

2023



**Environmental, Social and Governance & Corporate Social Responsibility Report** 

CanSinoBIO

About the Report  About CanSinoBIO			Content Index of ESG Reporting 103 Guide of Hong Kong Stock Exchange		
Chairman's Statement	08	GRI Content Index	105	$\prec$	$\Diamond$
ESG Overview	10	List of Internal Systems	108	<i>★</i>	$\check{\neg}$
Theme: Working Unswervingly to Contribute to	18	ESG Data List	110	<b> </b>	
a Shared Community of Health for Humanity		Definition	113	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
as a Benefactor from China		Reader's Feedback	114	× ,	
0	1.		02.		03.
	•		<b>U</b> Z.		
Responsible Governance		Compliant Operation		Product Responsibility	
Corporate Governance	27	Responsible Procurement	37	Product Quality	47
Risk Control and Internal Audit	31	Ethic Protection	41	R&D Innovation	56
Business Ethics	34	Information Security	45	Customer Service	61
0	4.		05.		06.
Employee Development		Low-carbon Actions		Community Care	
Employment Management	66	Response to Climate Change	84	Access to Health Care	98
Talent Development	69	Environmental Management	89	Social Empowerment	101
Employee Benefits	75	Energy Conservation and	92		
Occupational Health and Safety	79	Consumption Reduction			
		Discharge Control	94		

# **About the Report**

Following the principle of objectivity, normativity, transparency, and comprehensiveness, the Environmental, Social and Governance(ESG) & Corporate Social Responsibility Report provides a genuine disclosure of CanSinoBIO's ESG practices and social responsibility performances to all stakeholders in such areas as business operation and development, environment conservation, employees and community, as well as chain optimization.

# **Basis of Preparation**

The Report is prepared in accordance with the *Environmental, Social and Governance Reporting Guide* set out in Appendix C2 to the *Rules Governing the Listing of Securities* (the "Listing Rules") on HKEX (see definition on P113) and the *SSE Environmental Information Disclosure Guidelines for Listed Companies* by Shanghai Stock Exchange, as well as the requirements of the *GRI Standards* issued by the Global Sustainability Standards Boards (GSSB).

# **Scope of Report**

The Report involves the major research and development ("R&D") and manufacturing sites and workplaces of CanSino Biologics Inc. It covers the period from January 1, 2023 to December 31, 2023, with some reviews over previous years and the forecast of 2024 when necessary. Notes will be found in the text when the data scope is inconsistent with the Report.

#### **Source of Information**

The information and cases herein were extracted mainly from the Company's statistical reports, internal communications, and other relevant documents. The financial data involved are sourced from the annual financial statement of CanSino Biologics Inc. unless otherwise specified. Other data comes from internal statistics and manual collation within the Company.

# **Reporting Principle**

Materiality

The Company follows the materiality assessment procedure to determine what and to which extent these contents should be disclosed in the Report. The results of the materiality analysis in 2023 are available in the chapter "Stakeholder Communication".

Quantitative

The Report discloses the quantitative information on environmental and social aspects to present our performance in main ESG KPIs.

Balance

The Report objectively disclose both positive and negative information to ensure balanced disclosures.

Consistency

Data disclosed herein are for 2023 unless otherwise specified. We will prepare the future ESG report with consistent statistical methodologies according to the actual management, and disclose the comparative data for consecutive years as far as possible to help readers better understand how indicators change over time. Unless otherwise stated, the data disclosed in the Report are counted according to the unified information collection process and mechanism established by the Company to ensure comparability.

# References

To facilitate presentation and reading, in the Report, "CanSino Biologics Inc." is also referred to as "CanSinoBIO", "the Company", or "we". CanSino Biologics Inc. and its subsidiaries are referred to as "the Group". The monetary unit adopted in the Report is RMB (yuan) unless otherwise specified.

# **About CanSinoBIO**

# **Company Profile**

Incorporated in Tianjin Economic Technological Development Area (TEDA) West District, Tianjin in 2009, CanSino Biologics Inc. is a high-tech company dedicated to the R&D, production and commercialization of high-quality innovative vaccines (abbreviation in H-share: CanSinoBIO 06185.HK, abbreviation in A-share: CanSinoBIO 688185.SH).

CanSinoBIO has gathered a collection of senior vaccine scientists and technical experts who once worked for renowned pharmaceutical companies at home and abroad. With excellent management capabilities and strong R&D prowess, CanSinoBIO has rapidly promoted the R&D, production and commercialization of innovative vaccines. As a leading company in innovative vaccine R&D, we are committed to global public health security, fulfilling social and international responsibilities by unswervingly developing and providing high-quality vaccines and making contributions to global public health.



# **Technology platforms**

CanSinoBIO has established five core technology platforms: adenovirus-based viral vector technology, synthetic biotechnology, protein structure design and VLP assembly, mRNA and LNP technology, formulation and drug delivery technology.



#### Vaccine R&D

The R&D pipeline covers multiple innovative vaccines in more than 10 disease fields such as meningitis, pneumonia, DPT, novel coronavirus (COVID-19), Ebola virus disease, herpes zoster, tuberculosis, etc.



## Vaccine manufacturing

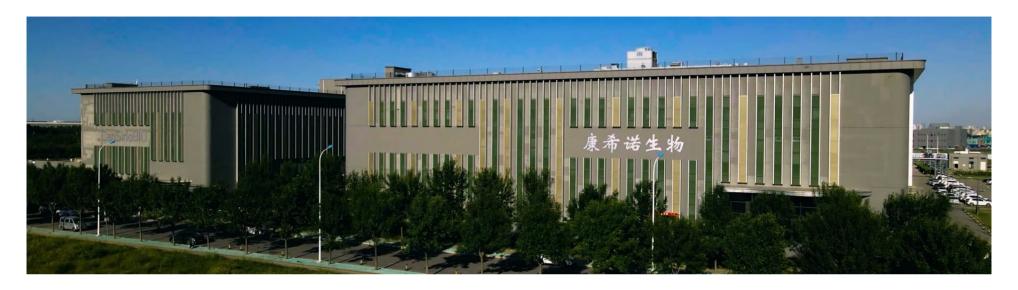
CanSinoBIO has established large-scale modern vaccine industrial bases in Tianjin and Shanghai, China, and has built multiple local production lines in countries and regions such as Mexico, Pakistan and Malaysia to supply innovative vaccines in multiple locations.



#### Collaborations

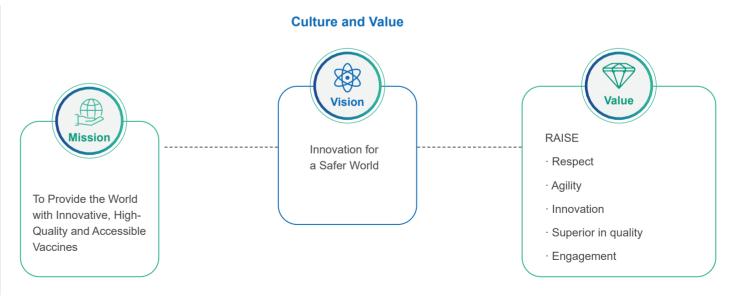
The Company has established partnerships with AstraZeneca, Vaccitech (UK) Limited and Ocugen, etc.





Under the mission of "To Provide the World with Innovative, High-Quality and Accessible Vaccines", CanSinoBIO proactively fulfills the vision of "Innovation for a Safer World". We pursue the value of "Respect, Agility, Innovation, Superior in Quality and Engagement" to treasure the reverence and protection of life.





# Milestones in 2023

February

The world's first COVID-19 vaccine for inhalation developed by CanSinoBIO was awarded the title of Top 10 China Medical Science and Technology News as well as Top 10 International Medical Science and Technology News, which marked one more honor of "Top 10 Medical Science and Technology News" following the approval of Ad5-EBOV in 2017.

#### 2022年度中国十大医学科技新闻



The first batch of stock solutions of novel coronavirus vaccine exported to Malaysia arrived in Kuala Lumpur, CanSinoBIO collaborated with Solution Biologics, a Malaysian pharmaceutical company to advance the filling process and realized stable local supply of the vaccine, which marked another milestone of CanSinoBIO's commercialization progress in ASEAN Region.



March

The world-first Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5 Vector) for in halation Convidecia Air® obtained the emergency use approval by the Badan Pengawas Obat dan Makanan (BPOM). Following China and Morocco, Indonesia was the third country to approve the use of the COVID-19 vaccine for inhalation.



April

The novel gene therapy product candidate OCU400 for the treatment of inherited retinitis pigmentosa (RP) and Leber congenital amaurosis (LCA) jointly developed by CanSinoBIO and American biopharmaceutical company—Ocugen obtained positive Phase I/II clinical data.



May

CanSinoBIO's Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5 vector) Convidecia® obtained a certificate of registration from the Pharmacy and Poisons Board of Hong Kong, officially registered as a pharmaceutical products in Hong Kong.





CanSinoBIO's Tdcp Adolescent and Adult received the Clinical Trial Ap-

proval granted by the National Medical Products Administration (hereinafter "NMPA") to initiate relevant clinical trials in individuals aged 6 years old and above for the prevention of pertussis, diphtheria, and tetanus in China.

CanSinoBIO received the *Clinical Trial Approval* approved and issued by NMPA regarding conducting clinical trial of MCV4 vaccine in people aged 7 to 59.



July

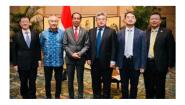
CanSinoBIO's Recombinant Zoster Vaccine received the *No-Objection Letter on Clinical Trials* from the Public Health Agency of Canada.

CanSinoBIO's absorbed tetanus vaccine received the *Clinical Trial Approval* approved and issued by the NMPA, which marked that the clinical trials could be conducted on population aged 18 and above.



The Indonesia President Joko Widodo met with Dr. Xuefeng Yu, Chairman of CanSinoBIO in Chengdu. CanSinoBIO and the Indonesian Biopharmaceutical Company—PT Etana Biotechnologies Indonesia signed a strategic cooperation agreement to further advance the local cooperation on tuberculosis vaccines and MCV4.

Indonesia's healthcare experts visited CanSinoBIO to conduct academic discussions and industrial investigation on the development and industrialization of innovative vaccines with Chinese immunological experts/scholars and R&D teams.





CanSinoBIO signed the *Product Supply Cooperation Framework Agreement* with AstraZeneca AB (AstraZeneca Sweden), both parties agreed to cooperate on the R&D of specific vaccines through the Company's mRNA manufacturing platform.



CanSinoBIO initiated the phase IIII clinical trial of DTcP infant and the first trial patient case has been formally enrolled.

Convidecia® obtained the Halal Decree granted by Assessment Institute for Foods, Drugs and Cosmetics of Majelis Ulama Indonesia.



CanSinoBIO, Pharmaceutical and Medical Devices Resiliency under Kementerian Kesehatan Republik Indonesia (Ministry of Health of the Republic of Indonesia), Tsinghua University and PT Etana Biotechnologies Indonesia (an Indonesia biopharmaceutical company) signed memorandum of understanding on vaccine evaluation platform, each party agreed to cooperate on the technological R&D of inhaled tuberculosis vaccine, providing more impetus for building a China-Indonesia community with a shared future.







CanSinoBIO was invited to attend the Ceremony for the 13th China International Patent Fair as an awardee of the 23rd WIPO-CNIPA Award (World Intellectual Property Organization-China National Intellectual Property Administration Award)



The Company entered into a Grant Agreement with the Bill & Melinda Gates Foundation to support development of the Recombinant Poliomyelitis Vaccine, a polio vaccine based on virus-like particles.





