaces	Place(s)	1	1	1
	Total Number of Workplaces	Place(s)	1	1	1

Training on Anti-Corruption

GC (Holding Company) produces and distributes 'Ethical Management Briefs', an anti-corruption training publication to instilling ethical awareness for employees. Following the certification of ISO37301, five dedicated compliance management staffs from GC (Holding Company) completed internal auditor training from the Korea Compliance Initiative and conducted dissemination training for all employees. Additionally, we require partners (contractors) to sign compliance and ethical conduct pledge and conduct due diligence using checklists that contains anti-corruption contents.

Training on Anti-Corruption

Classification		Unit	2021	2022	2023
Training for staff members in Anti Corruption task [1]	Training Completion Rate	%	100	0	100
	Training completed	Persons	14	0[2]	5
	Training Target	Persons	14	0[2]	5

1) Training for internal auditors and training for personnel responsible for managing corruption risks
2) No training conducted in 2022, as it was not required

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Anti-Corruption Policy

GC Biopharma has established anti-corruption guidelines and annually publishes a message from CEO on the intranet to demonstrate leadership and commitment to anti-corruption. In April 2023, the anti-corruption policy was enhanced and made available on our company webpage, intranet and compliance management system. We continuously provide trainings on this policy to all employees.

Compliance Program

In 2007, to uphold the value of fair and transparent competition, GC Biopharma introduced the Fair Trade Compliance Program (CP). We have established regulations and guidelines for business activities that reflect Fair Trade Act, Pharmaceutical Affairs Act and Fair Competition Codes. We continuously train and monitor on these regulations. Additionally, we conduct effectiveness check annually of these operations and the results of the evaluations are incorporated into the improvements on our operations.

Compliance Risk Assessment

GC Biopharma has identified and evaluated all compliance risks including unfair trade and unfair competition risks. A total of 1,087 compliance risks and based on our internal risk evaluation criteria, 161 risks have been identified as high risk. For these high risks evaluated, we identified control measures and effectiveness of these control measures. Additional control activities are developed to further mitigate residual risks where necessary.

Corruption Risk Assessment

Classification		Unit	2021	2022	2023
Anti-corruption Risks	Ratio of Workplaces	%	100	100	100
	Number of Workplaces	Place(s)	15	15	15
	Total Number of Workplaces	Place(s)	15	15	15

Conducting Audits

In addition to regular audits, special audits are conducted upon specific requests from management and based on reports received through cyber whistleblowing center. We strive to foster a transparent corporate culture by investigating violations of ethical management such as employee misconduct.

Compliance Monitoring

GC Biopharma conducts regular monitoring biannually to ensure effectiveness of internal control activities. In 2023, Ethics management team issued warnings to 34 violations on internal guidelines identified through monitoring. In addition to monitoring marketing and sales activities, we also monitor compliance with the Subcontracting Act on unfair price reductions, unfair returns, non-issuance of written documentation, technology misuse, unfair special terms, non-payment of subcontracting fees. Furthermore, GC Biopharma conducts compliance monitoring due diligence for our partners. In 2023, 123 partners participated in due diligence and checked for legal violations, conflict of interest and partner's effort against anti-corruption.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Attained Integrated Certifications ISO37001 and ISO37301

GC Biopharma attained an integrated certification for ISO37001(Anti-Bribery Management System) and ISO37301(Compliance Management System) from Korea Compliance Initiative (KCI). We attained our initial certifications for ISO37001 in May 2018, and ISO37301 in December 2022, demonstrating that GC Biopharma's compliance framework meets global standards.

Certifications

ISO37001 (Anti-bribery management system)

— Certification Scope: Entire GC Biopharma (Headquarter, R&D Center, 3 plants, and 10 sales offices)
— Effective date: Nov. 30, 2023 to May 22, 2027

Classification	Unit	2021	2022	2023
Overall Certification Rate	%	100	100	100
Number of Certified Sites	Place(s)	15	15	15
Number of Sites Subjected for Certification	Place(s)	15	15	15

ISO37301 (Compliance management system)

— Certification Scope: Entire GC Biopharma (Headquarter, R&D Center, 3 plants, and 10 sales offices)
— Effective date: December 12, 2022 to December 11, 2025

Classification	Unit	2021	2022	2023
Overall Certification Rate	%	N/A	100	100
Number of Certified Sites	Place(s)	N/A	15	15
Number of Sites Subjected for Certification	Place(s)	N/A	15	15

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

GC Biopharma's Ethics management team conducts regular and sporadic trainings on fair trade. Additionally, regular trainings and special lectures are provided on the Improper Solicitation and Graft Act, the Fair Trade Act, and the Subcontracting Act. Throughout the year, expert interviews and on fair competition codes and compliance on-site trainings take place. In 2022, job-specific special training has been conducted for all employees on Subcontracting, Fair Trade Act, Trade Secrets, and Sales/Clinical compliance. In April 2023, Code of Conduct, along with policies on 'Anti-Corruption', 'Conflict of Interest', and 'Gifts, Entertainment and Hospitality' were revised and updated. Training on these revision and updates was conducted to all employees including contractors, temporary staffs and interns. Additionally, special training was provided to team leads and new employees.

Regular training is conducted biannually for departments with a high compliance risk. To enhance the effectiveness of the compliance education system, trainings are delivered in various formats, including workplaces visits, online video sessions, lectures by external instructors, and cartoons. Additionally, frequent training sessions are provided for new employees and for executives.

Training on Anti-Corruption

Classification		Unit	2021	2022	2023
Training on Anti-Corruption	Training Completion Rate	%	91.1	93.8	82.6
	Training completed	Persons	564	2,072	1,847[1)]
	Training Target	Persons	619	2,208	2,235

1) Entire employees including contract workers

Compliance Training in 2023

Training Topic		Target Subject	No. of Target	Course Completed	Completion Rate
Code of Conduct and Compliance Regulations		All Employees	2,193 Persons	2,193 Persons	100%
Compliance Training (Fair Competition Code and CP Guidelines)		Sales and Marketing	418 Persons	418 Persons	100%
Delivery Price Linkage System		Procurement	8 Persons	8 Persons	100%
CP Operation Guidelines		Domestic Sales	428 Persons	428 Persons	100%
Special Lecture on Compliance	ESG	Procurement, Partners	27 Persons	27 Persons	100%
	Trainings on Recent Rebate Cases and Pharmaceutical Advertisement Guidelines by Lawyers	Sales, Marketing and Academic	423 Persons	423 Persons	100%

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

Anti-Corruption Policy

In June 2022, GC Cell posted policies and guidelines Shortcut on the intranet featuring a message from the CEO Shortcut on anti-corruption. Subsequently, a robust anti-corruption management system was designed and operated.

Participate actively in achieving anti-corruption goals.

Identify potential corruption risks in advance and strictly prohibit all corrupt act.

Adhere to all domestic and international laws, as well as internal anti-corruption policies.

Continuously monitor and improve the anti-corruption management system for effective operation.

Foster a sound corporate culture by utilizing internal reporting system that ensures anonymity of whistleblowers reporting corruption and bribery act.

Compliance Program

GC Cell continuously operates compliance program (CP) in accordance with the CP regulations. The CP program is managed through CP training and monitoring according to the annual plan. This includes providing guidance on laws related to fair trade, such as the Fair Trade Act and the Improper Solicitation and Graft Act, as well as offering counseling for inquiries and grievances to instill the CP program. These CP activities are reported annually to Board of Directors.

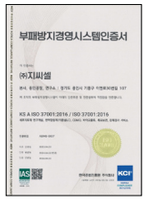
8 Components of the Compliance Program

1. **Commitment of Management on Fair Trade Compliance** — Proclaim compliance commitment annually on company website and e-compliance
2. **Operation of CP under the Designation of Compliance Officer with Authority and Responsibility** — Establish and manage comprehensive training programs and an audit system
3. **Preparation and Distribution of Manuals on Fair Trade Regulations Compliance** — Create and distribute CP Letters through online channels.
4. **Implementation of Training Programs** — Develop and execute an annual training plan
5. **Establishment of a Robust Monitoring System** — Monitor expense reports and corporate card usage
6. **Sanctions on Employees Violating Laws** — Enforce compliance through regular internal audits.
7. **Establishment of a Document Management System** — Develop and revise CP regulations, Ethical Code of Conduct, guidelines and procedures.
8. **Effectiveness Evaluation** — Integrate KPIs and launch an end-of-year reward system

Integrated Certification of ISO37001 and ISO37301

GC Cell attained an integrated certification for ISO37001(Compliance Management System) and ISO37301(Anti-Bribery Management System) from Korea Compliance Initiative (KCI) in April 2024, demonstrating GC Cell's compliance framework at global level.

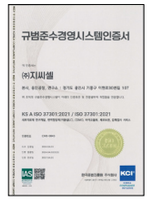
ISO37001 ✓



Certification Scope: Entire GC Cell (Headquarter, Cell Center, 47 sales offices and distribution center)

Effective date: April 2024 (Change) to April 2, 2026

ISO37301 ✓



Certification Scope: Entire GC Cell (Headquarter, Cell Center, 47 sales offices and distribution center)

Effective date: April 2024 (Initial) to April 1, 2027

Compliance Risk Assessment

In 2023, GC Cell oversaw the implementation of control measures on 176 identified corruption risk factors across all business sectors, including sales, manufacturing, R&D and management, achieving 80% execution rate. Furthermore, in March 2024, compliance risk assessment encompassing corruption risks was conducted. For the 103 inherent risks classified as high-risk, control measures have been planned and are currently being executed.

Corruption Risk Assessments

Classification		Unit	2021	2022	2023
Anti-corruption Risks	Ratio of Workplaces	%	0	100	100
	Number of Workplaces	Places	0	50	50
	Total Number of Workplaces	Places	0	50	50

Conducting Fair Trade and Monitoring Audits

To foster a transparent corporate culture through fair competition, GC Cell has established CP reward and sanction regulations. Each month, the company verifies compliance with fair trade practices, using the findings to inform end of year rewards and disciplinary actions. Additionally, regular audits are conducted to eradicate corrupt activities and to enhance processes. In 2023, total of 12 monitoring audits and 4 regular audits were conducted.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

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

To instill a culture of workplace ethics, GC Cell offers tailored anti-corruption and compliance training to each target group according to an annual training plan. In 2023, through expansion of CP training system was expanded beyond the Sales department to include a broader range of employees. Workplace ethics training was incorporated into induction programs for new hires, and online compliance training sessions were newly introduced to all employees. High-risk departments received intensive training through on-site visits and CP Letters covering compliance knowledge and industry trends have been distributed for 5 times. Additionally, to enhance the compliance awareness, in June 2023 was designated as 'Compliance Month' and featuring programs such as the 'Compliance Quiz', and 'Ethics in Daily Life'.

Compliance Training in 2023

Classification	Training Topic	Target Subject
In-person Training	CP Guideline and Fair Competition Code for Pharmaceuticals	Sales (CT/ BS /MKT)
	Writing Expense Reports and CP Guideline	Development, R&D
	ISO Internal Auditor Training	Team Leads
	Compliance Management and Workplace Ethics	New Employees
Video Training	Creating a Corruption-Free Organizations	All Employees
Guest Lectures	Promoting Proper Workplace Ethics	All Employees
Document Training	Changes in Fair Trade Law and Government Policies	All Employees
Compliance Pledges	Fair Trade Compliance Pledge / Anti-Corruption and Ethics Compliance Pledge	All Employees

Training on Anti-Corruption

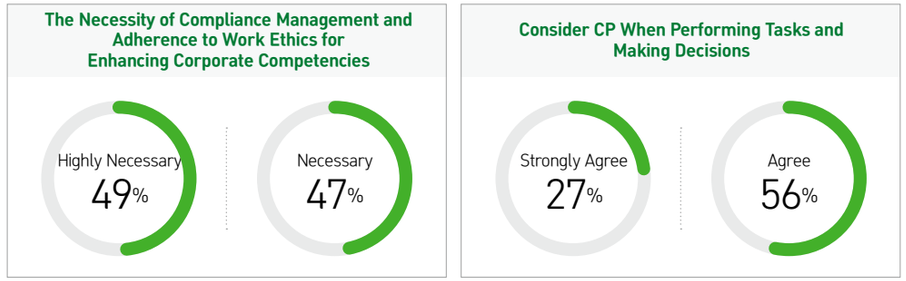
Classification		Unit	2021	2022	2023
Training on Anti-Corruption	Training Completion Rate	%	0	100	100
	Training completed	Persons	0	204	165
	Training Target	Persons	0	204[1)]	165[1)]

1) Subjected to Sales division, internal auditors and executives

Effectiveness Evaluation of the Training

The effectiveness of the anti-corruption and compliance training is evaluated through GC Cell's compliance survey. In 2023, for the question 'Is compliance management and adherence to workplace ethics necessary to enhance corporate competitiveness?' 49% of respondents answered 'Absolutely necessary' and 47% answered 'Necessary. For the question 'Is CP considered when performing tasks and making decisions?' 27% of respondents answered 'Strongly agree' and 56% answered 'Agree'.

(2023 Survey)



Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Research Ethics Policy

GC Biopharma recognizes the critical importance of research ethics throughout all research activities and strives to uphold ethics principles in all its activities. We strictly adhere to relevant legislation in every stage of research and have systemized monitoring of all activities. Our principles are designed to protect the safety and rights of humans, animals, and the environment at each stage of pharmaceutical development. We approve all research activities and appoint review boards to conduct thorough reviews of all research activities. We ensure transparency and reliability of research results by establishing a dedicated department dedicated for managing and supervising the proper execution of approved research activities.

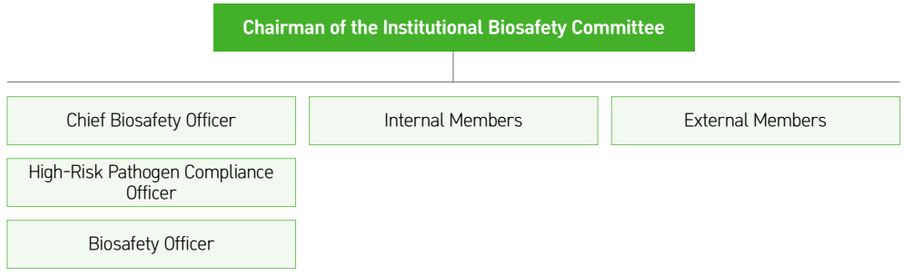
Research Ethics Activities of GC Biopharma

Biosafety Ethics	Animal Experiment 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 sector
IBC, Institutional Biosafety Committee	IACUC, Institutional Animal Care and Use Committee	Dedicated department in GC Biopharma - GCP, Good Clinical Practice

Organization for Biosafety Ethics

To ensure safety in research sites, GC Biopharma's Institutional Biosafety Committee (IBC) is dedicated to evaluating potential risks and biosafety reviews on research activities conducted within the organization. The IBC develops institutional biosafety measures, establishes institutional biosafety protocols and operate biosafety training programs.

IBC Organization Chart



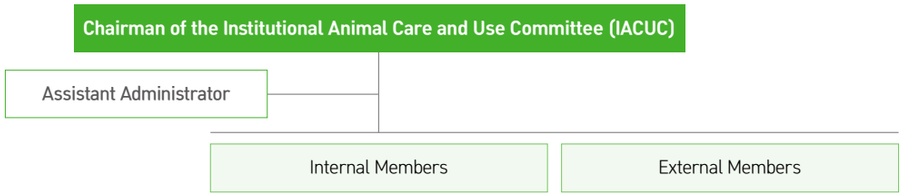
Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Organization for Animal Experiment Ethics

GC Biopharma's Institutional Animal Care and Use Committee (IACUC) has been in under operation since 2008 in adherence to the Animal Protection Act. IACUC supports adherence to 3R (Replacement, Reduction and Refinement), which are the fundamental principles in animal experiments that is conducted during research and preclinical stages of pharmaceutical development while enabling researchers to obtain the necessary research results.

Organization Chart of IACUC



Organization for Clinical Trial Ethics

GC Biopharma conducts clinical trials in accordance with International Council for Harmonization (ICH)-GCP guidelines. Clinical research is managed through Standard Operating Procedures (SOPs), which are regularly revised and updated. We provide continuous training related to clinical trials to prevent any violations. A dedicated Clinical Quality Assurance (QA) team oversees and ensures that the research activities are conducted in accordance with the clinical trial protocol. Data obtained during the clinical trials is managed and processed in accordance with the procedures those complies with relevant regulations. For research involving human-derived or information, they are conducted in compliance with applicable regulations and guidelines.

Animal Experiments Ethics Policy

GC Biopharma values the welfare of animals as well as welfare of humankind and making various efforts to uphold this principle. Within the course of development to release of pharmaceutical products, where animal experiment is required, a procedure has been established to have the testing undergo review and approval by the Institutional Animal Care and Use Committee (IACUC). The IACUC includes expert members including external veterinary doctors and representatives from animal protection organizations. The committee is responsible for ethical reviews and approvals of the animal experiments in accordance with the 3R principles[1]. Additionally, the IACUC oversees and inspects animal experiment operations in adherence to Animal Protection Act.

1) The 3R principles on Animal Experiments: An international standard emphasizing the use of alternative methods to replace animals (Replacement), minimizing the number of animals involved in tests (Reduction), and refining procedures to reduce pain, stress, and suffering (Refinement).

Certification of Animal Experiment Facilities

Animal experiment for all GC Biopharma production plants is conducted and managed centrally at the Ochang Plant. The animal laboratory at this facility received full accreditation from AAALAC[1] in 2011, making it the first South Korean pharmaceutical company to achieve this distinction. This accreditation is maintained through rigorous due diligence every three years. AAALAC certification signifies that the animal laboratory facility and its management programs meet international standards. It also indicates the laboratory's commitment to ethical management of testing animals and maintaining the facility in optimal condition, as recognized by this global certification institute.

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

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

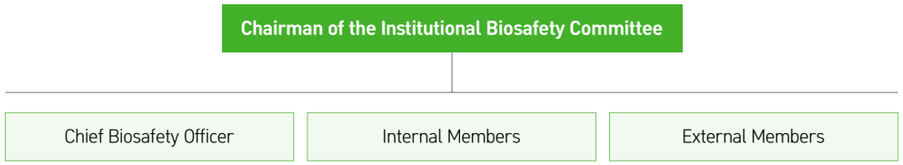
Research Ethics Policy

GC Cell complies with relevant legislation and regulations by establishing a system to fulfill ethical responsibilities throughout all research processes. All research activities must achieve reliability and objectivity based on integrity and honesty and they should meet the public interest standards for by generating social benefits grounded in ethical values and outcomes. To this end, GC Cell researchers receive regular ethics training to prevent cheating and unethical activities. Additionally, a dedicated QM team ensures the operation of ethics management systems in clinical research and maintains assurance systems at a global level.

Research Ethics Activities of GC Cell

Biosafety Ethics	Animal Experiment 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	Dedicated department in GC Cell - GCP, Good Clinical Practice

IBC Organization Chart



Organization for Animal Experiment Ethics

GC Cell is part of GC Biopharma's Institutional Animal Care and Use Committee (IACUC) under the 'Animal Protection Act' and the 'Laboratory Animal Act'. Researchers from GC Cell serve as committee members, adhering to the fundamental principles of animal experiment ethics by fulfilling equivalent roles and responsibilities within the IACUC.

Clinical Test Ethics

GC Cell offers ethics training courses in for researchers to ensure adherence to clinical trial ethics and enhance their understanding of related tasks. We ensure transparency and reliability in research through establishing detailed and clear guidelines and systematic clinical trial quality control system.
GC Cell's self-audit is a key monitoring activity that aims to secure the transparency and accuracy of clinical trial results and prevent cheating or fabrication. Additionally, we enhance reliability through thorough reviews of critical issues in clinical trial process conducted by the Independent Data Monitoring Committee (IDMC) and professional auditing organization.
We provide comprehensive research descriptions to clinical trial participants to ensure transparent communication with stakeholders. Personal information is managed stringently to prevent leaks. To maintain data integrity and security, we implemented global-level data management system and actively cooperate with relevant organizations.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

AREA 4

RESPONSIBILITY TO ENVIRONMENT

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 establish practical goals and strive to reduce GHG emissions by considering investments in high-efficiency and eco-friendly facilities, improving manufacturing facility process efficiency and reviewing in process equipment efficiency enhancements.

Environmental Responsibility

* Details of our activities related to the 17 UNSDG

Environmental Pollutant Emissions

GC GC Biopharma GC Cell

Our Approach

We strive to safely manage chemicals and prevent environmental pollution by adhering to environmental regulations, monitoring the entire lifecycle of chemical substances, and enhancing internal standards for pollutant emissions (air and water).

Negative Impact

Failure to control contaminants during corporate activities can negatively impact human and animal health and ecosystems and impose additional operational costs on the company due to the regulatory risks involved.

2023 Our Actions

GC (Holding Company)

Assigned quantitative targets for affiliates to reduce environmental pollution and improve potential risk factors. Monthly monitor compliance with environmental regulations and progresses on set goals. Conduct self-regulation risk assessments and environmental impact assessments. (Feb. 2024)

GC Biopharma

Conduct monthly water quality measurements of influent and effluent at the wastewater treatment plant. Develop and implement plans to reduce water consumption per process. Extend the scope of the CMS chemical substance management system to include the R&D center.

GC Cell

Established a chemical substance management system for entire lifecycle.

GHG Emissions

GC GC Biopharma GC Cell

Our Approach

We are actively pursuing measures to reduce GHG emissions in each work facility and establishing an internal management system to effectively address climate change.

Negative Impact

As global climate change becomes a critical issue in the international agenda, the needs for reducing GHG and Net-Zero implementation is increasing. Additionally, due to government policies in responding to climate change, compliance costs and risks are rising.

2023 Our Actions

GC (Holding Company) GC Biopharma GC Cell

Identified risks and opportunities in climate change. Discussed TCFD recommendations through ESG Council.

GC Biopharma

Signed Power Purchase Agreement (PPA) with SK E&S, first in the pharmaceutical industry. Replaced lightings in basement of R&D center with high-efficiency LED lights. Established five key goals and detailed objectives to reduce Scope 3 in the transportation sector of PAHO.

GC Cell

Declared a commitment to carbon neutrality by 2050. Participated in the Ministry of Environment's environmental information disclosure system. Registered the company in K-RE100.

Waste Disposal

GC Biopharma

Our Approach

We strive to establish eco-friendly production processes and minimize environmental impacts by tracking and controlling waste generation quantity throughout the entire lifecycle, from production to post-production disposal.

Negative Impact

Failure to properly discharge and process waste generated during product development and production can result in soil and water pollution.

2023 Our Actions

GC Biopharma

Annual evaluation of waste disposal service provider

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Environment, Safety and Health Management Policy

GC Biopharma establishes and announces company-wide environmental, safety and health policies annually by CEO to ensure the safety of all stakeholders, including employees, customers, partners, and the community in all processes related to business activities, products, and services that impact the environment, safety, and health. The company-wide environmental, safety and health policies established based on ISO14001(Environmental Management System) are shared with all employees. Each manufacturing facility establishes detailed plans to achieve these company-wide policies. We periodically investigate the environmental aspects of our organizational activities, products, and services, along with their associated environmental impacts.

In adherence to environmental laws, we regularly evaluate and manage emission facilities, prevention facilities, and energy use facilities related to air quality, water quality, noise, and soil pollution, according to established operational and management standards. Additionally, to ensure compliance with environmental laws, we monitor regulations in 26 areas, including safety and health-related laws such as Air Quality Conservation Act and Water Quality Conservation Act. These monitoring activities are conducted semi-annually to review any amendments to regulations related to environmental, safety, and health laws. To upgrade the water and waste management systems, we derived the basic unit on water consumption per process at the manufacturing plants in Ochang, Hwasun and Eumseong, and established corresponding reduction plans. Additionally, we analyzed the waste generated from 2021 to 2023 to develop strategies in increasing the recycling rate of waste that is typically incinerated.

GC Biopharma's Policy for Environment, Safety and Health

Policy for Environment, Safety and Health

Based on our mission of 'Making a healthier and happier tomorrow for humanity', GC Biopharma fulfills the obligations to implement the Environmental, Safety and Health management system, establish and practice ESG strategies for sustainable management and continuously develop them.

Sustainable management through ESG management
We strive to reduce energy use and GHG emissions at each business site to achieve carbon neutrality by 2050.
In order to establish eco-friendly production processes, we track and manage energy usage and waste generation throughout the entire process from manufacturing to post-production disposal.

Improvement and Prevention Management
We eliminate potential risks associated with environmental pollution and safety and health accidents by setting goals for environment, safety, and health, actively allocating resources, and through continuous identification, monitoring, evaluation, and improvement.

Adherence to Regulations on Environment, Safety and Health
We comply with domestic and international regulations on environmental, safety and health and actively participate in implementing ISO14001/45001 and in establishing prevention systems centered on autonomous risk assessment to eliminate major accidents.

Environment, Safety and Health Communication
We foster a mature environmental, safety and health culture where employees can actively participate in environmental, safety and health activities. We strive to create a safe workplace by efficiently communicating with stakeholders including employees, partners, local communities.

May 18, 2023 | Eun-Chul Huh, CEO of GC Biopharma

Goals for Environmental Management/Responding to Climate Change

We established an ESG strategy to achieve Net Zero by 2050 aiming to implement sustainable management through enhancing ESG management.

Net Zero	Enhance Monitoring	Strengthen Internal Standards	Assess Environmental Impacts
Reduction of GHG emission for achieving Net Zero by 2050	Enhanced monitoring on chemical substances throughout the entire lifecycle	Strengthening internal standards on pollutant emissions	Annual environmental impact assessment

Environment Management Governance

GC Biopharma establishes decision-making and implementation bodies to effective implementation of Safety, Health and Environment (SHE) organization in accordance with the corporate-level SHE policy. The Chief Sustainability and Environmental Officer (CSEO), reporting directly to the CEO, holds the authority and accountability for making environmental management decisions. The SHE team, functioning as an environmental management entity, is dedicated to creating a safer and more environmentally conscious workplace.

- Management of carbon emission
- Establishing measures for GHG reduction
- Internal audit and compliance management on environment
- Environmental Impact Assessment
- Legal/Regulatory response and management

- Operating environmental facility
- Regulatory affairs
- Pollutant control in business sites

1) Chief Safety Environment Officer

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Establishing and Management of GHG Emissions Reduction Strategies

GC Biopharma established a goal to reduce emissions by 2% compared to the previous year. GHG emission (Scope 1, Scope 2) are managed through objective data verified by third-party verification organization. A management system is in place to reduce energy consumption and GHG emissions, with the amount of emission monitored quarterly. GC Biopharma controls direct and indirect GHG emissions across all business sites, including Ochang plant, Hwasun plant, Eumseong plant, headquarters, R&D center, and sales offices. In 2023, total GHG emissions (Based on Scope 1+2) of GC Biopharma were 64,804 tCO_2eq, which is represents a 3% reduction compared to 2022, surpassing 2023 reduction goal of 2% reduction compared to the previous year.

GHG Emissions

Classification		Unit	2021	2022	2023
Total GHG Emissions (Scope 1+2)		tCO_2eq	68,166	66,854	64,804
Direct GHG Emissions (Scope 1)	Total	tCO_2eq	14,362	12,374	10,804
	Headquarter/R&D center[1]	tCO_2eq	983	984	937
	Ochang Plant	tCO_2eq	6,809	5,009	4,737
	Hwasun Plant	tCO_2eq	5,787	5,504	4,322
	Eumseong Plant	tCO_2eq	700	792	784
	Warehouses and Sales Offices	tCO_2eq	80	85	23
Indirect GHG Emissions (Scope 2)	소계	tCO_2eq	53,804	54,480	54,001
	Headquarter/R&D center[1]	tCO_2eq	2,964	3,238	3,214
	Ochang Plant	tCO_2eq	36,553	36,703	37,606
	Hwasun Plant	tCO_2eq	12,623	12,437	11,299
	Eumseong Plant	tCO_2eq	1,324	1,467	1,585
	Warehouses and Sales Offices	tCO_2eq	338	634	297
Direct/Indirect Emissions Intensity (Scope 1+2)		tCO_2eq/KRW 100 Million	5.825	5.37	5.356
Reduction Performance in KRW Unit, Compared to the Previous Year		%	(10.6)	7.8	0.3

1) Announced in the form of an integrated report on specifications for GHG emissions

Energy Usage Management

In 2023, GC Biopharma's total energy usage decreased by approximately 3% compared to 2022, achieving the 2023 reduction goal of a 2% decrease compared to the previous year. GC Biopharma excludes the calculation of energy usage outside the organization.

Energy Usage[1]

Classification		Unit	2021	2022	2023
Total Energy Usage		TJ	1,621.00	1,640.00	1,593.00
General Energy Usage (Direct Energy Source)[2]	Total	TJ	274.00	234.00	203.00
	Diesel Usage	TJ	23.00	23.00	22.00
	Gasoline Usage	TJ	1.00	1.00	1.00
	LNG Usage	TJ	250.00	210.00	180.00
General Energy Usage (Indirect Energy Source)	Total	TJ	1,347.00	1,406.00	1,390.00
	Electricity Usage	TJ	1,124.00	1,138.00	1,128.00
	Heat (Steam) Usage	TJ	223.00	268.00	262.00
Intensity of Energy Usage within Basic Unit Organization		TJ/KRW 100 Million	0.139	0.132	0.132

1) Scope: Headquarters, three plants (Ochang, Hwasun, Eumseong), R&D center, 10 sales offices

Renewable Energy Usage

Classification	Unit	2021	2022	2023
Total Renewable Energy Usage	TJ	0.04	0.29	0.36
Ratio of Renewable Energy Use to Total Energy Use	%	0.00	0.02	0.02
Number of Worksites That Have Introduced Renewable Energy	Place(s)	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 Wastewater Treatment System	Exchange of Process Facilities

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Efforts to Reduce GHG Emissions

Since August 2017, GC Biopharma has been receiving heat (steam) from a steam supply company that utilizes waste incineration and waste heat and we alternate this with our existing LNG boilers to reduce usage of boilers. This change in heat source cut out the usage of LNG in boilers and by using waste heat, we reduced GHG emission by approximately 11,000tCO_2eq per year. Additionally, all fluorescent lights have been replaced by high-efficiency LED in the basement of R&D building. The Hwasun Plant of GC Biopharma has implemented energy reductions by introducing a maximum electricity management system and replacing all fluorescent lights with LED lights. Efforts to reduce energy use are ongoing, including installation of an Energy Storage System (ESS), efforts to seeking alternative energy sources, and implementing efficient boiler operations such as inspecting for steam leaks, timely blocking of unused boilers. To achieve Net Zero in 2050 and implement RE100, GC Biopharma signed a Power Purchase Agreement (PPA) with SK E&S, marking the first such agreement in pharmaceutical industry. Starting from 2026, the three manufacturing plants in Ochang, Eumseong and Hwasun will be supplied with renewable energy. Total of 6.7MW of renewable energy will be supplied over the next 20 years, which is expected to reduce GHG emission by 3,600 tons of annually. Additionally, in 2024, rooftop solar power plants are currently under installation at the Ochang plant and Eumseong plant, producing renewable energy from the rooftops (Ochang plant : 1,325kW capacity and Eumseong plant : 313kW capacity) with plans to supply this energy externally.

