



2023 ESG Report



About this Report

Overview

Astrogen, inc. has been actively engaged in corporate social responsibility activities across economic, social, and environmental sectors. Since 2021, the company has annually published an ESG (Environmental, Social, and Governance) report, aiming to transparently provide relevant information to stakeholders.

Throughout the report's publication process, Astrogen conducted a significance assessment to identify key reporting issues, seeking to incorporate the perspectives of stakeholders. The ESG report diligently reflects the company's efforts and achievements related to these identified issues.

- Reporting Period: From January 1, 2023, to December 31, 2023
- Reporting Frequency: Annually

Reporting Scope

The reporting scope encompasses the sustainable management activities and performance of Astrogen, Inc.'s headquarters and domestic business facilities.

Reporting Standards

This report has been prepared in accordance with the core standards of the Global Reporting Initiative(GRI), a global writing guideline for ESG reporting. To enhance the credibility of the reporting content, efforts have been made to ensure the reliability, transparency, and fairness of the writing process, disclosed data, and the content by referring to global writing guidelines such as ISO 26000 and the UN Global Compact.

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Company Overview

CEO Message

Until living a normal life

becomes your everyday life

Respected stakeholders of Astrogen,

Hello, I am Hwang Su-Kyeong the CEO of Astrogen, Inc.

Astrogen is a biotech company dedicated to researching and developing new drug candidates to address unmet medical needs in the field of rare neurological disorders.

The year 2023 was a crucial period for Astrogen, marked by the discovery of new drug candidates and significant achievements in drug development. Following the completion of phase 2 clinical trials for AST-001, an investigational product for autism spectrum disorder, the company is currently conducting phase 3 trials in 11 hospitals nationwide. Astrogen was recognized as a 'Baby Unicorn Plus' company by the Ministry of SMEs and Startups and obtained certification as an Innovative Small and Medium-Sized Enterprise (Inno-Biz), showcasing various accomplishments that acknowledge Astrogen's technological capabilities and growth potential. Additionally, based on the research and development outcomes of AST-001, the company has published papers and is actively involved in patent applications for new derivatives through pipeline optimization.


In pursuit of sustainable management practices, Astrogen has successfully completed certifications for ISO 9001 (Quality), ISO 14001 (Environmental), and ISO 45001 (Occupational Health and Safety). The company is committed to furthering Environmental, Social, and Governance (ESG) activities, aiming to:

1. Contribute to ensuring everyone can enjoy a happy and healthy life.
2. Strive to meet the expectations of stakeholders.
3. Work towards becoming an environmentally friendly company that operates in harmony with nature.

Astrogen, with a deep sense of social responsibility and mission, gathers the hopes of patients and their families eagerly awaiting treatments for rare neurological disorders. The company pledges to do its utmost in research, development, and product commercialization until the day when living a normal life becomes an everyday reality. Astrogen requests continuous interest and support for its ongoing efforts and dedication.

On behalf of Astrogen Corporation, we express our sincere gratitude to all stakeholders.

Thank you.

Hwang, Su-Kyeong 
CEO, Astrogen, Inc.

Company Introduction

Astrogen, Inc. is a pharmaceutical venture company specializing in the research and development of small-molecule drugs, with a primary focus on addressing the unmet needs in the market for rare neurological disorders. Despite the high prevalence of Autism Spectrum Disorder (ASD), there is a lack of therapeutic options for core symptoms. Astrogen aims to lead in the development of novel drugs for challenging neurodevelopmental conditions associated with ASD, such as Attention Deficit Hyperactivity Disorder (ADHD), Rett syndrome, Dravet syndrome, and others, where there is a significant unmet demand in the market.

Company Establishment

Jul. 2017	Corporate Establishment
Aug. 2017	Venture Certification
Jan. 2018	Corporate Research Institute Approval
Aug. 2018	SEED Investment (KRW 1.9 billion)

Technological Growth

Mar. 2019	Seoul Office Opening (Clinical & BD, Fundraising)
Aug. 2019	Series A Funding (KRW 5B)
Nov. 2019	Selection(Frontier Venture, GIBO A+)

Technological Innovation

Jun. 2020	Ministry of SMEs Baby Unicorn Astrogen HQ Occupancy
Jul. 2020	AST-001 Phase 2 IND Approval
Dec. 2020	Series B1 Funding
Sep. 2011	ESG Report Website Publication
Nov. 2011	MSIT Excellent Enterprise RI Designation
Dec. 2011	Presidential Commendation/Family-Friendly/ AI Drug Collab with IKTOS
Feb. 2022	Bridge1 Funding
May. 2022	AST-001 Clinical Trial Final Subject/ Observation Completion Report
'Aug. 2022	Daegu City Employment-Friendly/ Bridge2 Funding
Dec. 2022	AST-001 Phase 2 CSR/ MHW Ministerial Commendation
Jan. 2023	CI & Website Renewal
Jun. 2023	AST-001 Phase 3 Clinical trial MFDS Approval
Jul. 2023	Ministry of SMEs Baby Unicorn+
Aug. 2023	ISO 9001, ISO 14001, ISO 45001
Oct. 2023	Inno-Biz Certification
Dec. 2023	Series C Funding

Company Name	Astrogen, Inc.
Address	440, Hyuksin-daero, Dong-gu, Daegu, Republic of Korea
Products	Development and Sales of Drugs for Rare Neurological Disorders
Homepage	www.astrogen.co.kr
CEO	Hwang Su-Kyeong
Establishment Date	July 24, 2017

2023 Highlights

Awards and Certifications, etc

Category	Name	Authority
Awarded	Ministerial Commendation	Ministry of Health and Welfare
Approved	AST-001 Phase 3 Protocol	Ministry of Food and Drug Safety
Selected	Ministry of SMEs Baby Unicorn Plus	Ministry of SMEs and Startups
Certified	ISO14001	GERMAN CERT
Certified	ISO9001	GERMAN CERT
Certified	ISO45001	GERMAN CERT
Certified	Inno-Biz	Ministry of SMEs and Startups

Journal






















Authorship	Title	Journal Name	Publication Year
Co-authors	AST-001 improves social deficits and restores dopamine neuron activity in mouse models of autism	Biomedicines	2023
Co-authors	Changes of lysosome by L-serine in rotenone-treated hippocampal neurons	Appl Microsc	2023

Patent

Category	Until 2022		2023		Total
	Application	Patent	Application	Patent	
Domestic	14	8	14	0	36
International	3	3	15	0	21
Total					57

Efforts to Grow as a Trusted and Sustainable Company

Certifications and Awards

 <p>Kibo A+ Members</p>	 <p>Frontier Venture</p>	 <p>Excellent Venture</p>	 <p>Baby Unicorn</p>	 <p>Women-Owned Business</p>	 <p>Daegu Startup</p>	 <p>Venture Enterprise</p>	 <p>Commendation</p>
 <p>Pre-Star Company</p>	 <p>Outstanding R&D Center</p>	 <p>Star Venture in Daegu</p>	 <p>Family Friendly Company</p>	 <p>Presidential Commendation</p>	 <p>Innovation Company</p>	 <p>Family-Friendly Workplace</p>	 <p>Commendation</p>
 <p>Baby Unicorn Plus</p>	 <p>ISO 14001</p>	 <p>ISO 9001</p>	 <p>ISO 45001</p>	 <p>Inno-Biz</p>			