CanSinoBIO initiated the phase I clinical trial of Recombinant Zoster Vaccine in Canada and the first trial patient case has been formally enrolled.



December

After being recommended by the National Health Commission, CanSinoBlO's Recombinant COVID-19 XBB.1.5 Variant Vaccine for Inhalation (Adenovirus Type 5 Vector) was approved by NMPA on the expert demonstration for emergency use, helping the update of immunization strategy and providing better protection to the population.

CanSinoBIO initiated the phase I clinical trial of Tdcp Adolescent and Adult and the first trial patient case has been formally enrolled.

CanSinoBIO initiated the phase I clinical trial of Adsorbed Tetanus Vaccine and completed all patient case enrollment.

CanSinoBIO and Saudi Pharmaceutical Industries and Medical Appliances Corporation, a National Champion in the Saudi Pharma industry, have inked a strategic Supply Agreement to continue to advance the comprehensive strategic partnership, this strategic collaboration encompasses commercialization of CanSinoBIO's innovative vaccines, joint clinical R&D, and the localization of biopharmaceuticals in the Kingdom.





# Accolades in 2023



# State Key Laboratory of Medical Chemical Biology

The Ministry of Science and Technology of the People's Republic of China





# 2023 China Best ESG Employer

Aon





# The 1st China Reform Cup Top 50 ESG Golden Bull Award

China Securities Journal & China Reform Holdings Corporation Ltd. & Nantong Municipal People's Government





#### National Intellectual Property Advantageous Enterprise

China National Intellectual Property Administration





# 2023 Top 100 Chinese Pharmaceutical Innovative Enterprises

HealthCare Executive





#### Demonstration Site for Party Building Work of the TEDA



Commission for Non-public Sector and Social Organizations of the TEDA



# 2023 Public Companies Best ESG Practice Case

China Association for Public Companies





#### Top 20 Chinese Pharmaceutical Listed Companies in ESG Competitiveness in 2023

HealthCare Executive





#### Advanced Grass-roots Party Organization of the TEDA

Administrative Commission of the TEDA





# 2022 China's Top 500 New Economy Enterprises

China Enterprise Evaluation Association





## Pharmaceutical Supply Chain "Golden Quality Award" Top Ten Industrial Enterprise Award

Healthcare Logistics Association of China Federation of Logistics & Purchasing





# **Chairman's Statement**



The year of 2023 witnessed the rapid development as well as opportunities and challenges in the biopharmaceutical industry from me-first to me-better, CanSinoBIO has always adhered to the original aspiration of "Health, Hope, and Promises" and has been committed to providing the world with innovative, high-quality, and accessible vaccines. We embrace changes to reshape our competitiveness; we draw lessons from the history to pioneer across the industry.



We have pursued development with innovation to promote global cooperation. While remaining steadfast in commercialization of meningococcal vaccine and witnessing remarkable achievements, CanSinoBIO has invested multiple efforts into PCV13*i*, DTcP infant, Tdcp Adolescent and Adult, Recombinant Zoster Vaccine, Adsorbed Tetanus Vaccine and other vaccine candidates, with positive progress. We consistently deepen the strategic alignment with global partners, cooperated with diversified entities such as well-known pharmaceutical companies, research institutions, foundations and government authorities, contributing to build a shared community of health for humanity as a benefactor from China.

We have improved corporate governance and achieved compliant development. CanSinoBIO adheres to the business philosophy of compliance and transparency, complies with business ethics, and continuously strengthens compliant operation management. In addition, we carry out responsible procurement to develop a transparent and win-win responsible supply chain. In 2023, we passed the ISO 37301 and ISO 37001 compliance system certifications, marking that the Company's compliant management has reached international standards.

We have improved product quality and safeguarded customer rights. CanSinoBIO constantly improves its quality management system and is committed to providing customers with reliable products and services. In 2023, we continued to update and optimize the standard operating procedures (SOP) for clinical trials, attached great importance to innovative R&D, and participated in domestic and international academic exchanges and seminars, with the aim to improve the overall quality of products. Furthermore, we have established a professional customer service team, optimized marketing compliance management structure and styles, and spared no effort to provide customers with excellent service experience.

We have gathered diverse talents and provided them with a sound career development platform. CanSinoBIO firmly believes that talent is the inexhaustible mainspring for our sustainable development. By providing competitive compensation and benefits, inclusive and safe workplace, as well as comprehensive training and career development programs for employees, we have achieved common progress in talents growth and the Company's development. In 2023, we were once again awarded the "Aon's China Best ESG Employer". This honor is the recognition of our talent development strategy and human resource endeavors, and a new beginning for "CanSino family" to work together and create a brilliant future.

We have been committed to green development and enabling environment protection. CanSinoBIO has always been upholding the philosophy of harmonious coexistence between man and nature, striving to strengthen environmental management capacity-building, actively addressing climate change, implementing efficient emission management and resource use strategies, and helping protect the environment and sustainable development. In 2023, we revised our environmental management related system, conducted environmental compliance renovations, successfully completed the energy consumption self-inspection and energy measurement assessment organised by government authorities, and effectively advanced the Company's green and low-carbon development.

We have catered to social needs and embraced our corporate responsibilities. CanSinoBIO willingly assumes corporate social responsibility, and responds to the health needs of various sectors through diversified social activities such as access to health care, community care, and social welfare, contributing to the sustainable development of society. In 2023, we continued to advance R&D work and strive to ensure that vaccines benefit a wider range of people and regions. Beyond that, we supported various charitable associations and foundations in providing welfare services such as assistance to hospitals, the disabled, the elderly, orphanages, schools, and disaster relief, sharing our humble strength to build a healthy and mutual supportive society.

With unwavering determination, we stride toward greatness; we remain true to our original aspiration in our pursuit of dreams and moving forward. After fifteen years of hard work, we will always stick to the mission of providing solutions for the prevention of infection and contagious diseases worldwide and constantly consolidate and enrich our product pipeline. Furthermore, we will work together with upstream and downstream enterprises to actively fulfill our social responsibilities, working relentlessly to enhance human health and promote the development of global public utilities.



# **ESG Overview**

As a vaccine manufacturing company with profound scientific research strength and a high sense of social responsibility, CanSinoBIO has always been committed to deeply integrating the philosophy of environmental, social and corporate governance (ESG) into the Company's core values and daily operational practices. Regarding the environmental aspect, CanSinoBIO upholds the philosophy of green and low-carbon practices. The Company consistently optimizes production processes, aiming to reduce energy consumption and emissions. All of these efforts are in pursuit of harmonious coexistence with the environment while ensuring product quality and safety. As for social aspect, CanSinoBIO is deeply committed to product R&D and technological innovation and willingly assumes our social responsibilities, proactively responds to the UN's Sustainable Development Goals (SDGs), and takes the mission to provide solutions for the prevention of infectious and contagious diseases worldwide. As for governance aspect, CanSinoBIO adheres to standardised and transparent management principles, establishes and improves a sound corporate governance structure and internal control system, and ensures scientific and effective decisions. We spare no effort to achieve the favorable integration of economic benefits, social benefits, and environmental benefits, and continue to empower the commercialization of results with advanced global technologies, making innovative, high-quality vaccine products globally accessible, and working relentlessly to enhance human health and promote the development of global public utilities.

# **Board Statement**

The Board of Directors of CanSinoBIO strictly complies with the Code of Corporate Governance for Listed Companies, the Environmental Information Disclosure Guidelines for Listed Companies by Shanghai Stock Exchange, and the Environmental, Social and Governance Reporting Guide of the HKEX, to establish standardised and effective ESG management and information disclosure system, and assure orderly development of ESG work.

The Board of CanSinoBIO is the highest decision-making body of the Group responsible for overseeing ESG matters. It regularly supervises and ensures the effective enforcement of environmental, social, and governance strategies, objectives, and policies to continuously improve the risk resilience of CanSinoBIO. ESG-related functions have been incorporated into the scope of the Audit Committee's duties, which regularly reports to the Board and makes sure the Board approves significant matters related to ESG.

In 2023, CanSinoBIO systematically reviewed the Company's ESG development status, aligning with diverse regulatory requirements. This comprehensive approach facilitated the establishment and enhancement of governance systems pertaining to environment, product quality, and corporate governance. Moreover, the Company has identified ESG and climate-related risks and opportunities within its operation, including climate change, renewable energy, water resources, biodiversity, talent development and cultivation, occupational health and safety, supply chain ESG management, and business ethics. We actively established management procedures and implemented pertinent response measures to address these identified ESG and climate-related considerations.

The Report details the progress and effectiveness of CanSinoBIO's ESG efforts in 2023 and was deliberated and approved at a board meeting on March 27, 2024.

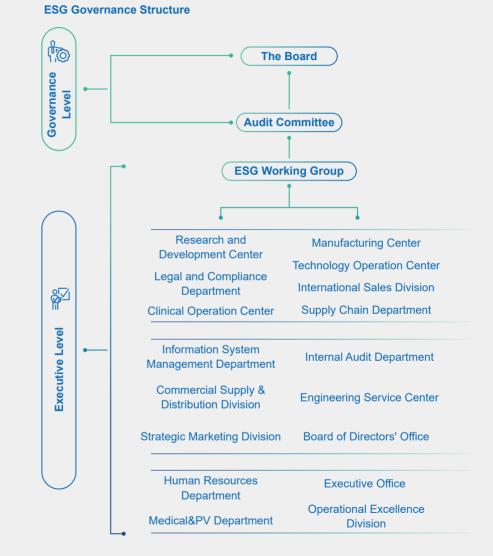


# **ESG Governance System**

CanSinoBIO persists in practicing the philosophy of sustainable development, attaches great importance to ESG governance, and promotes the in-depth integration of ESG governance and corporate governance system to improve our ESG governance structure, continuously strengthen the participation of the Board of Directors in ESG-related matters, and enhance the ability and performance of ESG governance. Furthermore, we proactively communicate with various stakeholders to integrate their needs and company operations fully and deeply into sustainable development philosophy, and promote the coordination and unity between company development, industry progress and social prosperity.

CanSinoBIO specifies graded governance functions and ensures ESG institutionalization, standardization, and professional management. A well-defined governance structure has been established, consisting of the Board, the Audit Committee, and the ESG Working Group. The Board and the Audit Committee constitute the governance body, while the ESG Working Group, as an executive arm, leads and coordinates all departments to strengthen overall ESG management. The Audit Committee communicates with the Board on ESG-related matters at least once a year. Along with that, the Company incorporates each department and each business segment into ESG governance system to leverage the capabilities of each tier and implement the philosophy of sustainable development in a comprehensive, systematic and effective manner.

We place significant emphasis on the ESG risks that may impact our operations, and we have implemented an ESG governance structure to realize ESG risk management, efficiently improving our resilience to these risks. The Company conducts a comprehensive assessment of ESG risks in our business process from environment, social, and governance aspects, according to national laws and regulations, industry characteristics, as well as in combination with our business features. After the Audit Committee identifies ESG risks, the Board conducts risk assessment and develops corresponding plans. The ESG Working Group coordinates the management and mitigation of ESG risks across departments. We implement ESG risk prevention and controls by enhancing our internal management processes, conducting regular internal audits and on-site inspections, and providing training to improve employees' awareness of risk management.