Strategies for Responding to Climate Change

Each year, GC Biopharma establishes and implements environmental management plans that encompasses targets and projects, implementations and checks, and evaluations and improvements. This plan covers the management of wastewater and waste, the reduction of emissions of air pollutants and hazardous chemicals, the reduction of GHG emissions and saving of energy and resources. With our mid-to-long-term goal to achieving Net Zero, we aim to finalize the plan for reducing carbon emissions and expand the proportion of renewable energy. We plan to set the direction for climate change response, establish mid-to-long GHG reduction goals, and implement tasks to achieve these goals through the ESG committee.

Efforts to Save Energy

- Installation of ESS (Energy Storage System)
- Seeking Alternative Heat Sources
- Effective Operation of Boilers (Inspect for Steam Leakage, Timely Blocking of Unused Boilers)

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Investigations on Climate Change Risk Factors and Opportunities

GC Biopharma, together with GC (Holding Company) and GC Cell, derived climate change risk factors and opportunities through ESG Council. We actively participate in climate change response through continuous discussion on TCFD recommendations.

GC Biopharma's Climate Change Risk Factors and Opportunities

Classification		Factors	Point of Impact	Financial/Non-financial Impact and Response Strategy	
Risk Factors	Physical Risks (Acute/Chronic)	Risk of discontinuance in the supply of pharmaceuticals due to abnormal weather conditions	Medium and long term	Sales	· Establish response scenario for climate anomaly
	Transition Risks	Increased operation costs due to increased purchases of GHG emission rights	Medium term	Costs	· Establish carbon reduction measures to achieve carbon neutrality in year 2050
		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	-	· Establish carbon neutrality targets and implement detailed reduction plan
		Increasing costs of replacing products and services and transitioning to low-carbon technologies for a low-carbon economy	Medium and long term	Costs	· Invest in high efficiency facilities for reduction of GHG emission and introduce low-carbon technology.
		Increase in demand for SCOPE 1, 2, 3 Net-Zero as global customer companies focus more on sustainability	Medium term	-	· Manage emission across the entire supply chain (Scope 3) in response to customer demands and establish net Zero targets
		Increase in product production costs due to the increased costs of raw materials/materials	Medium term	Costs	· Reduce product packaging size and utilize reusable/recyclable materials. · Manage supply chain of raw material suppliers
		Strengthening demand for responding to climate change from investors and stakeholders	Short and medium term	Financing	· Calculate carbon emissions based on LCA for major products
Opportunity Factors	Resource Efficiency	Reduction in water usage due to water management	Short and medium term	Costs	· Identify water usage by process and introduce water reuse technology
	Energy Resources	Reduction in GHG emissions and response to relevant GHG regulations through renewable energy	Short and medium term	-	· Reduce GHG emission by using renewable energy
	Market	Stronger ability to prepare ESG-relevant capital such as green bonds to implement a low-carbon economy	Medium term	Financing	· Issue, manage and operate green bonds when undertaking businesses that comply with Green Bond Principles
		Approach to new markets through the manufacturing of new pharmaceutical in response to climate change	Medium term	Sales	· Continuous research and development
	Resilience	Better corporate image with more investment in renewable energy	Short and medium term	-	· Power in business sites partially transitioned to renewable energy starting from 2026 through first Power Purchase Agreement in pharmaceutical industry

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Eco-friendly Transportation

GC Biopharma is the process of establishing eco-friendly transportation system in accordance with 5 major and detailed objectives for reducing Scope3 emissions in transportation.

Enhancing Sustainability Requirement for Suppliers	Transitioning from Air to Sea Transportation	Reduce Packaging and Promote Eco-Friendly Materials	Optimization of Supply Chain Operation	Using Eco-friendly Fuel for Transportation
GC Biopharma will establish policies and strategies for the sustainability of all product lines transported Scope 1, 2, and relevant Scope 3 GHG emissions will be measured, reduction targets for emissions during transportation and distribution will be set, and reduction measures and progress will be publicly reported annually. Scope 3 GHG emissions will be measured in alignment with GRI and SBTi guidelines, and we will strive publicly disclose the most accurate measurements possible within the next five years.	GC Biopharma is considering enhancing strategies on carbon emission reduction during transportation customers, and a low-emission transportation by transitioning from air to sea transportation or using Sustainable Aviation Fuel (SAF). Products that can be transitioned to sea transportation will be selected from temperature-controlled products (e.g., products with ambient storage temperature). These will be validated through shipping validation, and the actual transportation will be implemented within the next five years.	Reducing the volume of the packaging and using sustainable, eco-friendly, and reusable materials is one the most effective ways to contribute to carbon emissions reduction in the short time. We will continuously seek and apply of eco-friendly export transportation packages through WHO PQ certification. (e.g., utilizing eco-friendly papers in export packaging) We will also review on reusing the shipping packages and refrigerants after the completion of a single shipment.	Plans are consolidate small-volume shipments to reduce the total number of shipments. To achieve this, discussions will be continued to secure an airport and a warehouse that work as a hub for consolidating the supplies within each country.	Plans are in place to utilize eco-friendly fuel vehicles such as electric and hydrogen cars for inland transportation within the next 5 years. Collaboration with transportation partners will be sought to explore the use of various transportations, including eco-friendly ships and aircraft, for transporting export goods. Additionally, the usage of Sustainable Aviation Fuel (SAF) and other eco-friendly fuels is planned to be promoted. By using eco-friendly fuel transportation methods, carbon emissions during exports can be reduced, contributing to protection of the global environment and a sustainable future.
Goal 1	Goal 2	Goal 3	Goal 4	Goal 5

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

Environment, Safety and Health Management Policy

GC Cell recognizes environment, safety and health as top priorities of corporate management and establishes and implements goals accordingly with the policy of the CEO. By establishing policies based on ISO14001 (Environmental Management System), GC Cell demonstrates its commitment to environmental performance through practicing eco-friendly management, ensuring regulatory compliance, and minimizing environmental impact. The policy on environmental, safety and health as approved by the CEO of GC Cell, applies to all stakeholders, including employees, partners, customers and local communities. It covers all business operations of GC Cell including products and services, manufacturing and research facilities, logistics, and supply chains. GC Cell regularly reviews the 'Environment, Safety and Health Management' policy to incorporate timely issues and revises it with the approval of the CEO.

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

Policy for Environment, Safety and Health Management

GC Cell, to become the 'Global Creator of Cell & Gene Therapy', is committed to our mission of 'contributing to the healthy lives of humankind.' In line with this mission, we ensure that all members uphold safety, health, and environmental systems, which are essential for sustainable management, while promoting mutual coexistence with partners and local communities.

Practicing Eco-friendly Management

Establish and implement goals to reduce contaminants throughout the entire process from manufacturing to post-production disposal of pharmaceuticals.

Adherence to Regulations on Environment, Safety and Health

We apply stringent management standards to comply with domestic and international regulations on environmental, safety and health, and the compliance to the regulations are regularly monitored.

Improvement and Prevention Management

We eliminate potential risks associated with environmental pollution and safety and health accidents by conducting internal environmental impact and risk assessments to identify, improve, and prevent risk factors.

Communication on Environment, Safety and Health and Activities

We take a leading role in advancing safety, health, and environmental initiatives by enhancing employee awareness through active training programs, securing various communication channels, and fostering mutual exchange with employees, partners, and the local community

April 3, 2023 | James Jong-Eun Park, CEO of GC Cell

Environmental Management Governance

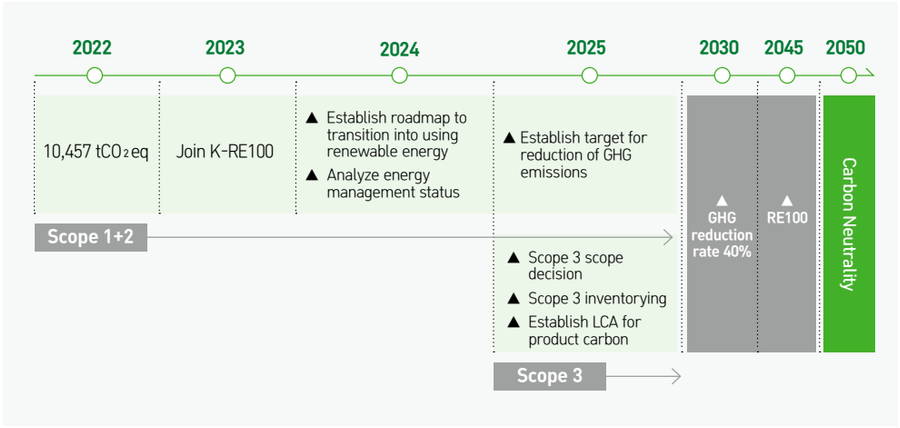
The head of business administration department, who is responsible for environmental management at GC Cell, holds the authority and accountability for decision-making in environmental management. Dedicated environmental management team plans and manages these efforts. GC Cell reports the status of environmental management implementations, including issues in climate change response, to the Board of Directors as a major agenda item at least once a year. 'Climate Change Response and Carbon Neutrality Implementation Plan' and '2023 Environmental Achievements' were reported as agenda items on December 21, 2023.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

Strategies for Net Zero for year 2050

GC Cell declared its commitment to achieving carbon neutrality by 2050 and outlined corresponding strategies, as reported to Board of Directors in 2023. As a mid- to long-term goal, the aim is to reduce greenhouse gas emissions by 40% by year 2030 compared to year 2022 and achieve Net Zero by 2050. Detailed implementation strategies are being pursued to achieve these goals. In 2023, to enhance the transparency of environmental data, GC Cell participated in the Ministry of Environment's Environmental Information Disclosure System and published verified data. Additionally, as part of the preparation for the transition to renewable energy, the company completed its registration for K-RE100. In 2024, GC Cell plans to mark the first year of implementing carbon neutrality by establishing a roadmap for the transition to renewable energy and proceeding with power purchase agreements.



GHG Emission Target and Achievements

GC Cell is reviewing various emission reduction methods to lower GHG emissions, including saving energy through efficient business facility operations, transitioning to renewable energy, and introducing carbon emission-reducing technologies. In 2023, GC Cell's Scope 1 and 2 emissions amounted to 9,553 tCO_2eq, representing a 9% reduction from 2022. In 2024, we aim for a 5% reduction in Scope 1 and 2 emissions from 2023. To achieve this, we have replaced parts in the plant steam depressurizing valve in the autoclave to enhance energy efficiency. Furthermore, we are in place of assessing the scope of external consumption related to Scope 3 and establishing a plan to obtain an inventory.

GHG Emissions Management

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

GHG Emissions

Classification		Unit	2021	2022	2023
Total GHG Emissions (Scope 1+2)		tCO_2eq	4,567	10,457	9,553
Direct GHG Emissions (Scope 1)	Total	tCO_2eq	1,654	3,210	2,564
	Headquarter/Cell center	tCO_2eq	1,654	3,210	2,564
Indirect GHG Emissions (Scope 2)	Total	tCO_2eq	2,913	7,247	6,989
	Headquarter/Cell center	tCO_2eq	2,913	7,247	6,989
Direct/Indirect Emissions Intensity (Scope 1+2)		tCO_2eq/KRW 100 Million	2.866	4.726	5.607
Reduction Performance in KRW Unit, Compared to the Previous Year		%	40.8	(64.9)	(18.6)

Energy Usage Management

Energy Usage[1)]

Classification		Unit	2021	2022	2023
Total Energy Usage		TJ	93.52	214.78	196.37
General Energy Usage (Direct Energy Source)	Total	TJ	32.65	63.34	50.32
	Diesel Usage	TJ	0.01	0.01	0.01
	LNG Usage	TJ	32.64	63.33	50.31
General Energy Usage (Indirect Energy Source)	Total	TJ	60.87	151.43	146.06
	Electricity Usage	TJ	60.87	151.43	146.06
Intensity of Energy Usage within Basic Unit Organization		TJ/KRW 100 Million	0.059	0.097	0.115

1) Scope of data : Headquarter/Cell center

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

GC Cell's Climate Change Risk Factors and Opportunities

GC Cell, together 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	Financial/Non-financial Impact and Response Strategy	
Risk Factors	Physical Risks (Acute/Chronic)	Risk of discontinuance of the supply of pharmaceuticals due to abnormal weather conditions	Medium and long term	Sales	· Establish and operate BCP system
		More sophisticated Business Continuity Plan (BCP) is required due to climatic abnormalities	Short term	-	· Establish and operate BCP system
	Transition Risks	Increased costs of purchasing emission rights due to stringent government regulations on GHG emissions	Short term	Costs	· Establish goals to achieve Net Zero and develop detailed reduction strategies
		Increased scope of management due to obligation to disclose environmental information through various channels	Short term	-	· Participate in environmental information disclosure system to ensure information transparency
		Challenge in establishing countermeasures against climate change risks since pharmaceutical industry is classified to have a relatively low environmental impact.	Short term	-	· Collaborate with ESG managers in other pharmaceutical and biotech companies for a joint response including developing industry specific strategies
		Increase in energy costs due to increasing requirements to transition into renewable energy	Medium term	Costs	· Implement in accordance with renewable energy transitioning roadmap
		Failure to meet stakeholder expectation can result in decrease in investor trust, reduced revenue and increased capital raising costs.	Medium and long term	Financing	· Establish goals to achieve Net Zero and develop detailed reduction strategies
Opportunity Factors	Resource Efficiency	Establishing an eco-friendly logistics system can lead to market leadership due to providing competitive advantage within the industry	Long term	Costs	· Review customer requirement and legal compliance · Incorporate and implement within the environmental management policies and strategies
		Achieving long-term reduction in operational costs by designing energy-efficient buildings when expanding infrastructures such as manufacturing facilities	Long term	Costs, Assets	· Proactively incorporate energy efficiency and carbon emission reduction facilities when designing manufacturing facilities. · Design manufacturing facilities to accommodate solar power installation
	Market	The increasing frequency of pandemics and endemics due to climate change is likely to drive higher demand for new pharmaceuticals.	Medium and long term	Sales	· Assess the feasibility of incorporating cell and gene therapy into the long-term R&D roadmap based on scientific assumptions (climate scenario analysis)
		Increase intangible assets such as brand value by enhancing the company's image as a market leader	Medium term	-	· Establish strategies and operate systems to improve the ESG rating

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC (Holding Company)

Environment, Safety and Health Management Policy

GC (Holding Company) established and announced a company-wide Environmental and Health Safety Policy based on ISO 14001 (Environmental Management System), with the CEO's approval, in 2015. This policy reflects our intention and strategy to minimize the environmental impact of our business activities and our dedication to safety and health, officially declared our commitment to ESG management. This policy applies to all stakeholders in the supply chain, including employees, partners, and customers. Amendments to this policy are made with the CEO's approval as necessary. Based on this policy, entire GC affiliates enhance management systems on environmental, safety and health by prioritizing safety and health of stakeholders. GC (Holding Company)established environmental goals and policies specific to each business site, addressing not only environmental hazards but also reducing pollutant emissions (air, wastewater, and waste disposal). This ensures management's ability to respond to environmental risks and implement necessary follow-up measures.

GC (Holding Company)'s Policy for Environment, Safety and Health

Policy of Environment, Safety and Health

GC (Holding Company) established a new 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." We are writing a new history as a respected and loved pharmaceutical company and aim to become a leading global pharmaceutical company through high-quality products and diligent management. Also, to fulfill our mission on social responsibility through 'dedication and compassion' and 'transparent and integrity', we prioritize safety, health and environment as our highest values in corporate management. We will strive to establish and implement Health, Safety, Environment (HSE) management system, preservation of environment and create a accident-free workplaces. To efficiently manage and implement our safety, health, and environment management systems, we will fulfill our responsibilities and obligations by adhering to the following management policies regarding safety, health, and the environment.

Adherence to Regulations on HSE
We ensure the compliance with domestic and international regulations on environmental safety and health, enhance and apply stringent internal management standards, and pursue continuous improvements our performance in safety, health, and environment.

Environment-friendly Manufactures
We minimize pollutants throughout the entire process, from manufacturing to post-production disposal of pharmaceuticals, and strive to develop eco-friendly product technologies.

Improvement & Prevention Management
We eliminate potential risks associated with environmental pollution and safety and health accidents by setting goals for environment, safety, and health, actively allocating resources, and through continuous identification, monitoring, evaluation, and improvement.

HSE Communication
We take a leading role in advancing safety, health, and environmental initiatives by enhancing employee awareness through proactive training programs and promotional activities and by fostering mutual understanding and exchange with partners and local communities to fulfill social responsibilities.

January 2022 | Yong-Jun Huh, CEO of GC (Holding Company)

Strategy for Responding to Climate Change

GC (Holding Company) continues to strive to reduce GHG emissions to minimize environmental impact. As part of our eco-friendly activities, such as efforts to save energy to minimize operational environmental impact, we are in progress towards incorporating ISO50001 (Energy Management System).

Goals for Environmental Management and Climate Change Adaptation

GC (Holding Company) established detailed implementation plan to achieve Net Zero by 2050.

GC (Holding Company)'s Goals for Environmental Management in 2024

Respond to 2050 Carbon Neutrality	Technical Oversight on Accident Prevention	Risk Mitigation Activities
Establish standard systems on climate change to achieve carbon neutrality by 2050 and attain relevant certifications	Ensure compliance with HSE regulations across all affiliates and provide technical oversight on accident prevention	Enhance potential hazard risk management and continuously maintain zero major accidents.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC (Holding Company)

Environment Management Organization

The HSE Team of GC (Holding Company) regularly audits 15 affiliates on environmental aspects under the corporate-level environmental management system. The team is dedicated to sustainable management (environment and safety), ensuring proper operational management and supporting tasks, including activities to prevent and monitor environmental contamination and accidents, and evaluating compliance with environmental regulations.

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, reducing electricity and water usage, and minimizing the emission of air pollutants (dust, SOx, NOx) as part of the energy-saving and emission reduction activities.

Eco-friendly Investment Costs[1)]

Classification		Unit	2021	2022	2023
Investment Execution Rate	Total	%	203	76.8	211
	Planned Amount	KRW million	48	39	42
	Executed Amount	KRW million	96	30	88

1) This figure reflects ISO certification and post-examination costs

GHG Emissions Management

GHG Emissions

Classification		Unit	2021	2022	2023
Total GHG Emissions (Scope 1+2)		tCO_2eq	823	872	837
Direct GHG Emissions (Scope 1)	Total	tCO_2eq	142	131	119
	Headquarter	tCO_2eq	142	131	119
Indirect GHG Emissions (Scope 2)	Total	tCO_2eq	681	741	718
	Headquarter	tCO_2eq	681	741	718
Direct/Indirect Emissions Intensity (Scope 1+2)		tCO_2eq/ KRW 100 million	1.113	1.305	1.402
Reduction Performance in KRW Unit, Compared to the Previous Year		%	(18.7)	(17.3)	(7.4)

Energy Usage Management

Energy Usage

Classification		Unit	2021	2022	2023
Total Energy Usage		TJ	16.9	17.4	14.6
General Energy Usage (Direct Energy Source)	Total	TJ	2.67	2.43	2.18
	Diesel Usage	TJ	0.02	0.02	0.02
	Gasoline Usage	TJ	0.40	0.49	0.50
	LNG Usage	TJ	2.25	1.92	1.66
General Energy Usage (Indirect Energy Source)	Total	TJ	14.2	15.0	12.5
	Electricity Usage	TJ	14.2	15.0	12.5
Intensity of Energy Usage within Basic Unit Organization		TJ/ KRW 100 million	0.02	0.03	0.02

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

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	Disruptions in the green supply chain due to abnormal climate conditions and anticipated increases in supply unit prices	Short and medium term
		Assets	Physical damage to buildings and real estate owned by GC due to natural disasters	Short term
		Sales	Reduced cost profitability due to supply and demand imbalances and increased raw material prices from natural disasters	Short term
	Transition Risks	Costs	Increased emission liabilities due to a surge in GHG credits	Long term
		Costs	Basic operating costs (electricity, gas, water) are expected to rise when GHG emission trading prices or pan-government reduction targets increase	Medium and long term
		Costs	Increased investment costs for chemical handling and pollution reduction when disclosing environmental information, such as strengthening the GHG inventory for GC rental/owned real estate	Short and medium term
		Costs	An expected increase in the opportunity cost of environmental investments, reflecting customer needs for products and services in line with global environmental policies and targets	Short term
		Costs	Increased legal risks and lawsuit costs for non-compliance with pollution and emission standards	Short term
		Costs	In the event of a serious accident in the safety sector, increased opportunity costs for safety accidents, such as damage to corporate image and punitive damages under domestic laws, are expected	Short term
		Financing	Increased investment opportunities in the pharmaceutical industry, such as the development of low-carbon medicines	Short term
		Costs	Increase in the cost for transition to low-carbon technology	Long term
		-	Increase in customer expectations and demands for corporate climate change response	Short term
		Costs	Increase in raw material prices for supply chain and green buyers.	Short and medium term
		Sales	Risks of an insecure supply of raw materials due to imbalances in supply	Medium term
		-	Limitations on the rapid development of eco-friendly products in the pharmaceutical industry	Short term
		Sales	Delays in and failure to address consumer trends and eco-friendly products can lead to a decline in corporate image	Short term
		-	Negative opinions may arise due to a lack of strategy in responding to demands for compliance with global climate change measures	Short term
Opportunity Factors	Resource Efficiency	Costs	Increased investment costs for eco-building and energy recycling systems (solar/heat, waste heat resource recovery system, rainwater recycling) in cost-saving architectural design	Medium term
	Energy Resources	Costs	Offset investment costs through reduced GHG credits	Long term
		-	Reducing energy consumption to respond to climate change and the globalization of environmental policies	Long term
		-	Continuous advancements in sustainable energy technology expected	Long term
	Market	Financing	Increase shareholder value and expand investment through technology-intensive climate change response and performance	Short term
		-	Creating an environment based on the transition from pandemics to endemics, natural disasters, and global warming caused by climate change	Long term
		-	Increase in GC and corporate brand value through a green and eco-friendly corporate image	Medium and long term

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Safe Chemical Substances Management Strategy

All GC Biopharma sites handling chemicals are committed to protecting the natural environment and operators, adhering to relevant laws and regulations such as the Chemical Substances Control Act and the Act on the Registration and Evaluation of Chemical Substances. In compliance with relevant laws, the company manages hazardous chemicals by conducting risk assessments based on MSDS[1], establishing appropriate safety management plans, and controlling the life cycle from procurement to disposal to prevent safety accidents and environmental pollution. Through these actions, the introduction and disposal of chemical substances are thoroughly controlled to prevent safety accidents and environmental pollution.

1) MSDS (Material Safety Data Sheets): A document describing safety and health precautions, health hazards, and physical risks associated with handling chemical substances.

Scope of Response to Chemical Regulations

Chemical Substances Control Act	Occupational Safety and Health Act	Act on Safety Control of Hazardous Substances
Toxic Substances	Substances with Occupational Exposure Limits	Class 1 Oxidizing Solids
Restricted Substances	Environmental Monitoring Substances	Class 2 Combustible Solids
Prohibited Substances	Controlled Hazardous Substances	Class 3 Pyrophoric materials and water reactive chemical
Accident Preparedness Substances	Permitted Hazardous Substances	Class 4 Flammable liquids
Authorized Substances	Prohibited Hazardous Substances	Class 5 Self-reactive substances
	Substances Requiring Special Health Examinations	Class 6 Oxidizing liquids
	Specially Controlled Substances	

Chemical Substances Management System

GC Biopharma assesses the harmfulness of hazardous chemical substances through dedicated personnel responsible for their management. This includes evaluating potential impacts on operators and the surrounding environment during warehousing, handling, storage, usage, and registration processes. Before procurement, a review is conducted using the Chemical Management System (CMS) to ensure that no hazardous substances enter the business site without SHE team approval. Additionally, in 2024, operation scope of the Chemical Management System (CMS) has been extended to R&D center to monitor regulated chemical substances by conducting legal regulatory reviews before warehousing of reagents.

Process for controlling chemical substances

Identification of chemicals
- Obtain the MSDS
- Register substance information into electronic system

→ **Request for review and approval**
- Process for regulatory approval of new substance
- Decision-making on acceptance by the SHE team (new material)

→ **Procurement**
- Review of relevant regulations (existing and new substances)
- Decision-making on purchase by the SHE team

→ **Storage and use**
- Verify appropriate handling facilities
- Provide personal protective equipment and disaster prevention equipment
- Conduct training for hazardous chemical

← **Waste management**
- Dispose waste in compliance with relevant regulations

Training on Chemical Substance Management

GC Biopharma conducts regular safety training for handlers, facility management during handling, and emergency response to chemical leaks to ensure safe chemical substance management. We manage Material Safety Data Sheets (MSDS) that include information such as handling and storage method of products and materials, names and ingredients of substances, their hazards and risks, required personal protective equipment, and precautions. This MSDS is trained to users for the prevention of accidents including occupational disease, fire, and explosion caused by handling of chemical substances. We also secure and display MSDS for all chemical substances on-site, and conduct safety training for operators, including information on material hazards and risks, handling precautions, and emergency response plans, before starting operations and regularly thereafter.

Annual Training Contents for Chemical Substances Management

- Chemical substances management in specific departments
- Understanding Material Safety Data Sheets (MSDS) and warning signs
- Physical and health hazards associated with chemical substances
- Precautions and safe practices for handling chemical substances
- Selection and use of appropriate protective equipment for handling chemicals
- Emergency response procedures during chemical leaks and accident prevention measures
- Recognizing signs of chemical accidents and preventing them
- Reporting chemical accidents and communicating information effectively
- Emergency procedures for human exposure to chemicals

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Air Pollutants Management

For operation and management of air emission and pollution prevention facilities, we conduct continuous facility-specific monitoring and management. Regarding emitted pollutants, ensuring that emissions remain below legal limits through biannual self-measurement in accordance with 'Clean Air Conservation Act' conducted by engaging external environmental monitoring contractors.

Emissions of Air Pollutants

	Classification	Unit	2021	2022	2023
Total amount of air pollutants	Total	Ton	9.59	7.13	6.72
	Nitrogen oxide (NOx)	Ton	9.01	6.53	6.10
	Sulfur oxides (SOx)	Ton	0.05	0.10	0.00
	Dust (PM)	Ton	0.43	0.27	0.47
	Ammonia	Ton	0.00	0.00	0.00
	Zinc compounds	Ton	0.00	0.00	0.00
	Copper compounds	Ton	0.00	0.00	0.00
	Total hydrocarbon (THC)	Ton	0.10	0.23	0.15
	Volatile organic compounds (VOCs)	Ton	0.00	0.00	0.00

Water Pollutants Management

GC Biopharma conducts monthly measurements on water quality of raw wastewater and effluent from wastewater treatment facilities. Wastewater from each business site is managed by applying standards(Area 'Clean') that are more stringent than the legal permissible limits(Area 'Na') for water pollutant. Specific hazardous substances in wastewater discharge facilities and wastewater treatment facilities are measured semi-annually, and the results of the emission amount investigated are reported every March. GC Biopharma's Ochang plant operates three sedimentation tanks in the wastewater treatment facility, where two of the tanks are under operation for 24/7 throughout the year, while the remaining tank is kept on standby and undergoes periodic test runs to remain operational during contingencies. Additionally, Ochang plant routinely updated drawings for clean water, wastewater, septic tanks and manholes throughout the facility to ensure efficient management of water pollution prevention facilities

Emissions of Water Pollutants

	Classification	Unit	2021	2022	2023
Total amount of water pollutants	Total	Ton	11.271	10.584[1)]	10.625
	Biological oxygen demand (BOD)	Ton	1.165	0.886	0.940
	Chemical oxygen demand (COD)	Ton	3.843	2.572	2.644
	Suspended Solids (SS)	Ton	2.164	2.104	1.509
	Total nitrogen (T-N)	Ton	2.089	1.030	2.356
	Total phosphorus (T-P)	Ton	0.625	1.173	0.623
	Total organic carbon (TOC) [2)]	Ton	1.077	2.801	2.443
	Others[3)]	Ton	0.310	0.018	0.110
	pH[4)]	pH	-	7.650	7.543

1) Data error has been corrected excluding the data of pH concentration
2) TOC was disclosed as part of 'Others', but disclosed separately from 2023,
3) Section on 'Others' include n-hexane mineral oils (N-H (light)), n-hexane oils (N-H (copper)), and specific water hazards and excludes pH for separate disclosure.
4) pH concentration is calculated as average

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

Establishing for the Chemical Substance Management System

GC Cell established chemical substance management systems to proactively respond to domestic and international regulations on chemical substances.

The scope of management extends to chemical substances used in the cell therapy research center aiming to minimize the risk associated with handling chemicals those are managed in small quantities and various types. We manage the entire process starting with a preliminary review during the procurement of raw materials, where we register domestic and international chemical substances and verify compliance. This process includes handling from receipt, storage, usage, and disposal.

- GC Cell results on material registration in accordance with Chemical Substance Registration and Evaluation Law in 2023: 14 substances registered; 27 substances exempted from registration

Chemical Substance Management Activities

As part of the chemical substance management activities, GC Cell continues to conduct chemical substances risk assessments, regularly collect inventory information, inspect on hazardous chemical substance handling facilities, and secure, publish, and update Material Safety Data Sheets (MSDS). Additionally, operators are provided with on-site personal protective equipment and emergency resources have been positioned in the proximity of equipment and facilities for immediate use during emergencies. We endeavor to ensure a safe environment through working environment measurements, specialized trainings and health checkups.