Vision and Policy

Mission

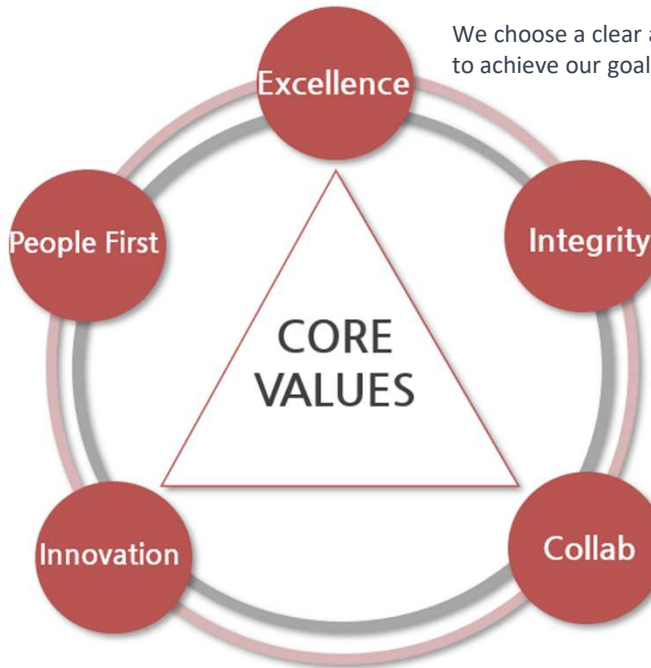
Rapid research, development, and commercialization of new drugs based on the unmet medical need of patients centered on their clinical experience and promotion of patient happiness as a companion beyond treatment.

Vision

Growing into a global biotech group leading innovative progress in the treatment of intractable diseases

We embrace the belief that "all opportunities and values come from people" as our primary management philosophy. There is an open field of endless possibilities for talents, partners, and companies to join together.

Through creative exploration that connects even the ordinary, we detect and adapt to change, executing innovation.



We choose a clear and likely path to success, ensuring to achieve our goals and produce outstanding results.

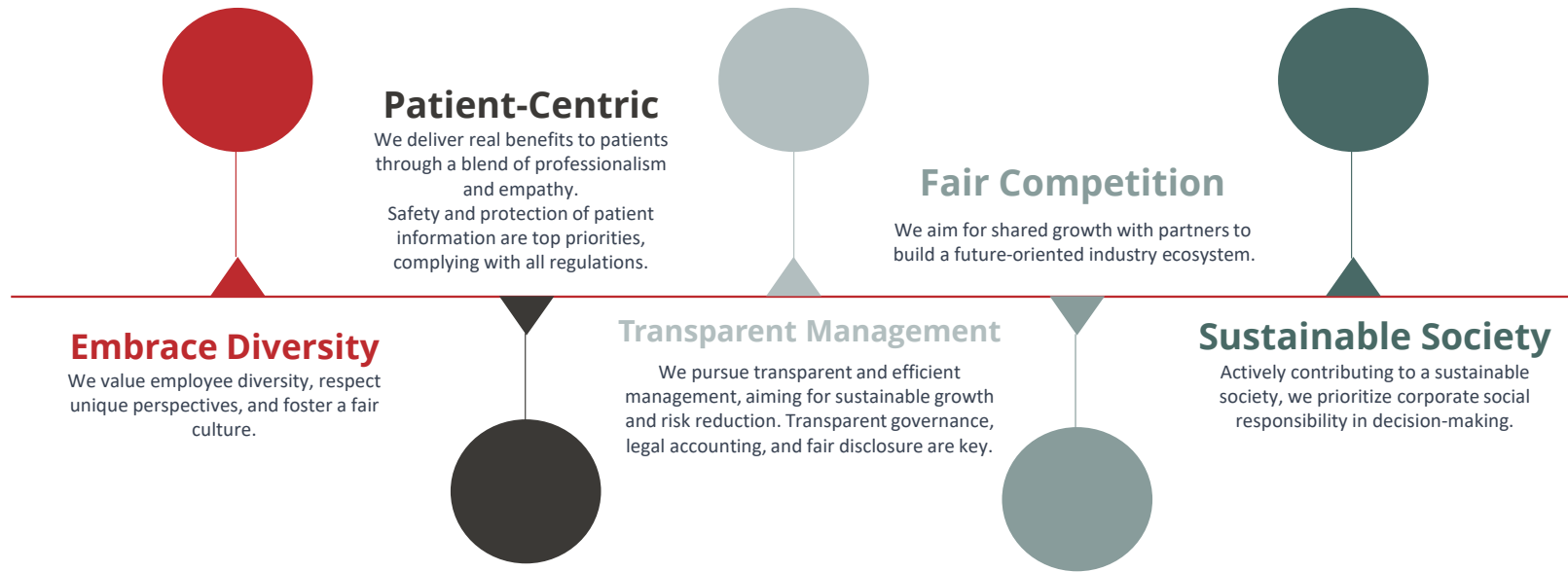
Upholding integrity and fairness, every employee follows ethical management, building strong trust with customers and shareholders.

Emphasizing teamwork within the company, we contribute to the local community as part of South Korea, striving for mutual growth and collaboration to benefit the nation.

Astrogen, Inc. is committed to actively contributing to the happiness of patients and the healthy development of humanity by researching, developing, and commercializing new drugs based on the urgent needs of patients. We aim to gain voluntary support from shareholders and employees, and to become a trusted company by fulfilling our public mission and social responsibility.

To achieve this, Astrogen, Inc. establishes norms and guidelines for the behavior and value judgments that all employees should adhere to.

ESG Policy



ESG Policy

Astrogen, Inc. is an R&D startup company developing innovative new drugs, and due to the nature of its industrial structure, the company's environmental impact is minimal.

The social impact is significant due to the nature of the industry, and it can have a positive impact through the development of treatments that society requires, as well as a high impact on regional shared growth and economic revitalization through the high value-added industry of new drug development.

By focusing on the development of therapies for challenging conditions such as Autism Spectrum Disorder (ASD), where effective treatments are still lacking, we aim to alleviate the burden on patients and their families. We are committed to contributing to both the socio-economic aspects of healthcare and easing the societal impact.

Developing therapies to meet unmet demands represents a significant opportunity to enhance our societal contribution.

- **Risk Management**

- Accounting Risk Management: Disclosures through the Financial Supervisory Service system following biannual execution.
- Enterprise-wide Risk Management: Weekly executive meetings and quarterly investor conferences for cross-verification of risks.