#### **Duties at Different Levels of ESG Structure**



The Board

- Comprehensively supervise and approve the Company's ESG progress along with other important affairs
- · Review the Company's major ESG issues and ESG goal achievement progress
- Approve and determine the ESG risks and opportunities related to the Company's development, ensure ESG-related risk management and internal control system run appropriately and effectively



Audit Committee

- · Regularly advise the Board on ESG matters
- · Review the Company's annual ESG report
- · Identify major ESG risks and opportunities, approve and review ESG-related policies



ESG Working Group

- Carry out management and practice under the direct leadership of the Audit Committee, and regularly report to the Audit Committee/management team
- Formulate work plans for ESG management, goal achievement, etc.
- Sort out the existing ESG policies, improve ESG policies on various issues, and coordinate duties among various departments



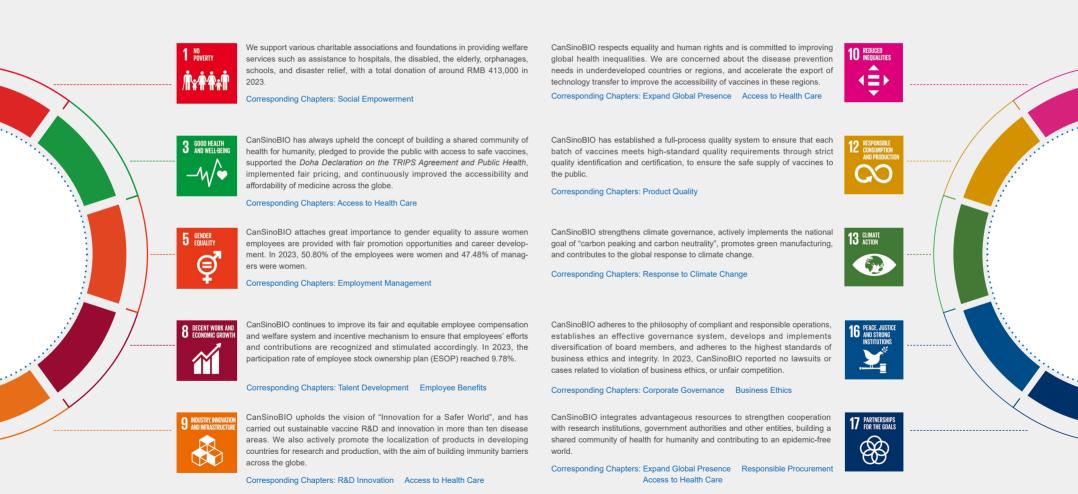
Functional Department

- Implement the actions and measures related to ESG matters within the Company based on ESG goals
- Complete information disclosure, project implementation, etc.
- Understand the stakeholders' ESG requirements, communicate the Company's ESG work and effectiveness, and enhance communication with the stakeholders



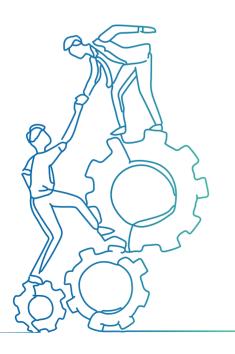
# **SDGs' Performance and Response**

CanSinoBIO proactively advances the SDGs through practical actions. We integrate SDGs into the Company's strategic planning and regular operation activities, with the aim to realize harmony between the corporate value and social value.



# **Stakeholder Communication**

CanSinoBIO believes that the Company's sustainable development relies on stakeholder engagement and participation. We always focus on and listen to the demands of internal and external stakeholders by establishing a wide range of channels, to facilitate frank communication and exchange with each stakeholder. We comprehensively sort out the Company's characteristics and changes in the external environment to identify materiality and respond to the demands of each stakeholder.



Stakeholders	Demands	Response from the Company
Government and regulators	Compliance with laws and regulations     Ensure product quality and safety     Accept supervision from the government and promote the healthy development of the industry     Pay taxes and contribute to the regional economy	<ul> <li>Fulfill all obligations in accordance with laws and regulations</li> <li>Report operational performance as scheduled</li> <li>Continue to increase access to health care</li> <li>Promote the synergy of upstream and downstream companies in the industry</li> <li>Establish internal control mechanisms for compliance</li> <li>Promptly pay taxes</li> </ul>
Shareholders and investors	Know the Company's business performance and governance norms; ensure strict risk controls     Conduct business steadily to bring returns on investment     Fair, impartial and open information disclosure	Disclosure of compliance information     Investor communication through telephone, email and online conversations     Annual General Meeting of Shareholders     Investor exchange meetings and on-site visits
Employees	<ul> <li>Protect employees' basic rights and interests</li> <li>Care about employees' physical and mental health and safety</li> <li>Provide training and career advancement for employees</li> <li>Generous benefit packages</li> </ul>	<ul> <li>Employee communication meeting</li> <li>Employee satisfaction survey</li> <li>Solicit opinions and feedback from employees</li> <li>Employee training</li> <li>Employee benefits</li> </ul>
Customers and users	<ul> <li>Protect consumers' basic rights and interests</li> <li>Compliance with business ethics</li> <li>Ensure product safety and timely recall of faulty products</li> </ul>	Strictly and fully follow the quality control of vaccines     Protect customer information and optimize compliant mechanism     Handle consumer complaints and opinions
Suppliers and partners	Maintain good and stable partnerships     Operate in good faith and ensure product compliance     Sustainable supply chain	Regular communication     Standardised management and enforcement of contracts and agreements     Jointly fulfill social responsibilities
Media and NGOs	Understand environmental pollution and emission reduction measures     Timely and effectively reply to complaints     Undertake social welfare responsibilities	Disclose data on environmental performance and set targets for environmental conservation  Establish complaint channels on the official website and social media accounts  Charitable activities
Communities	Put emphasis on the impact of manufacturing and operation on the local communities Drive local economy and help vulnerable groups Recycle product packaging and waste to reduce environmental pollution	Engagement in charity     Regular assistance in certain areas     Volunteer services

# **Materiality Assessment**

CanSinoBIO regularly conducts ESG materiality assessment work, clarifies key areas of ESG work, effectively responds to the expectations and demands of stakeholders, and continuously improves ESG management. In 2023, we updated material issues in an orderly way based on the process of "relevant issues identification—stakeholder engagement—issue ranking—review and approval by the Board".

# **Material Issue Identification Process** Relevant Identify relevant issues based on external policy environment and Issue the Company's business process. Identification Stakeholder Communicate with stakeholders to collect feedback and concerns. **Engagement** Analyze materiality of issues based on investigation results and Issue Ranking comments of the management, and update the materiality matrix. Review and Submit the materiality matrix to the Board for review, and determine Approval by material issues upon approval. the Board

#### **ESG Materiality Matrix of CanSinoBIO in 2023**



Employee and

community

EnvironmentValue chain

Operation and development

of the Company

# **ESG Highlights in 2023**

#### Governance



Reported **10** lawsuits or cases related to corruption,

violation of business ethics, or unfair competition

The anti-corruption The community training hours for the Board members reached reached

The compliance and risk control training hours for employees



3 hours/person

26.02 hours/person

The Company passes dual compliance system certification to ISO 37301



compliance management system and ISO 37001 anti-bribery management system

Signing rate of *Confidentiality*Agreement and the *Integrity*Agreement by supplier

reached

100%

Completion rate of business partner compliance questionnaires reached

100%

# **Operation**



Conducted a total of

31 supplier quality audits

Signed a total of



156 framework agreements

on local procurement

The volume of information security and privacy breaches is



Regarded the protection of human subjects' rights and safety as the **primary** ethical consideration in clinical trials

#### **Products**



Conducted **full lifecycle** quality testing and precautionary testing on all batches of our products

Employee coverage of quality training



100%

Invested a total of



 $\mathsf{RMB}\textcolor{red}{\mathbf{662}} \text{ million in R\&D, including expensed R\&D}$ 

cost and capitalised R&D cost



Reported 10 actual product recall

# **Employees**

25%

of directors were women in the 2nd Board of Directors

28.57%

of directors were women in the 3rd Board of Directors



33.33%

of the senior management were women

50.80%

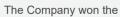
of the employees were women

of managers were women

100%

72 70 hours

of employees accepted training of training per employee



"2023 China Best ESG Employer"



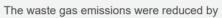
#### **Environment**

Invested about

RMB 9 5 million in environmental protection

The energy consumption intensity declined by

44.56% over the previous year



1790% over the previous year,

the hazardous waste generation was reduced by

21 23% over the previous year,

both of which reached the previous targets

Set up quantitative energy and water consumption targets, namely, with 2022 as the benchmark year, production energy consumption for single batch of

products will be reduced by

the production water consumption for single batch of

products will be reduced by 10% by 2030

#### Social

The total amount of charitable donations reached

RMB **413,000** 

Supported the Doha

Declaration on the TRIPS Agreement and Public Health

Compliance with

international and domestic

fair pricing strategies

Actively supported

"Healthy China 2030" Plan









# **Theme**

# Ø



CanSinoBIO has always upheld the concept of building a community of health for humanity, creating advanced vaccine technology platforms, and striving to become a "global vaccine supplier based in China". We take the mission to provide solutions for the prevention of infectious and contagious diseases worldwide, and we are committed to creating high-quality, innovative, and accessible vaccine products, promoting the improvement of global public health governance, better serving the world with China's innovative vaccines, and helping build a community of health for humanity.

# **Accelerate the Launch of Innovative Vaccines**

CanSinoBIO has always promoted the R&D of innovative vaccines with an international perspective, and consistently develops advanced vaccine products relying on a sound R&D system. From Asia's first Ad5-EBOV, to the adenovirus vector COVID-19 vaccine certified by WHO for emergency use; from the first tetravalent meningococcal meningitis vaccine in China, to the world's first COVID-19 vaccine for inhalation, CanSinoBIO has laid out multiple innovative vaccine product pipelines based on five core technology platforms, and is committed to making positive contributions to the establishment of immune barriers across the globe by promoting the launch of innovative products, bringing more benefits to the people around the world.



# **Innovation Capabilities**

Since its establishment, CanSinoBIO has been upholding technological innovation, energizing the development of China's innovative vaccines with long-term determination and innovating in independent R&D of innovative vaccines. We successively made multiple breakthroughs: the new drug application for Ad5-EBOV was approved in China; Convidecia®, Menphecia® and Menhycia® were approved for marketing; Convidecia Air® was approved to be included as a booster for emergency use in China.

The Company is committed to building a professional leadership and innovation team, in a bid to provide strong impetus for innovative technologies and vaccine development by virtue of management talent pool with global perspectives. The founder and core technical personnel of CanSinoBIO boast extensive experience in the biopharmaceutical industry, providing professional leadership and support in R&D and operations. Our R&D team comprises of senior experts and frontier scientists from the vaccine industry.

The Company actively leverages its technological platform advantages, continuously enhances its R&D innovation capabilities, improves its R&D system building, and focuses on five major technology platforms: adenovirus-based viral vector technology, synthetic biotechnology, protein structure design and VLP assembly, mRNA and LNP technology, formulation and drug delivery technology, providing sufficient technological support for innovative vaccine products. Based on its innovative delivery through inhalation, the world's first COVID-19 vaccine for inhalation Convidecia Air® developed by CanSinoBIO has been successfully included into one of the Top 10 China Medical Science and Technology News in 2022, fully demonstrating its innovative solutions for infectious diseases



# CanSinoBIO's mRNA Technology Platform Achieved Positive Progress in 2023

The mRNA technology platform built by CanSinoBIO has independently designed and developed sequence optimization and therefore it can produce key sites that affect stability and optimal sequences that effectively improve antigen expression. It can shorten product development duration and has the advantage of quick commercialization of scientific research results, providing assistance in disease prevention.