Chemical Substance Risk Assessment

Based on the chemical substance management activity data, GC Cell conducts regular (once a year) and ad-hoc (upon introduction of new products) chemical substance risk assessments for each materials handled, covering entire business sectors. The chemical substance risk assessment calculates risks by multiplying 'hazard score' and 'exposure score', determining the level of risk on a scale from 1 to 16. If the risk level from the chemical substance risk assessment is 5 or higher, we strive to reduce the risk during handling of chemical substances by implementing improvement activities that integrate these findings into process risk assessments.

Process of Chemical Substance Risk Assessment

Chemical Substance Information management	· Secure and electronically register the data related to received chemical substance
Determining Exposure Score and Hazard Score	· Hazard Score: Quantifies the H-code from the MSDS to assign a score ranging from 1 to 4 · Exposure Score: Calculated by multiplying volitivity/fugacity and frequency of use
Determine the Risk	· This is a stage to determine the acceptability of the substance (Exposure x Hazard Score) · Levels 5 to 11 require risk reduction activities, while levels 12 to 16 necessitate immediate measures
Establish and implement measures to reduce the risk	· Establish risk reduction measures and set priorities for targets requiring improvement actions · Establish measures such as process changes, isolation, installation and improvement of ventilation systems, and wear personal protective equipment

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Cell

Air Pollutants Management

Nitrogen oxide emissions, the main source of GHG emissions, are minimized due to the low NOx burner installed in the boiler facility. Additionally, efforts to minimize pollutant emissions include semi-annual self-evaluations of air pollutant measurements, boiler safety inspections, and cleaning of pipes prior to performance test to enhance boiler efficiency and managing load reduction. An in-house standard that is 90% of the legally permitted amount is applied to ensure effective management.

Emissions of Air Pollutants

Classification		Unit	2021[1)]	2022[1)]	2023
Total amount of air pollutants	Total	Ton	0.70	0.21	0.28
	Nitrogen oxide (NOx)	Ton	0.70	0.21	0.27
	Sulfur oxides (SOx)	Ton	0.00	0.00	0.00
	Dust (PM)	Ton	0.00	0.00	0.01
	Ammonia	Ton	N/A	N/A	0.00
	Zinc compounds	Ton	N/A	N/A	0.00
	Copper compounds	Ton	N/A	N/A	0.00
	Total hydrocarbon (THC)	Ton	N/A	N/A	0.00
	Volatile organic compounds (VOCs)	Ton	0.00	0.00	0.00

1) Recalculated using formula provided by Environmental Information Disclosure System

Water Pollutants Management

To reduce water pollution, biological wastewater generated during the production is transferred to a kill tank, sterilized with steam, and then discharged into sewage system. Additionally, degree of pollution in water pollutants (measure items: BOD, TOC, SS, T-N, T-P) from the discharge facility is measured and monitored quarterly by third-party contractors. An in-house standard that is 70% of the legally permitted amount is applied to ensure effective management.

Emissions of Water Pollutants

Classification		Unit	2021[1)]	2022[1)]	2023
Total amount of water pollutants	Total	Ton	0.057	0.136	0.177[2)]
	Biological oxygen demand (BOD)	Ton	0.001	0.001	0.019
	Chemical oxygen demand (COD)	Ton	0.027	0.040	0.053
	Suspended Solids (SS)	Ton	0.001	0.002	0.008
	Total nitrogen (T-N)	Ton	0.025	0.090	0.087
	Total phosphorus (T-P)	Ton	0.003	0.003	0.004
	Others	Ton	0.000	0.000	0.006

1) Recalculated using formula provided by Environmental Information Disclosure System
2) pH has been excluded from the item 'Others'.

Efforts to Conserve Biodiversity

To raise awareness and enhance response capabilities regarding biodiversity conservation and utilization, GC Cell joined as a member of the <Business and Biodiversity platform>, established in 2016 and we stay updated on biodiversity policy trends and exemplary corporate activities. Through this, we will establish biodiversity policies and systems, analyze risks and promote relevant activities.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC (Holding Company)

Establishing the Basis for the Chemical Substances Management System

GC (Holding Company) plans to review the applicability of GC Biopharma's Chemical Management System for listed affiliates to establish the foundations of a chemical substance management system for the GC Group.

Emissions of Air Pollutants

Classification		Unit	2021	2022	2023
Total amount of air pollutants	Total	Ton	0.15	0.11	0.03
	Nitrogen oxide (NOx)	Ton	0.15	0.11	0.03
	Sulfur oxides (SOx)	Ton	0.00	0.00	0.00
	Dust (PM)	Ton	0.00	0.00	0.00
	Volatile organic compounds (VOCs)	Ton	N/A	N/A	N/A

Evaluating and Monitoring of Environmental Impacts

GC (Holding Company) assigned quantitative goals to its affiliates (GC Cell, GCMS, GCWB and 7 others) for reducing environmental pollution and mitigating potential risk factors. The company monitors compliance with the environmental regulations and the implementation status of these goals on a monthly basis. In February 2024, self-discipline risk assessment and environmental impact assessment have been conducted. For the 42 unacceptable risk factors identified, fundamental reduction and improvement plans were established, and the first phase of improvement activities was implemented through environmental technicians (outsourced to GCEM). Additionally, environmental and safety operation council has been organized for partners, and annual due diligence are conducted to evaluate and manage their environmental and safety operation system and qualifications. Continuous improvement guidance and efforts to enhance environmental and safety capabilities are enforcing the corporate relationship between primary company and the partner.

GC Group

Waste Management Strategy

GC Group sets the target on waste generation and efforts to minimize waste generation in all production and disposal processes. Additionally, waste management procedure has been established in accordance with waste management related regulations, and the company implements reduction of environmental impact through compliant practice for treatment, separation and minimization of waste. Specifically, medical waste generated due to the nature of the pharmaceutical industry among the designated waste (isolated, hazardous, and general medical waste) is processed by professional contractors in accordance with legal procedures. The relevant details are reported to the appropriate governmental authority and the waste is properly disposed.

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	2021	2022	2023
Amount of Waste	Total	Ton	138	164	103
	General Waste[1)]	Ton	138	164	103
Waste Disposal Amount (Landfill)	Total Amount of Landfill	Ton	0	0	0
	Total Percent of Landfill	%	0	0	0
Waste Disposal Amount (Incineration)	Total Amount of Incineration	Ton	132	148	93
	Total Percent of Incineration	%	95.2	90.3	90.2
Waste Disposal Amount (Recycled)	Total Amount Recycled	Ton	7	16	10
	Total Percent Recycled	%	4.8	9.7	9.8

1) Integrated management of GC Town, including GC Cell data

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
• Area 1. Extending Access to Healthcare
• Area 2. Customer Safety and Responsibility to Quality
• Area 3. Corporate Ethics and Compliance
• Area 4. Responsibility to Environment
General Disclosure ▾
Appendix ▾

GC Biopharma

Waste Management

GC Biopharma maintains clean living and production environment clean by pertinently managing the waste generated throughout all production processes in the manufacturing plant, thereby preventing production contamination and environmental pollution. All generated waste is disposed of by waste treatment contractors through a 'Consignment Agreement on Waste Collection, Transfer, and Disposal' in accordance with the 'Waste Management Act'. Contractors used for waste disposal are evaluated annually and must be registered for waste collection, transfer, and disposal. Efforts are made to reduce waste generation by further classifying and seeking ways to recycle waste, excluding non-recyclable items such as waste medicines and medical waste. An extra recycling process is conducted when general waste from the business site is temporarily stored in the waste storage.

Waste Management and Recycling

Classification		Unit	2021	2022	2023
Amount of Waste	Total	Ton	3,322	3,344	2,987
	General Waste	Ton	3,072	3,076	2,608
	Designated Waste	Ton	201	151	256
	Medical Waste	Ton	49	117	123
Waste Disposal Amount (Landfill)	Total Amount of Landfill	Ton	170	0	0
	Total Percent of Landfill	%	5.1	0	0
Waste Disposal Amount (Incineration)	Total Amount of Incineration	Ton	1,174	1,275	1,234
	Total Percent of Incineration	%	35.4	38.1	41.3
Waste Disposal Amount (Recycled)	Total Amount Recycled	Ton	1,978	2,068	1,752
	Total Percent Recycled	%	59.5	61.8	58.7

Waste Treatment Process

2023 Waste Management

Classification			Unit	2023
Total Amount of Waste	Total		Ton	2,987
	General Waste		Ton	2,608
	Designated Waste		Ton	256
	Medical Waste		Ton	123
Total Waste Disposal Amount	Total		Ton	2,987
	General Waste	Landfill	Ton	-
		Incineration	Ton	1,054
		Recycled	Ton	1,554
	Designated Waste	Landfill	Ton	-
		Incineration	Ton	58
		Recycled	Ton	198
	Medical Waste	Landfill	Ton	-
		Incineration	Ton	123
		Recycled	Ton	-
	Recycle Rate of Waste		%	58.7

GC Cell

Waste Management

GC Cell disposes waste generated in our R&D and production sites and offices by classifying it into general waste, medical waste and designated waste. Additionally, environmental personnel at GC Cell monitor our performance in the Allbaro System, managed by the Ministry of Environment, to ensure all waste is disposed in compliance with regulations. It has been confirmed that all waste disposal is compliant.

- Plan to improve general waste disposal: To collect more accurate data and reduce waste generation, an application will be submitted in 2024 to switch from collective waste discharge for entire GC Town in Yongin to sole waste discharge by GC Cell.
- Action to reduce medical waste: Reduce the disposal of non-conforming Immuncell-LC's API, blood, by enhancing quality control.

Waste Management and Recycling

Classification		Unit	2021	2022	2023
Amount of Waste	Total	Ton	26	89	116
	Designated Waste	Ton	6	8	16
	Medical Waste	Ton	20	80	100
Waste Disposal Amount (Incineration)	Total Amount of Incineration	Ton	26	89	116
	Total Percent of Incineration	%	100	100	100
Waste Disposal Amount (Recycled)	Total Amount Recycled	Ton	0	0	0
	Total Percent Recycled	%	0	0	0

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

General Disclosure

General 90
Economy 99
Environment 103
Society 108

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

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. 94
	Location of headquarters	107, Ihyeon-ro 30beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea
	Country 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, 2023 to Dec. 31, 2023 Where necessary, include performance in the first half of 2024 Quantitative data : Three-year data from 2021 to 2023
	Reporting period for financial disclosures	Jan. 1, 2023 to Dec. 31, 2023
	Publication date	June. 28, 2024
	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 58th Business Report I-1. B. Changes in the consolidated company p. 3.
External Assurance		Refer to 'Independent Assurance Statement' p. 150

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' pp. 9-14
	Supply chain	Refer to 'Supply Chain ESG Management' pp. 53-56 and 'Co-prosperity with Partners' p. 118

GRI 2: Employees

Employees and Workers who are not employees GRI 2-8

Employees (As of Dec, 31, 2023)

Classification					Unit	2021	2022	2023
GC (Holding Company)	Total Employees	Total			Persons	146	163	178
		Gender	Male	Personnel	Persons	99	102	112
			Female	Personnel	Persons	47	61	66
		Age	Under 30	Ratio	%	16.4	14.7	14
			Over 30 Under 50	Ratio	%	76.7	76.7	75.3
			Over 50	Ratio	%	6.8	8.6	10.7
	Number of Employees by Employment Type	Regular Workers	Total		Persons	143	160	173
		Temporary Workers	Total		Persons	3	3	5
			Ratio of temporary workers		%	2.1	1.8	2.8
GC Biopharma	Total Employees	Total			Persons	2,187	2,302	2,272
		Gender	Male	Personnel	Persons	1,640	1,712	1,681
			Female	Personnel	Persons	547	590	591
		Age	Under 30	Ratio	%	15.7	15.8	14.1
			Over 30 Under 50	Ratio	%	75.9	75.7	76.6
			Over 50	Ratio	%	8.4	8.5	9.2
	Number of Employees by Employment Type	Regular Workers	Total		Persons	2,093	2,105	2,092
		Temporary Workers	Total		Persons	94	197	180
			Ratio of temporary workers		%	4.3	8.6	7.9
GC Cell	Total Employees	Total			Persons	799	838	858
		Gender	Male	Personnel	Persons	521	536	552
			Female	Personnel	Persons	278	302	306
		Age	Under 30	Ratio	%	45.4	39	37.5
			Over 30 Under 50	Ratio	%	49.2	56.2	57.7
			Over 50	Ratio	%	5.4	4.8	4.8
	Number of Employees by Employment Type	Regular Workers	Total		Persons	728	776	775
		Temporary Workers	Total		Persons	71	62	83
			Ratio of temporary workers		%	8.9	7.4	9.7

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

G GENERAL

GRI 2: Governance

BOD Composition and Operation GRI 2-9

· Each affiliate of GC Group independently operates its own board of director (BOD)
· GC (Holding Company) operates a Management Committee within the Board of Directors
  - The Management Committee is established to regularly discuss and make timely decisions on major agendas delegated by the BOD
  - Decisions made by Management Committee is shared with the BOD members and can be re-discussed and decided upon by the BOD where necessary
· GC Biopharma operates three committees within the Board of Directors
  - Management Committee: Established to make timely decisions on various projects to address rapid changes in the management environment
  - Audit Committee: Established to audit and support management activities to enhance corporate and shareholder value through appropriate procedures and rational decision
  - Independent Director Nomination Committee: Established to verify the independence and competence of independent director nominees to ensure they are fit for a global company

BOD Composition (As of March 31, 2024)

Classification		Name	Gender	Term	Position	Key Experience
GC (Holding Company)	Inside director	Il-Sub Huh	Male	2023.3~2025.3	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	2024.3~2026.3	-	· 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	2024.3~2026.3	CEO	· Ph.D. in Science (Cornell University) · Chairman of BOD · Chairman of Management Committee
		Jae-Wook Jeong	Male	2024.3~2026.3	Head of R&D	· Ph.D. in Organic Chemistry (Purdue Univ.) · Member of Management Committee
		Woong Shin	Male	2024.3~2026.3	Head of QM	· Member of Management Committee
	Independent director	Choon-Woo Lee	Male	2024.3~2026.3	-	· Professor of Business Administration (University of Seoul) · Chairman of Independent Director Nomination Committee · Member of Audit Committee
		Jin-Hee Lee	Female	2024.3~2026.3	-	· Korean lawyer / pharmacist · Member of Audit Committee
		Seong-Hoon Shim	Male	2024.3~2026.3	-	· CEO of Spectra Corporation · Member of Independent Director Nomination Committee
		Ki-Joon Park	Male	2024.3~2026.3	-	· CPA at Woori Accounting Corporation · Chairman of Audit Committee · Member of Independent Director Nomination Committee
GC Cell	Inside director	James Park Jong-Eun	Male	2023.3~2025.3	CEO	· Chairman of BOD
		Sung-Yong Won	Male	2024.3~2026.3	Head of R&D	· Ph.D. in Immunology (UTMB)
		Ji-Won Jeon	Female	2024.3~2026.3	Head of BD&MKT	· Master's degree in Biotechnology (SNU)
	Independent director	Hong-gi Bae	Male	2023.3~2025.3	-	· CEO of Seohyun Accounting Corporation · Accountant

· The Board of Directors in GC Group is operated in accordance with the Articles of Incorporation, Board of Directors regulations, and the regulations of the committees within the Board.
  - GC (Holding Company)'s Articles of Incorporation, GC Biopharma's Articles of Incorporation, GC Cell's Articles of Incorporation

BOD Composition Rate

Classification				Unit	2022	2023	2024
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	7
		Independent Director (Non-standing)	Ratio of Independent Director	%	25	25	57
		Female Director	Ratio of Female Director	%	25	25	14
GC Cell	Composition	Total Number of Persons		Persons	7	4	4
		Independent Director (Non-standing)	Ratio of Independent Director	%	29	25	25
		Female Director	Ratio of Female Director	%	14	0	25

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**	**Jae-Wook Jeong**	**Woong Shin**	
GC Biopharma Inside director	Management	◎			
	Industrial Expertise (R&D)	◎	◎		
	Industrial Expertise (Quality)			◎	
Classification	**Competence**	**Choon-Woo Lee**	**Jin-Hee Lee**	**Seong-Hoon Shim**	**Ki-Joon Park**
GC Biopharma Independent director	Management	◎		◎	
	Industrial Expertise (Medical)		◎		
	Laws		◎		
	Accounting / Finance				◎
Classification	**Competence**	**James Park Jong-Eun**	**Sung-Yong Won**	**Ji-Won Jeon**	**Hong-gi Bae**
GC Cell	Management	◎			
	Accounting / Finance				◎
	Industrial Expertise (R&D)		◎		
	Industrial Expertise (Sales)	◎		◎	

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

G GENERAL

GRI 2: Governance

BOD Composition and Operation GRI 2-9

BOD Operation

Classification				Unit	2021	2022	2023
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	6
		The Number of Agendas	The Number of Overall Meetings (Report and Decision)	Cases	18	24	24
			The Number of ESG Agendas	Cases	2	6	6
			The Number of Correction/Rejection Agendas by Independent Director	Cases	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	7	6
		The Number of Agendas	The Number of Overall Meetings (Report and Decision)	Cases	15	24	23
			The Number of ESG Agendas	Cases	4	6	6
			The Number of Correction/Rejection Agendas by Independent Director	Cases	0	0	0
GC Cell	Operation	Attendance Rate of BOD	Total	%	70	80	97
			Independent Director (Non-standing)	%	47	65	100
		BOD Meetings Held		Times	13	9	5
		The Number of Agendas	The Number of Overall Meetings (Report and Decision)	Cases	28	24	30
			The Number of ESG Agendas	Cases	2	3	5
			The Number of Correction/Rejection Agendas by Independent Director	Cases	0	0	0

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

· In order to prevent transactions that pursue private interest of directors, executives, or major shareholders, GC Group systematically blocks the possibility of conflicts of interest by requiring the approval of transactions between major shareholders, directors and the company to be a special resolution of the BOD
  - Directors with special interest in the agenda of BOD are restricted from exercising their voting rights
· The results of the committee resolutions within the BOD are notified to each director within 5 business days from the date of the resolution

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 through a resolution from Annual General Meeting of Shareholders in accordance with the Commercial Act and Articles of Incorporation
  - Independent directors are appointed from individuals without any special relationship with the management.
  - Chairman of the BOD is appointed from directors through a resolution from the Board meeting, to ensure separation from the CEO

Performance

Amendment of Articles of Incorporation

· At the general shareholders' meeting in March 2024, GC Biopharma amended the Articles of Incorporations to enhance the independence and transparency of the BOD by increasing the number of independent directors and establishing additional committees within the BOD.
  - At least 3 independent directors (more than half of the total number of directors), mandatory appointment of female directors (prohibiting the Board of Directors from being composed of a single gender)
  - Established Audit Committee and Independent Director Nomination Committee

Enforcing Independence of BOD

· GC Group verifies potential conflicts of interests required by related laws, such as the criteria for determining independence under Article 382 of the Commercial Act, from the stage of appointing independent directors to ensure that they can supervise and support the company's management independently from the management.
· Concurrent positions of independent directors are limited to no more than two in accordance with legal requirements.
· When appointing an independent director, concurrent positions at other companies are verified through the 'Confirmation of Qualifications for Independent Director'. The independent director appointed should have long experience and expertise in the company's business field to enhance both expertise and responsibilities.
· Independent directors are provided with comprehensive support in various business areas for performing their tasks efficiently.
  - Support is provided through the Board of Directors department.
  - Regulations include the rights of independent directors to request information (ensuring their rights to request information from the company and, if necessary, to receive training and assistance from external experts at the company's expense).

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

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 performs and supervises the agenda items including general Annual General Meeting of Shareholders, management (including ESG), finance, investment and expenditure, sales and production, appointment of directors, and the establishment and operation of committees within the board of directors.
- Management Committees are established and operated to timely respond to major management agenda items, including ESG. Critical matters are escalated to BOD for resolution.

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.106)

- The Reappointment of a director is determined by the BOD based on the evaluation of their performance during their tenure when their term ends.
- The performance evaluation of the BOD is based on factors such as the attendance rate at BOD meetings and their performance, including achieving the company's management goals and enhancing the corporate image.
- The compensation of directors is appropriately determined within the limits set by the resolution of the Annual General Meeting of Shareholders, taking into account the duties, roles and responsibilities of the directors.
  - Independent directors are not paid additional performance-based compensation to ensure their independence.
- Standards for performance evaluation and calculation: Financial indicators such as revenue and net profit, and KPI achievements.

Compensation of Management

Classification			Unit	2021	2022	2023
GC (Holding Company)	Total Amount of BOD Compensation	Total	KRW million	2,660	2,459	2,451
		Inside Director	KRW million	2,624	2,423	2,415
		Independent Director (Non-standing)	KRW million	36	36	36
GC Biopharma	Total Amount of BOD Compensation	Total	KRW million	1,970	1,698	1,537
		Inside Director	KRW million	1,934	1,662	1,501
		Independent Director (Non-standing)	KRW million	36	36	36
GC Cell	Total Amount of BOD Compensation	Total	KRW million	1,399	1,775	2,033
		Inside Director	KRW million	1,349	1,706	1,997
		Independent Director (Non-standing)	KRW million	50	69	36

Audit

- GC (Holding Company) and GC Cell have a full-time auditor and have 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.
- GC Biopharma has established and operates an Audit Committee.

Performance

Audit Organization

- GC (Holding Company) and GC Cell Operate a full-time audit who conducts audits while working full-time at the company, based on Article 542-10 (1) of the Commercial Act
- GC Biopharma operates an Audit Committee, based on Article 542-11 of the Commercial Act
  - The independence of the Audit Committee is ensured by having all three members as independent directors.
  - Transparency in corporate management is improved through the soundness of accounting and financial activities, as well as the evaluation of internal control systems.
- The appointment of auditors and audit committee members should meet the qualification requirements under relevant statutes such as the Commercial Act, and they should be experts with long experience in finance, accounting, and management to ensure independence and expertise.
- The compensation of auditors and audit committee members is appropriately determined within the limits set by the resolution of the general shareholders' meeting, taking into account their duties, roles, and responsibilities to secure work fidelity.

External Auditor

- Regular audits by independent external auditors are conducted to ensure objectivity and transparency for financial information
  - GC (Holding Company), GC Biopharma, GC Cell received an 'Unqualified' audit opinion for 2023 fiscal year. (External auditor: EY Hanyoung)
- External auditors attend the Annual General Meeting of Shareholders to support responding to shareholder's questions regarding the submitted audit report.

Internal Control Organization

- The company has established internal accounting management policies and operates a dedicated organization to manage internal accounting in order to prepare and disclose reliable accounting information.
- Each year, the operation status of the internal accounting control system is evaluated and the results to are reported to the BOD and shareholder meeting by the CEO of each company, promoting transparency and reliability of the accounting information.
- The Management Diagnosis Team, an internal audit department, is responsible for establishing audit plans, approving audit plans, conducting regular and sporadic audits and preventing risks in advance and strives to effectively operate internal controls.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

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. Shareholders' rights are respected in accordance with laws and Articles of Incorporation. Decisions that bring significant changes to shareholder's right are made through the Annual General Meeting of Shareholders, aiming to protect and guarantee the rights to the fullest extent.
- Shareholders of GC Group may propose an agenda at the General Annual General Meeting of Shareholders 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
- Annual dividends are provided to shareholders to return management performance. The size of the dividends is determined by considering the current year's profit level and financial solvency within net profit on the separate financial statements.
- At the general shareholders' meeting in March 2024, GC Group amended the procedure on dividend process to enhance shareholder value by allowing shareholders to confirm the dividend status and amount before making decisions on investment.
  - Articles of Incorporation has been amended to separate the date of voting rights at the Annual General Meeting of Shareholders from the date for dividends.

Communication with Shareholders

- GC Group shares the company's management performance and major issues with shareholders through the Annual General Meeting of Shareholders, provides them with a free opportunity to speak, and offers sufficient explanations for shareholders' questions.
- In order to secure corporate transparency and build confidence, GC Group conducts NDR (Non-Deal Roadshows) for institutional investors and participates in various IR activities, such as Corporate Day and conferences held by stock firms.
- The company's business activities, financial status, and management performance are transparently disclosed through the company's website and the Financial Supervisory Service's electronic disclosure system, DART (Data Analysis, Retrieval, and Transfer System).

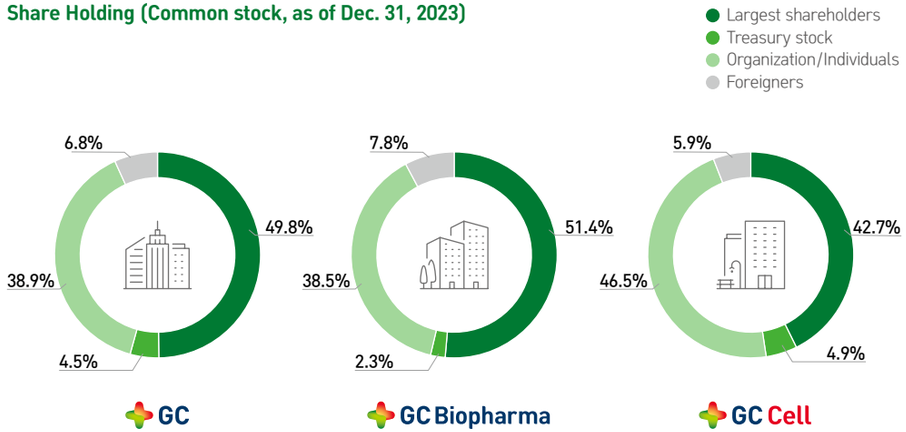
Increase Shareholder Value

- GC Group's listed affiliates make efforts to schedule our regular Annual General Meeting of Shareholders on a different date from the concentrated meeting dates designated by the Financial Supervisory Service
- The date, time, place, and purpose of the Annual General Meeting of Shareholders are notified no later than two weeks prior to the meeting date, and the business report and audit report are disclosed one week prior to the meeting.
  - This is to protect shareholders' rights by ensuring an understanding of the business performance and major agenda in advance, thoroughly review the agenda, and exercise their voting rights accordingly.
- Electronic voting system is introduced and under operation to enhance shareholder convenience

Implementation System for Recommendation of Proxy Solicitation

- GC (Holding Company) and GC Biopharma implement system for recommendation of proxy solicitation in the Annual General Meeting of Shareholders based on Capital Market Act to actively support shareholders to express their voting rights in various ways

Share Holding (Common stock, as of Dec. 31, 2023)



Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

G GENERAL

GRI 2: Governance

Shareholder-Friendly Policy

Shareholder and Dividend

Classification			Unit	2021	2022	2023
GC (Holding Company)	Major dividend indicator	Face Value of Stock	KRW	500	500	500
		Net Profit	KRW million	55,270	32,823	(54,136)
		Earnings per Share	KRW	1,222	727	(1,184)
		Total Amount of Cash Dividend	KRW million	18,162	13,622	13,622
		Cash Dividend Payout Ratio	%	32.9	41.5	(25.2)
		Cash Dividend Yield Ratio	%	1.5	1.7	1.9
		Cash Dividend Per Stock[1]	KRW	400	300	300
	Issued stocks	Total Amount of Possibility of Issue	Stock	150,000,000	150,000,000	150,000,000
		Total Amount of Issued Stocks	Stock	49,543,070	49,543,070	49,543,070
		Treasury Stock	Stock	4,141,339	4,141,339	4,141,339
		Number of Shares Ready to Trade	Stock	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	123,212	65,453	(26,632)
		Earnings per Share	KRW	10,796	5,735	(2,333)
		Total Amount of Cash Dividend	KRW million	22,826	19,973	17,120
		Cash Dividend Payout Ratio	%	18.5	30.5	(64.3)
		Cash Dividend Yield Ratio	%	0.9	1.3	1.2
		Cash Dividend Per Stock[1]	KRW	2,000	1,750	1,500
	Issued stocks	Total Amount of Possibility of Issue	Stock	30,000,000	30,000,000	30,000,000
		Total Amount of Issued Stocks	Stock	11,686,538	11,686,538	11,686,538
		Treasury Stock	Stock	273,360	273,360	273,360
		Number of Shares Ready to Trade	Stock	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	30,064	24,169	79
		Earnings per Share	KRW	2,785	1,664	(12)
		Total Amount of Cash Dividend	KRW million	0	5,256	1,502
		Cash Dividend Payout Ratio	%	0	21.0[2]	18.4[3]
		Cash Dividend Yield Ratio	%	0	0.7	0.2
		Cash Dividend Per Stock[1]	KRW	0	350	100
	Issued stocks	Total Amount of Possibility of Issue	Stock	50,000,000	50,000,000	50,000,000
		Total Amount of Issued Stocks	Stock	15,800,344	15,800,344	15,800,344
		Treasury Stock	Stock	783,492	783,692	777,703
		Number of Shares Ready to Trade	Stock	15,016,852	15,016,652	15,022,641

1) Based on common stock
2) Correction made accordingly with the electronic disclosure on the first-quarter report in 2024
3) Reflecting the net profit (separate) according to the dividend policy

GRI 2: ESG Management Strategy, Risk Management

Compliance with Laws and Regulations GRI 2-27

- Compliance of GC Group is disclosed for each subject
- Financial loss due to legal proceeding for GC Group during the reporting period was zero

▶ Violation of Environmental Regulations (Refer to p. 107)
▶ Violation of Information Security Regulations (Refer to p. 143)
▶ Violation of Regulations related to Information Provision and Labelling (Refer to p. 50, 53, 143)
▶ Violation of Regulations related to Anti-corruption/Fair trade (Refer to p. 97)

Membership Associations GRI 2-28

- GC Group engages in mutual communication with various stakeholders and receives necessary information

Performance

GC (Holding Company)'s Association Membership (As of April 2024)

- 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 April 2024)

- CANCER X
- Gyeonggi Province Freight Transport Business Association
- Gyeonggi Province Freight Forwarding Business Association
- Korea National Enterprise for Clinical Trials (KoNECT)
- Business and Biodiversity Platform (BNBP)
- Korea Trade-Investment Promotion Agency (KOTRA)
- Pharma Specialists Association (PhaSa)
- Council for Advanced Regenerative Medicine (CARM)
- KOSDAQ Association
- Korea IR Association
- Korea Association of Clinical Laboratory Service Agencies
- Korea Biomedicine Industry Association (KOBIA)
- Korea Human Resource Development Institute for Health and Welfare (KOHI)
- Korea Health Industry Development Institute (KHIDI)
- Korea Industrial Technology Association (KOITA
- Korea Energy Agency New and Renewable Energy Center (K-RE100)
- 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)

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

G GENERAL

GRI 2: ESG Management Strategy, Risk Management

Performance

GC Biopharma's Association Membership (As of April 2024)

- 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)
- Korea Biopharma Sustainability Alliance (K-BPSA)
- 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 Listed Companies Association (KLCA)
- Korea Fire Safety Institute
- Korea Food Industry Association (KFIA)
- Korea Drug Research Association (KDRA)
- Korea Energy Engineers Association
- Korea Pharmaceutical Traders Association (KPTA)
- Korea Pharmaceutical Distribution Association (KPDA)
- 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)
- Korea Organization for Rare Diseases (KORD)
- Korea Environmental Preservation Association (KEPA)

Overall Risk Management

Risk Management System

- GC Group continuously identifies risks and monitors both risk and opportunity factors to systematically prevent and manage potential threats.
  - Risk management and emergency response relevant to the manufacturing, sales, and provision of products and services, targeting potential emerging risks that threaten normal business operations.
- Operating the 'GC Risk Management and Crisis Response Manual'
  - The objective is to minimize initial damages due to risks and the secondary impact that may be caused by inappropriate responses.
  - All employees are responsible for responding to risks in a timely and systematic manner by sharing information through the reporting system presented in the manual as soon as the risks are identified.