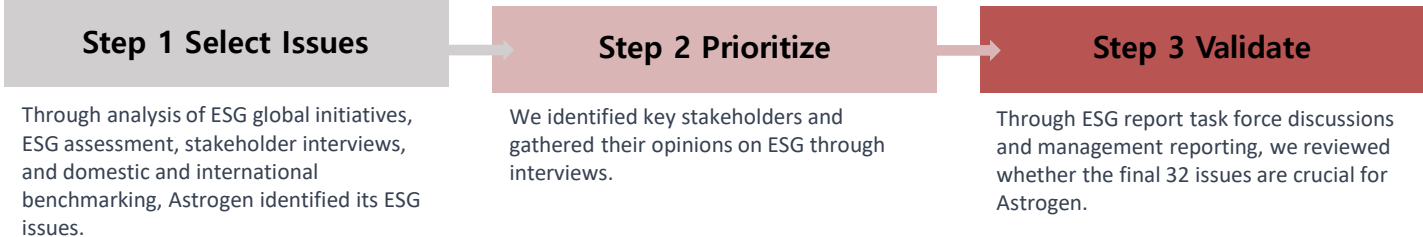
- **Internal ESG Arrangement**



Stakeholder Engagement

Stakeholder Participation and Significance Assessment Overview

Astrogen, Inc. conducted a stakeholder engagement and significance assessment based on the GRI (Global Reporting Initiative) and KPC ESG consulting to identify ESG key issues that should be considered in business activities. The selected key issues were used to structure the report content and were incorporated into the ESG mid-to-long-term strategy. Utilizing the principles of Sustainability Context, Materiality, Completeness, and Stakeholder Inclusiveness, the following process was employed to derive ESG key issues.



Board Composition and Stakeholder Engagement

We strive to practice responsible management by enhancing transparency and promoting corporate values.

On November 30, '23, a shareholders' meeting was held, appointing two new outside directors. The board consists of a total of 5 members, including 2 inside directors, 2 outside directors, and 1 nonexecutive director, ensuring transparent decision-making. In addition to regular audits, an outside nonexecutive auditor (Attorney In-su Jang) is appointed annually to enhance stakeholder participation. The Chairman of the Board is Hwang Su-kyeong, CEO, as stipulated in the articles of association.

Based on the GRI (Global Reporting Initiative) and KPC ESG consulting, we conducted stakeholder engagement and significance assessments to identify ESG key issues that should be considered in our business activities. The selected key issues were used to structure the report content and were incorporated into our ESG mid-to-long-term strategy.



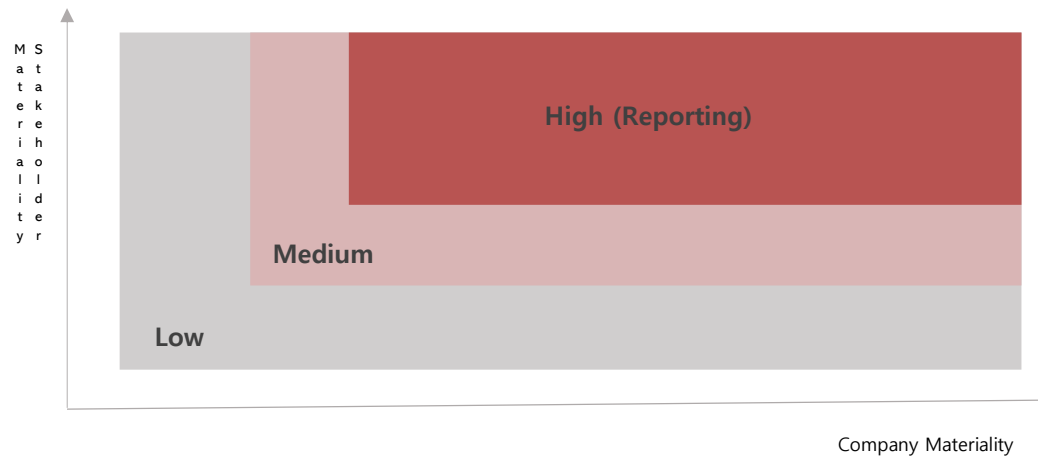
ESG Impact Materiality

Based on the assessment of business relevance and stakeholder impact, Astrogen has identified improvement tasks for key risks by developing an operational action plan for sustainable management through KPC ESG consulting.

In accordance with the reporting principles of the Global Reporting Initiative (GRI), including Stakeholder Inclusiveness, Sustainability Context, Materiality, and Completeness, the importance assessment process considered sustainability indicators through DJSI (Dow Jones Sustainability Index), KCGS (KOREA INSTITUTE OF CORPORATE GOVERNANCE AND SUSTAINABILITY), TCFD (Task Force on Climate-Related Financial Disclosures), and PSCI (Pharmaceutical Supply Chain Initiative) to review key trends within the industry.

Additionally, gathering opinions from stakeholders and experts helped in understanding the impact and characteristics of each issue on the business. The significance assessment revealed that environmental issues related to the business environment include the importance of 'plastic reduction' and 'energy conservation.' Social significance was identified through stakeholder-related issues such as 'strengthening industrial safety and laboratory safety management,' 'social contribution,' and 'work-life balance.'

This year's report focuses on Astrogen's future value creation through IPO preparation, selecting topics such as strengthening employee safety management and expanding stakeholder value. The report includes Astrogen's key activities categorized by each theme.



ESG Impact Materiality Framework

Results of the Materiality

We report the results of the materiality assessment based on the sustainable management framework, with a focus on the identified issues.

PART 1. Introduction to Sustainable Management							
Reporting Areas	Significance	Reporting Areas	Significance	Reporting Areas	Significance	Reporting Areas	Significance
CEO's Sust. Philosophy	⊙	ESG Company Strat.	⊙	Stakeholder Engage.	⊙	ESG Governance	⊙
Company Intro.	⊙	Sust. Issues	⊙	Report Intro.	⊙	Fin. Perf. Distribution	⊙

PART 2. Sustainable Performance Report							
Economic Performance				Environmental			
Reporting Areas	Sig.	Reporting Areas	Sig.	Reporting Areas	Sig.	Reporting Areas	Sig.
Management Policy	High	Anti-Corr. Policy	High	Energy Mgmt.	High	Waste	High
Gov't Financial Support	High	Comm. Ed.	High	Water & Waste Mgmt	High	Enviro. Participation	High
Pension Liability	High	Confirmed Corr. Cases	High	Waste Mgmt.	High	Enviro. Compl.	High

Social							
Labor/Diversity		Training		Occupational health & safety		Local Communities	
Reporting Areas	Sig.	Reporting Areas	Sig.	Reporting Areas	Sig.	Reporting Areas	Sig.
Regular Employment Ratio	High	Education Support	High	Safety/Health Policies	High	Local Comm. Mgmt.	High
Human Rights Management Policy	High	Self-Development	High	Lab Safety	High	Strategic Social Contributions	High
Welfare	High	Lab Safety Education	High	Risk Assessment	High	Member Volunteerism	High
Flexible Work Environment	High	Legal Obligation Ed.	High	Industrial Accident	High	Social Solidarity	High

Governance			
Reporting Areas	Sig.	Reporting Areas	Sig.
Values, Principles, Code of Conduct	High	Board Composition	High
Complaint Handling	High	Board Activities	High
Corporate Governance	High	Stake. Part.	High

Economic Management

Financial Performance Distribution

Financial Statements

To facilitate understanding of the economic performance and distribution of Astrogen Co., Ltd., we are disclosing financial statements, including balance sheets and income statements, to share financial performance and distribution areas. We aim to provide insights into key financial indicators and essential aspects of our financial results.