In August 2023, CanSinoBIO signed a *Product Supply Cooperation Framework Agreement* with AstraZeneca Sweden. The Company will provide contract development and production services to AstraZeneca Sweden to support its mRNA vaccine project, manufacture and supply specific products, and provide related specific services. The conclusion of this agreement significantly marks the Company's ability to be recognized by international pharmaceutical companies, validating CanSinoBIO's R&D strength and competitive advantages in the mRNA technology platform, which is conducive to the further expansion of the Company's mRNA production platform and meets the needs of the Company's future development.

As one of the five core technology platforms built by CanSinoBIO, mRNA technology has a wide range of applications, not limited to the development of COVID-19 vaccine. Beyond that, it has R&D potential in influenza vaccine, COVID-19+influenza combined vaccine, mRNA zoster vaccine, and respiratory syncytial virus (RSV) mRNA vaccine. CanSinoBIO will continue to enrich its mRNA product pipeline, and promote the R&D and commercialization of related products, further providing immunological protection for human health.



# CanSinoBIO's Protein Structure Design and VLP Assembly Technology Platform Achieved Positive Progress in 2023

CanSinoBIO has always paid close attention to the needs of disease prevention in countries and regions around the world, actively participated in the World Health Organization's Global Polio Eradication Initiative (GPEI). We are committed to developing a recombinant poliomyelitis vaccine based on virus-like particle (VLP) technology route through our own protein structure design and VLP assembly technology. The GPEI believes that VLP poliomyelitis vaccine is a potential ideal poliomyelitis vaccine product in post-polio era. The non-infectious VLP poliomyelitis vaccine is also recommended by the World Health Organization as one of the preferred vaccines for the future eradication of polio.

In October 2023, the Company and the Bill & Melinda Gates Foundation signed a project funding agreement on the recombinant polio vaccine. According to the agreement, the Foundation will provide project funding to CanSinoBIO to support the development of the Company's recombinant polio vaccine based on virus-like particles.

In January 2024, CanSinoBIO launched phase I clinical trial for the recombinant polio vaccine in Australia and the first trial patient case was formally enrolled, aiming to evaluate its safety and preliminary immunogenicity.

## **Product Assurance**

The Company's business activities are primarily focused on five commercialized products, including a range of vaccines and vaccine candidates for such diseases such as meningitis, pneumonia, DPT, novel coronavirus (COVID-19), Ebola, herpes zoster and tuberculosis. This aligns with the mission of developing, manufacturing, and commercializing high-quality, innovative and cost-effective vaccines.



Our product pipeline aims at the huge global market in short supply strategically, including the following three categories:



Globally innovative vaccines to serve unmet medical needs worldwide



First-in-class in China, domestic world-class vaccines with higher quality developed to replace the current primary vaccines in China



Pre-clinical vaccine candidates

In 2023, while promoting the commercialization of tetravalent meningococcal conjugate vaccine, the Company established a comprehensive layout with all-round efforts to actively advance the clinical trials and research progresses of such vaccine candidates as PCV13*i*, PBPV, Tdcp adolescent and adult, DTcP infant, recombinant zoster vaccine, recombinant poliomyelitis vaccine, absorbed tetanus vaccine and Hib vaccine. In the future, we will continue to deeply boost vaccine R&D, facilitate the development of all vaccine candidate projects, and establish new technology platforms based on future development trends and directions to expand R&D technologies fields and expertise.



# **Progress of CanSinoBIO Vaccine Candidates**

Vaccine Pipeline	Pre-clinical Development	Clinical Trial Application (CTA)	Phase I	Clinical Trials  Phase II	Phase III	Application and Approval
Group ACYW135 Meningococcal Polysaccharide Conjugate Vaccine (CRM197) Menhycia®		Filase	Tilase II	Filase III		
Groups A and C Meningococcal Polysaccharide Conjugate Vaccine (CRM197) Menphecia®						
Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5 Vector) Convidecia®						
Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5 Vector) for Inhalation Convidecia Air® an						
Ad5-EBOV						
PCV13i (CRM197/TT Double Vector)						
DTcP Infant						
Group ACYW135 Meningococcal Polysaccharide Conjugate Vaccine (CRM197) Indication Expansion						
Group ACYW135 Meningococcal Polysaccharide Conjugate Vaccine (CRM197) Indication Expansion						
Absorbed Tetanus Vaccine	Absorbed Tetanus Vaccine					
COVID-19 mRNA Vaccine			$\bigcirc$			
TB Booster		$\bigcirc$				
PBPV						
Tdcp Adolescent and Adult						
Recombinant Zoster Vaccine (Adenovirus Vector)					Globally Innovative	
Recombinant Poliomyelitis Vaccine						First-in-class in China
Haemophilus Influenzae Type b Conjugate Vaccine, Freeze-dried						
CS-2023 Meningococcal Vaccine					Pre-clinical	
CS-2028 Multivalent Pneumococcal Conjugate Vaccine	0					
CS-2201 DTcP Components Combined Vaccine						



Conjugate Vaccine

Menhycia<sup>®</sup>, a tetravalent meningococcal conjugate vaccine independently developed by CanSinoBIO, has filled the gap in the protection of YW135 for infants and young children under 2 in China, and opened up a new pattern of prevention of infantile meningitis in China. The vaccine covers a wider range of age group and serum groups, thus providing more comprehensive and high-quality protection for children aged 3 months to 3 years (47 months). As of December 2023, the advanced tetravalent meningococcal conjugate vaccine Menhycia® was available in approximately 30 provinces, autonomous regions, and municipalities across the country. For the MCV4 clinical trial for population aged 4 to 6, we have officially completed the enrollment of subjects, and are following up and collecting samples as planned. We have officially launched the extended clinical trial of MCV4 for indication in population aged 18 to 59, and the first trial patient case has been formally enrolled.

Conjugate Vaccine

Menphecia®, a bivalent meningococcal conjugate vaccine, is used to prevent Neisseria meningococcal serum group A and C infections. Using CRM197 as a carrier protein, it improves the quality and safety of vaccines. Relying on the polysaccharide-protein conjugate technology platform of CanSinoBIO, this conjugate vaccine effectively overcomes the deficiencies of polysaccharide vaccines, further enhancing immune response and bringing stronger immune protection.

PCV13i

PCV13i adopts the covalent binding method of polysaccharide antigen and protein carrier. After the polysaccharide antigen is linked to the carrier protein, the polysaccharide can be converted into a T-dependent antigen, which can not only induce a high level of specific antibody in infants under 2 years old, but also produce memory B cells and generate immunological memory. In addition, the Company adopts a dual-carrier technology, which can reduce the immunosuppression caused by co-injection with other vaccines. In terms of production technology, the Company adopts a safer production process, using animal-free fermentation medium to reduce the risk of animal-derived biological factors and avoid the toxic residue caused by phenol purification method in traditional purification process. In February 2024, the application for domestic drug registration and marketing license of PCV13i has been accepted by the NMPA. The Company expects to obtain approval for the new drug application of PCV13i in 2025.

**PBPV** 

PBPV is a globally innovative pneumococcal vaccine candidate. Currently, the 23-valent pneumococcal polysaccharide vaccine (PPV23) and the 13-valent pneumococcal conjugate vaccine (PCV13) are both serotype products, which can only effectively protect against up to 23 serotypes of pneumococcus, but cannot provide protection against all 90 serotypes of pneumococcus. The Company's PBPV vaccine candidate is not a serotype vaccine. It uses antigens based on pneumococcal surface protein A (PspA, a highly conserved protein expressed by almost all pneumococci), which contains four proteins. It is expected to have a larger coverage in the elderly than current PPV23 and PCV13 products. In March 2023. Phase Ib clinical trial for PBPV has been launched. and on-site clinical work has been completed so far.

DTcP Infant

The DTcP infant developed by the Company is a DPT components combined vaccine. Each pertussis antigen can be purified separately and formulated at a determined ratio to ensure product quality consistency between batches and more stable product quality. As of the reporting date, there is no DPT components combined vaccine developed by domestic vaccine manufacturers approved for marketing, and the DTcP infant developed by the Company will substitute imported products. What's more, the development of this vaccine is also the foundation for further R&D of Tdcp adolescent and adult vaccine and CS-2201 DPT components combined vaccine. The DPT components combined vaccine product portfolio will further enrich the Company's product strategy and enhance its core competitiveness. In August 2023. Phase III clinical trial for the vaccine was officially launched, and as of now, all subjects have been enrolled.



#### **Tdcp Adolescent and Adult**

The Tdcp adolescent and adult is suitable for people aged 6 and above, and is a DPT booster vaccine for adolescents and adults. If successfully approved for marketing, this product will fill the gap in the domestic market. Currently, the manufacturing process of co-purified DPT vaccine sold in China adopts the process of pertussis antigen co-purification. The Tdcp adolescent and adult is a DPT components combined vaccine, and each pertussis antigen can be purified separately and prepared with definite proportion to ensure product quality consistency between batches and more stable product quality. As of the reporting date, Phase I clinical trial for the vaccine has been officially launched and all subject enrollments have been completed.

#### Recombinant Zoster Vaccine

The recombinant zoster vaccine adopts the chimp adenovirus vector technology route. Adenovirus vector vaccines can stimulate both cellular immunity and humoral immunity. The clinical trial product is manufactured using internationally advanced technology as well as quality control and control systems conforming to international standards. The whole vaccine manufacturing process uses no animal-derived ingredients, improving the safety of the final product. Preclinical research data show that this product can stimulate both humoral immunity and cellular immunity. There is no significant difference between humoral immunity and zoster vaccine Shingrix (a recombinant subunit adjuvant vaccine developed by a multinational pharmaceutical company), while the level of systemic cellular immunity is significantly higher than that of Shingrix vaccine. It is expected that this product will have good protective efficacy. In November 2023, the vaccine began Phase I clinical trials in Canada and the first trial patient case was formally enrolled.

#### Recombinant Poliomyelitis Vaccine

The recombinant poliomyelitis vaccine is based on protein structure design and VLP assembly technology development; it is expected to contribute to the control and even eradication of poliomyelitis across the globe. The recombinant poliomyelitis vaccine is a non-infectious VLP poliomyelitis vaccine that does not rely on live virus during production and is expected to have good safety and immunogenicity. Unlike the currently available attenuated and inactivated poliomyelitis vaccines, the non-infectious VLP poliomyelitis vaccine is recommended by the World Health Organization as one of the preferred vaccines for the future eradication of poliomyelitis. In October 2023, the Bill & Melinda Gates Foundation agreed to provide a total of more than USD 2 million to support the development of the recombinant poliomyelitis vaccine. In order to make the poliomyelitis vaccine widely available and affordable in developing or underdeveloped countries, the Company will ensure timely and widespread dissemination of knowledge and information obtained from the R&D project, and provide affordable development results to the most needed populations in developing countries at an affordable price. In January 2024, Phase I clinical trial for the vaccine has been launched in Australia and the first trial patient case has been formally enrolled.

#### Absorbed Tetanus Vaccine

The vaccine is fermented using animal-free culture media, which provides higher safety. The industrial-scale process has been established and the process is stable. This vaccine is mainly used for the prevention of non-neonatal tetanus, which will further enrich the Company's product pipeline and enhance its core competitiveness. In March 2024, the Company has officially launched Phase III clinical trial for absorbed tetanus vaccine.