Risk Management Organization

- Risk managers are appointed for each affiliate and GC (Holding company) acts as the control tower for integrated risk management.
  - Integrated Risk Manager: The head of business administration department at GC (Holding Company)
  - Affiliate Risk Managers: The head of business administration department of GC Biopharma and GC Cell
- Risks are reported based on the managers' assessment of whether there is a potential for the crisis to spread.
  - Low risks (low risk of crisis spreading) are managed through consultation and coordination with relevant departments.
  - High risks (high risk of crisis spreading) are reported to the CEO immediately and, depending on the matter, to the Board of Directors for a group-level response.
- The responsible organization performs pre- and post-monitoring and takes measures according to the types of risks.
  - (ex) GC Biopharma operates through a permanent organization and a personnel committee for custom of labor relations

Risk Management Organizations

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

G GENERAL

GRI 2: ESG Management Strategy, Risk Management

Performance

Risk Identification and Classification

· Risk is classified into internal risk (financial, legal, business operation, and strategic in 4 areas) and external management environment risk. Detailed types of each risk are redefined for systematic management.

GC Groups Risk Classification System

Internal Risk				External Risk	
Finance	Market	Credit	Liquidity	External	Management Environment
	Tax	Profit & Loss	Disclosure		Political
Regulations	Fraud	Compliance			Customer Change
	Disputes	Liability	Contracts		Government Policy
Business Operation	Supply Chain	IT	Technology		Public Relations
	Quality	Regulations	Partnership		Competitor
	Security	Development	Projects		National
	Environment / Climate Change	Human Rights	Safety		Disaster
Strategy	Strategic Direction	Management			Emerging Technology
	M&A	Overseas Investment	New Business		Pandemic

Risk Response

· Various risks are monitored in advance, risk control procedures are identified, and the actual operational status is regularly reviewed.

Risk Response Process

Anti-Corruption/Fair Trade Regulation Violations GRI 206-1

Anti-Corruption/Fair Trade Regulation Violations

Classification			Unit	2021	2022	2023
GC (Holding Company)	Violation of Regulations	Number of cases in which employees have been fired or disciplined in corruption cases	Number	0	0	0
		Number of cases of corruption where contracts with business partners were terminated or not renewed	Number	0	0	0
		Number of corruption-related lawsuits against companies and employees	Number	0	0	0
		Number of legal sanctions related to fair trade	Number	0	0	0
GC Biopharma	Violation of Regulations	Number of cases in which employees have been fired or disciplined in corruption cases	Number	0	0	0
		Number of cases of corruption where contracts with business partners were terminated or not renewed	Number	0	0	0
		Number of corruption-related lawsuits against companies and employees	Number	0	0	0
		Number of legal sanctions related to fair trade	Number	0	0	0
GC Cell	Violation of Regulations	Number of cases in which employees have been fired or disciplined in corruption cases	Number	0	0	0
		Number of cases of corruption where contracts with business partners were terminated or not renewed	Number	0	0	0
		Number of corruption-related lawsuits against companies and employees	Number	0	0	0
		Number of legal sanctions related to fair trade	Number	0	0	0

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

G GENERAL

GRI 2: Stakeholders

Engagement and Communication with Stakeholders GRI 2-29

Approach to Stakeholder Engagement

Stakeholder	Main Concerns	Communication Channels	Cycle
Customers	Customer satisfaction activities, quality management, sales and marketing activities	Website	Ongoing
		Customer Service Center	Ongoing
Shareholders and Investors	Minimization of management risk, sharing of management activity information and plans, protection of shareholder interest	Board of Directors	4 times/year, as needed
		Annual General Meeting for Shareholders	Once/year, as needed
		Business report, governance report	Once/year
		Disclosure on Electronic System (DART)	As needed
Partners	Fair trade and mutual growth	Discussion meeting (Shared Growth Partners Day)	Once/year
		Whistleblowing system for ethical management	Ongoing
		Procurement information system	Ongoing
		Internal e-mail	As needed
Employees	Welfare benefits, corporate culture and HR system	In-house bulletin board	Ongoing
		Grievance handling channel	Ongoing
		Solution Center (Suggestion Square)	Ongoing
		Employee survey	As needed
Local Communities	Social contribution, regional economic contribution, and conservation	Social contribution activities	As needed
Government and Local Authorities	Compliance with laws, response to policies and regulations	Discussion meeting, website of local governments	As needed

Labor-Management Relations GRI 2-30

Labor-Management Relations

Classification			Unit	2021	2022	2023
GC (Holding Company)	Labor Union	Ratio of membership employees participating	%	N/A	N/A	N/A
		Ratio of applying collective agreement[1)]	%	81	83	84
GC Biopharma	Labor Union	Ratio of membership employees participating	%	21.2	26.2	35.1
		Ratio of applying collective agreement[1)]	%	94	90	91
GC Cell	Labor Union	Ratio of membership employees participating	%	N/A	N/A	N/A
		Ratio of applying collective agreement[1)]	%	88	90	88

1) Subjected to employment rules

GRI 202: Market Presence

· GC Biopharma has multiple labor unions, while GC (Holding Company) and GC Cell have no labor unions. Employees appoint union representatives and discuss collective agreements and working conditions through labor relations council.

Performance

Labor Relations Council

· GC (Holding Company)
  - Elected worker representatives and management representatives regularly hold meetings every three months to discuss enhancement of productivity, profit sharing, employee recruitment and training, institutional improvements in human resources management, and enhancing employee welfare.
  - In 2023, resolutions were made on various aspects including welfare (health examinations, running shuttle buses, etc.), training (supporting online courses), and the operation of hub offices
· GC Cell
  - Elected worker representatives and management representatives regularly hold meetings every three months to discuss regulations on human resource and welfare system, training and corporate culture for continuous improvement
  - Achievement in 2023: Negotiation conducted for introduction of a title system to foster a horizontal corporate culture and for changes to the attendance management system for production operators.

Employment Salary GRI 202-1

Employee Salary

Classification				Unit	2021	2022	2023
GC (Holding Company)	Compare to legal minimum wage ratio	Salary rate for new employees	Male	%	173.4	165	161
			Female	%	169.1	161	157
		Legal minimum wage		KRW million	24	25	26
GC Biopharma	Compare to legal minimum wage ratio	Salary rate for new employees	Male	%	164.8[2)]	158.2[2)]	140.5
			Female	%	160.4[2)]	158.2[2)]	140.5
		Legal minimum wage		KRW million	24	25	26
GC Cell	Compare to legal minimum wage ratio	Salary rate for new employees	Male	%	137	129.0[3)]	126
			Female	%	132	129.0[3)]	124
		Legal minimum wage		KRW million	24	25	26

2) Data for 2021 and 2022 were revised based on recalculations reflecting the starting salary standards for GL and SGL
3) Data corrected for 2022 due to entry errors.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

E

ECONOMY

GRI 201: Economic Performance

Consolidated Statement of Financial Position GRI 201-1

Financial Statement - GC (Holding Company)

Classification		Unit	2021	2022	2023
Assets	Total	KRW million	3,496,834	3,592,061	3,737,707
	Current assets		1,424,864	1,261,978	1,361,246
	Cash and cash equivalents		335,569	208,637	174,538
	Trade and other receivables		465,586	474,563	537,339
	Other financial assets		62,825	31,341	21,573
	Unbilled construction work		29,082	9,305	8,998
	Inventory assets		506,995	505,086	579,728
	Derivative assets		1,231	5,235	3,803
	Other current assets		17,908	27,512	34,918
	Disposal assets held for sales		5,668	299	348
	Non-current assets		2,071,970	2,330,082	2,376,462
	Trade and other receivables		22,512	30,867	81,441
	Other non-current financial assets		145,704	125,579	130,243
	Investment in associates		164,290	242,233	214,125
	Tangible assets		1,068,971	1,109,123	1,067,100
	Intangible assets		533,245	666,154	693,907
	Investment property		79,725	62,594	63,315
	Right-of-Use assets		20,493	39,196	50,111
	Derivative assets		153	1,964	2,153
	Defined benefit assets		10,128	16,412	29,612
	Other non-current assets		4,704	3,818	3,627
	Deferred tax assets		22,045	32,142	40,827

Financial Statement – GC (Holding Company)

Classification		Unit	2021	2022	2023
Liabilities and Equity		KRW million	3,496,834	3,592,061	3,737,707
Liabilities	Total	KRW million	1,586,105	1,625,017	1,856,166
	Current liabilities		925,913	1,052,354	1,513,207
	Trade and other payables		274,259	293,318	343,198
	Short-term borrowings		509,432	603,010	1,012,300
	Short-term lease liabilities		6,345	11,655	16,213
	Overbilled construction work		7,530	15,232	27,374
	Income tax liabilities		44,390	19,118	6,609
	Derivative liabilities		5,253	22,352	26,989
	Other provisions		29,801	31,484	30,919
	Other current liabilities		48,873	56,185	49,605
	Disposal liabilities held for sales		30	-	-
	Non-current liabilities		660,192	572,663	342,958
	Trade and other payables		13,163	21,765	32,028
	Long-term borrowings		508,783	448,359	216,353
	Long-term lease liabilities		21,223	34,848	35,300
	Derivative liabilities		1,421	3,758	5,143
	Defined benefit liabilities		1,856	3,381	4,983
	Long-term other provisions		3,234	3,228	4,768
	Other non-current liabilities		24,590	22,693	15,884
	Deferred tax liabilities		85,922	34,630	28,499
Equity	Total	KRW million	1,910,729	1,967,043	1,881,542
	Equity attributable to owners of the parent		1,025,425	1,037,734	980,252
	Issued capital		26,579	26,579	26,579
	Share premium		60,291	51,065	56,139
	Other components of equity		(18,289)	(18,289)	(18,289)
	Accumulated other comprehensive income		11,690	19,228	19,310
	Retained earnings		945,154	959,150	896,513
	Non-controlling interests		885,304	929,309	901,290

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

E ECONOMY

GRI 201: Economic Performance

Consolidated Statement of Financial Position 201-1

Financial Statement - GC (Holding Company)

Classification	Unit	2021	2022	2023
Operating revenue	KRW million	1,840,558	2,079,560	2,057,936
Operating expenses		1,754,314	2,008,400	2,074,374
Operating profit		86,244	71,961	(16,438)
Other income		29,688	63,011	36,910
Other expenses		12,952	27,822	25,153
Finance income		57,807	33,980	34,175
Finance costs		48,891	76,027	64,956
Share of profit (loss) of affiliates		68,117	(34,673)	(45,648)
Profit before tax		180,013	30,430	(81,110)
Income tax expense (benefit)		52,355	(29,268)	(9,470)
Net profit (loss) for the period		127,658	58,897	(72,794)

Financial Statement - GC (Holding Company)

Classification	Unit	2021	2022	2023
Other comprehensive income (loss)	KRW million			
Other comprehensive income to be reclassified to profit or loss in subsequent periods (net of tax)		13,112	25,493	869
Net gain (loss) on equity adjustments of investments in associate		4,091	12,869	(472)
Foreign currency translation of foreign operations		9,021	12,623	1,341
Other comprehensive income not to be reclassified to profit or loss in subsequent periods (net of tax)		14,439	(3,780)	12,153
Re-measurement gain (loss) on defined benefit plans		(1,978)	(1,800)	11,688
Fair value gain (loss) on financial assets at FVOCI		16,403	(1,979)	465
Net gain (loss) on equity adjustments of investments in associate		14	-	-
Other comprehensive income (loss) for the year, net of tax		27,550	21,713	13,022
Total comprehensive income (loss) for the year		155,208	80,610	(59,772)
Profit (loss) for the year attributable to				
Equity holders of the parent		55,270	32,823	(54,136)
Non-controlling interests		72,388	26,074	(18,658)
Total comprehensive income (loss) for the year attributable to				
Equity holders of the parent		78,107	45,892	(48,935)
Non-controlling interests		77,101	34,719	(10,837)
Earnings per share attributable to owners of the parent	KRW			
Basic and diluted earnings per common share		1,222	727	(1,184)
Basic and diluted earnings per Type 1 preferred share		790	360	501
Basic and diluted earnings per Type 2 preferred share		785	355	496

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

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	2021	2022	2023
GC (Holding Company)	Defined Benefit (DB)	Financial operation	KRW million	15,331	17,407	19,612
		Number of people with membership	Persons	135	135	178
GC Biopharma	Defined Benefit (DB)	Financial operation	KRW million	122,740	132,865	139,586
		Number of people with membership	Persons	1,901	2,045	2,225
GC Cell	Defined Benefit (DB)	Financial operation	KRW million	20,478	24,667	22,933
		Number of people with membership	Persons	795	827	843

1) Separate basis

GRI 203: Value Distribution

Indirect Economic Value Distribution GRI 203-1 | GRI 203-2

Indirect Economic Value Distribution

Classification				Unit	2021	2022	2023
GC (Holding Company)	Value Distribution	Total		KRW million	252,775	227,624	205,315
		Partners	Purchasing cost	KRW million	206,114	199,158	157,677
		Employees	Total	KRW million	17,604	18,464	21,154
			Employee salary	KRW million	17,006	17,674	19,841
			Training Expenses	KRW million	162	179	188
			Welfare Expenses	KRW million	436	611	1,125
		Shareholders and Executives	Total	KRW million	25,845	23,423	27,748
			Total amount of dividends	KRW million	18,162	13,622	13,622
			Interest cost	KRW million	7,683	9,801	14,126
		Government	Corporate tax	KRW million	3,185	(13,448)	(1,293)
		Local Community	Donations	KRW million	27	26	29

GRI 203: Value Distribution

Indirect Economic Value Distribution

Classification				Unit	2021	2022	2023
GC Biopharma	Value Distribution	Total		KRW million	951,404	930,794	1,049,511
		Partners	Purchasing cost	KRW million	692,499	685,614	802,831
		Employees	Total	KRW million	197,498	206,237	209,856
			Employee salary	KRW million	170,107	170,290	175,011
			Training Expenses	KRW million	1,934	2,732	2,790
			Welfare Expenses	KRW million	25,457	33,215	32,054
		Shareholders and Executives	Total	KRW million	33,022	30,922	36,271
			Total amount of dividends	KRW million	22,826	19,973	17,120
			Interest cost[1)]	KRW million	9,196	10,949	19,151
		Government	Corporate tax[1)]	KRW million	26,528	2,500	(2,052)
		Local Community	Donations	KRW million	2,857	5,521	2,606
GC Cell	Value Distribution	Total		KRW million	76,556[2)]	110,282[2)]	74,708
		Partners	Purchasing cost	KRW million	24,574	28,067	20,506
		Employees	Total	KRW million	41,970	63,674	57,131
			Employee salary	KRW million	34,804	55,357	48,894
			Training Expenses	KRW million	141	202	235
			Welfare Expenses	KRW million	7,025	8,115	8,002
		Shareholders and Executives	Total	KRW million	416	7,419	4,569
			Total amount of dividends	KRW million	0	5,256	1,502
			Interest cost	KRW million	416	2,163	3,067
		Government	Corporate tax	KRW million	9,578	11,071	(7,504)
		Local Community	Donations	KRW million	18[2)]	51[2)]	6

1) Modified to accrual accounting standards
2) Modified based on the electronic disclosure business report standards

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

E ECONOMY

GRI 203: Value Distribution

Indirect Economic Value Distribution GRI 203-1 | GRI 203-2

Performance

Direct and Indirect Investment to Revitalize Healthcare Industry Ecosystem

· GC (Holding Company)
- Establish an ecosystem in which the technology of innovative companies helps enhance the quality of human life

Major Investment Area of GC Group

Classification	Investment Target	Description
Direct Investment	Humanscape	Providing digital healthcare service
	Kanaph Therapeutics	Developing therapeutics for oncology and autoimmune diseases
	Redblue	Fitness CRM and O2O platform
	Atommerce	Online/Offline psychological counseling platform
	Cyrus Therapeutics	Developing therapeutics for oncology and metabolic diseases
	Genecast	Liquid biopsy cancer diagnosis
	Kitten Planet	Digital dentalcare platform
	Emocog	Digital dementia treatment
	Doinglab	Artificial intelligence diet nutritional information platform
	Gravity Labs	Blockchain based Move-to-Earn
	Pumpkincorp	Specialized in Online/Offline pet IoT

Direct and Indirect Investment to Revitalize Healthcare Industry Ecosystem

· GC Biopharma and GC Cell
- Participating and collaborating in 'Business to support commercialization of raw materials of biomedicine' and Biomedicine Material-Parts-Equipment union cooperation council to establish a domestic ecosystem for raw materials which are mostly dominated by overseas suppliers.

Major Investment Area of GC Biopharma and GC Cell

Classification	Description
Business to support commercialization of raw materials of biomedicine	• Incheon Metropolitan City/Korea Biopharmaceutical Association (in conjunction with the Ministry of Trade, Industry and Energy) • Project schedule: 2022-2025 • Project budget: KRW 9.3 billion • Participating organizations: 24 participants from approximately 20 companies including GC Biopharma • Participating method: Taking part as a Selection evaluation committee
Biomedicine union cooperation and association	• Ministry of Trade, Industry and Energy/Ministry of Health and Welfare/Korea Biotechnology Organization • Project schedule: 2022-2026 • Project budget: KRW 85.7 billion • Participating organizations: 100 companies including GC Biopharma and GC Cell • Participating method: Taking part as an expert committee member for demand companies

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

E ECONOMY

GRI 204: Procurement Practices

Procurement Cost on Local Suppliers GRI 204-1

Procurement Cost

Classification		Unit	2021	2022	2023
GC (Holding Company)	Procurement cost on local suppliers	KRW million	197,883	192,903	151,823
	Total expenses for suppliers	KRW million	206,114	199,158	157,677
	Percent of total expense	%	96	96.9	96.3
GC Biopharma	Procurement cost on local suppliers	KRW million	568,361	567,698	576,086
	Total expenses for suppliers	KRW million	692,499	685,614	802,831
	Percent of total expense	%	82.1	82.8	71.8
GC Cell	Procurement cost on local suppliers	KRW million	22,650	24,004	17,132
	Total expenses for suppliers	KRW million	24,574	28,067	20,506
	Percent of total expense	%	92.2	85.5	83.5

GRI 204: Tax Policy

Tax Risk Management GRI 207-1 | GRI 207-2 | GRI 207-3

▶ Risk Identification and Classification (Refer to p. 97)

· GC Group manages risk by conducting pre-and-post tax reviews through consultations with accounting firms and by discussing major tax issues with affiliates in advance. The group complies with all tax related laws.

E ENVIRONMENT

GRI 301: Raw Materials

Status of Raw Materials Used GRI 301-1

Amount of Raw Material Used

Classification		Unit	2021	2022	2023
GC Biopharma	Amount of raw material used (Human blood plasma)	L	380,793	469,584	507,583
	Amount of product manufactured using the raw material (Human blood plasma)	L	195,928	170,588	173,121
GC Cell	Amount of raw material used (Human blood plasma)	L	758	613	702
	Amount of product manufactured using the raw material (Human blood plasma)	L	2,166	1,752	2,005

GRI 303: Water and Effluents

Efforts to Reduce Water Use and Data Management

GRI 303-3 | GRI 303-4 | GRI 303-5

· Ochang plant and R&D center of GC Biopharma aim to reduce water usage by installing water-saving device in the wash basin (changing the faucet to water reducing type) and adjusting water pressure to efficiently operate the water required for building maintenance.
· Hwasun plant of GC Biopharma discontinued the operation of high-capacity central vacuum pump installed in the UT building. Instead, vacuum pumps are individually installed at each usage point to prevent cross-contamination and to reduce energy consumption (electricity, potable water, waste water) during equipment operation.
· GC Cell installed and operates water reuse facility at the R/O (Reverse osmosis) system to reduce water usage.
  - Wastewater generated from the R/O system (UV/Activated carbon filter) is optimized before discharge and used as domestic water and cooling water supply.
  - Water level adjusted prior to cleaning the potable water reservoir tank to manage and reduce water consumption
· Collection scope of water data
  - GC (Holding Company): Headquarter
  - GC Biopharma: Headquarter, 3 manufacturing plants (Ochang, Hwasun and Eumseong), R&D Center
  - GC Cell: Headquarter and Cell Center

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

E ENVIRONMENT

GRI 303: Water and Effluents

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

Water Management

Classification			Unit	2021	2022	2023
GC (Holding Company)	Total amount of water withdrawal	Total	Ton	6,540	7,147	6,347
		Utility water	Ton	6,540	7,147	6,347
	Total water consumption		Ton	6,540	7,147	6,347
	Total Amount of Effluents (Discharge)		Ton	6,540	7,147	6,347
	Water Consumption Intensity		Ton/ KRW 100 million	8.8	10.7	10.6
GC Biopharma	Total amount of water withdrawal	Total	Ton	967,822	986,726	971,502
		Groundwater	Ton	0	0	0
		Utility water	Ton	847,246	903,706	884,523
		Others	Ton	117,910	79,961	86,979
	Total water consumption		Ton	425,318	399,669	351,856
	Total Amount of Effluents (Discharge)		Ton	542,504	587,058	619,646
	Water Consumption Intensity		Ton/ KRW 100 million	36.342	32.104	29.083
GC Cell	Total amount of water withdrawal	Total	Ton	29,536	70,283	81,005
		Utility water	Ton	29,536	70,283	81,005
	Total water consumption		Ton	27,156[1)]	67,119[1)]	76,694
	Total Amount of Effluents (Discharge)		Ton	2,380[2)]	3,164[2)]	4,311
	Water Recycling	Water Recycling	Ton	17,253[1)]	36,989[1)]	28,738
		Water Recycling Rate	%	63.5[1)]	55.1[1)]	37.5
	Water Consumption Intensity		Ton/ KRW 100 million	17.043[1)]	30.332[1)]	45.01

1) Data adjusted to reflect the changes made to calculation standards on water consumption
2) Data adjusted due to adoption of measured values

Operation of Wastewater Discharge in Consideration of Environmental Impact GRI 303-1 | GRI 303-2

· GC Biopharma and GC Cell, as pharmaceutical manufacturers, considers wastewater treatment and environmental impacts in the operations based on legal standards in the form of the use and discharge of water required for the pharmaceutical production processes.
  - Although the locations of the headquarters (Yongin, Gyeonggi-do), manufacturing plants (Ochang and Eumseong, Chungcheongbuk-do and Hwasun, Jeollanam-do), and Cell Center (Yongin, Gyeonggi-do) do not affect water sources, impact management in connection with community water resources is necessary.
· GC Biopharma and GC Cell treats wastewater in adherence to relevant regulations and in GMP standards, in accordance with SOP for management of environmental pollutant emissions.

GRI 308: Environmental Assessment of Suppliers

Status of Environmental Assessment of New Suppliers GRI 308-1 | 414-1

· GC Biopharma applies an ESG Code of Conduct to all suppliers to manage transactions with eligible companies that have passed the environmental audit
· For new suppliers, a pledge is required prior to signing a transaction contract, replacing the need for an initial audit
· GC Cell applies the ESG Code of Conduct to major suppliers, ensuring that those who pass the environment audit are eligible to transact.

New Suppliers Undergoing Environmental Audits

Classification		Unit	2021	2022	2023
GC Biopharma	Ratio	%	100	100	100
	Number of New Suppliers	Partners	13	9	4
	Number of Suppliers Undergoing Environmental Audit	Partners	13	9	4

ESG Monitoring for Supply Chain GRI 308-2

· GC Biopharma monitors partners who submitted Pledge of Compliance with Code of Conduct and Fair Trade Due Diligent Assessment
  - Monitoring subjects: Domestic partners who supply general raw materials (raw materials, excipients and packaging materials)
· GC Cell monitors partners who submitted Pledge of Compliance with Code of Conduct and Fair Trade Due Diligent Assessment

ESG Monitoring for Supply Chain

Classification		Unit	2021	2022	2023
GC Biopharma	Ratio	%	35.0	72.5	82.7
	Number of Partners Required for Monitoring	Partners	59	121	139
	Total Number of Suppliers	Partners	169	167	168
GC Cell	Ratio	%	N/A	N/A	17.1
	Number of Partners Required for Monitoring	Partners	N/A	N/A	38
	Total Number of Suppliers	Partners	N/A	N/A	222

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

E ENVIRONMENT

Circular Economy

Operating Resource Circulation System

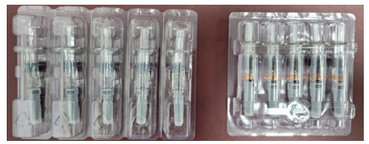
· Centered on GC Group's affiliate manufacturing plants, management systems on chemical substances, waste and water (effluents) are in place to establish and upgrade to a circular economy
  - GC Biopharma's manufacturing plants: Ochang Plant, Hwasun Plant and Eumseong Plant
  - GC Cell's manufacturing plants: Cell Center
· GC Biopharma's Eumseong Plant to use packaging with FSC marks for OTC medicine from the second half of 2023
· GC Cell is in the process of reviewing the introduction of eco-friendly packaging materials and the design of optimized in-land transport routes
  - GC Cell's Eco-Friendly Implementation: Introduced a paperless work environment by adopting FMS[1] IT for facility management. Performance management of this implementation has been ongoing since 2024.

1) FMS: Facility Management System

Performance

Use of Eco-Friendly Packaging and Implementation of the 3R Concept

· GC Biopharma has been using FSC certified materials since June 2023
· When developing new products, GC Biopharma is implementing the 3R principles to enhance eco-friendliness: Reduce input resources, size, and packaging materials; Replace with eco-friendly materials and high-efficiency systems; Recycle by designing for recyclability and establishing recycling systems
  - Since March 2021, by reducing the carton size for logistics, paper usage has been reduced by 18,584 sheets per year, and energy for transportation and storage has been saved accordingly (as of 2023)
  - Since June 2021, by improving the plastic injection vial net (including the hanger function), plastic consumption has been reduced by 529,690 pieces annually (as of 2023)
  - Since August 2022, by transitioning to barcodes for Hunterase ICV product inserts, paper usage has been reduced by 1,313 sheets annually (as of 2023)
  - Since February 2023, by reducing the size of economical packaging for GCFlu PFS, paper usage has been reduced by 76,164 sheets per year, and energy for transportation and storage has been saved accordingly (as of 2023)
  - Starting June 2024, by transitioning to electronic approval for daily records of release inspections in logistics for ambient, cold, and frozen storage areas (15 pages), paper usage is expected to be reduced by approximately 3,700 to 3,750 sheets per year



Reduction in Plastic Packaging Size

Reduction in Insert Packaging Size

Resource Circulation Management

Resource Circulation Management

· GC Biopharma's Ochang Plant has established goals for achieving resource circulation and manages implementation performance for each goal
· (Performance of 2023) Environmental Performance Evaluation Result of 2024
  - Achieved a final disposal rate of 18.60% against the target goal of 31.28%
  - Achieved a circular utilization rate of 40.26% against the target goal of 18.54%
· GC Biopharma's Hwasun Plant aims to gradually reduce the incineration of general industrial waste. Once a contractor for intermediate processing of recyclable synthetic resins is secured, direct incineration will be eliminated
  - Achieved a final disposal rate of 47.96% against the target goal of 49.18%
  - Achieved a circular utilization rate of 94.37% against the target goal of 44.92%
· At GC Biopharma's Ochang Plant, waste ethanol is distilled using a distillation tower to retrieve and regenerate ethanol for reuse
  - Raw material consumption (Amount of waste ethanol): 2,654,000 L
  - Production amount (Amount of ethanol after distillation): 861,500 L

Resource Circulation Goal Performance in 2023

Classification		Unit	Performance
Resource Circulation (Waste amount[1])	Amount of Resource	Ton/Year	1,199.79
	Final Amount of Disposal	Ton/Year	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

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

E ENVIRONMENT

Environmental Management

Environmental Impact Assessment and Monitoring

- GC (Holding Company)
  - Conducts regular environmental audits of 15 affiliates, covering air quality, water quality, waste management, chemical substances, and more
  - Manages and supervises compliance with environmental regulations through preventive actions to avoid environmental accidents and by monitoring the adherence and implementation of environmental laws and regulation
  - Updates and monitors detailed data on environmental information disclosure annually and reports to the Ministry of Environment.
  - Conducted corporate-level compliance evaluations in 2023, identifying issues related to water quality and air, and requested improvements
  - Plans to conduct environmental audits of foreign business sites, such as GC China, in 2024
- GC Biopharma
  - Conducts regular environmental audits for all business sites to ensure continuous improvement and regulatory compliance
  - Identifies impact factors through environmental impact assessments targeting all departments (assessing the degree of environmental pollution caused by factors input or discharged throughout the entire product lifecycle[1])
  - For significant environmental impacts, incorporates findings into the establishment of environmental policies, goals, detailed objectives, and progress plans, utilizing them in communication with internal and external stakeholders
  - Sets environmental goals and implements improvements for departments with environmental impacts
- GC Cell
  - Reviews and applies regulations for risk management under the leadership of the HSE team.
  - Identifies impact factors through environmental impact assessments on business sites across all departments
  - Sets environmental goals and implements improvements for departments with identified environmental impact
  - Conducts regular internal audits and compliance assessments
  - Monitors waste treatment compliance via dedicated environmental personnel who inspect performance using the Allbaro system, operated by the Ministry of Environment
  - Selected greenhouse gases (GHG), a major factor in global warming, as an environmental impact category and is establishing a system to evaluate the entire lifecycle of Immuncell-LC

1) Raw material sampling, production, distribution, installation, utilization and disposal

Performance

Result of Internal Environmental Impact Assessment and Compliance in 2023

Classification	Unit	GC (Holding Company)	GC Biopharma	GC Cell
Number of Improvement Proposals	Cases	6	14	5
Number of Improvement Completion	Cases	6	14	5
Improvement Rate	%	100	100	100

KPI Operation GRI 2-18

- GC (Holding Company) incorporates ESG tasks into organizational KPIs and sets environmental KPIs for each team and individual to enhance environmental performance and strives to achieve these KPIs.
- Achievement rate for applicable tasks is evaluated every year in areas such as energy reduction, waste reduction, and the extension of resource circulation. This data is used to assess and reward management and employees, motivating them to produce better environmental performance and fostering a shift towards eco-friendly practices.
- GC Biopharma incorporates ESG tasks into organizational KPIs and sets environmental KPIs for each team and individual to enhance environmental performance.
  - Energy reduction, waste reduction and extension of resource circulation etc.,
- Achievement rate for applicable tasks is evaluated every year and use this data to assess and reward management and employees, motivating them to achieve higher levels of environmental performance.
- GC Cell aligns its team KPIs with the company's overall safety, health, and environmental strategic goals through risk analysis and implements these KPIs. This approach is then used in the company's performance evaluation and reward system.
  - Environmental Management Officer (Head of Management): Sets KPIs for climate change response and carbon neutrality implementation tasks (10% proportion).