Key Financial Performance			Amounts in KRW
Item	2021	2022	2023(Until Sep)
Total Assets	14,607,719,912	17,782,710,575	20,247,475,803
Total Liabilities	4,068,338,835	3,996,385,298	4,600,865,862
Total Equity	10,539,381,077	13,786,325,277	15,646,609,941
Revenue	49,112,737	14,565,460	73,330,000
Gross Profit	37,358,940	10,841,092	47,570,000
Corporate Tax	-	-	-
Net Income (Loss) for the Period	(5,761,001,261)	(9,009,503,538)	(4,464,475,844)

Balance Sheet			Amounts in KRW
Item	2021	2022	2023(Until Sep)
Assets	14,607,719,912	17,782,710,575	20,247,475,803
Liabilities	4,068,338,835	3,996,385,298	4,600,865,862
Equity	10,539,381,077	13,786,325,277	15,646,609,941

Income Statement(Comprehensive)			Amounts in KRW
Item	2021	2022	2023(Until Sep)
Total Revenue	49,112,737	14,565,460	73,330,000
R&D Expenses ⁽¹⁾	5,106,291,448	5,078,774,166	3,251,796,519
Wages and Benefits	693,158,490	1,133,615,764	642,592,776
Net Income (Loss) for the Period	(5,761,001,261)	(9,009,503,538)	(4,464,475,844)

(1) Research and development expenses include salaries and accrued annual leave allowances for the R&D department.

(2) The financial statements for the fourth quarter of 2023 will be publicly disclosed through DART in April 2024. (Financial performance up to the third quarter due to the issuance date)

(3) According to the profit structure of an R&D startup company, profits are generated after investing initial research and development costs. (Among the pipelines, AST-001 is currently in phase 3)

Fundraising						Unit: Billion Won
Item	SEED	Series A	Series B1	Series B2	Series C	Total
Investment Amount	19	50	130	115	125	439

Government & Pension

Our company operates as a profit-oriented corporation, with the primary goal of generating income. However, we have not yet reached the production and sales phase for the products in our current development pipeline. Despite this, as a startup, achieving minimal economic viability is a key factor for organizational sustainability. Therefore, we are actively seeking investments and government support to create economic impact. Additionally, we are committed to expanding security measures tied to employee tenure through various pension systems.

Government Financial Support

Since 2018, we have been receiving support through various government programs for personnel and research and development.

Category	Support Program	
	2022	2023
Workforce Support	Future Emerging industry Talent Recruitment Support Program	Future industry Talent Recruitment Support Program
	Daegu Inbound Youth Career Job Matching Program	Daegu Inbound Youth Career Job Matching Program
	YES! Matching	YES! Matching
	K-Healthcare Industry Youth Employment Creation Program	K-Healthcare Industry Youth Employment Creation Program
	Youth Return YES Matching	Youth Return YES Matching
	New Deal Youth Talent Employment	Science & Tech R&D Alternative Workforce Support
	Future Youth Talent Development Program	Youth Employment Leap Incentive Grant
	Emerging Research Talent Support Program	
	Science & Tech R&D Alternative Workforce Support	
Daegu Promising Business	Hustar	
	2022 Pre-Star Customized Support Program	Employment-Friendly Company Program
R&D Support	Employment-Friendly Company Program	
	Industry-Academia Collaboration R&D	Industry-Academia Collaboration R&D
	Ministry of SMEs Support Program	Ministry of SMEs Support Program
Business Development Support	IPO Support Program	IPO Support Program
		Ministry of SMEs Baby Unicorn Plus

Pension System

We operate various pension systems, including defined benefit pension plans.

Category	Unit	2022	2023
Retirement Benefit Obligation	10,000 KRW	29,494	All Employees Enrolled in Retirement Pension*

*The accurate calculation of the 2023 retirement benefit obligation will be confirmed after the completion of the financial statements around March 2024.

Astrogen specializes in the development of therapies for rare neurological disorders

Pipeline

Pipeline	Indication	Drug Discovery	Non-Clinical	Phase 1	Phase 2	Phase 3
AST-001	Autism Spectrum Disorder (Core symptom)	▶				
AST-003	Autism Spectrum Disorder (Core symptom)	▶				
AST-031	ADHD	▶				
AST-004	Rett syndrome	▶				
AST-008	Dravet syndrome	▶				
AST-035	Glioblastoma	▶				
AST-038	Neurofibromatosis type 1	▶				
AST-029	Parkinson's disease	▶				

Environmental Management

Management

In order to lay the groundwork for building a prosperous future society with the participation of stakeholders, we formulate an environmental management policy. This policy aims to lead in reducing greenhouse gas emissions and advancing environmental protection to address global warming, promoting sustainable environmental management.

Additionally, we strive to use resources efficiently and reduce costs through systematic monitoring and improvement. Efforts are made not only to minimize the environmental impact on stakeholders but also to minimize the environmental cost.

For sustainable resource utilization, we establish a strategic task of "Minimizing Environmental Impact" along with corresponding action items. We are committed to systematically managing environmental impact across all aspects of our business activities.

- We establish an environmental management system to drive continuous environmental improvement.
- We comply with environmental regulations and other requirements agreed upon by the company to establish a more effective environmental management system.
- From product development to sales and services, we minimize environmental pollution throughout the entire process.
- We set and achieve environmental goals and objectives to enhance environmental management performance.
- Through systematic education, we cultivate environmental management capabilities.
- By gathering opinions from stakeholders and providing necessary information, we ensure transparency in environmental management.

Astrogen, inc. has been pursuing environmental management, obtaining ISO 14001 certification from 2023 onwards to emphasize the importance of environmental conservation. We conduct sustainable resource utilization promotion education and campaigns for employees.

Energy

Astrogen, inc. consistently engages in energy-saving activities and actively responds to societal demands for addressing global warming and climate change.

As a pharmaceutical research company, the environmental impact of energy consumption within our organization is minimal. In the design of our headquarters, we have incorporated glass-fronted buildings, excluding the framework, to encourage reduced power consumption for heating and cooling.