# **Expand Global Presence**

Leveraging its professional capabilities and market opportunities, CanSinoBIO actively enhances technological exchanges and R&D, collaborates with local enterprises in various countries, promotes the global layout for vaccine products and technologies, creates a more robust and sustainable business model, and achieve collaborative development across the globe. We are willing to work together with global innovators as well as upstream and downstream enterprises to promote international cooperation in vaccines, build a shared community of health for humanity and contribute to an epidemic-free world. In 2023, the Group signed a project funding agreement with the Bill & Melinda Gates Foundation on the recombinant poliomyelitis vaccine. We will conduct the development of recombinant poliomyelitis vaccine based on virus-like particles under the funding of the foundation.



# The Company presented at JPMorgan Healthcare Conference

In January 2023, the 41st Annual JPMorgan Healthcare Conference was held in the United States, and more than 8,000 people from various sectors, including medical biology, financial investment, academic research, and government organizations, were invited to participate. Dr. Xuefeng Yu, Chairman of CanSinoBIO, was invited to attend the conference and delivered a keynote speech on the Company's important achievements. He also introduced the Company's vaccine R&D and production progress to global professionals, shared the latest industry trends, promoted cross-border cooperation and knowledge exchange, and actively promoted the global innovation strategy.



Dr. Xuefeng Yu Delivering a Speech at the Conference



# The Company Signed China-Indonesia Tripartite Cooperation Agreement

In September 2023, Kementerian Kesehatan Republik Indonesia (Ministry of Health of the Republic of Indonesia) and Tsinghua University co-sponsored the China—Indonesia Vaccine and Gene Seminar. CanSinoBIO, Pharmaceutical and Medical Devices Resiliency under Kementerian Kesehatan Republik Indonesia (Ministry of Health of the Republic of Indonesia), Tsinghua University and Etana (an Indonesia biopharmaceutical company) signed memorandum of understanding on vaccine evaluation platform, each party agreed to cooperate on the technological R&D of inhaled tuberculosis vaccine, providing more impetus for building the community with a shared future in China and Indonesia.



CanSinoBIO at the China—Indonesia Cooperation
Agreement Signing Ceremony



The Company Signed Cooperation Framework
Agreement on Innovative Vaccine with Saudi
Arabia's Pharmaceutical Manufacturing Company

In December 2023, CanSinoBIO signed a vaccine cooperation framework agreement with Saudi Arabia's pharmaceutical manufacturing company SPIMACO. Both parties will cooperate in the commercialization of innovative vaccines, joint R&D and clinical research, and localized production, with focus on promoting CanSinoBIO's tetravalent meningococcal conjugate vaccine Menhycia® into the Saudi Arabian and other Middle East and North African (MENA) markets. The tetravalent meningococcal conjugate vaccine has been included in the Saudi Arabian childhood immunization program. This cooperation will help provide a durable and highly safe quadrivalent meningococcal vaccine for Saudi Arabia, and effectively meet the local children's immunization needs.



CanSinoBIO at the Innovative Vaccine Cooperation Agreement Signing Ceremony with Saudi Arabian



agreement with the Bill &

Melinda Gates Foundation on the recombinant poliomyelitis vaccine,

the Foundation will provide a total of more than USD 2 million to support the development of the recombinant poliomyelitis vaccine and improve global vaccine accessibility, with expansion in Africa,

South America, North America, Europe, Asia and Oceania.

# 01

# Responsible Governance

CanSinoBIO upholds the business philosophy of compliance and transparency, abides by the highest standards of business ethics and integrity, gradually improves internal risk control and audit management systems as well as related measures, with the aim to ensure its own business development meets compliance requirements, and achieves robust corporate growth.



# **Corporate Governance**

CanSinoBIO vigorously complies with relevant national and industry laws and regulations, continuously improves its corporate governance system, builds a comprehensive governance system, optimizes decision-making mechanisms, and enhances corporate efficiency.

# **Governance Structure**

CanSinoBIO strictly complies with laws, regulations, and regulatory requirements such as the *Company Law of the PRC*, the *Securities Law of the PRC*, the *Listing Rules of HKEX*, and the *Stock Listing Rules of the Science and Technology Innovation Board of the Shanghai Stock Exchange*. CanSinoBIO has established the Board and the Board of Supervisors in line with actual development of the Company, elects Directors and Supervisors in strict accordance with the recruitment procedures specified, and has formed a corporate governance structure and operating mechanism where shareholders' meetings, the Board, and the Board of Supervisors play key roles. The Company has established a scientific, efficient, stable and long-term decision-making and supervision mechanism to ensure a standardised operation and protect the interests of shareholders.

The Board consists of committees, including the Audit Committee, the Remuneration and Assessment Committee, and the Nomination Committee. Each committee provides opinions and suggestions on major management topics, evaluates and improves various management systems and business operation processes, and supervises the implementation of resolutions to ensure the efficient operation of the Board. As of the end of the reporting period, the 2nd Board of CanSinoBIO had consisted of 5 executive directors, 3 non-executive directors, and 4 independent non-executive directors<sup>1</sup>. During the reporting period, the Board held seven meetings where all members were present.



<sup>&</sup>lt;sup>1</sup> On February 21, 2024, the Company held elections for the third Board of Directors. The third Board comprises 3 executive directors, 1 non-executive director, and 3 independent non-executive directors.





# Corporate Governance Structure

Controlling shareholders and listed companies



- The Company's controlling shareholders strictly regulate shareholders' behavior, legally exercise shareholder rights, and support the Company's business development.
- The Company has an independent business, personnel, assets, institutions, and finance of controlling shareholders, who do not bypass shareholder meetings to intervene in the Company's decisionmaking and operating activities.

Shareholders and general meeting



• As the highest authority of the Company, the general meeting is composed of all shareholders who have the right to appoint and dismiss directors, determine business policies and investment plans, and make decisions on major issues of the Company. We strictly regulate the procedure for convening and voting at general meetings, to ensure all shareholders, especially minority shareholders, have equal access to legitimate rights and interests in the decision-making process.

Directors and the Board



- The Company continues to reinforce the role of external directors as a think tank for supervision and decision-making, fully listening to outside directors' useful suggestions on industry development and risk control, effectively improving the scientific decision-making of the Board.
- We require the Board to hold at least 4 regular meetings every year.

Supervisors and Board of **Supervisors** 



 The Board of Supervisors conscientiously performs its supervisory responsibilities, conducts compliant supervision on the Company's business development, related party transactions, management of raised funds, and promotes the Company's health, stable and sustainable development.



During the reporting period, CanSinoBIO held Board Meetings, Meetings of the Audit Committee,

Meeting of the Remuneration and Assessment Committee,  $\frac{1}{3}$  General Meetings of Shareholders, and



Meetings of Board of Supervisors.

# **Board Composition**

The Board of CanSinoBIO attaches great importance to the diversity and equality of operation and decision-making. In order to ensure board diversity, the Company has formulated and implemented the *Board Member Diversity Policy*. When replacing board members, the Company comprehensively considers diversified factors such as gender, age, cultural and educational background, race, professional experiences, skills, knowledge and service terms. The Company's Board members boast balanced expertise and skill sets, including (but not limited to) healthcare, financial accounting, business administration, and risk management. The Board members persist in improving expertise to provide more effective decision-making for the Company. As of the end of the reporting period, the 2nd Board of CanSinoBIO had consisted of twelve directors<sup>2</sup>, including three women directors, accounting for 25%; the 3rd Board of CanSinoBIO consists of seven directors, including two women directors, accounting for 28.57%.

#### Cultural and Director type Gender Age educational background 5 executive directors 9 men 8 hold a master's degree 3 aged 40 to 49 The 3 non- executive directors 3 women 4 hold a doctoral degree 4 aged 50 to 59 2nd Board 5 aged 60 to 69 4 independent non- executive directors 3 executive directors 5 hold a master's degree 1 aged 40 to 49 5 men The 2 aged 50 to 59 1 non- executive director 2 women 2 hold a doctoral degree 3rd Board 3 independent 4 aged 60 to 69 non- executive directors

## <sup>2</sup> Information regarding the Board of Directors members can be found in the 2023 Annual Report as well as in announcements and communications.

# **Investor Communication**

CanSinoBIO is committed to disclosing information truthfully, accurately, completely, timely, and effectively, and we actively state our business philosophy, corporate culture and operation achievements. The Company actively communicates with investors and creates open and transparent communication opportunities with investors through various channels such as investor mailboxes, investor hotlines, general meetings, and performance briefings. In 2023, we participated in multiple investor exchange meetings and issued the *Investor Relations Activity Record Form* on a regular basis, establishing a long-term and good mutual trust relationship with investors while maintaining long-term, stable, high-frequency communication with various investors across the globe.



# **Leadership of Party Building**

2023 marked the first year to fully implement the spirit of the 20th CPC National Congress, and also a crucial year for CanSinoBIO to create a brand-new outlook of high-quality development. Adhering to the principle of high-quality leadership of the Party building to guide the Company's innovative development, we forge ahead with enterprise and fortitude, making contribution to building a strong nation of science and technology. We organised online and offline training programs and all Party members participated in the training, effectively promoting the wide dissemination and intensive practice of the spirit of the 20th CPC National Congress in primary Party organizations. In addition, we carried out various Party building activities to strengthen the construction of primary Party organizations, giving full play to the leadership of the Party building.



#### Party Lecture of Xibaipo Spirit

On October 15, 2023, the Party Committee of CanSinoBIO invited the deputy director of Xibaipo Memorial Hall to present an in-depth explanation of the Xibaipo Spirit to 81 Party members. This Party lecture inspired Party members to integrate the hard-working spirit of revolutionary predecessors into their daily work, promote learning through practice, and practice through work, thus promoting the realization of corporate strategic goals and new progress in work. The Party lecture emphasized the importance of real practice and diligent work, calling on all Party members to take on their responsibilities and create new atmosphere and new achievements for the Company.



Party Lecture on Xibaipo Spirit



#### Revolutionary Tour to Xibaipo and Xiong'an

On October 14 and 15, 2023, CanSinoBIO organised all Party members to Xibaipo and Xiong'an New Area to conduct Party day activities under the theme of "Gathering All Strength to Undertake the Mission, Forging Ahead on A New Journey", and deeply study the spirit of the 20th National Congress and the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. By visiting the Xibaipo Memorial Hall and Xiong'an New Area, Party members deeply learned the Party's glorious history and the "Two Musts" and the "Exams-taking" spirit, and enhanced their revolutionary beliefs and fighting spirit. All Party members stated that they will continue to play a pioneering and exemplary role and contribute to the innovative development of the enterprise.



Revolutionary Tour to Xibaipo and Xiong'an



# "Jointly Building Interconnected Aggregation Power, Working in Alignment with the Party" Party Building Activity

In 2023, CanSinoBIO and the China Society for Drug Regulation jointly organised a joint Party building activity under the theme of strengthening Party building and deepening the study on Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, focusing on promoting innovative development of enterprises and implementing the spirit of the 20th CPC National Congress. During the event, leaders of CanSinoBIO introduced the Company's innovation strategy and its work on high-quality development under the leadership of the Party building. They also conducted in-depth exchanges with leaders of the China Society for Drug Regulation on improving the quality and efficiency of vaccine industry, and jointly looked forward to the future of the industry. After the event, both parties visited the Memorial to Zhou Enlai and Deng Yingchao in Tianjin to deepen their understanding and study of the revolutionary spirit.





Joint Party Building Activity

# **Risk Control and Internal Audit**

CanSinoBIO strengthens the compliant operation management, improves the compliant operation level, maintains the bottom line of compliance value, and provides strong support for stable and long-term development.