Major ESG Performance Index by Position to Instilling Environmental Management

Classification	Position[2]	ESG Performance Index
GC (Holding Company)	Compliance Support Office (Executives, Management)	Establish and certify a standard system to address climate change in response to carbon neutrality by 2050 [Introducing ISO 50001 (Energy Management System)]
		Manage HSE compliance and provide technical supervision and support for accident prevention within affiliates
		Achieve continuous 'Zero' major disasters through proactive risk assessment and improvement activities
GC Biopharma	CSEO	Increase the recycling rate of waste at business sites, prepare utility flow diagrams, and identify water usage status
	Ochang Plant Manager	Reduce energy consumption by considering idle operation floors, decrease waste through filter reuse recovery, and save energy by installing master light switches in the workspace
	Hwasun Plant Manager	Minimize product disposal, reduce energy consumption by considering idle operation floors, and improve the NaOH supply system
	Eumseong Plant Manager	Use recycled paper for wrapping paper boxes and transport boxes, reduce purified water usage, and minimize waste (ex) by reducing packaging container size to minimize customer waste
GC Cell	Head of Management	Respond to climate change and implement carbon neutrality by signing power purchase agreements

2) All personnel mentioned under 'Position' are C-level executives

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

E ENVIRONMENT

Environmental Management

Violation of Environmental Regulations GRI 2-27

Violation of Environmental Regulations

Classification			Unit	2021	2022	2023
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) promotes the development of environmental policies and systems by supporting affiliates in maintaining and obtaining environmental management system certifications
· GC Biopharma: Maintains ISO14001 (Environmental Management System) certification
· GC Cell: Maintains ISO14001 (Environmental Management System) certification through annual renewal audit continuously assessing and improving its environmental management system

ISO14001 Certification

Classification			Unit	2021	2022	2023
GC (Holding Company)	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	Places	1	1	1
GC Biopharma	Acquisition of Certification	Ratio	%	100	100	100
		Number of Worksites of Acquisition of Certification[2]	Places	4	4	4
		Number of Worksites Required for Acquisition of Certification	Places	4	4	4
GC Cell	Acquisition of Certification	Ratio	%	0	100	100
		Number of Worksites of Acquisition of Certification[3]	Places	0	1	1
		Number of Worksites Required for Acquisition of Certification	Places	1	1	1

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

ISO14001
· Certification Scope : R&D Center, Ochang Plant, Hwasun Plant, Eumseong Plant
· Effective Date : Aug. 31, 2021~Aug. 30, 2024

ISO14001
· Certification Scope : Cell Center
· Effective Date : Oct. 1, 2022~Sep. 30, 2025

ISO50001 Certification Attainment Plan

· GC (Holding Company) plans to attain ISO50001 certification
  - Develop energy management indicators and improve energy efficiency to reduce cost
  - Continuous improvement on GHG emissions to support government strategy of 2050 carbon neutrality
  - Establish GC's energy management standards to address climate change
· Worksites planned for ISO50001 certification
  - GC (by the end of 2024)
  - GCMS, GC Wellbeing (review in progress for certification in 2025)
· ISO50001 certification plan (GC)
  1) April 2024: Establish procedures and identify risks – Risk assessment and prepare mitigation plan
  2) May 2024: Establish process standards – plan the operation of energy-using facilities
  3) June 2024: Performance evaluation – internal audit – management review
  4) July 2024: Undergo certification audit – follow-up management
  5) Oct. 2024: Attain ISO50001 certification
  * Certification body: DQS Certification

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

E ENVIRONMENT

Environmental Management

Environmental Training

· GC (Holding Company) prepares an SOP for environmental management training for all employees and employees of partner companies, and implements the training accordingly
  - Enhancing environmental awareness, and preventing, managing, and improving various environmental factors
  - Plan to train internal auditors for ISO14001 in 2024 (5 trainees)
  - Plan to attend environmental information disclosure training in 2024 (2 participants)
· A dedicated legal manager in GC Biopharma conducts introduction training and maintenance training either annually or once every three years. Since 2023, GC Biopharma conducts annual training on environmental impact assessment to supervisors in each department for improving awareness of the environment management system
  - Standard Operating Procedures (SOP) for managing wastewater and waste are used for training, and internal training materials are prepared and circulated
· GC Cell conducts environmental training for working staffs in addition to mandatory legal training for managers in specific environmental areas (air, water quality and waste) to proactively respond to changing global environment
  - GC Cell conducted internally developed and conducted training courses on <Safe handling of chemical substances> and <Environmental Impact Assessment Suitable for Our Site>. Additionally, GC Cell participated in the RE100 consulting support project and implemented 5 courses including <Overview of RE100> through Korea Energy Convergence Association including working staffs from supplier.

Environmental Training[1)]

	Classification	Unit	2021	2022	2023
GC (Holding Company)	Training Completion Rate	%	100	100	100
	Number of Employees Completing Training	Persons	1	3	1
	Number of Training Target	Persons	1	3	1
GC Biopharma	Training Completion Rate	%	100	100	100
	Number of Employees Completing Training	Persons	1,335	1,303	1,351
	Number of Training Target	Persons	1,335	1,303	1,351
GC Cell	Training Completion Rate	%	100	100	100
	Number of Employees Completing Training	Persons	2	1	76
	Number of Training Target	Persons	2	1	76

1) For environmental technicians (Air and water quality), responsible personnel for hazardous chemical substance (Operators, handling staffs, technical personnel and managers), waste disposal personnel and responsible personnel for discharging medical waste

S SOCIETY

GRI 401: Employment

Securing and Maintenance of Talents GRI 401-1

GC (Holding Company)

· GC aims to become a global leader in healthcare industry and strives to achieve this vision with our members
· Based on systematic and rational recruitment process, GC recruits, selects and assigns outstanding talents in various fields
· By hiring full-time regular employees for over 97% annually, GC provides quality jobs and contributes to job stability, and operates recruitment process based on the principles of non-discrimination and respect for human rights
· In accordance with the group's leadership development system, GC fosters future leaders and supports their growth through nurturing leadership competency and corporate culture diagnosis.
· GC provides trainings for newly promoted executives and supports them to perform their roles stably through an onboarding program
  - Onboarding program for new executives target all newly promoted executives. The training includes learning and sharing about their roles, GC's strategic direction and expected roles as GC executives. This training is not a one-off event, but includes 3 months of 1:1 leadership coaching.
· Satisfactory survey of training participants showed a high-quality outcome with a satisfactory score of 4.7 out of 5.0

GC Biopharma

· Training programs considering job transitions
  - Operating an online job training campus called 'GCBP University'
  - Providing approximately 30 in-house dedicated contents to enhance overall job understanding for employees
  - Employees can apply for and participate in various online training courses on foreign languages, leadership, and job skills each month
· Training for job transitioning staff in the marketing division
  - Training is provided to employees transitioning to the marketing division, whether by request or due to organizational changes, to ensure swift adaptation to their new roles
  - In 2023, 10 employees who transitioned completed this course
  - Key content includes training on the organization's sales system, disease knowledge by TA, information on major products, market status, and marketing strategies
  - Understanding is assessed through tests, with follow-up training planned and implemented based on the results
· Training programs for promoted staff
  - GC Biopharma offers mandatory promotion training
  - Junior-level employees undergo a common induction program
  - Since 2022, all GL3 staff have participated in a 'Future leader' training program before being designated as team leads. A total of 483 employees have completed this course, preparing them for leadership roles
  - Once designated as a leader, team leads must complete annual mandatory leadership training as part of the promotion program
  - This program is integrated with the human resources system to provide opportunities for systematic growth

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 401: Employment

Securing and Maintenance of Talents GRI 401-1

GC Biopharma

· Other
  - In the recruitment process, based on the current Fair Hiring Procedures Act, we are strengthening efforts to ensure fairness by expanding job competency evaluations. This includes integrating competency tests and evaluating job and leadership competencies required for different types of hires
  - From the perspective of the Employment and Labor Act, continuous monitoring is conducted to ensure compliance with minimum requirements to prevent issues of illegal hiring of contract workers
  - To prevent interviewer errors, job requirements are specified in detail (including competency levels required by internal job experts for different position levels)
  - Over 60 job descriptions are provided on 'GC People', the integrated recruitment website for GC affiliates, in the form of 'Shorterview'

GC Cell

· Experts with experience in the field are recruited for the global top-tier cell and gene therapy business
· To secure outstanding talent suitable for the positions, various recruitment channels appropriate to the job requirements are utilized
· Step-by-step training is offered tailored to each role and circumstance, including induction training for new employees, language courses, new manager training, promotion training, and leadership training, to provide opportunities for career expansion and continuous professional development
· The recruitment process is conducted fairly in adherence to the 'Fair Hiring Procedures Act'

Training Courses

Target	Training Content
New Employees	Basic mindsets and essential skills for new employees, including basic job training
Experienced Employees	Basic job training and communication skill training for experienced employees
Promoted Employees	Competency training required for each job level
New Managers	Preliminary training for entry into leadership competency programs
Task Transitioned Employees	Basic training to enhance job understanding

Hiring New Employees

Classification				Unit	2021	2022	2023
GC (Holding Company)	New Hire	Total		Persons	26	38	22
		Gender	Male	Persons	17	19	11
			Female	Persons	9	19	11
		Age	Under 30	Persons	7	8	6
			Over 30 and Under 50	Persons	19	28	14
			Over 50	Persons	0	2	2
GC Biopharma	New Hire	Total		Persons	185	180	189
		Gender	Male	Persons	116	101	128
			Female	Persons	69	79	61
		Age	Under 30	Persons	49	60	126
			Over 30 and Under 50	Persons	129	117	55
			Over 50	Persons	7	3	8
GC Cell	New Hire	Total		Persons	248	190	222
		Gender	Male	Persons	150	118	150
			Female	Persons	98	72	72
		Age	Under 30	Persons	202	120	141
			Over 30 and Under 50	Persons	41	67	73
			Over 50	Persons	5	3	8

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 401: Employment

Securing and Maintenance of Talents GRI 401-1

Performance

Strategy for Securing Talents to Secure Core Capability in the Future

· GC Biopharma formed a consultative group to establish recruitment strategies and forecast recruitment needs. Through regular meetings, it strengthens talent in existing core businesses and operates key business projects aimed at growth as a global company.
1) Operate strategies to secure talents suitable for driving initiatives
2) Strengthening strategic functions related to overseas businesses, including Alyglo and CMO Indonesia Plant Projects and expanding global markets
· GC Cell recruits and selects as follows to secure outstanding talents suitable for positions and to flexibly respond to recruitment needs
1) Utilizing various recruitment channels (Campus recruiting, self-supporting youth, Future Foundation of Korea etc.)
2) Internal job posting and employee referral programs

Internship Program

· GC Group actively operates internship programs to provide career design opportunities for young people and to recruit outstanding and verified talents. During the internship period, we provide opportunities for practical work experience and evaluate through assignments and recruit as full-time regular employee for interns with outstanding evaluation results.
· GC Biopharma – As of 2023, number of interns: 18, number of interns transitioned to regular employees: 15 (Transition ratio: 83.3%)
· GC (Holding Company) – As of 2023, number of interns: 2, number of interns transitioned to regular employees: 2 (Transition ratio: 100%)
· GC Biopharma
- Trainings to interns and provides networking programs: Mentoring support, intern induction trainings etc.
- Intern induction training
1) GC Biopharma fosters loyalty and a sense of belonging in new interns through induction training
2) Promotes early maximization of potential by developing the essential GCBP core competencies required for job performance
3) The curriculum is comprised of essential knowledge on GC Biopharma including human resource policies, history, product understanding and ethics training.
4) After the induction training, monthly mentoring activities and networking events within the organization are conducted for five months to help interns adapt
5) Mentors are selected from employees with more than three years of experience, who has the right values and expertise in the field, and an understanding of the importance of talent development
6) Mentor serves as an onboarding partner for new interns and provides insights into work and overall company life.
- Sales intern job induction training
1) Support understanding of intern's assigned role and the organization, and swift application to actual work through job induction training
2) Key contents include understanding of sales organization, system utilization, product and disease knowledge, market condition and competitors of sales product, insurance program, CP and selling skills
3) Understanding is verified through tests for each course and tailored coaching is supported for organizational leaders through role-play training and evaluations.

On-boarding Program

· GC (Holding Company)
- Since 2023, a hybrid (online and offline) onboarding program utilizing the metaverse has been in operation.
- The program runs for about a month, starting from the pre-boarding stage before joining the company until one month after joining, and is designed and operated to suit experienced and ad-hoc recruitment.
- Through biannual New Member Orientations, additional opportunities for communication with the CEO and networking with colleagues are provided.
· GC Biopharma
- 'Preliminary Online Communication' for soft-landing of prospective employees has been in operation
- Through new employee on-boarding campus, new hires can freely access and take classes in GC Biopharma's in-house online content.
- From the point of hiring to the first day of work, step-by-step packages, including 'Welcome Kit' are provided to enhance organizational understanding.
- New employees are provided with various training and networking programs: Induction training and workshops etc.

On-boarding Program for New Employees

Training Name	Target Audience	Frequency	Training Content and Effectiveness
Common Induction Training	New hires (both new and experienced)	Quarterly	Training to introduce GC Biopharma
Intern Induction Training	New intern hires	Semi-annually	Conduct department job training once completed
New Hire Induction Training	GL1 new hires	Semi-annually	Supports early maximization of potential by developing the essential competencies in new employee Foster a sense of belonging and camaraderie as part of GC Biopharma
Self-leader Retention Training	Employees with 1-2 years after hire	Once/year	• Training to strengthen retention • Share work experience and establish a sense of identity and belonging as part of GC Biopharma • Strengthen retention through the establishment of growth directions
Experienced Employee On-boarding Workshop	Experienced hires after 1-2 years from hire	Once/year	Promote positive stimulation during mutual experience exchange and organizational adaptation stage to prevent turnover

· GC Cell
- Various programs are offered to new hires including company orientation, basic skills, practical training by internal instructors, and tour of affiliate facilities.
- On the first day of work, new employees are given with a welcome kit including GC Cell merchandise to instill a sense of belonging to the company
- A living guidebook containing A to Z necessary to work life helps get new employees' adjustment.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 401: Employment

Securing and Maintenance of Talents GRI 401-1

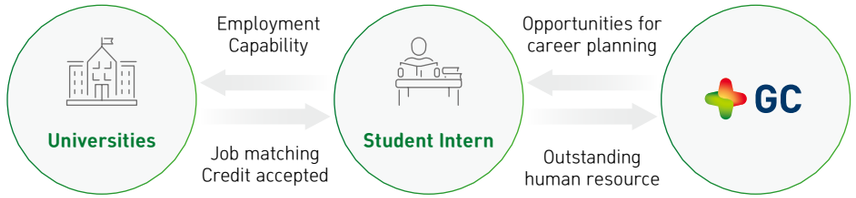
Performance

Off-boarding Process

· GC (Holding Company), GC Biopharma
  - The respect for employee human rights is extended to the off-boarding process at the end of the employee life cycle
  - An off-boarding process is in place to minimize negative experiences
  - Employee experiences are analyzed based on exit surveys and interviews and utilized to enhance an employee-friendly environment.
· GC Cell
  - Exit interviews are conducted to ensure a positive employee experience at the final stage as a GC Cell employee
  - Feedback from employees who have directly experienced the organization is collected and utilized to improve systems

Industry-Academic Internship

· GC (Holding Company) promotes industry-academic collaborations between corporations and universities by hiring interns through an industry-academic internship program structure established in partnership with various universities
· GC Biopharma signs MOUs with various universities to strengthen industry-academic collaboration activities, potentially leading to internship programs



Re-employment Support Service

· 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	2021	2022	2023
GC (Holding Company)	Turnover	Total		Persons	19	26	20
		Gender	Male	Persons	15	17	9
			Female	Persons	4	9	11
		Turnover Rate		%	13	16	11.2
	Voluntary Turnover	Number of Voluntary Turnover		Persons	19	25	20
		Voluntary Turnover Rate[1]		%	13	15.3	11.2
	Involuntary Turnover	Number of Involuntary Turnover		Persons	0	1	0
		Involuntary Turnover Rate		%	0	0.6	0
GC Biopharma	Turnover	Total		Persons	125	140	153
		Gender	Male	Persons	84	99	116
			Female	Persons	41	41	37
		Turnover Rate		%	5.7	6.1	6.7
	Voluntary Turnover	Number of Voluntary Turnover		Persons	122	133	118
		Voluntary Turnover Rate[1]		%	5.6	5.8	5.2
	Involuntary Turnover	Number of Involuntary Turnover		Persons	3	7	35
		Involuntary Turnover Rate		%	0.1	0.3	1.5
GC Cell	Turnover	Total		Persons	108	178	194
		Gender	Male	Persons	821	126	136
			Female	Persons	26	52	58
		Turnover Rate		%	13.5	21.2	22.6
	Voluntary Turnover	Number of Voluntary Turnover		Persons	108	178	194
		Voluntary Turnover Rate[1]		%	13.5	21.2	21
	Involuntary Turnover	Number of Involuntary Turnover		Persons	0	0	0
		Involuntary Turnover Rate		%	0	0	0

1) The number of turnover due to personal circumstances, including inter-affiliate transfers, excluding retirement recommendations or retirement, is calculated based on the total number of employees

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

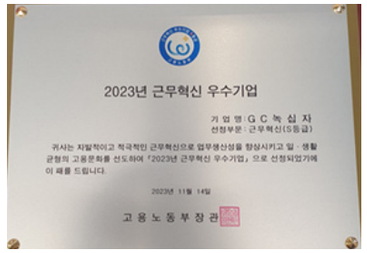
Work-Life Balance

Various Work Plans

· GC Group
- GC Group has implemented various strategies to support continuous work and work-life balance, thereby improving employees' quality of life
- A flexible and family-friendly working environment is fostered through work-from-home options, flex-time work, flexible working hours, discretionary working hours, holiday replacement, and compensation leave

· GC Biopharma
- Various work-life balance policies are in place, including flexible working hours, compensation leave for overseas business trips, and the PC ON/OFF system, to ensure employees balance work and life.
- In 2023, GC Biopharma was selected as an excellent company (S grade) in the 'Work Innovation Incentive System organized by the Ministry of Employment and Labor, aimed at creating a balanced work and life environment
- This program selects outstanding companies and provides them with various benefits based on indicators such as the status of overtime work, implementation of flexible working systems, efforts to promote the use of annual leave, and work methods. GC Biopharma was recognized as an outstanding company due to its excellent operational status


근무혁신 우수기업 선정서


2023년 근무혁신 우수기업

· GC Cell
- In 2023, GC Cell was selected as one of Korea's leading companies in job creation, receiving recognition for its efforts in job creation, improving job quality, and excelling in nine assessed categories, including employment stability, job creation, and work-life balance

Performance

GC Group's Flexible Work System

Classification	Description
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 (52 hours)
Discretionary working hours	Entrust working hours and methods 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	Description
Optional working hours	Working flexibly in within the specified working hours per month and core-time policy
Compensation leaves 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	System that specifies PC hours for headquarters, plants (management), and branches (8:30-17:30), to clearly operate working hours

Implementation of a Smart Office

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

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



GC Biopharma, selected as a 'Family-friendly Company' and 'Work Innovation Incentive Program'

· In Dec. 2022, selected as a 'Family-friendly company' by the Ministry of Gender Equality and Family
· In Nov. 2023, selected as an outstanding company for the 'Work Innovation Incentive Program' by Ministry of Employment and Labor

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

Work-Life Balance

Welfare System GRI 401-2

· Operation of the in-house clinic, 'Dr. GC'
- In-house clinic, 'Dr. GC' is in operation for healthcare and treatment available to employees from GC (Holding Company), GC Biopharma and GC Cell within the Mogam town. It is also available to resident partner company employees and part-time employees (contract workers and temporary staffs)

· Operation of employee healthcare 'Wellness Program'
- GC (Holding Company) operates Wellness Programs to encourage employees to proactively manage their health, contribute to a healthy company life, and enhance welfare
- The Wellness Programs include walking challenges and chronic condition management services. Employees are rewarded with points redeemable at the employee welfare mall upon achieving personal goals

· Operation of in-house fitness center 'GYM' and expansion of service scope
- The GYM, which consists of two floors above ground and one basement floor, is available throughout the day, including weekends and holidays (early morning to post-work hours)
- The facility is equipped with body composition measuring devices, cardio equipment, and weight training equipment
- Professional qualified trainers are available on-site to support employees in exercising safely and effectively
- Various group exercise (G.X.) programs and personal training (P.T.) programs are offered.
- Active communication is maintained by incorporating employee feedback, such as changing programs or adding trainers
- The facility's availability is extended to allow usage during summer and winter holidays

· Operation of in-house childcare center 'GC Childcare Center'
- The center includes 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
- The childcare center is organized into a total of five classes, ranging from 1 to 5 years old

· GC Group in-house welfare system
- Family Friendly: In-house wedding hall, college scholarships for employees' children, various financial support and flowers for celebrations and condolences, gifts on holidays, foundation anniversaries, and Labor Day, gifts for weddings and childbirth
- Life Stability: Office supplies support, free cafeteria, free shuttle bus, home purchase loans
- Leisure: In-house clubs, in-house café, corporate condominium, support for education expenses, in-house library
- Healthcare: Health checkups, external counseling services, cancer treatment support, free flu vaccines

· GC Biopharma's Welfare System
- GC Biopharma operates various welfare programs to enhance employee's welfare and quality of life, including health management, accident insurance and refreshment programs
- Long-term service leave is provided. (Amazing Holiday)
- Employees receive long-term holidays for refreshment after certain period of service
- This is not a one-time leave, but accumulates over the service period, allowing for future refreshment (operated as a virtuous circle to enhance productivity)
- Employee accident insurance (Medical Care) is provided, offering various insurance options (e.g., indemnity, dental) and non-insured benefits to ensure employees enjoy diverse benefits.
- To support employee healthcare, Wellness Programs are under operation by GC Care, providing services such as sleep management, chronic disease management and psychological counselling
- Holiday gift sets are provided to in-house employees, as well as partner employees, contractors and temporary workers.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

Work-Life Balance

Maternity and Parental Leave GRI 401-3

Maternity and Parental Leave

Classification				Unit	2021	2022	2023
GC (Holding Company)	Number of Employees Who Took Maternity Leave	Number of employees	Total	Persons	5	3[1)]	2
			Male	Persons	1	1	0
			Female	Persons	4	2	2
	Ratio of Employees Who Returned After Maternity Leave	Ratio	Male	%	100	100	0
			Female	%	100	100	100
	Number of Who Took Parental Leave	Number of employees	Total	Persons	3	3	3
			Male	Persons	0	0	0
			Female	Persons	3	3	3
	Employees Who Returned After Parental Leave	Ratio	Male	%	0	0	0
			Female	%	100	100	100
	Ratio of Employees With At Least 12-month Working After Returning From Parental Leave	Ratio	Male	%	0	0	0
			Female	%	100	100	100
GC Biopharma	Number of Employees Who Took Maternity Leave	Number of employees	Total	Persons	124	88	78
			Male	Persons	99	50	46
			Female	Persons	25	38	32
	Ratio of Employees Who Returned After Maternity Leave	Ratio	Male	%	100	100	100
			Female	%	100	100	100
	Number of Who Took Parental Leave	Number of employees	Total	Persons	45	63	52
			Male	Persons	8	14	20
			Female	Persons	37	49	32
	Employees Who Returned After Parental Leave	Ratio	Male	%	87.5	77.8	85.0
			Female	%	91.7	100	88.6
	Ratio of Employees With At Least 12-month Working After Returning From Parental Leave	Ratio	Male	%	100	71.4	71.4
			Female	%	83.9	75.8	76.3

Maternity and Parental Leave

Classification				Unit	2021	2022	2023
GC Cell	Number of Employees Who Took Maternity Leave	Number of employees	Total	Persons	25	28	47
			Male	Persons	18	22	36
			Female	Persons	7	6	11
	Ratio of Employees Who Returned After Maternity Leave	Ratio	Male	%	100	100	100
			Female	%	100	100	100
	Number of Who Took Parental Leave	Number of employees	Total	Persons	5	16	16
			Male	Persons	0	3	4
			Female	Persons	5	13	12
	Employees Who Returned After Parental Leave	Ratio	Male	%	100	0	80
			Female	%	100	100	100
	Ratio of Employees With At Least 12-month Working After Returning From Parental Leave	Ratio	Male	%	100	100	0
			Female	%	80	100	71.4

1) Data correction due to errors (6) in the previous year's report

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

Human Rights Management

Performance

Human Rights Grievance Handling System

· Operation of an online communication system and reporting center where anonymity and security are technologically ensured
· Various types of grievances are received through the grievance reception channel, and efforts are made for timely improvement. For cases where immediate resolution is not possible, an action plan is communicated within the due date.
· The 'Ethical Management Reporting' link, accessible through the company website, serves as a channel for anonymous reporting of grievances as well as violations of ethical and compliance management, and is integrated across the entire GC group.
· To protect whistleblowers, the K-whistle helpline is managed by an independent external specialized company. Security technology that ensures the IP address does not leave a trace is applied to guarantee anonymity.

· GC Cell
- For employee grievance counseling, the grievance counseling center on the in-house website dedicated to CP and the KakaoTalk channel is in operation.
- The utilization of the grievance counseling center is actively promoted during every training session for employees.
- In adherence to compliance program operation regulations, the identity of the internal reporter is kept anonymous, and the principle to guarantee their status and prevent any disadvantages is followed.
- In 2023, 4 cases of grievances were received through the grievance counseling center, and all cases were processed and resolved in accordance with the internal reporting system operation policy (processing rate: 100%).

Human Rights 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 verify the facts · Protect the informers · Review measures	· Deliver review results and hearing to perpetrator's opinion	· Disciplinary action and preventive training depending on the case

Grievance Channel for Human Rights Issue

Channels	Contents
GC Helpline	A space where reporting can be made on ethical values, integrity and actions contrary to compliance management, or anonymously express suggestions or opinions on employee grievance
Counselling Cafe	A space where various grievances, including human rights issues such as workplace bullying, sexual harassment, job/work environment conflicts, and other internal conflicts, can be resolved through in-house counseling
Suggestion Square	A space where employees can freely participate and communicate on various topics such as suggestions, proposals, and grievances
Change Agent	An organization composed of working-level officials representing each unit to listen to and communicate the actual opinions of the members. Key issues are discussed, and ideas are presented during monthly regular meetings.
Communication Survey	To establish a desirable corporate culture, anonymous surveys are conducted annually for all GC and affiliate employees to assess the organizational atmosphere and working conditions.
Town-hall Meeting	A space where all employees can communicate horizontally and freely on agendas, such as sharing the company's strategic direction, held quarterly.

Grievance Handling System[1)]

Classification		Unit	2021	2022	2023
GC (Holding Company)	Rate of Employee grievances processed	%	100	100	100
	Employee grievances reported	Cases	0	0	7
	Employee grievances processed	Cases	0	0	7
GC Biopharma	Rate of Employee grievances processed	%	100	100	100
	Employee grievances reported	Cases	8	5	8
	Employee grievances processed	Cases	8	5	8
GC Cell	Rate of Employee grievances processed	%	100	100	100
	Employee grievances reported	Cases	0	0	4
	Employee grievances processed	Cases	0	0	4

1) GC (Holding Company), GC Biopharma and GC cell received zero case of reporting on human rights through employee grievance handling system from 2021 to 2023

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

Human Rights Management

Human Rights Management Policy - GC Human Rights Charter

· GC Group is committed to implementing human rights management to mitigate risks of human rights violations across all business activities
· The 'GC Human Rights Charter' has been established and distributed, and its contents are regularly reviewed and revised with the CEO's approval as necessary.