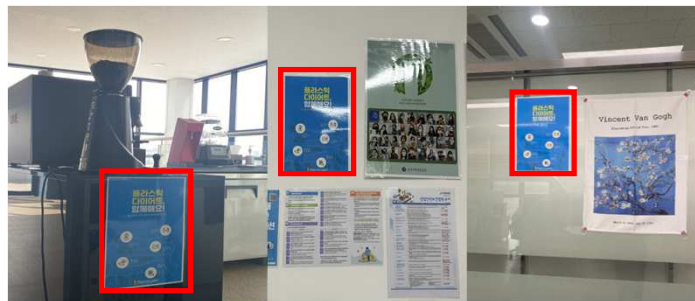
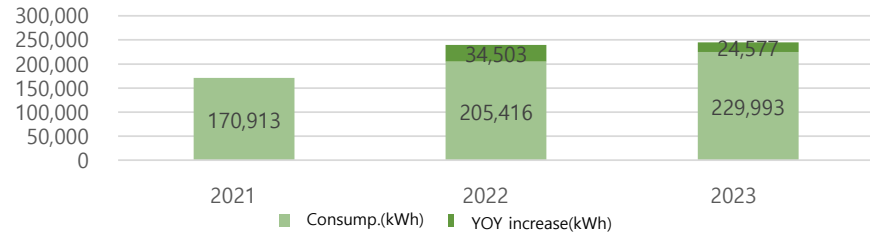
We promote the use of tumblers instead of disposable cups for office and research staff, and we actively practice reducing plastic use and energy-saving campaigns (enforcing power-saving mode, participating in turning off power, unplugging cords, simultaneous turning off of lights, etc.).

To improve awareness of autism spectrum disorders, we conducted an Autism Race along with plogging activities for local community environmental improvement.

Despite an increase in electricity consumption due to a steady increase in research personnel and equipment for research and development since 2021, the year-over-year increase has decreased by approximately 50% compared to 2022. This confirms the continuous efforts of employees in saving electricity.

Electricity Usage

Year	Consump.(kWh)	YOY increase(kWh)
2021	170,913	-
2022	205,416	34,503
2023	229,993	24,577



Plastic Reduction Campaign



Local Community Plogging

Waste

Astrogen, inc. is a startup company focused on drug development, and waste generated so far originates from the corporate research laboratory. Waste generated after experiments undergoes designated procedures for medical waste disposal.

Waste is separated by type and placed in designated waste bins for pharmaceuticals, which are stored in a dedicated storage room. Disposal is carried out in accordance with waste management regulations using specialized vehicles from a professional collection company. The disposal process is reported to the relevant local government authorities.

- **Business Waste Disposal**

1. Medical Waste Disposal: Specialized Collection and Transportation Company (GL Co., Ltd.) / Local Authority Notification / Proper System (Once a week)
2. Designated Waste Disposal: Specialized Collection and Transportation Company (ENL abis) / Disposal by Type (Once a year)

Category	Unit	2021	2022	2023
Medical Waste Disposal	kg	1,823	2,070	2,398
Designated Waste Disposal	kg	110	120	140

- **General Waste Disposal**

1. General Household and Food Waste: Processed according to regulations of the local district, using designated bags or other methods as specified.
2. Recycling: Rigorously separated by purpose and managed for disposal on designated dates.

Number of Violations of Environmental Regulations

Category	Unit	2021	2022	2023
Violations	case	0	0	0

Social Management

Management

The most crucial aspect for a company to sustain continuous growth and secure competitiveness lies in its workforce. To maintain a competitive edge in the global market, it is essential to secure and nurture excellent human resources.

Additionally, creating a favorable working environment for employees to fully utilize their capabilities is a critical management strategy.

Astrogen, inc. strives to foster a positive atmosphere within the company by continuously implementing policies and strategies related to human rights, grievance resolution, non-discrimination, fair employment, quality of life enhancement, and talent development, all aimed at creating an enjoyable working environment.

Furthermore, the company pursues symbiotic growth with the local community, aiming for harmonious development. Astrogen Corporation values relationships with employees, partner companies, and the local community. It actively manages and evaluates key issues for each stakeholder, seeking continuous improvement and development.

- We actively support a harmonious work-life balance by encouraging a balanced approach to work and home life.
- We engage in community service activities to foster mutual growth and collaboration with the local community.
- Safety and health are our top priorities, as we work to minimize harmful and hazardous factors, creating a safe and pleasant working environment.
- We are committed to realizing a transparent, empathetic, and fair human rights management system that resonates with and involves all employees.
- We establish policies for respecting employees' human rights, implementing processes to proactively identify and address human rights risks.
- We devote our best efforts to safeguarding the privacy of personal information.

Employment

Hiring and retaining top talent are crucial for the growth of a company. Creating employment, even on a large scale, has a significant positive impact on overall economic sustainability. Consequently, various public supports and external stakeholder evaluations include employment creation as a fundamental non-financial factor.

Astrogen, inc. aims to contribute to continuous employment creation and provide high-quality jobs as part of its business expansion.

In 2023, we hired 17 new employees, including both regular and contract positions, with 8 employees transitioning. Among the new hires, there are 6 female employees and 2 male employees.

We are committed to improving the working environment and employment status for all employees. Our efforts include implementing regular employment for all staff members. We also operate a university internship program to facilitate communication channels with industries and schools within the local community.

All employees receive benefits such as national pension, employment insurance, industrial accident insurance, and health insurance.

Additionally, we have implemented a retirement pension system for some employees. We operate various measures to protect pregnant employees in accordance with Article 43 of the Employment Regulations.

Number of Headcount Composition

Category	Number of Employees		
	2021	2022	2023
Male Employees	10	15	17
Female Employees	24	24	26
Total	34	39	43
Executives (Male)	4	2	4
Executives (Rale)	2	2	2
Total	6	4	6

Number of employees returning from parental leave

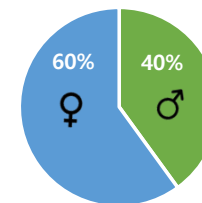
Category	2021	2022	2023
PL employee	0	2	0
PL returnee	0	0	2

Number of New hires & Job switchers

Category	2021	2022	2023
New employee	19	14	8
Turnover Rate(%)	37.5	26.5	10.3

Turnover Rate = (Number of Employees Separated in the Current Year / Number of Employees at the End of the Previous Year) * 100

Gender Composition



■ Male ■ Female

Category	Staff	Manager	Executive
Female	75.0%	64.0%	33.3%
Male	25.0%	36.0%	66.7%

Human rights

We have established a Human Rights Charter to prevent human rights violations by businesses, promote human rights-friendly management activities, and contribute to the establishment of a culture of respect for human rights. Additionally, we fulfill the obligation of education and inspection for our human rights practices, and strive to provide a remedy procedure for human rights violations. We have implemented human rights policies to ensure the respect of human rights and human dignity for all members and stakeholders.