# **Compliance Management**

CanSinoBIO complies with relevant laws and regulations such as the Company Law of the People's Republic of China and has updated the CanSinoBIO Compliance Manual and the Procedures for Acceptance of Government Investigation in 2023. The Company has clarified its compliance commitments and responsibilities, full-process compliance management system, compliance management measures and accountability mechanism to ensure its legal compliance operations. In addition, the Company requires suppliers and business partners to comply with the Company's compliance policies, standards and prohibitions during business transactions. In terms of human genetic resources management, the Company issued the Human Genetic Resources Management System to ensure respect for and proper utilization of human genetic resources and prevent experiment ethics risks in scientific research and medical fields.

The Company has been consistently improving its compliance control structure. The Risk and Internal Control Management Committee, as the top internal management and decision-making body for compliance management, is responsible for overall coordination of the Group's compliance risk control and comprehensive management and leadership of the Group's internal governance. Along with that, the Company has further improved the compliance BP work mechanism this year, strengthened the compliance BP management in procurement and engineering, and prevented risks in key areas. During the reporting period, CanSino Biologics maintained the bottom line of compliance value and did not have any violations.

# CanSinoBIO's Compliance Management Structure and Duties





Governance

Level

#### Risk and Internal Control Management Committee

- The top internal management and decisionmaking body for compliance management
- Approve the Company's compliance management plans, systems and procedures, provide decision-making on major compliance risks and prepare solutions
- Promote the improvement of compliance management systems and culture building
- Approve annual compliance work reports and compliance performance evaluation results



#### Management Level

#### Legal and Compliance Department

- Leading and centralized management department for compliance work
- Organise, coordinate, promote and supervise the operation of compliance management systems
- Formulate the Company's compliance objectives, identify compliance obligations and transform to executable polices or procedures
- · Regularly identify, analyze and evaluate compliance risks
- Monitor and quantify performance, issue annual compliance report

#### Internal Audit Department

- Supervise and evaluate the performance of compliance management work within Departments/Centers
- Conduct regular specialized audits, propose internal control suggestions

## **Head of Departments/Centers**



Executive Level

- As the first person responsible for the management within Departments/Centers, ensure the planned execution of compliance work
- Organise compliance risks identification, early warming and response
- Assist the Legal and Compliance Department in formulating compliance standards

#### All employees

 Voluntarily report compliance risks, implement compliance requirements

# **Internal Control and Internal Audit**

To ensure effective compliance governance, the Company has established a risk control and audit supervision system of "beforehand prevention, in-process control, and afterwards supervision". The Company has continuously improved various internal control management systems such as the *Internal Control Manual* and the *Internal Audit Management System*, clarifying the Company's internal control management principles, processes, requirements, risks, key control points, and corresponding control measures, covering key areas such as sales, procurement, manufacturing, fixed asset management, R&D project management, investments in external parties or in subsidiaries, fund management, and engineering project management, to ensure

the smooth implementation of internal control. In addition, the internal control team holds risk management workshops and utilizes a combination of case analysis and group discussion to collaboratively analyze and identify potential risks across various departments. This process aims to develop targeted control measures to ensure more effective and operable management practices.

In 2023, the internal control team and audit team integrated and cooperated to analyze issues requiring rectification as identified in audit, reviewed and created about 200 internal control management documents throughout the year. Furthermore, the audit team conducted internal control

and specialized audits on import and export management, subsidiary management, information system authority management, fund management, EHS management, marketing expense compliance management, fixed asset management as well as other business segments. Before the audit was conducted, they fully evaluated the business risks, clarified audit priorities and ideas. They conducted audits according to plan and ideas, checked the implementation of system, and identified possible business risks. They issued the *Internal Audit Report* upon completion. In addition, they also proposed rectification suggestions and continued the follow-up. During the reporting period, key rectification items have been completed.



# **Compliance Training**

Improvement of compliance awareness among employees and partners is a key step for the Company to establish and improve its internal control systems and enhance risk management capabilities. To strengthen the management of compliance training, the Company issued the *Compliance Training Procedures* and organised compliance training sessions.

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

In 2023, the Company organised an array of highly targeted and practical specialized training sessions for highrisk business areas, including topics such as commercial operation compliance, clinical work compliance, external promotion material compliance, disease education com-

pliance, marketing compliance, non-compliance reporting investigation, and supplier due diligence. For employees of key positions, the Company tailored compliance courses including the Commercial Secrets Protection Compliance Training, the Personal Information Protection, the Non-compliance Reporting Investigation, the International Business Partner Compliance Management. For new recruits, the Company has made internal control and risk management a compulsory course, and all new employees must complete corresponding course training. In 2023, the Company held a total of 45 training sessions related to risk management and compliance internal control.

Highlights of Compliance Risk Control Training in 2023



100% of the Board members and management

99% of employees accepted training

Average training hours for Board members reached

2 hours

Average training hours for employees<sup>3</sup> reached

26.02 hours



# Activities in the "Compliance Promotion Month"

In October 2023, the Company held the 2nd "Compliance Promotion Month", including 2 on-site activities, 6 professional trainings, and 4 practice workshops. During the event, compliance concept was promoted by such means as compliance commitment wall, looping of promotional videos, distribution of brochures, as well as posters and roll-up banners. In addition, the Company elected "Compliance Culture Promoters" to raise employees' awareness of compliance participation. This event comprehensively covered key issues such as anti-corruption, anti-bribery, and anti-fraud, but also discussed multiple professional areas such as conflicts of interest, personal information protection, and data compliance, effectively deepening the Company's compliance culture.





Photos of the "Compliance Promotion Month"

<sup>&</sup>lt;sup>3</sup> The scope of the data includes senior, mid-level management, and junior employees.

# **Business Ethics**

CanSinoBIO strictly complies with laws and regulations such as the Anti-Monopoly Law of the People's Republic of China, the Anti-Unfair Competition Law of the People's Republic of China, and the Anti-Money Laundering Law of the People's Republic of China. We always adhere to high-standard business ethics and are opposed to bribery acts and unfair competition in all forms. To further standardise our own business activities and ethics, the Company has improved and developed the Anti-Corruption and Fraud Management System, the System of Conflicts of Interest, and the Employee Receiving Gift Management Process, to standardise the employees' actions in business activities and performance of duties.

In 2023, the Company successfully passed the certifications of ISO 37301 compliance management system and ISO 37001 anti-bribery management system. In April 2023, the Company launched the certifications of ISO 37301 compliance management system and ISO 37001 anti-bribery management system. In early July, the first stage—documentation review was conducted. In early August, the on-site audit by the British Standards Institution (BSI) was completed, and all rectification works were completed according to the BSI's rectification recommendations in mid-August. On October 27, 2023, the Company obtained ISO 37301 compliance management system certificate issued by BSI, and on December 12, the Company obtained ISO 37001 anti-bribery management system certificate issued by BSI. Both certifications fully demonstrate the rationality of the Company's scientific compliance management system and management approaches such as risk thinking, process control, and PDCA cycle, and reflect the Company's conformance to the compliance management system and response to anti-bribery trade requirements, thus effectively reducing organizational operating costs, enhancing customer confidence, and establishing a clean and honest image for the Company.

To supervise and ensure the effective implementation of anti-corruption and business ethics policies and regulations, the Company conducts regular special inspections and audits on the regulation and implementation of system. In 2023, the Company conducted audits on special compliance policies and procedures such as the *Compliance Handbook*, the *Compliance Management System*, the *Anti-Corruption and Fraud Management System*, and the *Punishment Regulations for Dereliction of Duty in Anti-Bribery and Anti-Fraud Management*. In addition, the Company conducted corresponding reviews on the effective implementation and maintenance of business ethics systems. Through interviews with responsible persons and relevant personnel of the audited departments, as well as reviews on documents and records, no non-compliance cases were reported in 2023.

CanSinoBIO encourages reporting/whistleblowing and complaints against corruption and violations of business ethics, and has established various channels such as telephone, email, and letter. The Company attaches great importance to the protection of whistleblowers and has established a strict whistleblower protection mechanism covering the *Non-compliance Complaint and Reporting Internal Investigation Procedures*. The Company strictly ensures the information security of real-name whistleblowers, prevents information leakage, and fully protects the legitimate rights and interests of whistleblowers. Furthermore, to encourage employees, suppliers, and business partners to participate in supervision, the Company has formulated the *Reward Process for Non-Compliance Reporting*, stipulating that whistleblowers will be granted with corresponding rewards upon offering valuable information substantiated to be true.



Main reporting channels:

Reporting hotline: 022-58213600-6218

Reporting website: compliance@cansinotech.com

Mailing Address: Rongsheng Building, 185 South Street, West District, Tianjin Economic and Technological Development Zone

ISO 37301 and ISO 37001 Certificates

For external suppliers and partners, the Company actively promotes integrity cooperation and deepens the awareness of integrity and self-discipline in both parties. The Company requires all business partners to complete the *Compliance Questionnaire*, covering key compliance areas such as conflicts of interest and related transactions. In addition, the Company conducts strict compliance due diligence on partners to ensure their legal establishment, valid existence, and conformance to legal compliance principles in business activities. The Company boasts a sound compliance management system. During supplier entry, the Company requires each supplier to sign the *Confidentiality Agreement* and the *Integrity Agreement*, and all suppliers have signed the documents.

The Company provides anti-corruption, anti-bribery, and anti-fraud training for directors, supervisors, senior management, and all other employees at least once a year, and organise key groups to participate in internal business ethics training within the industry. In 2023, the Company launched three compulsory training courses for all employees through online training system platform, including the *Conflicts of Interest Training*, the *Compliance Manual Training*, and the *Anti-Corruption and Anti-Fraud Compliance Training*. In addition, the Company organised an online mandatory training course titled "Anti-Corruption, Anti-Fraud and Anti-Commercial Bribery Management Responsibilities" for middle managers and above, aiming to further enhance the responsibility awareness and proficiency of management in combating corruption, fraud, and commercial bribery. In 2023, the anti-corruption training hours for board members of the Company averaged 3 hours/person, about 2.70 hours/person for management, and about 4.69 hours/person for employees.

Highlights in Business Ethics of CanSinoBIO in 2023

2023 Environmental, Social and Governance & Corporate Social Responsibility Report



Signing rate of employee commitment letters on anti-corruption and business ethics codes of conduct

100%

Signing rate of *Confidentiality Agreement* and the *Integrity Agreement* by suppliers reached

100%

Completion rate of business partner compliance questionnaires reached

100%

NO lawsuits or cases related

to corruption, violation of business ethics, or unfair competition

In 2023, the Company participated in multiple exchange and training activities on business ethics and compliance internal control organised by internal and external organisations in the industry, including:

- The Skills and Practice of Confrontational Interview organised by Hill & Associates in February 2023
- The Compliance Risk Control for the Third-party Business Partners organised by Atal International in February 2023; and the Interpretation of the Trend of Centralized Rectification of Corruption in the Medical and Health Field + Closed-door Discussion on Response to Joint Inspection in August
- The China Global Compliance Summit in March 2023
- The Enterprise Financial Decision-making and Internal Risk Control organised by Welegal School of Law and Busines in July 2023
- The Compliance Investigation and Practical Response to Commercial Bribery and Other Behaviors in Supplier Management organised by China Legal in October 2023
- The Fraud Inspection in Supply Chain Procurement, Compliance in Import and Export Supply Chain and Customs Trade Supervision organised by ACI-COUN-SEL in December 2023



# Responsible Procurement

CanSinoBIO is committed to integrating the concept of sustainable development into supply chain management, proposing ESG management initiatives for suppliers, and working with suppliers to build a transparent and win-win responsible supply chain.