1. Regarding Human Rights Management Standards
- GC respects fundamental rights of all stakeholders, including customers, partners and local communities, and strives to become a company that practices human rights management through high level of global citizenship
- GC adheres to global standards on human rights and labors including 'The UN Universal Declaration of Human Rights', 'The ILO Conventions', 'The OECD Guidelines for Multinational Enterprises', and 'The UN Guiding Principles on Business and Human Rights'. The company also adheres to labor and human rights related laws in each country and region where the business is operated
- Human rights that GC respects refer to those recognized internationally
- Human rights those recognized internationally includes 「the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights (ICCPR)」, 「the International Covenant on Economic, Social and Cultural Rights (ICESCR)」, and the core conventions of the International Labor Organization (ILO), which encompass eight fundamental conventions on freedom of association, the elimination of forced labor, the abolition of child labor, and the elimination of discrimination in respect of employment and occupation
- In addition, GC adheres to all human rights outlined in both internationally recognized hard laws and soft laws

2. Regarding Statement on Stakeholders
- GC systematically defines and classifies its stakeholders based on function, size, criticality, business activities, mutual impact and relevance
- In this process, aspects such as future generations and the environment which do not have a direct voice, are also considered as stakeholders
- GC does not discriminate against any stakeholders, including employees, for any reasons such as race, religion, place of birth, gender, age, disability, pregnancy, childbirth or political belief.
- GC engages in fair trade with partners for mutual growth and supports them in practicing human rights management
- GC pursues sustained partnership with shareholders, investors, academics, experts and members of the local community to share and develop our vision

3. Regarding Additional Contents to the Human Rights Charter
- Responsible supply chain management: GC recommends key suppliers and partners to fulfill their obligations to protect human rights and where necessary, takes appropriate actions to ensure the implementation of human rights management of suppliers and partners
- Protection of customer human rights and information: GC prioritizes the protection of customer's life, health and assets when providing products and services. GC respects the privacy of customers to the utmost and takes the best possible measures to secure personal information collected through business activities

4. Establishing Definition of GC Human Rights (Goal)
- In addition to ensuring fundamental human rights (guarantee of action, prohibition of discrimination, realization of freedom, prohibition of forced labor, human dignity, prohibition of child labor, etc.) and labor rights (Freedom of association, right to collective bargaining, fair compensation and compliance with labor standards, guarantee of health and safety), GC strives to enhance of human rights further (Practice of freedom of expression, responsible supply chain management, protection of personal information and privacy, pursuit of happiness through innovation)
- GC has mid-to-long term plans to concretize specific definitions and major aspects related to the 'Enhancement of Human Rights'

5. Identifying and Managing Potential Human Rights Issue for Each Stakeholder (Goal)
- GC plans to establish a management system to identify and address potential human rights issues for each stakeholder
- The goal is to prevent potential issues and to manage them for swift action they arise
- Going forward, GC has mid-to-long term plans to establish a shareholder map to strive in the protection of stakeholders' human rights by regularly updating it through enhancement of the management system for each human rights issue

· GC (Holding Company)
- Policies on human rights management and the Human Rights Charter are published on the company website and applied to group's affiliates
- Scope of the Human Rights Charter: All stakeholders related to overall business activities, including employees (including executives, staffs, and temporary workers), partners, workers in special employment form, and the local community

· GC Biopharma
- GC Biopharma operates its human rights management policies by incorporating the GC Group's Human Rights Charter
- Scope of the Human Rights Charter: All stakeholders related to overall business activities, including employees (including executives, staffs, and temporary workers), partners, workers in special employment form, and the local community

· GC Cell
- GC Cell operates its human rights management policies by incorporating the GC Group's Human Rights Charter
- Scope of the Human Rights Charter: All stakeholders related to overall business activities, including employees (including executives, staffs, and temporary workers), partners, workers in special employment form, and the local community

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

Human Rights Management

Human Rights Management Policy - GC Human Rights Charter

GC Group's Human Rights Charter

No Discrimination

GC prohibits discrimination based on gender, age, religion, social status, place of birth, level of education, school of origin, marriage, pregnancy, childbirth, or medical history without rational justification

Prohibition of Child Labor Exploitation

GC fundamentally prohibits all forms of child labor and adheres to the laws and regulations of each country where business is conducted when hiring underage workers.

Compliance with Working Condition

GC complies with the legal working hours defined in each country where business is conducted and provides reasonable overtime compensation for extended working hours within the limits prescribed by law, while also offering flexible working arrangements.

Freedom of Association and Collective Bargaining

GC guarantees freedom of association, collective bargaining and collective actions and prohibits employment disadvantages.

Humanitarian Treatment

GC protects privacy and personal information of all employees and strictly prohibits bullying between employees

Assurance of Occupational Safety

GC actively supports employees to work in a safe and hygienic working environment

Prohibition of Forced Labor

GC prohibits all forms of forced labor and any labor activities against the worker's will

Human Rights Protection of Local Residents

GC ensures that the living environment, safety, and health of the local community and residents are not compromised while operating business sites or during the establishment and expansion of facilities

Grievance Handling

GC operate grievance handling channel at all times and assures anonymity and confidentiality of grievance reporter's identity and information

· GC Group identifies human rights-related risk factors, including potential human rights risks and negative human rights issues, through the 'ESG Council' Critical human rights issues are reported to the Board of Directors.

Expanding Human Rights Management Governance (Goal)

· To strengthen ESG management, GC plans to establish ESG promotion governance (Sustainable Management Committee) where stakeholders participate as a mid-to-long term strategy. It will set mid-to-long term goals in safety and health, information security, diversity and human rights to continuously instill ESG management and expand the governance system.

Risk Management of Human Rights Violation

GC Group prohibits any form of human rights violations and enforces zero tolerance policy towards perpetrators

· Continuous monitoring is conducted to prevent recurrence based on regular analysis and inspection
· GC plans to enforce human rights audit processes and continuously promote the management of each human rights issue to fulfill social responsibility, adhere to regulations, and achieve a high level of respect for human rights.
· GC Cell conducted a human rights audit in 2023 (1 time) and identified 2 opportunities for improvement. Corrective actions for these issues have been completed, resulting in an action rate of 100%
· GC (Holding Company) and GC Biopharma manage the monitoring of human rights violations through the number of grievance received
  - GC (Holding Company): As of 2023, the number of human rights violations was zero
  - GC Biopharma: As of 2023, the number of human rights violations was zero

Identify potential risks and establish mitigation measures for each stakeholder

Stakeholders	Potential Risk Management	Scope
Employees, Partners and Workers in Special Employment Types	· Compliance with working hours and improvement of labor management and capabilities. · Protection from unfair conduct or unreasonable demands in the workplace · Resolution of industrial safety and health issues and physical threats · Information security and protection of personal information	· GC (Holding Company) · GC Biopharma · GC Cell
Local Community	· Support management and reporting process to ensure that human rights issue do not arise in the local community	· GC (Holding Company) · GC Biopharma · GC Cell

Human Rights Audit Process

1 Receiving Violation Reports and Protecting Victims
- Receiving reports on violation to human rights
- Protecting Victims

2 Assessing the Current Situation and Identifying Risks
- Investigation for facts
- Identify potential human rights risk

3 Committee Review
- Review based on the investigation results
- Decision-making on reporting to BOD

4 Reporting the Result to the Board of Directors
- Critical human rights issue is reported to BOD
- Prevent recurrence through sharing the results internally and externally

5 Post-management
- Establish improvement tasks
- Monitor the implementation of the task

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

Human Rights Management

Human Rights Education GRI 410-1

- Human Rights Education is conducted for all employees (domestic business sites) of all GC's affiliates under GC Group, with three hours of human rights education provided annually since 2022
  - The training related to labor human rights includes the prevention of sexual harassment, the prevention of workplace bullying and improving awareness of people with disabilities
- Through conducting various human rights education programs, efforts to protect human rights within the workplace will be continuously promoted
- Training on human rights policies and procedures is substituted by the distribution of the 'GC Human Rights Charter'.

Human Rights Education

Classification			Unit	2021	2022	2023
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	151	163	168
		Number of People Targeting	Persons	151	163	168
GC Biopharma	Sexual Harassment Prevention	Training Completion Rate	%	100	100	100
		Number of People Completing Course	Persons	2,099	2,212	2,209
		Number of People Targeting	Persons	2,099	2,212	2,209
	Improving Awareness of Disability	Training Completion Rate	%	100	98.7	100
		Number of People Completing Course	Persons	2,099	2,212	2,189
		Number of People Targeting	Persons	2,099	2,242	2,189
	Workplace Bullying Prevention	Training Completion Rate	%	95	100	100
		Number of People Completing Course	Persons	2,051	2,194	2,209
		Number of People Targeting	Persons	2,159	2,194	2,209
GC Cell	Sexual Harassment Prevention Improving Awareness of Disability Workplace Bullying Prevention	Training Completion Rate	%	100	100	100
		Number of People Completing Course	Persons	799	838	858
		Number of People Targeting	Persons	799	838	858

Co-prosperity with Partners

Policy for Co-prosperity with Partners

- GC Group establishes transparent and fair business relationships with partners by adhering to fair trade principles and relevant laws, aiming to build a sustainable business ecosystem.
- To provide high quality pharmaceutical products and services, GC Biopharma operates its supply chain based on co-prosperity and mutual growth with partners throughout the entire process of production and quality control.

Performance

Strengthening HSE Supporting System for Partners

- GC (Holding Company)
  - GC's policies and vision for a sustainable future environment, including compliance with environmental, safety, and health regulations, and activities to reduce environmental pollution, have been shared with approximately 40 partners in the first and second halves of the year
  - In the long term, a regular training system on environmental, safety, and health will be introduced for partners to share future values on environmental safety

Establishing Supporting System to Strengthen Safety and Health for Partners

- GC Cell has established standard operating procedures for 'Consignors and Outsourced Contractors' to operate systems that promote joint efforts in safety and health activities between GC Cell and its partners
  - Conducts regular audits of partners and joint quarterly inspections
  - During the monthly council meetings, requests for corrective actions on findings are made, and activities to fulfill the consignee's safety and health obligations are continued
- In 2023, GC Cell provided training on risk assessment methods and evaluation formats to partners who have difficulties conducting regular self-risk assessment activities, offering guidance and recommendations for improvement actions.

Partners Day for Co-prosperity

- Since 2019, GC Biopharma has invited partners every once a year to promote ethical standards and internal reporting systems, and hold expert lectures and ethics management meetings to collect feedback from partners.
- From 2020, due to COVID-19, face-to-face meetings became difficult. Thus, the event alternatively conducted by distributing materials on GC Biopharma's ethical standards and contracting laws to partners. Starting from 2023, offline event was resumed.
- Booklets containing the Code of Conduct were distributed to partners, explaining the company's ethical standards. External experts were invited to give lectures on ESG, and ethical management meetings were held to listen to the concerns of partners.

Strengthening the Operation of Contractor's Council and Joint Safety Inspection Activities

- GC Biopharma discussed issues that require higher quality of safety and health information, financial support and decision-making by the primary contractor are discussed in the meetings between representatives of resident contractors and the primary contractor.
- In order to create comfortable working environment for contractors, GC Biopharma regularly meets once a month to discuss and make decisions on safety and health issues with representatives from both the contractors and the primary contractor form a council. GC Biopharma provides safety work methods for risk factors, emergency response methods and chemical substance information.
- GC biopharma's quarterly inspections are conducted including the chief safety and health officer to identify and improve hazardous and risk factors in the contractor's site, immediate corrections take place if risk factor are found.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 401: Employment

Communicative Organization Culture

Strategy for How to Operate Organization Culture
· GC Group selects and operates change managers from among working staffs, providing official communication channels and junior board for employees to actively participate in company operation.
· Major issues related to organizational culture, including operations and policies are discussed, and new ideas are presented.

Performance

GC (Holding Company)

Publication <GC+> and Online Communication Channel GC Live Operation

· Quarterly publication and distribution of the newsletter <GC+> to share issues among all GC Group affiliates.
· The online communication channel, GC Live, delivers timely news and facilitates interactive communication through contributions from in-house writers.

GC Change Agent 'MOM', Conducts Small Group Employee Communication Program

· Change Agent 'MOM', operated by members of GC (Holding Company), holds monthly meetings to discuss issue in organizational culture issues that needs improvement and actively promotes acceptance and adaptation to organizational changes among members.
· 'MOM' also operates a monthly communication program with the CEO for employees celebrating their birthdays. In small groups, employees can directly ask the CEO questions and receive answers, providing a special communication experience.

GC Biopharma

Operation of Change Agent 'C.O.D.E', the Workshop Promotion Organization

· GC Biopharma voluntarily operates C.O.D.E (Culture. Organization. Design. Environment)
  - C.O.D.E avoids top-down, one-way organizational culture improvement, and identifies improvement points for organizational culture in each division
  - It provides an all-around communication infrastructure to gain consensus on the company's strategy and direction.

Establishing CoP System

· GC Biopharma has established a CoP (Community of Practice) system by voluntary participation of employees to enhance job-related knowledge and work efficiency providing a venue for communication among employees
· Since the first in-house CoP system was established in 2021, it has been operated as an annual activity. A total of 10 teams in 2021, 20 teams in 2022 and 18 teams in 2023 participated, striving to foster a self-centered learning culture.
· At the end of the year, a CoP festival is held to discover and to reward outstanding cases based on the annual activities performed. These outstanding cases are shared through various in-house communication channels.

Town Hall Meeting

· GC Biopharma holds regular Town Hall Meetings hosted by the CEO five times a year, both online and offline
· The purpose is to promote horizontal communication between members and managements and to enhance intimacy among employees.
· Through the Town Hall Meeting, members are informed about company's strategies and key issues, establishing it as an effective in-house communication tool.

Spreading 'G-Culture' Activities

· GC Biopharma is spreading 'G-Culture'
  - This involves re-establishing working methods of employees to bring better innovative value for customers
  - 'G-Culture' is based on employee-centered storytelling, recognizing that the key to business success in the digital transformation era lies in corporate culture
  - 'G-Culture' suggests ways to work 'Fast, Young and Strong' for both team managers and members
· The instillation of 'G-Culture' is promoted through communication with employees, rather than one-way training
  - Programs such as 'Workshop at Your Workplace' and team coaching are provided to facilitate team-level communication and implement various 'G-Culture' activities throughout the year
  - Online Learning Cloud system is utilized to enhance effectiveness and efficiency

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 401: Employment

Communicative Organization Culture

Performance

GC Cell

News Letter W.O.W

· A newsletter is issued each month to share news about GC Cell with employees
· The newsletter is themed around GC Cell's four values: Create / Explore / Link / Learn
· Instead of unilateral information delivery, the newsletter promotes employee participation, writing news in an article format based on contributions from employees

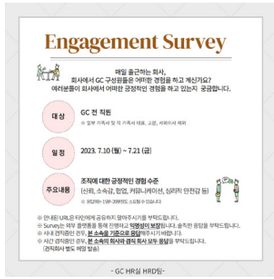
Culture Evangelist Activities

· The organizational culture is improved under the leadership of selected Culture Evangelists from among the volunteered employees
· Through regular meetings, status of the organizational culture is diagnosed, identify areas for improvement, and disseminate these improvements throughout the organization.

Employees Satisfaction Survey and Response Status

· Annual Employee Satisfaction Survey
- Honest feedbacks are received from employees, and based on these feedbacks, directions are sought to enhance satisfaction of organizational culture and implement mitigations for each risk factor related to labor practices (employment policies, labor-management relations, human resource management, worker welfare etc.)

· GC Group
- Each year, GC Group conducts a survey on employee satisfaction and engagement through an employee experience global survey platform
- Honest feedback on employee experience is regularly collected to identify indicators that can raise employee engagement, and efforts are made for continuous improvement and development.
- Objective tracking and monitoring are conducted using benchmark data from companies within the same industry and region (East Asia), as well as feedback from within the group.
- According to global benchmark data, GC shows a higher level of awareness in work-life balance, social responsibility, ethics, and safety compared to other companies
- By analyzing the survey results, each affiliate in GC Group identifies and implements methods for improving organizational culture
- Efforts are made to enhance communication within the organization by holding Town Hall Meetings within each company and conducting employee communication programs to share various information and facilitate communication among employees
- In 2023, GC Group's satisfaction/engagement survey participation rate was 67% for GC and all affiliates (1% increase compared to 2020)
- In 2023, GC's participation rate was 79% (22% increase compared to 2020)



Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 401: Employment

Communicative Organization Culture

Performance

· GC Biopharma
- Questions on the satisfaction survey include three indicators: employee engagement, working methods (G-Culture), and creating an organizational environment
- Excluding those with employment less than 1 month, the survey targeted all employees, and was conducted online from May 8, 2023 to May 22, 2023, with a participation rate of 72.9%
- In 2023, the overall satisfaction score was 3.38 out of 5 (a 0.03 point decrease from the previous year)

GC Biopharma Employee Satisfaction Survey Result

Classification	Unit	2021	2022	2023
Average[1)]	Points	3.32	3.41	3.38
Positive[2)]	%	48	51	49

1) Average: Average value of scores rated for Not at all(1), No(2), Neutral(3), Yes(4), Very Much(5)
2) Satisfaction: The percentage of the respondent answered for Very Much(5), and Yes(4) / Neutral(3) is considered neutral, No(2) and Not at all(1) is considered as not satisfied

- After diagnosing the organizational culture, various activities are conducted for improvement
- Firstly, based on the diagnosis results for each organization, leaders are directed to provide 1:1 feedback and guidance on improvement points
- To improve the 'psychological safety' factor, identified as the most influential factor on employee engagement from the diagnosis results, team leader leadership training was conducted in the second half of the year. A total of 163 participants completed the training over six sessions
- Based on the diagnosis results, teams needing improvement or identified as outstanding were selected for 'on-site team coaching' (8 teams). One team with outstanding results presented their case at the 2024 leadership workshop attended by all leaders, sharing it organization-wide
- To improve organizational culture, each organization leader, all managers, and selected teams are provided opportunities to implement changes

GRI 403: Occupational Health and Safety

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

· GC Group
- GC Group is operating a safety and health management system based on international standards ISO45001 (Occupational Health and Safety Management Systems) and Process Safety Management (PSM) to ensure that all employees work in a safe and healthy environment and lead healthy lives
- The safety and health management system applies to all employees working at business sites, as well as on-site contractors and partners
- A dedicated health and safety organization (SHE team) is in operation to prevent major industrial accidents, and the Safety and Environmental Officer manages the necessary human resources and budget to prevent accidents
- The SHE council meetings are regularly conducted to share performance achievements of health and safety plans and to make decisions on safety strategies and issues

· GC Biopharma
- GC Biopharma attained an international standard ISO45001 (Occupational Health and Safety Management Systems) and in May 2023, additionally attained certification for KOSHA-MS to establish self-regulation system
- Hwasun Plant formed a consultative body called Autonomous Safety Committee, comprising Safety and Health Management Officer, Safety and Health Managers, Supervisors and Safety Leaders to carry out overall safety and health activities at the Plant. Hazardous risk factors on the site are identified and current situations are shared, identified problems and gathered opinions to find solutions and improvements through collective intelligence. Monitoring and follow-up actions are conducted based on these discussions.

· GC Group's Safety and Health Management Policies are disclosed as 'Environment, Safety, and Health Management Policies'
GC (Holding Company)'s Policy, GC Biopharma's Policy, GC Cell's Policy
· As for GC Biopharma and GC Cell, approval is obtained on Safety and Health Management Policy, describing management policies, budgets, organizations, achievements, and plans on safety and health by the Board of Directors early in the year. (Date of BOD approval for GC Biopharma: Feb 19, 2024; GC Cell: Feb 8, 2024)


안전보건경영시스템
인 증 서
KOSHA-MS

KOSHA-MS
· Certified Business Site: GC Biopharma Ochang Plant
· Effective Date: May 18, 2023 to May 17, 2026 (3 years)

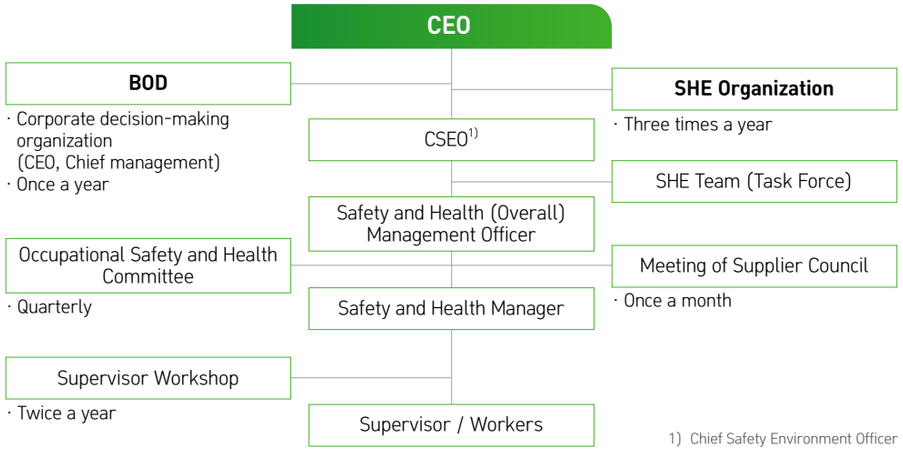
Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 403: Occupational Health and Safety

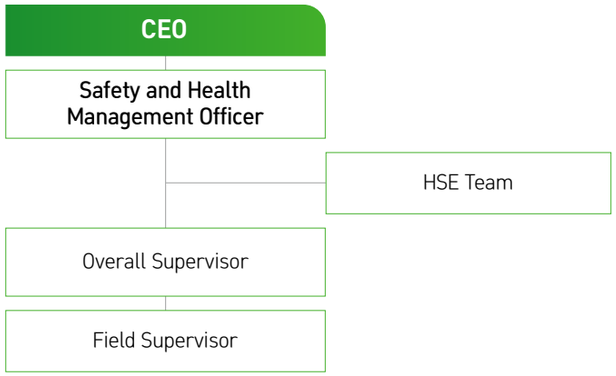
Safety and Health Management System GRI 403-1 | GRI 403-8

GC Biopharma's Safety Health Organization System



1) Chief Safety Environment Officer

GC Cell's Safety Health Organization System



Performance

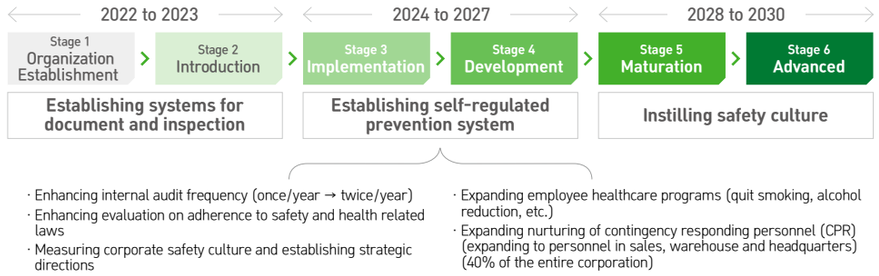
Health and Safety Plan and Goal Establishment

· GC (Holding Company)
  - Dedicated division for establishing strategic directions and proactive prevention management on environment, safety, health and energy management of all affiliates.
· GC Biopharma
  - Each year, a 'Protocol for Safety and Health' is established, and achievements and plans are reported to the Board of Directors for review and approval. This includes a review of safety and health management principles, safety and health organization, budget, objectives, tasks, and more
  - Safety and health goals are established to implement mid-to-long term action plans for continuous improvement. Achievements are regularly monitored semi-annually and reported to the CEO
  - The objective is to implement a six-stage plan by 2030 for each site to establish a self-regulated prevention system and to instill a safety culture
· GC Cell
  - An objective for the safety and health plan is established based on the safety and health risk assessment and the risk assessment results
  - In 2024, safety and health will be included in the personal KPIs of managers in charge, with a weight of 5% (establishing individual goals linked to corporate objectives)
  - Achievements for 2023 and the plan for 2024 on health and safety are reported and approved by the Board of Directors

GC (Holding Company) Objectives for Safety and Health Management Policy in 2024

1	2	3
Establishing HSE regulatory risk prevention management system for all affiliates	Securing competitiveness in sustainable and safe environment in response to serious accident reduction roadmap	Enhancing safety competencies across all affiliates to achieve zero incidents in three accident types (industrial, fire, and environmental)

GC Biopharma Objectives for Safety and Health Management Policy



Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 403: Occupational Health and Safety

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

Performance

GC Cell's HSE Vision, Purpose and Targets (5 years)

Vision	Striving to Become a Safe, Healthy and Eco-Friendly Company				
Purpose	2023 → 2024 → 2025 → 2026 → 2027				
	Enhancing the HSE system	Autonomous safety culture	Ensuring Safety and Health Management System	Mutual growth with partners	Digitizing Safety and Health Management
Target	Standard revision rate : 80%	100% KPI setting for operational teams	Attaining KOSHA-MS certification	Allocation of Safety and health support fund for partners (5% of total budget)	Introducing electronic system for Safety and Health Management
Achievements	· Standard revision rate : 100% · New Standard established: 1 case				

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

· GC Group operates decision-making bodies such as the Occupational Safety and Health Committee and the Research Center Safety Management Committee to review and make decisions on matters related to workers' occupational safety and health

Performance

Operation of Occupational Safety and Health Committee

· The Occupational Safety and Health Committee for each workplace is operated under the Occupational Safety and Health Act
  - Discusses agendas on 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
  - The Occupational Safety and Health Committee is operated with an equal number of seats for both the labor and company sides to deliberate and decide on major matters related to basic on-site safety management measures and health to prevent worker risks and health hazards
  - Discussions take place between representatives from labor and management on safety and health agendas, and the SHE department shares overall safety and health tasks including accident cases, issues, achievements, and plans
  - The committee meets quarterly
  - GC Biopharma: In 2023, 27 deliberation resolutions were implemented, and pending issues are expected to be completed by early 2024 through improvement activities
  - GC Cell: In 2023, 24 deliberation resolutions were implemented, and pending issues were completed within 2023 through improvement activities

Operation of SHE Council

· GC Biopharma semi-annually operates the SHE Council with the participation of the CEO, CSEO, Health and Safety Managers from each business site, and the SHE team
  - In the council, corporate-level safety and health system operations, achievements against targets, upcoming plans and issues are shared and discussed
  - In addition to fulfilling the legal requirements of the Serious Accident Punishment Act, including the execution of safety and health-related budgets, identification and improvement of hazards, compliance evaluation results, and assessments of Health and Safety Managers, the council also discusses and makes decisions on company-wide safety and health environment issues

Operation of Autonomous Safety Committee

· GC Biopharma operates a committee to enhance the safety and health management organizational system and the safety functions of the worksite. The committee leads safety activities across the entire manufacturing plants and makes decisions centered on the participation of the worksite
  - Safety leaders comprised of worksite specialists are included in the committee

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 403: Occupational Health and Safety

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

Performance

Operation of R&D Safety Management Committee

· GC Biopharma's Ochang Plant has organized an Occupational Safety and Health Committee and separately organized an R&D Safety Management Committee for R&D staff
· GC Cell's R&D has additionally organized its own R&D Safety Management Committee and operates it in the same manner as the Occupational Safety and Health Committee

Activities by Safety Health Committee

· GC Biopharma
  - Member of the Pharmaceutical Companies' Safety and Health Committee [Corporate-level], operational member in the Cheongju Safety and Health Committee [Ochang Plant]
  - Cheongju PSM Council [Ochang Plant], Cheongju Chemical Substance Management Council, Chair company of Ochang and Oksan Industrial Complex [Ochang Plant]
  - Chemical Substance Association in the Ochang area [Ochang Plant], Ochang Scientific Industrial Complex Association (Fire Protection) [Ochang Plant]
  - Autonomous Safety Council for the Manufacturing Industry in the Gwangju area [Hwasun Plant]
  - Industrial Safety Council in North Chungcheong Province [Eumseong Plant], Plant Industrial Complex Association (Fire Protection) [Eumseong Plant], among others
· GC Cell
  - In 2023, joined the Pharmaceutical and Bio-Pharm Safety and Health Association to obtain policy trends and study outstanding cases in order to explore ways to advance the safety and health system


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

Performance

· GC Group
· GC Group operates various health support programs to maintain employees' health
  - Support comprehensive health check-ups once a year for employees and their spouses
  - Provide flu vaccinations for all employees and their families
  - Conduct special health check-ups and regular monitoring of working environments for employees handling hazardous chemical substances, including temporary workers
· Hospitals and gyms are operated to enhance the physical and psychological well-being of employees, and psychological consultation services are provided
· After the emergence of COVID-19, strict disinfection measures were implemented for all workplaces
  - Protecting employee health from infectious diseases
· Operation of in-House clinic "Dr.GC" for employee healthcare
  - Provide consultations with medical experts on health risks such as disease treatment, obesity, fatigue, and stress
  - Efforts are made to help employees manage their health and adopt healthy lifestyle habits through preventive activities
  - GC Group's products and solutions are utilized to offer more systematic healthcare

· GC Biopharma
· Implementing Employee Health Promotion Programs
  - Introduced the 'Mind Care Service (Mind Diagnosis)' to enhance employees' psychological well-being
  - Operating Healthcare Rooms continuously in the Ochang and Hwasun plants to monitor and manage the health of resident employees. The Healthcare Rooms offer services including first aid, medical supplies distribution, health consultations (with counseling for individuals with notable findings), information provision, and measurements for diabetes, blood pressure, cholesterol, and body composition
  - Conducting smoking cessation promotions and campaigns in collaboration with local public health centers
  - Conducting mental health program in collaboration with the Jeollanam-do Metropolitan Mental Health Center, including lectures by psychiatrists and healing experiences
  - Implementing mental health campaigns for all employees in cooperation with the Yongin Mental Health Welfare Center, focusing on the importance of mental health management due to increased social interest in issues like COVID-19 blues and excessive stress
  - Providing mental health services for employees through healing programs such as singing bowl sessions and temple stays



· GC Cell
· In 2023, GC Cell completed an analysis to establish a health management roadmap through internal health management status surveys including one of GC Group and benchmarking other companies. This project has been selected as a strategic task for 2024 and is currently being implemented

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 403: Occupational Health and Safety

Performing Safety Health Risk Assessment GRI 403-2

· Led by the dedicated Safety and Health Division, periodic safety evaluation and risk assessment has been conducted on worksite facilities and equipment
  - Regular evaluations are conducted to verify the implementation of health and safety plans through monitoring and interviews
· Annually, all employees participate in firefighting drills as part of regular emergency drills, thereby establishing a comprehensive emergency response system
· We plan to continuously strengthen our company-wide systems and operational measures to thoroughly identify and mitigate risks of accidents and disasters due to various factors such as serious accidents, raw materials and manufactured products
· GC Biopharma
  - Conduct safety inspections and evaluations at business sites through site cross inspections quarterly
  - Conduct safety inspections and evaluations at managed business sites including sales offices and depots quarterly
  - 2023 company-wide safety inspection results: risk level before improvement 6.5 → risk level after improvement 3.2
  - Each worksite fully implements Tool Box Meeting (TBM) based on risk assessments prior to start working