We have introduced a code of conduct addressing workplace harassment prevention, sexual harassment prevention, and other human rights education obligations. At Astrogen, inc., we have formulated and implemented regulations addressing employee rights, grievance handling, discrimination prevention, and harassment prevention. We operate hotlines and suggestion boxes to address employee grievances, and we monitor and continuously work to improve the annual incidents related to human rights. All reports are kept confidential, and we ensure no repercussions for those reporting. We conduct internal investigations and take actions based on relevant standards when issues are confirmed.

In accordance with Article 4 (Non-Discrimination) of Astrogen's employment regulations, we specify and operate without discrimination based on gender, age, religion, social status, region of origin, education, marital status, pregnancy, childbirth, or military service in recruitment, compensation, benefits, training, placement, transfer, promotion, and retirement without reasonable cause.

Anti-Corruption (Number of hotline reports)

Category	2021	2022	2023
Incident Reports	-	-	-

Discrimination Incidents and Remedial Actions

Category	2021	2022	2023
Incident Reports	-	-	-
Actions Taken	-	-	-



Ethical Conduct Badge on the back of employee ID card

Astrogen, inc. is committed to creating a great workplace. Each year, we operate various benefit programs to ensure the stability of employees' work lives and provide a healthy working environment. We offer diverse benefits to enhance skills and promote work-life balance.

Benefit

Benefit for Work-Life Balance

Category	Benefit
Work-Life Stability	<ul style="list-style-type: none"> • Dormitory/Housing • Relocation Allowance • Congratulatory and Condolence Support • In-house Cafeteria and Snack Bar • On-site Gym Facilities • Vehicle Maintenance Support • Childbirth Expense Support
Healthcare	<ul style="list-style-type: none"> • Insurance Enrollment (Group Accident, Medical) • Health Check-ups • Medical Counseling • Massage Chairs
Self-Development	<ul style="list-style-type: none"> • Support for Book Purchases • In-house Education System • Seminars and Educational Support • Graduate School Education Support • Self-Development Fund Support
Work-Life Balance	<ul style="list-style-type: none"> • Flexible Working Hours • Bonuses and Incentives • Awards (Long Service/Exemplary) • Family Love Day (Early dismissal every Friday at 5:30 PM) • Commemorative Day Support • Dress Code Flexibility • Youth Tomorrow Contribution Deduction • Special Meal Day every Wednesday • Workshops



Training

The drug development business is highly dependent on human capital. To ensure ongoing employment stability, it is essential to create an environment where each member's abilities can be maximized, surpassing 100%.

- Regular performance reviews and coaching
- Connecting individual growth through mentoring to the organization's growth
- Conducting training for employees' job capabilities and enhancement (mandatory training, attending conferences and seminars, job-related education, etc.)

- Job Title Education: Education tailored to the qualities and leadership required for each job title
- Job Competency Education: Education for acquiring specialized knowledge according to job roles(Job training and management by team)
- Common Competency Education: Knowledge education required for tasks and basic understanding
- Supporting external training of up to KRW 600,000 per employee annually for enhancing individual capabilities

Employee Training Completion Hours (Per Person)

Category	Training	Unit	2021	2022	2023
Mandatory Legal	Personal Information Protection	hours	1	1	1
	Sexual Harassment Prevention	hours	1	1	1
	Workplace Harassment Prevention	hours	1	1	1
	Disability Awareness Improvement	hours	1	1	1
	Pension	hours	-	-	1
Competency	Job Titles and Positions	hours	-	20	11
	Total	hours	20	40	16

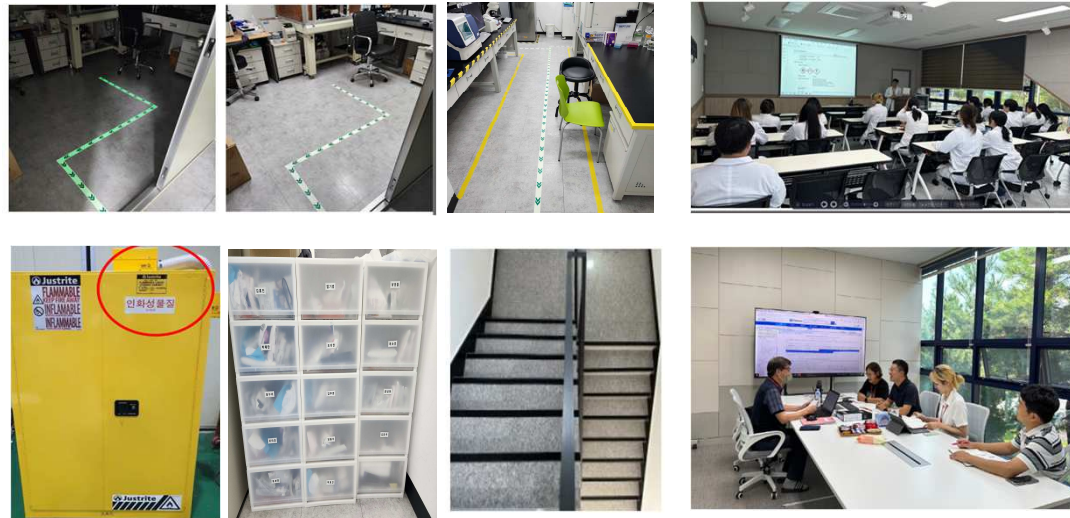
Astrogen, inc. prioritizes the safety and health of its workers as a fundamental value in its management. We have established a voluntary safety management system to prevent and respond to accidents in the target business and facilities for safety management. Our continuous prevention activities aim to secure life and safety through the best efforts.

Regular training is conducted to create a safe research environment, providing education for proactive prevention and swift response in case of issues. In 2022, a new safety and health policy was implemented. In 2023, we consulted with the Korea Occupational Safety and Health Agency (Daegu Branch) to establish a safety and health system centered around risk assessment in response to the enforcement of the Serious Accidents Punishment Act for Labor. Basic documents for constructing the safety system were formulated.

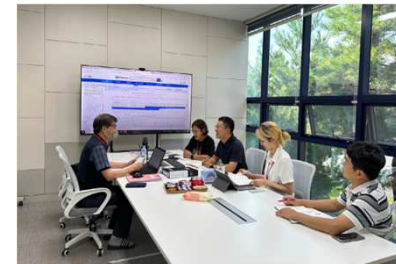
In 2023, we obtained ISO 45001 (Occupational Health and Safety) to solidify the culture of safety and health and promote more proactive safety and health activities for the company.

As part of occupational health and safety, Material Safety Data Sheet (MSDS) training is conducted, totaling 8 hours each in the first and second halves of the year, annually, for new hires and those who have changed positions.

Category	Education	Unit	2021	2022	2023
Legal	MSDS	hours	16	16	16



Occupational Safety and Health Improvement Activities



Lab safety education and consulting

Safety Management Policy

Astrogen, inc. places the safety and health of its employees as the highest priority in its management philosophy. We are committed to establishing a voluntary safety management system for targeted operators and facilities in order to prevent and respond to safety incidents. We make our best efforts through continuous preventive activities to ensure life and safety.