## **Supply Chain Management**

CanSinoBIO strictly complies with laws and regulations such as the Civil Code of the People's Republic of China, and the Bidding Law of the People's Republic of China, develops and improves management measures such as the Supplier Management Regulations, the Supplier Performance Management Procedures, and the Management Procedures for Supplier Blocking, Unblocking and Withdrawal, to clarify supplier management requirements, standards and processes, and conducts categorized and prioritized management as well as full lifecycle management for suppliers.



## **Supplier Management Process**



Entry

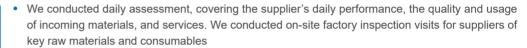


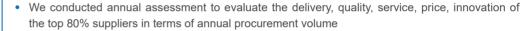
- In 2023, we developed the Management Procedures for Supplier Development and Registration and the Management Procedures for Supplier Access, to standardise the process of new supplier access
- We conducted access evaluation from three major elements including commercial capacity, technical capacity, and qualifications, with the scope of review covering supplier legal operation qualification documents, quality management system certificates, as well as other dimensions





Performance







Prioritized management



- Based on the supply risk and expenditure ratio, suppliers are classified into outstanding suppliers, excellent suppliers, good suppliers, rectification suppliers and unqualified suppliers for differentiated management
- Based on the results of performance evaluation, suppliers are classified into A, B, C, D, and E levels, for a prioritized management system

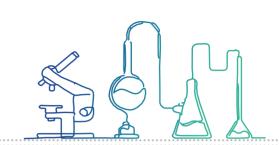


Blocking and withdrawal



- Suppliers with Level-D rating in the assessment must complete rectification within three months
  upon reception of the rectification notice. If the rectification is ineffective, the supplier will be
  blocked
- We will cancel the qualification of suppliers with serious quality issues or in violation of the Supplier Code of Conduct

The Company conducts regular assessments of suppliers to evaluate their quality, service, timely delivery rate, environmental health and safety (EHS), innovative behavior, and other indicators. We require that suppliers of key and important materials be assessed at least once a year, while other suppliers must be assessed at least once every two years. Based on the annual supplier assessment score, we classify the suppliers into qualified Level A, Level B, Level C, Level D and unqualified suppliers (Level E), and we develop follow-up cooperation strategies based on supplier classification and assessment scores.



Supplier Classification Cooperation Strategy



**Outstanding supplier** 

A (90~100)

Strengthen preliminary R&D cooperation, sign annual framework agreement

**Good supplier** 

C (70~79)

Normal procurement

Unqualified supplier

E (Less than 60)

Cancel qualification

**Excellent supplier** 

B (80~89)

Increase procurement volume, sign annual framework agreement

**Rectification supplier** 

D (60~69)

Provide assistance and require submission of rectification reports, reduce procurement volume; cancel cooperation in case of failure to complete rectification within specified time limit



#### CanSinoBIO Suppliers in 2023







Suppliers from Hong Kong, Macao and Taiwan

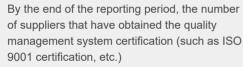
acao and Taiwan



Overseas suppliers

71

## Supplier Management System Certification in 2023



150

By the end of the reporting period, the number of suppliers that have obtained the environmental management system certification (such as ISO 14001 certification, ISO 14064 certification, etc.)

55

By the end of the reporting period, the number of suppliers that have obtained the health and safety management system certification (such as ISO 45001 certification, etc.)

55



## **Supply Chain Risk Management**

CanSinoBIO always implements quality management throughout the entire supply chain. We have signed detailed quality agreements with suppliers to clearly define the quality responsibilities and standards of both parties, and ensure that suppliers constantly supply us with high-quality production materials conforming to high standards. To ensure that production material suppliers strictly comply with GMP and related quality standards, we conduct comprehensive and detailed on-site audits on a regular basis, including product manufacturing quality, warehousing compliance, etc. For problems identified during the audit, the Company will propose practicable rectification suggestions to assist suppliers in continuously improving their quality management. In 2023, CanSinoBIO conducted a total of 31 supplier quality audits, including 19 production material suppliers, 1 equipment supplier, and 11 material distributors.

The Company attaches great importance to supply chain risk management, remains a highly vigilant attitude towards supplier risks, conducts prompt predictions and identifications, and develops comprehensive response measures to enhance the resilience and stability of supply chain. We develop accurate production material demand plans and actively coordinate with the suppliers and use departments to ensure smooth communication in all aspects, jointly address and solve potential supply risks. We strictly review the inventory and requisition status of production materials on a regular basis to prevent supply stagnation or failure risks. In 2023, we intensively optimized emergency procurement processes, and simplified approval procedures, to achieve a faster and more efficient supply chain risk response mechanism.

Since 2022, we have joined the Supply Chain Branch of the China Association for Vaccine, and established a full lifecycle supply chain quality risk management system for pharmaceutical products together with our industry partners. In addition, we have built a supplier-customer academic exchange platform to prevent supply chain risks restricting development of the industry.

## **Supplier ESG Management**

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

CanSinoBIO continues to focus on supplier ESG management. The Company is dedicated to creating a green and responsible supply chain and promoting suppliers to implement sustainable development initiatives. The Company incorporates environmental protection, health and safety, and business ethics requirements into the *Supplier Code of Conduct*, prioritizes low-carbon and environmentally friendly products or services, and takes corresponding measures against existing environmental and social risks in supplier operations.

#### Basic requirements

 Require suppliers to sign the Supplier Code of Conduct, with 100% coverage<sup>4</sup>

#### Employee rights and interests requirements

- Require suppliers to comply with laws and regulations related to employee rights protection, oppose child labor and forced labor, and anti-discrimination
- Request suppliers to respect employees' freedom of association and collective bargaining rights
- Require suppliers to prohibit workplace discrimination based on race, gender, age, religion, sexual orientation

#### Business ethics requirements

- Require suppliers to sign the *Integrity Agreement* to prohibit improper benefits and avoid corruption in cooperation
- Require suppliers to establish a fair operation and business environment and prohibit unfair competition
- Require suppliers to sign the Confidentiality Agreement and strictly keep confidential the Company's technical data, intellectual property, and other information

#### Certification requirements

 Under equal conditions, suppliers certified to ISO 9001, ISO 14001, ISO 45001 and OHSAS 18000 will be prioritized

#### Employee benefits, health and safety requirements

- Require suppliers to take measures to prevent work accidents and occupational diseases, to ensure the employees' occupational health and safety
- Require suppliers to conduct health and safety training for employees to control health and safety hazards at the source
- Require suppliers to offer all statutory benefits and paid holidays, as well as other rights

#### Environmental protection requirements

- Promote the concept of green and low-carbon in procurement activities, fully consider environmental protection, resource conservation, and recycling economy
- Advocate suppliers to reduce GHG emissions, avoid the use of harmful raw materials, and reduce adverse impacts on natural resources

The Company proactively supports localized procurement strategies, prioritizes local enterprises at supplier development stage, and promotes close integration and co-development with local economy. In 2023, we participated in the "Coordinated Development of Pharmaceutical Industry in Beijing-Tianjin-Hebei Region" event hosted by the Ministry of Industry and Information Technology, and focused on key areas such as biomedicine, chemical drugs, and medical devices, providing strong impetus into the booming of local pharmaceutical industry. In 2023, we signed a total of 156 framework agreements on local procurement.

We are committed to growing and developing together with our suppliers in line with the philosophy of "openness, cooperation, equality and mutual benefit". The Company provides training for all suppliers on a regular basis to assist them in improving ESG performance and overall management capabilities, and jointly promote the development of a sustainable supply chain.



## The Company Organised Supplier ESG Training

In 2023, the Company organised ESG compliance training for key suppliers. During the training, we elaborated the Company's commitment and philosophy of sustainable development, covering topics such as business ethics, information security and confidentiality agreements, as well as social responsibility and sustainable development. Beyond that, the Company clearly communicated to suppliers the principle of remaining "zero tolerance" attitude towards business misconduct, and informed them in detail of noncompliance reporting channels. Through this training, the Company hoped to work with suppliers to raise their ESG awareness and build a transparent and honest business environment together.

<sup>&</sup>lt;sup>4</sup> The data excludes collaborating entities such as universities, industry associations, and disease control agencies.

## **Ethic Protection**

CanSinoBIO fully considers ethics and moral factors in clinical trials and animal experiments, conscientiously protects the rights and safety of clinical trial subjects, deeply concerns about the welfare of laboratory animals and takes measures to reduce discomfort of animal, and respects ethical well-being while promoting scientific research.

## **Clinical Trial Ethics**

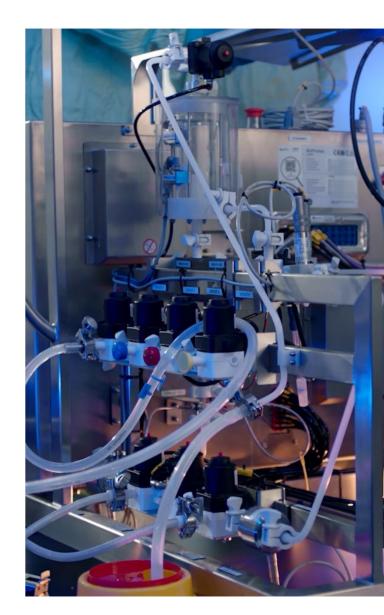
CanSinoBIO strictly complies with internationally recognised principles and related ethical requirements represented by the World Medical Association's *Declaration of Helsinki*, as well as the *Good Clinical Practice for Drug Trials (GCP)* and other laws and regulations, and conducts various tasks as required by the Ethics Committee to ensure the compliance of clinical trials. In 2023, the Company kept abreast of newly published ethics-related national guidelines, responded to and followed relevant requirements of the *Trial Guideline on the Review of Science and Technology Ethics* issued by the Ministry of Science & Technology, and submitted documentations required for review.

Ethics-related Training and Exchange Activities in 2023

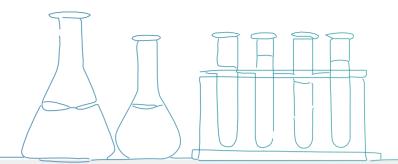
We studied the newly issued guiding documents by such means as seminars and staff training, and integrated the latest requirements into relevant processes of clinical trials. Furthermore, we participated in external training and exchange activities to learn cutting-edge clinical ethics knowledge in the industry.

We organised regulatory learning activities among all clinical employees to give them an insight into the *Ethical Review Measures of Life Science and Medical Research Involving Humans* issued by the National Health Commission in February 2023.

We participated in the "Clinical Trials Quality Management of Vaccine Academic Seminars" organised by the China Association for Vaccines to understand quality control points in various aspects such as clinical trial ethics review, recruitment, informed consent, and enrollment follow-up.



CanSinoBIO regards the protection of human subjects' rights and safety as the primary ethical consideration in clinical trials, fully respects the subjects' right to know, autonomy, and privacy, proactively prevents and handles Serious Adverse Event (SAE) during clinical trials. The Company establishes a transparent and trusting research relationship with human subjects, and protects the human subjects' rights throughout the whole process up to the pre-, mid-, and post-conduct of clinical trials, thus ensuring the ethicality and compliance of clinical trials.



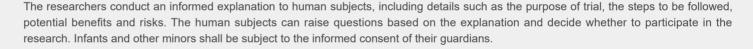


Protection of Autonomy and Right to Know

Before the clinical trial, CanSinoBIO provides human subjects the opportunity for two-way communication with the research team, thus ensuring their autonomy in participating in the trial.