GC Biopharma Company-wide Safety Inspection Result

Classification		Finding (Unit : Cases)	Improved (Unit : Cases)	Not Improved (Unit : Cases)	Improvement Rate (Unit : %)	Risk Level (Before Improvement)	Risk Level (After Improvement)
GC Biopharma	First Half	199	193	6	97	6.4	2.9
	Second Half	133	122	11	92	6.7	3.7
	Total	332	315	17	95	6.5	3.2

· GC Cell
- Conduct safety diagnosis and audit at managed business sites including sales offices and depots biannually
- Conduct evaluations by Health and Safety Management Officer semi-annually

Performance

Efforts to create safe work environments

· Laboratory personnel are provided with safety goggles, safety shoes, respirator masks, and safety gloves as personal protective equipment
· Laboratory safety and emergency response facilities and items are available, including chemical substance storage facilities, emergency showers, fume hoods, and other emergency response items
· Various waste generated within the laboratory is treated safely using dedicated waste boxes
· The work environment is measured semi-annually to ensure the laboratory environment is maintained in a safe condition

Exemplary case of installing automatic dispersion fire extinguishers for early fire response in case of a fire caused by an electric forklift charger (battery)


(Before the improvement)


(After the improvement)

Conducting risk assessment

· GC Biopharma
  - To enhance the implementation of periodic risk assessments, processes have been further specified in detail compared to 2022
  - Led by the SHE team, preliminary training on periodic risk assessment is conducted to enable workers to directly participate in the risk assessment
  - Compared to 2022, there has been an increase in unacceptable risk factors identified due to the overall increase in risk factors identified (1,995 cases → 2,760 cases)
  - To support risk assessment by contractors, risk assessments on all construction works have been conducted and reviewed using the JSA assessment method

· GC Cell
  - Risk assessment is conducted by supervisors with the voluntary participation of workers.
  - To increase voluntary participation, continuous activities are being conducted to improve the methods and utilization of risk assessment, such as introducing checklists for risk assessment at several business sites
  - Hazard information, risk factors, and improvement risks are identified in terms of safety and health
  - As part of efforts in risk assessment and compliance activities, the number of accidents has been maintained at 0 compared to 2022, and safety incidents have decreased from 8 to 4, a 50% reduction
  - Including the Cell Center, the risk assessment results for all business sites identified 1,088 risk factors. Of these, 867 were concluded to maintain the status quo, while 221 required corrective and improvement actions, which have been completed 100%

2023 Risk Assessment Result

Classification		Risk Factors Identified (Unit : Cases)	Improvement (Unit : Cases)	Improvement Completed (Unit : Cases)	Improvement Rate (Unit : %)
GC Biopharma	Ochang Plant	1,192	42	42	100
	Hwasun Plant	609	35	35	100
	Eumseong Plant	472	89	89	100
	R&D Center	487	53	53	100
	Total	2,760	219	219	100
GC Cell	All Business Sites (Including Cell Center)	1,088	221	221	100

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

· GC Biopharma and GC Cell conduct SHE safety training, safety culture campaigns, safety audits, and other initiatives for partners whose safety management levels are insufficient due to a lack of safety and health experts

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 403: Occupational Health and Safety

Emergency Drills GRI 403-7

· GC Group operates various emergency drills
· GC Biopharma
- In 2023, GC Biopharma conducted joint drills with fire station to enhance fire response capabilities.
- Each team develops and trains for various scenarios, including fire, explosion, leakage, and power outage
- Training programs are conducted to nurture emergency response personnel, aiming to improve employees' emergency response capabilities. This includes first aid training such as using AEDs and performing CPR
- Through self-defense firefighting team training, employees are trained on fire response procedures, the composition and duties of self-defense firefighting team
- Under the supervision of self-defense firefighting team, all employees are familiarized with the evacuation methods and routes: joint drills with fire station, practice initial fire suppression using hydrants and fire extinguishers
- Training at the Industrial Safety Experience Center (Ministry of Employment and Labor) to acquire knowledge on industrial safety, machinery, electricity, confined spaces, and industrial health
· GC Cell
- Potential major accidents during work have been identified by reflecting on natural and social disasters and risk assessments, and emergency preparedness and response systems have been established
- Emergency drills have been conducted not only for fires but also for chemical spills, and the code of conduct has been revised based on the results






Worker Training on Occupational Health and Safety GRI 403-5

· 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 data sheets (MSDS), occupational disease prevention measures, first aid in daily life, job stress management, etc.
- For supervisors, specific training on occupational safety health is conducted
· GC Cell conducts and manages training through an annual training plan for workers in each job group
- For R&D and production positions requiring specialized training, training is conducted on the manufacturing or handling of explosives, handling of drying equipment, precautions for working at heights, and manufacturing or handling of hazardous materials
- For new employees and safety officers, including supervisors, compliance with the statutory training content and completion hours is required
- All employees of resident contractors are required to undergo industrial safety and health education

Training on Occupational Health and Safety

Classification			Unit	2021	2022	2023
GC (Holding Company)	Supervisors	Training completion rate	%	100	100	100
		Number of employees completing training	Persons	288	308	319
		Number of training target	Persons	288	308	319
GC Biopharma	R&D, production, sales and management positions	Training completion rate	%	100	100	100
		Number of employees completing training	Persons	2,132	2,215	2,194
		Number of training target	Persons	2,132	2,215	2,194
GC Cell	R&D, production, sales and management positions	Training completion rate	%	100	100	100
		Number of employees completing training	Persons	799	838	858
		Number of training target	Persons	799	838	858

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 403: Occupational Health and Safety

ISO45001 Certification Status

· GC (Holding Company), GC Biopharma and GC Cell maintain ISO45001 certification

ISO45001 Certification

Classification			Unit	2021	2022	2023
GC (Holding Company)	Percent of worksites with certification	Percent	%	100	100	100
		Number of worksites with certification[1]	Place	1	1	1
		Number of worksites expected to have certification	Place	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	Place	4	4	4
GC Cell[3]	Percent of worksites with certification	Percent	%	0	100	100
		Number of worksites with certification[3]	Place	0	1	1
		Number of worksites expected to have certification	Place	1	1	1

1) Headquarter
2) R&D Center, Ochang Plant, Hwasun Plant, Eumseong Plant
3) Cell Center


CERTIFICATE dqs

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


CERTIFICATE dqs

ISO45001
· Certification Scope: Cell Center
· Effective Date : October 1, 2022 - September 30, 2025

Industrial Accident GRI 403-9 | GRI 403-10

Management of Worksites where Industrial Accidents Occurred

Classification			Unit	2021	2022	2023
GC (Holding Company)	Worksites	Ratio of worksites with accidents	%	0	0	0
		Total number of worksites	Places	1	1	1
GC Biopharma	Worksites	Ratio of worksites with accidents	%	6.7	6.7	0
		Total number of worksites	Places	15	15	15
GC Cell	Worksites	Ratio of worksites with accidents	%	0	0	0
		Total number of worksites	Places	44	50	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, distribution center

SHE

Classification			Unit	2021	2022	2023
GC (Holding Company)	Work Related Accidents	Number of Accidents	Cases	0	0	0
		Number of injured persons	Persons	0	0	0
		Number/ratio of work-related fatalities (for all employees)	Persons	0	0	0
		Number/ratio of work-related injuries (for all employees, excluding fatalities)	Persons	0	0	0
		Industrial accident rate	-	0	0	0
		Lost Time Injury Frequency Rate (LTIFR)[1]	-	0	0	0
		Number of lost workdays	Cases	0	0	0

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 403: Occupational Health and Safety

Industrial Accident GRI 403-9 | GRI 403-10

SHE

Classification			Unit	2021	2022	2023
GC Biopharma	Work Related Accidents	Number of Accidents	Cases	1	1	0
		Number of injured persons	Persons	1	1	0
		Number/ratio of work-related fatalities (for all employees)	Persons	0	0	0
		Number/ratio of work-related injuries (for all employees, excluding fatalities)	Persons	0	0	0
		Industrial accident rate	-	0.05	0.04	0
		Lost Time Injury Frequency Rate (LTIFR)[1]	-	0.19	0.18	0
		Number of lost workdays	Cases	2	6	0
GC Cell	Work Related Accidents	Number of Accidents	Cases	0	0	0
		Number of injured persons	Persons	0	0	0
		Number/ratio of work-related fatalities (for all employees)	Persons	0	0	0
		Number/ratio of work-related injuries (for all employees, excluding fatalities)	Persons	0	0	0
		Industrial accident rate	-	0	0	0
		Lost Time Injury Frequency Rate (LTIFR)[1]	-	0	0	0
		Number of lost workdays	Cases	0	0	0

1) Number of industrial accident / Total annual working hours * 1,000,000 hours

GRI 404: Employee's Performance Management

Employee's Performance Assessment GRI 404-3

· Regular assessments on work performance and career development are conducted for full-time employees
· Performance assessments consider both mid-to-long term goal management and short-term performance results in a hybrid approach

Employee's Performance Management

Classification		Unit	2021	2022	2023
GC (Holding Company)	Ratio of Employees Subject to Performance Evaluation	%	95.8	91.3	84.4
	Ratio of Employees Subject to Performance Evaluation	%	94.7	96.6	98.1
	Ratio of Employees Subject to Performance Evaluation	%	80.9	78.9	81.7

Performance

Training on Performance Management

· GC (Holding Company) strengthens employees' performance management through annual performance management training and improves the effectiveness of performance management
① Basic Training
- In 2023, online training programs on performance management and understanding of system manuals for all employees were developed and made available throughout the year.
② Specialized Training
- In addition to basic training, ad-hoc training programs are operated based on the performance management-related needs of the field.
- In 2023, OKR objective management coaching training was conducted for strategic project departments
→ 31 out of 37 members participated in the training, with a satisfaction score of 4.4 out of 5

2023 Training on Performance Management

Subject		Training Target	Number of Training	Trainees (Persons)	Training Completion (Persons)	Completion Rate (%)
Training on Performance Management	Basic Training	Regular Employees	On-going	173	173	100
	Specialized Training	Strategic project department	As needed	37	31	84

· GC Cell provides training and guidebooks for each step to ensure consistent and continuous results
- In 2023, 4 hours and 30 minutes of training sessions were conducted for employees subjected to assessment

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 404: Employee's Performance Management

Employee's Performance Assessment GRI 404-3

Performance

Satisfaction Survey on Performance Assessment

· In June 2023, GC (Holding Company) conducted a satisfaction survey on the performance management operation GC (ongoing performance management interviews) for all employees
  - 96 out of 111 people responded (86%)
  - The very satisfied/satisfied response rate was 89.6%, resulting in a high positive response score of 4.5 out of 5.
· GC Biopharma conducts a satisfaction survey on performance assessment each year after the end-of-year evaluation is completed
  - The contents of the survey include the performance management system, satisfaction of assessors, fairness of the assessment, and trends over the years, with the results reported to the CEO
  - The results of the satisfaction survey are actively incorporated when revising the performance system
  - In 2022, the satisfaction survey results showed a score of 3.32 out of 5, and no satisfaction survey was conducted in 2023

Operation of meetings on the overall performance assessment system and its management

· GC Biopharma operates meetings to collaboratively create a performance assessment system with employees
  - Through these meetings, feedback is received via face-to-face questions and answers, which is then incorporated into system improvements
  - System improvements based on feedback (2024): Enhancement of ongoing performance management methods, changes to multi-faceted assessment schedules and methods, and improvements in interim review methods

Operation of Continuous Performance Management

· GC (Holding Company) focuses on using performance management as a 'tool to help create performance' rather than an 'evaluation tool' by continuously repeating the communication cycle from goal setting to task performance review and process.
  - To establish clear and challenging goals for each individual, we focus on aligning goals at the company, group, and individual levels based on our mission and vision
  - A development-oriented performance management system based on absolute evaluation is being established and implemented
  - By utilizing the newly introduced cloud-based data-sharing performance management system, we can support the achievement of goals through real-time feedback
· GC Biopharma operates an absolute evaluation system to foster a 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 is conducted through regular activity management and feedback throughout the year
  - In 2022, the Success Factors' PMGM Module(best system in global) based on SAP's Cloud System was implemented to establish a system that meets global standards
· GC Cell operates a KPI system for performance management, linking company, sector, team, and individual KPIs to ensure that individual KPI achievements contribute to the company's overall goals.

Employees' Compensation GRI 405-2

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

Employee's Compensation

Classification				Unit	2021	2022	2023
GC (Holding Company)	Average Salary per Person			KRW million	85	82	83
	Average Salary	By Gender	Male	KRW million	91	92	93
			Female	KRW million	73	65	67
		Ratio of Basic Salary and Remuneration of Female to Male		%	80.2	70.7	72
GC Biopharma	Average Salary per Person			KRW million	71	69	70
	Average Salary	By Gender	Male	KRW million	73	72	72
			Female	KRW million	62	61	63
		Ratio of Basic Salary and Remuneration of Female to Male		%	84.9	84.7	87.5
		By Position	Total	KRW million	71	69	70
			Sales/Management	KRW million	81	81	78
			R&D	KRW million	72	75	73
			Production	KRW million	63	58	58
GC Cell	Average Salary per Person			KRW million	37	52	45
	Average Salary	By Gender	Male	KRW million	44	57	47
			Female	KRW million	26	43	40
		Ratio of Basic Salary and Remuneration of Female to Male		%	59.1	75.4	86.1
		By Position	Total	KRW million	39	53	45
			Sales/Management	KRW million	48	56	44
			R&D	KRW million	50	60	58
			Production	KRW million	13	45	41

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 405: Diversity Management

Diversity of Employees GRI 405-1 | GRI 202-2

· 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 the ratio of female employees over 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 childcare, such as maternal protection

GC Biopharma

Ratio of female employees **26%**

Ratio of female executives **9.5%**

Employment for the disabled in 2023 compared to 2022
Increase of 20 people
(achieving the goal of increasing by at least 10 in 2023)

2024 GC Biopharma's target to increase diversity
: Employ **10%** more employees with disabilities compared to 2023
Efforts to establish standard business sites for people with disabilities starting from 2025

Employee Diversity

Classification					Unit	2021	2022	2023
GC (Holding Company)	Female Employee Status	Female Executives			Persons	0	0	0
		Non-standing Female Executives			Persons	0	0	0
		Female experts			Persons	10	10	10
		Other female employees			Persons	37	51	56
	Disabled Employee Status	Number of disabled employees [1]			Persons	0	0	3
		Disabled employment rate			%	0	0	1.7
	Foreign Employee Status	Domestic Worksites	Total		Persons	3	3	3
			Ratio		%	2.1	1.8	1.7
			By Nation	The U.S.	Persons	1	1	1
				Australia	Persons	1	1	1
				Canada	Persons	1	1	1
		Overseas worksites			Persons	4	7	7

Employee Diversity

Classification					Unit	2021	2022	2023
GC Biopharma	Female Employee Status	Female Executives			Persons	3	2	2
		Non-standing Female Executives			Persons	0	0	0
		Female experts			Persons	200	215	262
		Other female employees			Persons	345	374	327
	Disabled Employee Status	Number of disabled employees [1]			Persons	16	17	37
		Disabled employment rate			%	0.7	0.7	1.6
	Foreign Employee Status	Domestic Worksites	Total		Persons	8	6	8
			Ratio		%	0.4	0.3	0.4
			By Nation	The U.S.	Persons	2	1	2
				Canada	Persons	2	2	2
				Germany	Persons	1	1	1
				Belgium	Persons	1	1	1
				China	Persons	1	0	0
				Russia	Persons	1	0	0
				Other	Persons	0	1	2
			By Position	Sales	Persons	1	1	1
				Production	Persons	2	2	2
				R&D	Persons	5	3	5
				Management	Persons	0	0	0
		Overseas worksites			Persons	0	0	0
GC Cell	Female Employee Status	Female Executives			Persons	1	1	3
		Non-standing Female Executives			Persons	0	0	0
		Female experts			Persons	51	57	64
		Other female employees			Persons	227	245	239
	Disabled Employee Status	Number of disabled employees [1]			Persons	10	11	19
		Disabled employment rate			%	1.3	1.3	2.2
	Foreign Employee Status	Domestic Worksites	Total		Persons	0	0	2
			Ratio		%	0	0	0.2
		Overseas worksites			Persons	0	0	0

1) According to the reporting standards of the Korea Employment Agency for the Disabled

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 405: Diversity Management

Diversity of Employees GRI 405-1 | GRI202-2

Performance

Achievement of Goals for Mandatory Hiring of Disabled Employees

· GC (Holding Company)
- Based on core values and social responsibilities, GC (Holding Company) manages the employment status of people with disabilities for all affiliates and pursues a stepwise expansion in employment
- As of the end of 2023, GC achieved 100% of the mandatory hiring of people with disabilities.

· GC Biopharma
- GC Biopharma makes an effort to create social value by creating and extending job opportunities for disabled people
- In 2023, GC provided language training services to employees by hiring people with severe disabilities for language teaching positions
- For recruitment, recommendations are received from the Korea Employment Promotion Agency for the Disabled, and recruitment notices offer preferential benefits for disabled employees
- We plan to create opportunities to provide high-quality labor in various fields such as facility management and beautification jobs by hiring to achieve mandatory employment in 2024, and will consider establishing a standard workplace for the disabled in 2025

· GC Cell
- GC Cell fulfills social values through creating jobs for people with disabilities

Job Extension for Disabled Employees

· GC biopharma
- Starting from 2023, people with disabilities are hired for positions in language lessons and developing training materials to provide employees with training programs, thereby improving employee language skills
- 10 people, including those with mild and severe disabilities who are able to provide educational services, have been hired and are currently in operation

· GC Cell
- Since 2023, people with disabilities have been hired to support in-house language training courses
- Starting from August 2024, employee welfare and the hiring of people with disabilities will be expanded through operating a vehicle cleaning facility staffed by people with disabilities

Training in diversity

· GC Cell
- Each year, all employees of GC Cell receive training on disability awareness to foster a healthy understanding of diversity

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

GRI 405: Diversity Management

Diversity of Employees GRI 405-1 | GRI202-2

Diversity of Governance Bodies and Employees

Classification					Unit	2021	2022	2023
GC (Holding Company)	Management Status	Executive	Total		Persons	11	12	14
			Male		Persons	11	12	14
			Female		Persons	0	0	0
		Non-Executive	Total		Persons	1	1	1
			Male		Persons	1	1	1
			Female		Persons	0	0	0
	Manager Status	By Gender	Male	Total	Persons	32	37	45
				Ratio	%	82.1	75.5	77.6
			Female	Total	Persons	7	12	13
				Ratio	%	17.9	24.5	22.4
		By Position	G3	Ratio	%	100	100	100
			G2	Ratio	%	0	0	0
			G1	Ratio	%	0	0	0
	Expert Status	By Gender	Male		Persons	4	6	5
			Female		Persons	10	11	10
GC Biopharma	Management Status	Executive	Total		Persons	27	25	21
			Male		Persons	24	23	19
			Female		Persons	3	2	2
		Non-Executive	Total		Persons	1	1	1
			Male		Persons	1	1	1
			Female		Persons	0	0	0
	Manager Status	By Gender	Male	Total	Persons	778	800	814
				Ratio	%	79.6	78.8	75.7
			Female	Total	Persons	200	215	262
				Ratio	%	20.4	21.2	24.3
		By Position	(S)GL5	Ratio	%	14	14	14
			(S)GL4	Ratio	%	27	28	27
			(S)GL3	Ratio	%	59	58	59
			(S)GL2	Ratio	%	0	0	0
			(S)GL1	Ratio	%	0	0	0

Classification					Unit	2021	2022	2023
GC Cell	Management Status	Executive	Total		Persons	9	10	13
			Male		Persons	8	9	10
			Female		Persons	1	1	3
		Non-Executive	Total		Persons	2	1	1
			Male		Persons	2	1	1
			Female		Persons	0	0	0
	Manager Status	By Gender	Male	Total	Persons	149	148	127
				Ratio	%	74.1	71.8	66.5
			Female	Total	Persons	52	58	64
				Ratio	%	25.9	28.2	33.5
		By Position	L4	Ratio	%	19	18	16
			L3	Ratio	%	81	82	84
			L2	Ratio	%	0	0	0
			L1	Ratio	%	0	0	0

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

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 the '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
- The information protection policy is applied to all persons, including employees and partners, who access personal information.
· The information security investment budget and execution performance in 2023 totaled KRW 980 million, with an investment budget of KRW 750 million for 2024 (based on GC Biopharma)

GC Group's Goals for Information Security and Personal Information Protection	More than **70%** security training completion for all executives and employees (regular workers, contract workers, dispatched workers)

· GC (Holding Company), GC Biopharma
- 'Information Protection Policy', 'Information Security Management Regulations' and 'Guidelines' (17) 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
- GC prepares and revises 'Information Security Management Regulations and Guidelines' more than once a year, and the latest version was approved on April 19th, 2024, by the CEO and is currently in effect
- The information protection policy and personal information protection policy are operated in accordance with GC's Information Protection Policy

· GC Biopharma
- To prevent internal data breaches and external intrusions, various security systems (firewalls, intrusion prevention systems, DDoS mitigation, data loss prevention, endpoint detection and response, virtual desktop infrastructure, spam filtering, server EDR, security information and event management, and more) are introduced and operated to securely protect and manage internal classified information.

· GC Cell
- A personal information handling policy is established in accordance with related laws and regulations, and the personal information processing policy is posted on the website to protect the rights and interests of users
- 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 Policy

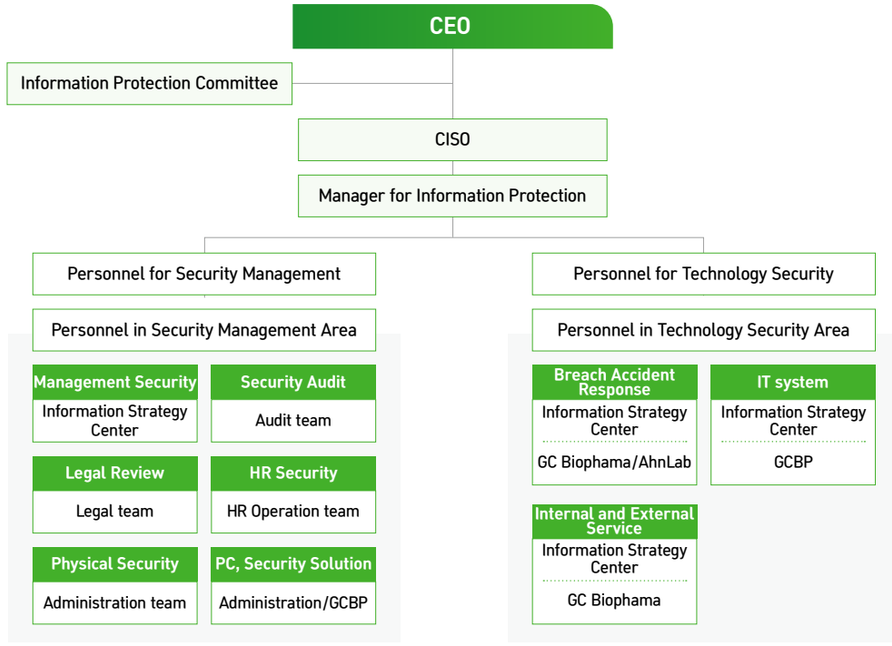
Article 7 Information Protection Policy
1. The company shall document related guidelines, procedures, etc. for establishing and implementing information protection policies and publish them to executives and employees.
2. Information protection policies shall be approved by the CISO upon enactment or amendment…(abbreviated)…

Article 37 Personal Information Protection
1. Personal information shall be collected and managed at a minimum based on necessary purposes.
2. Personal information should be protected so that only authorized personnel can access it…(abbreviated)…

Information Protection Governance

· GC Group appoints a Chief Information Security Officer (CISO) as required by the Information Network Act and performs relevant tasks to protect information
· The CISO complies with the Information Network Act, and the qualification for CISO is a person with a master's degree or higher in the field of information technology and information protection
- The CISO of GC (Holding Company) has more than 10 years, and the CISO of GC Biopharma has more than 20 years of experience in information protection and technology. Key issues related to information protection are reported to management and the decision-making process is operated. Critical issues are reported to the Board of Directors

Information Protection Organization System



Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

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 (Holding Company) conducted one training session on information protection in 2023
  - One session of personal information security training for all employees
· GC Biopharma conducted a total of three training sessions on information protection in 2023
  - One session each on personal information security training for all employees, training for new and experienced employees, and company-wide information security video training
· Training content of GC (Holding Company) and GC Biopharma: effective ways to respond to internal and external security threats, information security issues, and security compliance for employees and executives, etc.

Training on Information Protection

Classification		Unit	2021	2022	2023
GC (Holding Company)	Training Completion Rate	%	100	100	100
	Number of Employees Completing Training	Persons	137	159	168
	Number of Training Target	Persons	137	159	168
GC Biopharma	Training Completion Rate	%	100	100	100
	Number of Employees Completing Training	Persons	2,050	2,226	2,189
	Number of Training Target	Persons	2,050	2,226	2,189
GC Cell	Training Completion Rate	%	95.1	98.8	100
	Number of Employees Completing Training	Persons	750	817	853
	Number of Training Target	Persons	789	827	853

Performing IT Security Audit

· GC Biopharma conducts an audit on IT policy and security to strengthen information security and personal information protection once a year
  - Perform personal information compliance checks
  - Security diagnosis on internal operation systems (conducted 8 times in 2023)

Improvements From IT Security Audit

Classification		Unit	2021	2022	2023
GC Biopharma	Number of Suggestions for Improvement	Cases	100	100	100
	Number of Completion of Improvement	Cases	13	5	8
	Improvement Rate	%	13	5	8

Attaining ISO certificates and monitoring

· GC (Holding Company), GC Biopharma
  - Attaining ISO27001 (Information Protection Management System)

ISO27001 Certification

Classification			Unit	2021	2022	2023
GC (Holding Company), GC Biopharma	Ratio of systems attaining certification	Ratio	%	100	100	100
		Number of systems with certification[1]	Places	141	141	141
		Number of systems targeting to get certification	Places	141	141	141

1) Refers to the number of servers used, and GC Biopharma has attained certification for the systems of GC (Holding Company) and GC Biopharma


MANAGEMENT SYSTEM CERTIFICATE

ISO27001

· Certification Scope: GC (Holding Company), GC Biopharma
· Information security management system for the planning, operation, development, and maintenance of IT systems
· Effective Date : December 28, 2021 ~ December 27, 2024

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

Information Security and Personal Information Protection Policy

Risk management of Information Security and Personal Information Protection

· GC Group recognizes cybercrime and personal information leakage as information protection risks. In 2023, there were no cases of personal information breaches or information leakage
· GC (Holding Company) & GC Biopharma
  - Manuals for responding to information infringements have been established, defining the reporting systems and response procedures for each type of incident
  - To prevent personal information breaches such as external intrusion or internal leakage, an information protection system has been established, and a security control center is in continuous operation
  - Contractors are required to sign a security pledge
  - GC (Holding Company) conducts biannual simulation training for intrusion response, with the first session of 2024 held in January
· GC Cell
  - To prevent external intrusion and internal information leakage, document centralization and a data leakage prevention system have been established
  - Access control and authorization management for each system are regularly performed and monitored

Information Security and Personal Information Protection Management

Classification		Unit	2021	2022	2023
GC (Holding ompany)	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	Cases	0	0	0
GC Cell	Number of Violation of Personal Information and Leakage of Information	Cases	0	0	0

Effectiveness Assessment for Measures to Recognize and Alleviate Major Risk Factors

· In 2023, GC (Holding Company) conducted a 4-week evaluation of the information protection management system levels
- Diagnostics were conducted on administrative, technical, and physical levels according to ISMS-P and ISO27001 (Information Protection Management System) standards, as well as domestic and international guidelines
- The evaluation covered areas such as security governance, cyber risk management, system security, internal information leakage, and physical security management
· Background
- In response to the requirements of relevant laws such as the Personal Information Protection Act and the Information and Communications Network Act, and to address the increase in various security threats and incidents, it is necessary to prepare and implement countermeasures
- To prevent potential security incidents, internal security systems such as the establishment and operation of an information security management system should be maintained
· Improvement tasks for vulnerabilities identified in the diagnostic results have been established, and a three-year mid-to-long term master plan for information security is currently being implemented

Effectiveness Metrics

· Targeting Department: All departments of GC Biopharma
· Assessment Period: January 1, 2023 to December 16, 2023
· Indicators (Examples): Average score of department evaluations on Information Protection Day, number of security audit findings, employee security training completion rate, outsourced personnel security pledge rate, implementation rate of vulnerability diagnosis results, failure occurrence management rate, disaster recovery simulation training implementation rate

Effectiveness Measurement (KPI) Measurement Results Summary

No.	Security Indicator	Target Level	Measurement Frequency	Responsible Team	Measurement Results 2021	2022	2023
1	Average score of department evaluations on Information Protection Day	80%	Twice a year	All Departments	Not Operated	50%	100%
2	Number of security audit findings	70%	Once a year	IT Unit	79%	100%	100%
3	Employee security training completion rate (personal information education)	70%	Once a year	All Departments	100%	98%	100%
4	Outsourced personnel security pledge rate	90%	Once a year	All Departments	Partially Operated	100%	100%
5	Implementation rate of vulnerability diagnosis results	70%	Once a year	IT Unit	72%	76%	0% (in progress)
6	Failure occurrence management rate	90%	Twice a year	IT Unit	100%	00%	100%
7	Execution rate of disaster recovery simulation training	70%	Once a year	IT Unit	100%	00%	100%

Roadmap toward Improvement of Information Security and Personal Information Protection

	~ 2024 Establishment of information security system framework	2025 Enforcement of security control	2026 Enhancing information security system
	Establish an information security system framework and implement Quick-Win projects	Strengthen controls such as inspections after system establishment and support affiliates in enhancing public reliability and business by attaining ISO27001 certification.	Secure an elevated information security operation framework through self-motivated information security activities and improvements by GC affiliates
Major Activities	· Inspect the current status of information security and derive improvement projects · Establish and implement information security regulations · Conduct information security training and implement awareness enhancement activities · Update the processing of critical information and establish operational methods	· Evaluate and improve the status of other affiliates such as GCMS · Incorporate technical controls for information security (establish solutions) · Establish and implement a process for periodic security inspections · Regularly manage information security compliance · Support the attainment of information security certifications (for GC Genome and other affiliates)	· Establish and implement an integrated information security management system · Strengthen the management of contractors and third parties · Expand support for attaining information security certifications for other affiliates
Core Summary	Raise affiliates' information security level from 'needs improvement' to 'average'	Operate a system for regular inspection and improvement	Secure a standardized and elevated level of information security

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

Social Contribution

GC Group's Policy and Goals for Social Contribution

· GC Group categorizes three key areas under the goal of social contribution with the slogan 'Good Companion':
  - Start Together, Share Together, Support Together
· In 2023, the direction for activities based on mutual growth with the local community was specified, and a social contribution activity called 'Funation (Fun+Donation)' that combines fun and donation in daily life was planned.
· Starting in 2023, face-to-face activities resumed, with 54 interest groups nationwide each conducting at least one volunteer activity.