- I. We prioritize safety and health management as the highest value in our operations and continuously engage in preventive activities to prevent accidents and occupational diseases through systematic safety and health management.
- II. We foster safety awareness among employees through safety and health education and training, actively striving to identify potential hazards and eliminate risk factors through improvements.
- III. We comply with safety and health regulations and incorporate the opinions and perspectives of stakeholders into our safety management policy, reflecting and implementing them.
- IV. All employees actively participate in compliance with the safety management policy and faithfully fulfill their responsibilities and obligations in safety and health activities.
- V. We require all suppliers and contractors to comply with our safety and health policies and safety requirements.

In order to achieve the above policy, Astrogen, inc. must establish the following objectives and actively implement them.

Objectives for Implementation

- ▶ Achieving Zero Occupational Deaths and Creating a Safe Working Environment
- ▶ Ensuring the Safety and Protection of Employees' Lives
- ▶ Establishing a Safety and Health Management System with a Focus on Risk Assessment
- ▶ Securing a Safety and Health System and Improving Safety and Health Environmental Activities
- ▶ Building a Mutual Cooperation System with Contractors (Subcontractors or Outsourced Services) Responsible for Work

All employees must fully understand the safety management policy and strive to the best of their abilities to achieve the set objectives for implementation.

Astrogen, inc.

Safety management policy

Astrogen, inc. is growing sustainably by engaging in consistent social contribution activities, fostering mutual growth with the local community, and improving the business environment. Active participation in the community, which is directly or indirectly impacted by the company's operations, is a crucial element of modern corporate social responsibility.

Astrogen encourages its employees to engage in volunteer activities, embodying a sense of sharing within the local community.

The company consistently participates in events aimed at improving awareness and respect for individuals with disabilities. Astrogen organizes concerts featuring children with developmental disabilities to promote understanding and respect within the community. Since 2022, the company has financially supported the Value Development Play Center, a support group for parents of autistic and developmentally challenged children. This support includes assistance for caregivers, activity support, purchase of exercise equipment, and funding for therapists, contributing steadily to community collaboration.

Local Communities



Employee participation in autism awareness events

Volunteer cleaning at Value Development Play Center

ASK 한국자폐인사랑협회

주 소 : 아스트로젠 대표와
(명) : 남희정 회장
제 목 : 오차진 케이스 참여 인증서 간

1. 오 차 진 무영환 법인을 기증합니다.

2. 본 협회는 2009년 보건복지부로부터 사립법인 설립 인가를 받아 자폐장애인의 자립 및 사회활동과 자폐장애인의 가족의 복지증진을 목적으로 제정 법률을 준준에 따라 설립된 공익법인입니다.

3. 오차진 케이스는 자폐아들에게 생활 전반에 걸친 전문적인 재활교육을 지원하여 자립성과 자활능력을 증진시키고 사회의 구성원으로 모두 하나가 되는 공익을 이루고, 올해로 4주에 차근차근의 후원으로 활동하고 있는 기부자(후원회원)입니다.

4. 후원하여 주 사에게 도움을 받으시는 케이스에 참여인증서를 다음과 같이 발행합니다.

기 행 서 면 : 자폐장애아 자녀(후원 대상자) 오차진 케이스
이 서 발행 목적 : 자폐아를 위하여 4천 원 후원
다. 오차진 케이스

구분	회차	원금(천원)	발급 일자
1	2022	0	
2	2022	0	
3	2022	0	

사단법인 한국자폐인사랑협회장

*회장 : 박이대 회장 : 박이대 국장 : 심정선 전무 : 최정희
 대표 : 김 사무총장 : 2022-01-20(2022.12.27) 전 무 : http://www.ask.or.kr
 40722 서울특별시 강남구 테헤란로 22, 아스트로젠 202호 02-445-5444 전화번호 : 02-445-5404 / ask@ask.or.kr / 공구

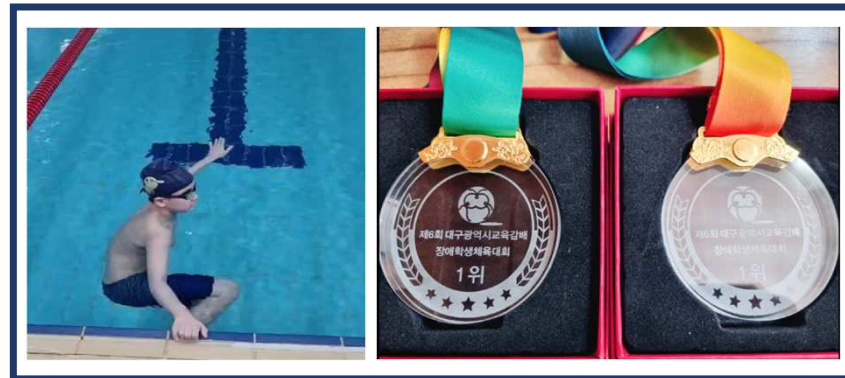
3 years of Autism Race participation

Astrogen, inc.'s continuous community service expanded in 2023 through voluntary contributions by company members. Those who participated in voluntary activities engaged in sharing, including purchasing books needed by families with developmental disabilities and heartfelt letters.

Local Communities



Furthermore, we created an opportunity to support a child with developmental disabilities who discovered a talent for swimming. By promoting a social change in the use of local community sports facilities for people with disabilities, the budding swimmer with developmental disabilities achieved a heartwarming moment by winning a medal through continued training.



Local Communities

Astrogen, inc. aims to build a bio ecosystem and contribute to advancing Medi-City Daegu, centered around the Daegu-Gyeongbuk Medical Complex located at the company's headquarters.

Actively participating in various programs for regional growth, Astrogen has led the event planning related to the establishment of the 'Medi-Startup Town' in Daegu, receiving appreciation from the city for successful collaboration.

In addition to local programs such as 'Youth YES Matching,' 'K-Medical Industry,' and 'Future New Industry Talent Support Project,' Astrogen is actively engaged in national initiatives, including the 'Baby Unicorn' and 'Baby Unicorn Plus Startup,' as well as being recognized as an 'Excellent Company Research Center.' Through collaborations with institutions like the Daegu-Gyeongbuk Advanced Medical Industry Promotion Foundation, the company contributes to regional development.

Looking ahead, Astrogen plans to operate entrepreneurship support programs, sharing experiences with locally established businesses and fostering a cycle of mutual growth through social contribution activities for the benefit of the local community.



Governance Management (Integrity Assurance)

Astrogen, inc. is establishing an advanced corporate governance structure centered around the Board of Directors to ensure management transparency and establish a trusted governance framework.

Board Composition and Operations

The board of directors consists of 6 members, including both inside and outside directors, as well as non-executive directors. Serving as the top decision-making body related to management, the board represents the interests of shareholders while overseeing and resolving key management issues with the goal of ensuring the company's sustained growth.

Category	Name	Gender	Expertise	Highest Edu. (School, Major, Degree)	Internal Directors Career
Representative Director	Su-Kyeong Hwang	Female	Clinical and Corporate Management	Master's / Bachelor (M.D.) - Kyungpook National Univ. School of Medicine Ph.D. - Fukuoka Univ.	Founder and CEO of Astrogen, inc. Current Associate Professor, Department of Pediatrics, Kyungpook National University School of Medicine"
Inside Director	Sung-Hyuk Park	Male	Corporate Management	B.A. in Economics - Seoul National Univ. MBA - Seoul National Univ.	Current VP at Astrogen, inc. B.A. in Business and Economics, MBA 14+ years in General Affairs, Contract, Export
Auditor	In-Su Jang	Male	Legal	Police Univ. Law B.A. Kyungpook National Univ. Law Grad. School M.A.	Current Attorney at Law at Law Firm Heonwon 18 years of service in the police force
Outside Director	Sang Ryong Kim	Male	Research	Ajou Univ. Life Science M.A. Ajou Univ. Medical School Ph.D. Columbia Univ. Post-Doc	Current Professor at Kyungpook National University Former Director of Kyungpook National University Brain Science Research Institute
Non-Executive Director	Jaeyeol An	Male	Clinical and Investment	King's College London B.A. Seoul National Univ. Medical School M.S./Ph.D.	Current Executive Director at Partners Investment Managed Funds totaling over 2 trillion KRW Director on 9 Boards both domestically and internationally
	Eunhee Park	Female	Pharmaceutical	Sogang Univ. Grad. School of Management M.A. Hanyang Univ. Business Grad. School Ph.D.	Current CEO of Korea Pharma Co., Ltd. Director of Korea Pharmaceutical Cooperative Director of KOSDAQ Association

Strengthening Board Independence

To enhance board independence, we disclose all information about directors before their appointment, including their relationships with recommenders and major shareholders, and transactions with the company. This ensures transparency.

Compensation for Board Members

Compensation for board members is determined based on approved criteria within the limits set by the shareholders' meeting, considering director performance.

Shareholder Composition and Communication

As of Q4 2023, our CEO, Su-Kyeong Hwang, holds 40.77% of the total shares, making him the largest shareholder. We hold annual shareholder meetings to actively incorporate shareholder opinions into key decision-making processes. Additionally, we communicate with shareholders by disclosing important management information through the Electronic Disclosure for Investors' Network (DART) system and other channels.

Ethical Management

Ethical Code Declaration

Astrogen, inc. recognizes the contemporary significance of ethical management, and commits to performing duties ethically and legally, establishing a fair trade order. We aspire to a transparent and clean corporate culture that fulfills social responsibilities.

- All managerial activities adhere to ethical values and comply with the laws and customs of local communities, the nation, and the international community.
- Establishing a transparent and fair trade order to eradicate corruption and malpractice.
- Practicing ethical management in all business operations and making efforts to convey the principles of ethical codes to collaborative societies.
- Appointing responsible parties for ethical management, continuously improving the application of ethical codes in each business area.
- To ensure the effective implementation of this declaration, it is disclosed to stakeholders for transparency.



Employee Code of Ethics Declaration Signature (Example)

Category	2021	2022	2023
Employee Corruption Cases	0	0	0
Internal Ethics Reports	0	0	0
Information Security Breaches	0	0	0

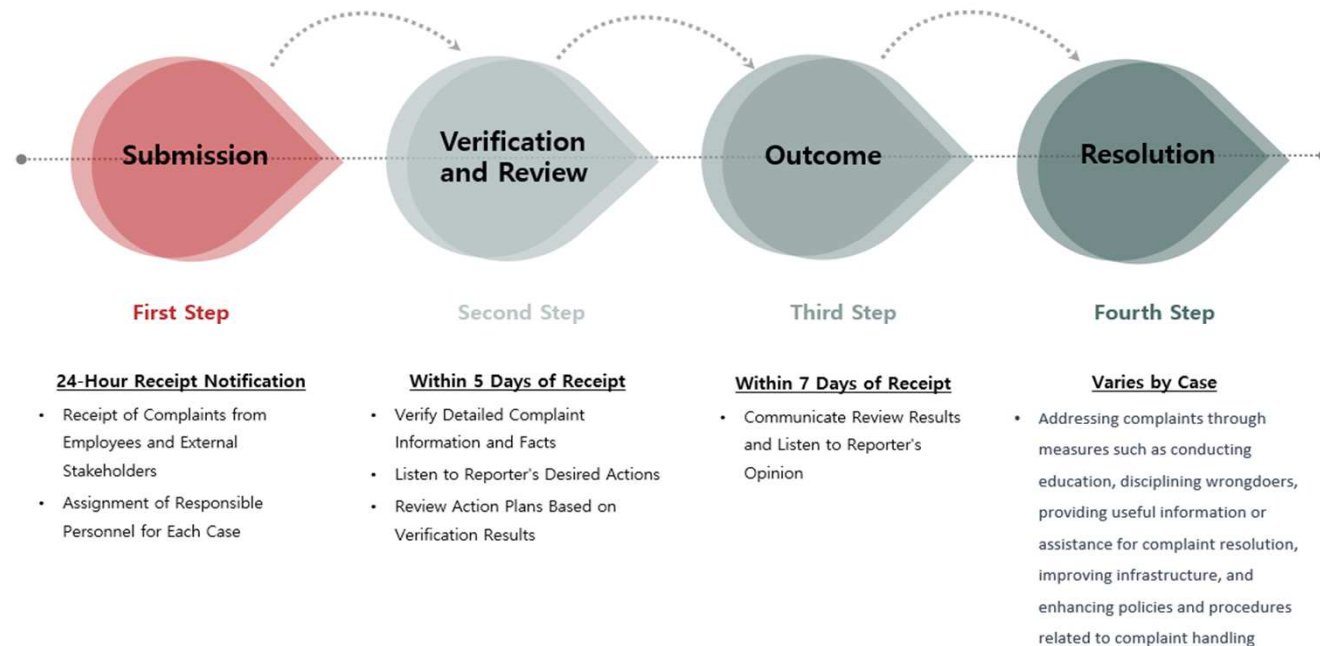
Ethical Management

We are striving to uphold ethical management by establishing a code of ethics and declaring our commitment to it.

Astrogen, inc. recognizes the contemporary importance of ethical management, aiming to perform duties ethically and legally, establish a fair trade order, and advocate for a transparent and clean corporate culture while fulfilling social responsibilities.

We have created and operate a separate account (hotline@astrogen.co.kr) to facilitate reporting of anti-corruption activities. All reported information is kept confidential, and measures are in place to ensure no disadvantages for the reporting party. These details are regularly communicated through internal education. When issues are identified, the company conducts internal investigations and takes appropriate actions according to established criteria.

Complaint Handling Procedure



※ If unable to process within the specified timeframe at each stage, provide the complainant with detailed reasons for the delay.

APPENDIX

APPENDIX

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BOOST BEYOND BOUNDARIES

www.astrogen.co.kr