GC Group's Key Area and Activities

Start Together	Share Together	Support Together
· Roundup Donation	· GC Matching Grant	· GC Walk Together
· End of Year 1% Donation	· GC Volunteer Group	· GC Plogging
	· Love Neighbors Day	· End of Year GC Donation
	· GC Charity Bazaar	· Blood Donation of Love
	· Mural volunteering activity	· Donation of medicines
		· Environmental Protection Reaction

GC Group's 2024 Social Contribution Activity Goal

Raising a total of over KRW 2.6 billion KRW in donations for 2024 (Includes employees fundraising from and company donations)

Participatory social contribution activities targeting more than 1,000 employee's participation (GC Walk Together, Environmental Protection Reaction, GC Plogging, GREAM DREAM Mural Volunteering)

Enhance the brand image as a positive influence on the world

GC Group's mid-to-long-term social contribution activity roadmap

By 2023
Establishing the framework for social contribution activities
- Establish goals for social contribution activities and focus areas
- Establish an implementation system for social contribution
  : Plan social contribution activities in accordance with operational directions such as 'Good Companion,' 'Funation,' 'Stabilization and Expansion,' and more

By 2024
Stabilizing the operation of social contribution activities
- Stabilize the operation of social contribution activities
  : Inspect the annual operation cycle of currently operating social contribution activities
- Encourage volunteer activities by interest groups at the business site level

2025 Onwards
Expanding the influence of social contribution activities
- Expand donations, number of participants, and scope of implementation
- Establish IT-connected platforms such as 'donation kiosks' to enhance social contribution content

Social Contribution

Classification		Unit	2021	2022	2023
GC (Holding Company)	Cost of Social Contribution Activities	KRW million	27	26	29
	Number of Employees Participating	Persons	200	206	179
	Service Hours per Employee	Hour/ Person	8	6.1	5.8
GC Biopharma	Cost of Social Contribution Activities	KRW million	2,857	5,521	2,606
	Number of Employees Participating (accumulated)	Persons	2,717	2,839	2,814
	Service Hours per Employee (accumulated)	Hour/ Person	8	5	4.5
GC Cell	Cost of Social Contribution Activities	KRW million	18[1)]	51[1)]	6
	Number of Employees Participating	Persons	364	373	366
	Service Hours per Employee	Hour/ Person	8.0	6.8	6.3

1) adjusted based on data in business report on DART

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

Social Contribution

Start Together – Little Love Goes A Long Way

Roundup Donation & End of Year 1% Donation

· 'Roundup Donation' is a monthly voluntary donation of less than KRW 1,000 (KRW 1 to 999) from the end digits of employees' monthly salaries, and the 'End of Year 1% Donation' is a voluntary donation of 1% of the December salary each year.

Share Together – Local Community & Neighbors

GC Matching Grant

· The 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 living alone and child heads of households, in conjunction with regional agencies in areas where the headquarters and manufacturing sites are located. At this time, the company supports the equal amount of the donation made by employees.
· We identify and support senior citizens living alone and child heads of households in cooperation with regional agencies and NGOs such as Yong-in Social Welfare Center, Community Chest of Korea, and Child Fund Korea
· In addition to financial support, we also visit the homes of senior citizens living alone, sponsored through the matching grant system, to replace old wallpapers and floorboards, and provide companionship as part of our volunteer activities

GC Volunteer Group

· Due to COVID-19, all activities were temporarily stopped, but it is expected that GC Volunteer activities will resume by encouraging volunteer activities centered around interest groups at the headquarters and local worksites
· The GC Volunteer Group continuously collaborates with local partner organizations for social contribution, highlighting the unique characteristics of each volunteer team

Love Neighbor Day & GC Charity Bazaar

· 'Love Neighbor Day' is a program for volunteering to help local neighbors in need, involving the families of employees and executives. Families participate together by visiting welfare centers and making kimchi, with these activities taking place across the entire GC Group.
· 'GC Charity Bazaar' has been GC's representative social contribution activity for the last 30 years, using the revenue from the sale of goods donated by employees to help neighbors in need and save resources at the same time.
  - In addition to supporting social welfare facilities associated with the GC Volunteer Group, we strive to provide practical help to neighbors in need, including living expenses for senior citizens, foreign workers, and North Korean refugees, as well as tuition fees for child heads of families

GC Biopharma, Running Campaign for 'World Hemophilia Day' and 'Rare Disease Day'

· Images are displayed to commemorate 'World Hemophilia Day' on the media facade of the R&D Center in Yongin, Gyeonggi-do
· To participate in the last day of February event, 'Rare Disease Day' set by the European Organization for Rare Diseases (EURORDIS), we conducted the campaign by displaying images with the slogan 'Rare Disease Day, February 28, 2022! #LightUpForRare'
· The slogan aims to raise awareness and highlight the challenges faced by patients with rare diseases

Mural Painting Volunteering GREAM DREAM

· In 2023, as a new participatory volunteer activity, approximately 80 GC employees and their families engaged in mural painting at Jeong-pyeong Middle School in Yongin-si, near GC headquarters
· Through face-to-face collaborative social contribution activities aimed at environmental improvement and mutual growth with neighbors, fun social contribution and talent sharing were conducted, fostering internal teamwork and a sense of accomplishment
· The mural volunteering activity improved the underdeveloped environment and space in the local area, addressing potential negative impacts on society and promoting mutual growth with the neighbors

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

Social Contribution

Support Together – Health and Environment

End-of-year GC Donation and Pharmaceutical Donation

· Donated KRW 200 million to social welfare facilities and the Korean Red Cross to support vulnerable groups such as patients with rare diseases at the end of the year (GC Biopharma)
· Donation has been made to social welfare institutions across the country, helping the underprivileged and patients with rare diseases (KRW 100 million)
· Donation has been to the Korean Red Cross, which carries out disaster relief projects and various welfare programs for the elderly, the disabled, and children and adolescents (KRW 100 million)
· 3,000 cans of Novalac, a premium baby formula (stage 1 & stage 2) have been donated to the underprivileged (GC Biopharma)
· 2,000 cans of Novalac are donated to 'G-Foundation', a social welfare organization for the underprivileged, and 1,000 cans to 'Wooyang Foundation'
· Through the network of each organization, baby formula has been delivered to the underprivileged, such as single mothers, single-parent families, and children's facilities

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.
  - Conducted for three times a year, and through this event, blood donation cards are donated to patients
· As of 2023, 235 GC employees participated in this event

GC Plogging

· Plogging activities have been conducted to promote health, protect the environment, and support donations
· As of 2023, 230 GC employees participated and raised KRW 11.5 million in donations

Environmental Protection Reaction

· This program aims to promote environmental protection through three Reactions: Remind(Rethink), Reduce(Reuse), and Recycle
  - 'Remind(Rethink)' step: Renewed awareness and commitment to environmental protection actions
  - 'Reduce(Reuse)' step: Reducing the use of disposable goods and actively reusing multi-use containers
  - 'Recycle' step: Make thorough waste segregation a part of daily life
· The activities include encouraging the writing and signing of an environment protection pledge, reducing the usage of disposable goods, and proper waste segregation. Funds are raised from these completed activities to make donations to vulnerable groups affected by environmental pollution
· As of 2023, donations amounting to KRW 8,760,000 have been raised

Social Contribution– Public Foundation

Mogam Institute for Biomedical Research

· Established in May 1984
· Its purpose is to contribute to enhancing national health and human welfare by developing medicines necessary for the prevention, diagnosis, and treatment of diseases. This is achieved by creating a stable and continuous research environment through contributions to society via advancements in biotechnology, promoting revenue, and reinvesting this revenue in research and development
· The institute is dedicated to researching and developing new drugs to contribute to the improvement of human health through the creation of outstanding pharmaceutical products
  - Developed the world's first Hemorrhagic Fever with Renal Syndrome (HFRS) vaccine, the world's second varicella vaccine, a quadrivalent flu vaccine, and a neutropenia treatment
· As research on new drug development incorporating artificial intelligence technology progresses, the institute continues to recruit experts in the field and actively collaborates with the industry, academia, and across various fields

Mogam Science Scholarship Foundation

· Began the scholarship project since 2006
· Scholarship and research funds are granted to recipients selected from Korean citizens who are international students, researchers, and university students from freshmen to seniors majoring in the fields of science, engineering, and medicine, and students who are diligent, have dreams, but face financial difficulties and require social support. Various scholarships that align with changes in society and the social environment are planned to be operated in the future
· As of 2023, a total of 478 people have received scholarships, with an accumulated amount of KRW 4.83 billion distributed

Main Business

Classification		Contents
Overseas Scholarship	Target	Korean citizens who are studying or conducting research abroad in the fields of science, engineering, or medicine (bachelor's, master's, PhD, or post-doctoral researchers)
	Scholarship Amount	About USD 4,000, 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

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
• General
• Economy
• Environment
• Society
Appendix ▾

S SOCIETY

Social Contribution

Social Contribution– Public Foundation

Future Foundation of Korea

· A public foundation established in 2009
· The purpose is to support North Korean refugees to have a passion for learning and hope for the future and nurture into leaders in the era of unification
· Performance as of 2023
- [Scholarship] Total of 284 scholarship recipients (accumulated from 2011 to 2023), with a funded amount of KRW 3.65 billion
- [Mental and Physical Healthcare] Total of 2,861 hours provided, with 1,064 instances
- [Job Search Support] Total training hours of 2,100, benefiting 95 individuals
- [Study on Settlement Improvement] Four academic research achievements (2014 to 2023)

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
Job Search Support	Target	Supports provided for North Korean refugees in the local communities
	Supports	Training on starting business and vocational competency
Study on Settlement Improvement	Supports	Aimed at producing and disseminating knowledge for the innovation of settlement support initiatives, including identifying research topics and providing academic research funding

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• TCFD Index
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

Appendix

GRI Standards Index 141
SASB Index 144
TCFD Index 149
Independent Assurance Statement 150
Greenhouse Gas Verification Statement 151

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• TCFD Index
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

GRI STANDARDS INDEX

GC Group

Classification	GRI Standards 2021	Remark
GRI 1: Foundation	Evidence of actual use	GC Group reports information from Jan. 1, 2023 to Dec. 31, 2023 in accordance with GRI Standards 2021.
	Used GRI 1	GRI 1: Foundation 2021
	Applicable GRI Sector Standards	As of June 2024, 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. 90
	2-2	Entities included in the organization's sustainability reporting	p. 90
	2-3	Reporting period, frequency and contact point	p. 90
	2-4	Restatements of information	p. 90
	2-5	External assurance	p. 90
	2-6	Activities, value chain and other business relationships	p. 90
GRI 2: General Disclosures (Activities and Workers)	2-7	Employees	p. 90
	2-8	Workers who are not employees	p. 90
GRI 2: General Disclosures (Governance)	2-9	Governance structure and composition	pp. 91-92
	2-10	Nomination and selection of the highest governance body	p. 92
	2-11	Chair of the highest governance body	p. 92
	2-12	Role of the highest governance body in overseeing the management of impacts	p. 93
	2-13	Delegation of responsibility for managing impacts	p. 93
	2-14	Role of the highest governance body in sustainability reporting	p. 93
	2-15	Conflicts of interest	p. 92
	2-16	Communication of critical concerns	p. 92
	2-17	Collective knowledge of the highest governance body	p. 92
	2-18	Evaluation of the performance of the highest governance body	p. 93
	2-19	Remuneration policies	p. 93
	2-20	Process to determine remuneration	p. 93
	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. 22
	2-23	Policy commitments	p. 22
	2-24	Embedding policy commitments	p. 22
	2-25	Processes to remediate negative impacts	p. 58
	2-26	Mechanisms for seeking advice and raising concerns	p. 58
	2-27	Compliance with laws and regulations	p. 95
	2-28	Membership associations	pp. 95-96
GRI 2: General Disclosures (Stakeholder Engagement)	2-29	Approach to stakeholder engagement	p. 98
	2-30	Collective bargaining agreements	p. 98
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. 26, 43, 57, 71
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	pp. 99-100
	201-2	Financial implications and other risks and opportunities due to climate change	p. 74, 78, 82
	201-3	Defined benefit plan obligations and other retirement plans	p. 101
	201-4	Financial assistance received from government	Refer to each affiliate's business report for governmental subsidy for R&D cost (GC (Holding Company)) 58th Business Report p. 65, GC Biopharma's 55st Business Report p. 50, GC Cell 's 13th Business Report p. 38)
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	p. 98
	202-2	Proportion of senior management hired from the local community	GC (Holding Company) & GC Biopharma: 100%, GC Cell: 75% (Based on Korean)
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	pp. 101-102
	203-2	Significant indirect economic impacts	pp. 101-102

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• TCFD Index
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

GRI STANDARDS INDEX

GC Group

Classification		Index	Reporting page
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	p. 103
Prevention of Unethical/Corrupt Behaviors			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 57
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	p. 63, 64, 66
	205-2	Communication and training about anti-corruption policies and procedures	pp. 62-67
	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. 97
GRI 207: Tax(2019)	207-1	Approach to tax	p. 103
	207-2	Tax governance, control, and risk management	p. 97, 103
	207-3	Stakeholder engagement and management of concerns related to tax	p. 103
	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. 103
	301-2	Recycled input materials used	Raw materials (Human Blood Plasma) 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. 73, 78, 81
	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. 73, 78, 81
	302-4	Reduction of energy consumption	p. 73, 78, 81
	302-5	Reductions in energy requirements of products and services	p. 73, 78, 81
Environmental Pollutants Emission			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 71
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	pp. 103-104
	303-2	Management of water discharge-related impacts	pp. 103-104
	303-3	Water withdrawal	p. 104
	303-4	Water discharge	p. 104
	303-5	Water consumption	p. 104

Classification		Index	Reporting page
GRI 304: Biodiversity2016	304-1	Operational sites owned, leased, managed in, or adjacent o, 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 areas affected by organizational projects	
GHG Emission & Environmental Pollutants Emission			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 71
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	p. 73, 78, 81
	305-2	Indirect (Scope 2) GHG emissions	p. 73, 78, 81
	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. 73, 78, 81
	305-5	Reduction of GHG emissions	p. 73, 78, 81
	305-6	Emissions of ozone-depleting substances (ODS)	GC group does not produce ozone-depleting substances (ODS)
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	pp. 84-87
Waste Emission			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 71
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	pp. 87-88
	306-2	Management of significant waste-related impacts	pp. 87-88
	306-3	Waste generated	pp. 87-88
	306-4	Waste diverted from disposal	pp. 87-88
	306-5	Waste directed to disposal	pp. 87-88
Management of ESG Risks in the Supply Chain			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 43
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	p. 104
	308-2	Negative environmental impacts in the supply chain and actions taken	p. 106

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• TCFD Index
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

GRI STANDARDS INDEX

GC Group

Classification		Index	Reporting page
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	p. 109, 111
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	p. 113
	401-3	Parental leave	p. 114
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. 121-123
	403-2	Hazard identification, risk assessment, and incident investigation	p. 125
	403-3	Occupational health services	p. 124
	403-4	Worker participation, consultation, and communication on occupational health and safety	p. 124
	403-5	Worker training on occupational health and safety	p. 126
	403-6	Promotion of worker health	p. 124
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	p. 126
	403-8	Workers covered by an occupational health and safety management system	pp. 121-123
	403-9	Work-related injuries	pp. 127-128
	403-10	Work-related ill health	pp. 127-128
Nurturing Pharmaceutical/Bio Talents			
GRI 3: Material Topics 2021	3-3	Management of material topics	p. 26
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	p. 38, 40, 42
	404-2	Programs for upgrading employee skills and transition assistance programs	pp. 35-42
	404-3	Percentage of employees receiving regular performance and career development reviews	pp. 128-129
GRI 405: : Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	pp. 130-132
	405-2	Ratio of basic salary and remuneration of women to men	p. 129
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 practice 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. 43
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	p. 104
	414-2	Negative social impacts in the supply chain and actions taken	pp. 53-56, 104
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. 43
GRI 416: Customer Health and Safety2016	416-1	Assessment of the health and safety impacts of product and service categories	p. 47, 51
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	p. 47, 51 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. 50, 53 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.

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• TCFD Index
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

SASB INDEX

GC (Holding Company)

Accounting Metrics (Financial Sector, Asset Management & Custody Industries)

Topic	SASB Code	Index - Asset Management & Custody Activities	Unit	2021	2022	2023	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	GC (Holding Company) has 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. 94			
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 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	(1) Male 100, Female 0, (2) Male 100, Female 0, (3) Male 4.5, Female 15.2, (4) Male 62.9, Female 37.1	(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	GC (Holding Company) does 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	N/A	Refer to 'Shareholder-Friendly Policy' in p. 94			
Financed Emission	FN-AC-410b.1	GHG intensity classified as (1) Scope 1, (2) Scope 2, (3) Scope 3	tCO_2eq	(1) 141.74 (2) 681.05 (3) N/A	(1) 130.87 (2) 740.64 (3) N/A	(1) 119.00 (2) 718.00 (3) N/A	
	FN-AC-410b.2	The total assets under management (AUM) included in the disclosure of financed emissions	KRW million				
	FN-AC-410b.3	The percentage of total assets under management (AUM) included in the disclosure of financed emissions.	%				
	FN-AC-410b.4	The methodology used to calculate financed emissions.	N/A				
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	GC (Holding Company) has zero number of lawsuits.
	FN-AC-510a.2	Description of whistleblower policies and procedures	N/A	Refer to 'Protection of Reporters' in p. 59			

Activity Metrics

Topic	SASB Code	Index - Asset Management & Custody Activities	Unit	2021	2022	2023	Remark
-	FN-AC-000.A	(1) Total registered and (2) total unregistered assets under management (AUM)	KRW million	(1) 3,496,834 (2) 0	(1) 3,592,061 (2) 0	(1) 3,737,707 (2) 0	-
	FN-AC-000.B	Total assets under custody and supervision		0	0	0	-

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• TCFD Index
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

SASB INDEX

GC Biopharma

Accounting Metrics (Healthcare, Biotechnology & Pharmaceuticals)

Topic	SASB Code	Index - Biotechnology & Pharmaceuticals	Unit	2021	2022	2023	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 pp. 44-50			
	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)	Cases	(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	GC Biopharma has 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. 27-28			
	HC-BP-240a.2	List of products on the WHO List of Prequalified Medicinal Products as part of its Prequalification of Medicines Program (PQP)	N/A	None of our products is registered in this applicable system.			
Affordability & Pricing	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	%	0.9	3.6	2.3	This is based on our internal and external major sales record and refer to 55th Business Report. See p.26
	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	(1) Number of recalls issued, (2) Number of products recalled	Cases, Number	(1) 4[1], (2) 235,991[2]	(1) 1[1], (2) 1,345[2]	(1) 0, (2) 0	
	HC-BP-250a.4	Total amount of product accepted for take back, reuse, or disposal	ton	2[3]	0	0	
	HC-BP-250a.5	Number of FDA enforcement actions taken in response to violations of current Good Manufacturing Practice or equivalent standards	N/A	GC Biopharma has 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	Refer to 'Policy on the Responsible Marketing of Medicines' in pp. 48-50			
	HC-BP-260a.2	Discussion of process for alerting customers and business partners of potential or known risks associated with counterfeit products	N/A	Refer to 'Policy on the Responsible Marketing of Medicines' in pp. 48-50			
	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	GC Biopharma has 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	N/A	Refer to 'Ethical Management Policy' in p. 60			

1) Change in standard due to SASB Standard revision
2021: Neocande Plus Tablets (Distributor Recall), Green Cross-Cell-cultured Japanese Encephalitis Vaccine (Distributor Recall), Woohwang Cheongsimwon Suspension (Government Recall), Hyalobarrier Gel Endo (Distributor recall)
2022: Tyranno Gold Plus Chewable Tablets (Distributor Recall)
2) Change in standard due to SASB Standard revision
2021: Neocande Plus Tablets: 195,073T, Green Cross-Cell-cultured Japanese Encephalitis Vaccine: 7,516 vials, Woohwang Cheongsimwon Suspension: 32,866 bottles, Hyalobarrier Gel Endo: 536 EA
2022: Tyranno Gold Plus Chewable Tablets 1,345 bottles
3) Change in standard due to SASB Standard revision (No regulatory agency observations or administrative actions leading to product license cancellation)

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• TCFD Index
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

SASB INDEX

GC Biopharma

Accounting Metrics (Healthcare, Biotechnology & Pharmaceuticals Industries)

Topic	SASB Code	Index - Biotechnology & Pharmaceuticals	Unit	2021	2022	2023	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 pp. 36-38 and 'Securing and Maintenance of Talents' in pp. 108-109			
	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) 6.4 - (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	(1) 5.2 - (a) 0.1, (b) 0.5, (c) 1.8, (d) 2.8, (2) 1.5 - (a) 0, (b) 0.0, (c) 1.2, (d) 0.0	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 because of legal proceedings associated with corruption and bribery	N/A	GC Biopharma has 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	N/A	Refer to 'Ethical Management Policy' in p. 60,			

Activity Metrics

Topic	SASB Code	Index - Biotechnology & Pharmaceuticals	Unit	2021	2022	2023	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) 87, (2) 11	(1) 83, (2) 11	(1) 88, (2) 8	-

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• TCFD Index
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

SASB INDEX

GC Cell

Accounting Metrics (Healthcare, Biotechnology & Pharmaceuticals Industries)

Topic	SASB Code	Index - Biotechnology & Pharmaceuticals	Unit	2021	2022	2023	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 pp. 51-53			
	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)	Cases	(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	GC Cell has 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' in pp. 29-30			
	HC-BP-240a.2	List of products on the WHO List of Prequalified Medicinal Products as part of its Prequalification of Medicines Programme (PQP)	N/A	None of our products is registered in this applicable system			
Affordability & Pricing	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	%	N/A	N/A	N/A	N/A
	HC-BP-240b.3	Percentage change in: (1) list price and (2) net price of product with largest increase compared to previous year	%	N/A	0	0	GC Cell sells single products.
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	ton	N/A	N/A	N/A	
	HC-BP-250a.5	Number of FDA enforcement actions taken in response to violations of current Good Manufacturing Practice or equivalent standards	N/A	GC Cell has 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	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	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	GC Cell has 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	N/A	Refer to 'Ethical Management Policy' in p. 61			

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• TCFD Index
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

SASB INDEX

GC Cell

Accounting Metrics (Healthcare, Biotechnology & Pharmaceuticals Industries)

Topic	SASB Code	Index - Biotechnology & Pharmaceuticals	Unit	2021	2022	2023	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.39 and 'Securing and Maintenance of Talents' in PP. 109-111.			
	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) 13.5 - (a) 0.1, (b) 0.6, (c) 0.9, (d) 12 (2) 0 - (a) 0, (b) 0, (c) 0, (d) 0	(1) 21.2 - (a) 0.5, (b) 1.3, (c) 1.8, (d) 18 (2) 0 - (a) 0, (b) 0, (c) 0, (d) 0	(1) 22.6 - (a) 0.2, (b) 2.6, (c) 1.9, (d) 17.9 (2) 0 - (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	GC Cell manages 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	GC Cell has 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	N/A	Refer to 'Ethical Management Policy' in p. 61.			

Activity Metrics

Topic	SASB Code	Index - Biotechnology & Pharmaceuticals	Unit	2021	2022	2023	Remark
-	HC-BP-000.A	Number of patients treated	Person	2,124	1,728	1,857	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) 1, (2) 4	(1) 1, (2) 3	(1) 1, (2) 4	Detailed clinical information can be seen in (nedrug.mfds.go.kr)

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• **TCFD Index**
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

TCFD INDEX

Classification	TCFD's Recommendations	GC (Holding Company)	GC Biopharma	GCCell
Governance	a) Description of BOD's activities relevant to climate change risk and opportunities	p. 96, 97 BOD's management and supervision on high-risk environment/climate change	p. 96, 97 BOD's management and supervision on high-risk environment/climate change	p. 96, 97 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	p. 96, 97 The management got reports for risks and performed risk management and reported them to BOD	p. 96, 97 The management got reports for risks and performed risk management and reported them to BOD	p. 96, 97 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-, medium- and long-term	p. 82 Refer to 'Climate change Risk Factors and Opportunities'	p. 75 Refer to 'Climate change Risk Factors and Opportunities'	p. 79 Refer to 'Climate change Risk Factors and Opportunities'
	b) Description of impact of how climate change risks affect organization's business, strategies and financial plans	p. 82 Refer to 'Climate change Risk Factors and Opportunities'	p. 75 Refer to 'Climate change Risk Factors and Opportunities'	p. 79 Refer to 'Climate change Risk Factors and Opportunities'
	c) Description of flexibility of strategies in consideration of various climate-related scenarios including 2℃ or less scenarios	N/A	N/A	N/A
Risk Management	a) Description of process for identifying and evaluating climate change risks	p. 97 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 97 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 97 Refer to 'Risk Response Process' (Company-wide risks including climate change)
	b) Description of process to manage climate change risks	p. 97 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 97 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 97 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. 97 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 97 Refer to 'Risk Response Process' (Company-wide risks including climate change)	p. 97 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	p. 81	p. 73	p. 78
	b) Disclosure of emission amount of Scope 1, Scope 2 and Scope 3 (If applicable)	p. 81 Disclosure of Scope 1, Scope 2	p. 73 Disclosure of Scope 1, Scope 2	p. 78 Disclosure of Scope 1, Scope 2
	c) Description of goals for managing risks, opportunities and performance of climate change	p. 80 Refer to 'Goals for Environmental Management / Response to Climate Change'	p. 72 Refer to 'Goals for Environmental Management / Response to Climate Change'	p. 78 Refer to 'Goals for Environmental Management / Response to Climate Change'

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• TCFD Index
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

INDEPENDENT ASSURANCE STATEMENT

Dear Management and Stakeholders of GC

Introduction

Korea Management Registrar (KMR) was commissioned by GC to conduct an independent assurance of its 2024 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 Standards2021
· 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 result;
· 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 database

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

Our Assurance Team discussed the revision of the Report several times with the GC based on the results of the document review and interviews, and reviewed the final version of the Report to confirm the revision and reflection of the recommendations for improvement. As a result of the verification, GC's Report was prepared in accordance with the reporting method of GRI Standards 2021, and no inappropriate parts were found regarding the compliance with the principles suggested by AA1000AP (2018). The opinion of Assurance Team on the principles is as follows.

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 2024 Seoul, Korea

KMR SRV1000 Sustainability Committee Assurance AA1000 Licensed Report 000-129/V3-2KRQ6 CEO E. J Hwang

Introduction ▾
Sustainable Fundamental ▾
Focus Area ▾
General Disclosure ▾
Appendix ▾
• GRI Standards Index
• SASB Index
• TCFD Index
• Independent Assurance Statement
• Greenhouse Gas Verification Statement

GREENHOUSE GAS VERIFICATION STATEMENT

GC Biopharma

GHG Emissions

Verification Target

Korean Foundation for Quality (hereinafter 'KFQ') has conducted a verification of Greenhouse Gas Emissions (hereinafter 'GHG Inventory') of GC Biopharma (hereinafter 'Company') for 2023.

Verification Scope

KFQ's verification covered on all facilities and emission sources under the operational control and organizational boundary of GC Biopharma during 2023.

Verification Criteria

The verification process was based on [Rule for emission reporting and certification of greenhouse gas emission trading Scheme[1)]], [Rules for verification of operating the greenhouse gas emission trading scheme[2)]] and [ISO 14064-3] for every applicable part.

1) Notification No. 2023-221 of Ministry of Environment 2) Notification No. 2021-112 of Ministry of Environment

Level of Assurance

The Verification has been planned and conducted as the 'Rules for verification of operating the greenhouse gas emission trading scheme, and the level of assurance for verification shall be satisfied as reasonable level of assurance. And it was confirmed through an internal review whether the process before the verification was conducted effectively.

Verification Limitation

The verification shall contain the potential inherent limitation in the process of application of the verification criteria and methodology.

Verification Opinions

Regarding to the data of the Greenhouse Gas Emission Consumption from the report through the verification, KFQ provides our verification opinions as below;

1) The Inventory Report has been stated in accordance with "Rule for emission reporting and certification of greenhouse gas emission trading Scheme" and "ISO 14064-1". The totals in this verification statement do not match the totals in emission trading scheme because the total emissions of each facility are calculated by truncating to integer units.
2) The materiality assessment result of GHG emissions has satisfied the criteria for an organization that emits less than 500,000 CO2-eq by meeting less than 5% of the total emissions, as per the "Rules for verification of operating the greenhouse gas emission trading scheme".
3) Thus, KFQ concludes that the Greenhouse Gas Emissions of Company in 2023 is correctly calculated and stated in accordance with "Rule for emission reporting and certification of greenhouse gas emission trading Scheme".

Unit : tCO_2eq

Scope 1	Scope 2	Total
10,804.098	54,000.587	64,802

* The totals in this verification statement do not match the totals in emission trading scheme because the total emissions of each facility are calculated by truncating to integer units

May 16th, 2024

Ji Young Song

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