Organise Informed Explanation





Sign Form of Informed Consent We sign the *Form of Informed Consent* approved by the Ethics Committee with each human participant, including the overview of clinical trial, the purpose of trial, the steps to be followed, the obligations of human subjects, the experimental items involved in clinical trial, the risks or inconveniences that may be caused to the human subjects due to the trial, the expected benefits of trial and the possibility of nobenefit, compensation and treatment available in case of any damage related to the trial, the compensation for human subjects, the limited confidentiality of personal data, and the principle of voluntary participation.



The Company assures human subjects will not be discriminated against or face retaliation for rejecting or withdrawing from the trial at any phase, and protects their medical treatment and rights.



2023 Environmental, Social and Governance & Corporate Social Responsibility Report

CanSinoBIO attaches great importance to the protection of human subject privacy, complies with privacy-related laws and regulations and ethics standards, and adopts strict protection measures in the collection, storage, and utilization of human subject personal information. The Company assigns research codes to participants in the trial, uses codes instead of human subject information in trial documents, and publishes clinical trial results while maintaining confidentiality of human subject identity information, with the aim to minimize the risk of human subject privacy leakage.





Control of
Adverse Event



Prevention of Adverse Event

CanSinoBIO strictly controls the risks of vaccine clinical trials, comprehensively manages the SAE information of all clinical trial projects, closely monitors and warns of safety signals identified during clinical trials, systematically sorts out SAEs and issues risk warnings; the Company is committed to identifying and preventing improper operations to reduce clinical trial risks. In 2023, the Company established a designated, tailor-made and case-specific management mechanism for SAE during clinical trials, to conduct targeted whole-process observation and follow-up tracking of SAEs, and keep case-specific records and report in accordance with laws and regulations.



Handling of Adverse Event To properly respond to SAEs, the Company and researchers will jointly ensure smooth green channel for medical treatment of SAEs in vaccine clinical trials. Professional medical staff will implement rapid response measures based on the actual situation of the human subjects to protect the safety and health of human subjects. In addition, we purchase commercial insurance for each clinical trial and provide financial guarantees according to the insurance contract to ensure that the subjects can receive timely and professional medical services. In 2023, we purchased "clinical trial liability insurance" for 11 clinical projects in which enrollment has been launched, providing insurance coverage for expected and unexpected adverse events to all enrolled human subjects.

## **Animal Experiment Ethics**

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

CanSinoBIO strictly complies with the Laboratory Animal—Requirements of Environment and Housing Facilities (GB 14925-2010), and has formulated regulations such as the Regulations for the Administration of Affairs Concerning Laboratory Animals, the Feed and Padding Management Regulations, the Management Regulations for Employee Dress Changing in Animal Quarters, the Standard Operating Procedures for Environmental Management of Animal Quarters, the Standard Operating Procedures for Goods in and out of Animal Quarters, and the Standard Operating Procedures for Quarantine of Laboratory Animals, to standardise the management in terms of the purchase, acceptance, reception, use, feeding and corpse disposal of laboratory animals. In 2023, we updated the License for the Use of Laboratory Animals to ensure animal experiments while observing ethical principles and respecting animal rights and interests.

CanSinoBIO ensures scientific and ethical experiments through internal and external supervision. The Company has established an Ethics Committee for Laboratory Animals to be responsible for reviewing the *Laboratory Animal Welfare and Ethics Review Application* and ensuring that experimental participants comply with the welfare and ethics of laboratory animal. Relevant trial projects shall only be carried out upon submission and approval of application. Furthermore, we accept external supervisions, and perform annual inspections of animal quarters to ensure that animal breeding environment and equipment use conform to regulations and requirements, and assure compliance with animal welfare and ethics





License for the Use of Laboratory Animals

## CanSinoBIO's Animal Welfare Measures in 2023



- Optimize experiment methods, reduce animal quantity, and develop alternative experiment methods
- Reduce number of animals raised in quarters, purchase new cages/boxes to improve living environment of laboratory animals
- Optimize alarm management process for environmental facilities, handle alarms in a timely manner, to ensure laboratory animals are always in a suitable environment

## **Information Security**

CanSinoBIO attaches great importance to information security and customer privacy protection, and avoids information and privacy leakage in operations. To effectively strengthen information security and privacy protection, the Company persists in improving its management and supervision system, strengthening data security assurance, raising risk awareness among employees, and comprehensively ensuring user information security.

CanSinoBIO strictly abides by laws and regulations such as the Data Security Law of the People's Republic of China and the Personal Information Protection Law of the People's Republic of China, and has developed an array of standardise management documents such as the Information Security Management Regulations, the Network and Communication Security Management Regulations, the System Security Management Regulations, the Operation Security Management Regulations, the Mobile Storage Device Security Management Regulations, and the IT Room Management Regulations, to clarify standards for information processing principles and procedures, data transmission, and personal information subject rights, thus effectively integrating information security and privacy protection requirements and measures into the whole business process.

The Company consistently improves its information security organizational system—a five-tier structure consisting of "decision-making tier—management tier—executive tier—employees and partners—supervision tier". During specific implementation, organization can also grant existing security teams and other relevant departments with information security functions, or seek third-party professional teams to conduct work, with the aim to ensure that the security prevention and control responsibilities are implemented at all tiers and information security risks are avoided in a timely manner.

#### Information Security Management Structure



- Formulate information security management targets and strategies
- making Tier Coordinate and make decision on major information security incidents

#### Management Tier

 Combined with compliance requirements and business needs, formulate an overall information security plan to standardise the operating mechanism at all tier, and ensure smooth information security work

## **Executive Tier**

- Ensure the specific implementation of information security work, such as permission management, threat detection
- · Evaluate and improve information security risk

## **Employees** and Partners

- Comply with and implement the Company's information security requirements
- Report the Company's information security risks in a timely manner, assist the management team in improving protective capabilities

#### Supervision Tier

- Supervise the implementation of information security system and the effectiveness of information security management
- Monitor and audit information security risks

CanSinoBIO comprehensively considers information security and privacy protection risk prevention and control, strictly follows the principle of "advance prevention, intermediate detection, and afterwards disposal", and comprehensively implements information security protection. The Company conducts internal information security inspections twice a year to ensure that all potential information security risks are promptly rectified. The Company successfully passed the three-level information system security certification of the People's Republic of China, providing safer and more reliable services for customers and partners.

The Company fully respects and protects the rights and interests of users' personal information, and only collects personal information based on their full knowledge and authorization in line with the principle of "minimum authorization". During data usage, we record and keep the operation process in real time, and take de-identification measures to protect personal information security. Furthermore, we strictly abide by national laws and regulations and industry regulations, set the necessary minimum storage period, and regularly clean up, delete and destroy data stored longer than the specified storage period.

To comprehensively enhance the employees' vigilance and response capabilities in information security and privacy protection, CanSinoBIO has launched a wide range of information security awareness promotion and skills training program for all employees, covering key areas such as basic information security knowledge, network security protection strategies, and anti-phishing skills. In 2023, a total of 1,698 employees participated in CanSinoBIO's online information security and privacy protection training, with 96% of employees scored above 95 on the post-course questions.



In 2023, the Company reported **NO** cases related to customer privacy security or leak of information.

# 03

# **Product Responsibility**

The safety of vaccines is fundamental to maintaining social stability. CanSinoBIO is keenly aware that the ultimate goal of medical affairs and pharmacovigilance work is to provide safe vaccines to the public. In line with the vision of "Innovation for a Safer World", CanSinoBIO strictly enforces product quality control and monitoring, and enhances product competitiveness and innovation through continuous R&D. We have established a highly-efficient customer service system to promptly respond to customer needs, gradually enhance customer satisfaction, consistently improve product responsibility management and protect customers' rights and interests.



## **Product Quality**

To ensure the safety and efficacy of vaccines, CanSinoBIO has established a full-process quality system to ensure that each batch of vaccines meets high-standard quality requirements through strict quality identification and certification. We have established a pharmacovigilance and product recall mechanism, and nurture a corporate quality culture, dedicated to maintaining and improving product quality.

## **Quality Management System**

CanSinoBIO complies with domestic and international laws and regulations and regulatory requirements such as the *Good Manufacture Practice (GMP)*, the *WHO Good Manufacture Practices for Pharmaceutical Products*, the *EU GMP*, and those released by FDA<sup>5</sup>, and adopts ICH<sup>6</sup> as the guiding principle for the establishment of quality system. In addition, we conduct refined quality management with reference to the *2020 Edition of the Pharmacopoeia of the PRC*, the *European Pharmacopoeia (10.0 Edition)* and other national pharmacopoeias. We have developed the *Quality Manual* to consistently optimize the quality system and ensure product safety and efficacy. In *2023*, the Company formulated and implemented the *Management Procedures for Acquisition and Implementation of Domestic and Foreign New Regulations*, and completed 19 gap analysis tasks based on the new regulatory gap analysis process, laying a solid foundation for the optimization of subsequent quality management work.

Since clinical quality is the basic safeguard for clinical trials, the Company follows the laws and regulations such as the *Good Clinical Practice for Drug Trials (GCP)*, the *Guidelines for Quality Control of Vaccine Clinical Trials (Tentative)*, strictly controls quality at clinical operation stage, continuously improves and updates the standard operating procedures (SOP) for clinical trials. In 2023, CanSinoBIO developed a total of 22 new SOPs and upgraded 31 SOPs of clinical operation quality system, thus ensuring that the latest operational standards are followed in clinical trial design, ethics and human genetic declaration, data management and statistical analysis, safety information management, etc., and improving the overall quality of clinical trials.



<sup>&</sup>lt;sup>5</sup> The Food and Drug Administration.

<sup>&</sup>lt;sup>6</sup> The International Council for Harmonization of Technical Requirements for Pharmaceuticals for Human Use.

## Full Process Management of Product Quality

The Company persists in developing a full-process quality management system covering R&D, manufacturing and release, and has set clear management requirements for employees and facilities involved in each link, including specific management objects such as suppliers, laboratories, facilities, manufacturing workshops, etc., aiming to ensure vaccine quality from the source, reducing potential safety risks, and provide reliable immune protection for the public.

Full Process Management of Product Quality





### **Material Quality Management**

- System building: conduct scientific and reasonable sampling of raw materials, excipients and packaging materials in accordance with international sampling inspection principles, with standardised sampling quantity; establish reinspection standards for material management within storage period to ensure the safety and effectiveness of materials in the process of use;
- Audit: create profiles of material suppliers, and conduct regular audits of key materials suppliers, involving written audits, on-site audits, remote audits and third-party audits;
- Risk control: conduct consumables risk evaluation in production, release part of the consumables to reduce the quality risks in use.

## \_\&

## **Production Process Control**

- System building: establish a product process management system to standardise the production process
  quality management in terms of employee management, equipment and facilities management, process control
  and environmental monitoring, develop relevant management SOPs, conduct daily monitoring on production
  environment to ensure the controllability of production;
- Responsibility implementation: prepare instructions to departments and positions, implement safe production and quality responsibility into annual performance targets, and conduct performance assessments;
- Information-based management: make use of the online control production process system to realize intelligent
  controls of workshop manufacturing, transparency in production processes, digital control of manufacturing
  equipment and integration of production information, thus guaranteeing the stability and data integrity of the
  vaccine production process;
- Technology optimization: in 2023, we optimized the medium formulation and stock solution preparation scale for meningitis products in a scientific way to reduce quality risks due to operation errors while improving production capacity;
- Environment control: follow EU, WHO, FDA as well as the Guide to Good Manufacturing Practice for Medical Products and other laws and regulations on sterility assurance, implement sterile control measures during production; use EMS environmental control system with alarm functions to monitor, record and save on-site environment data, and facilitate prompt response to abnormalities.



## **Laboratory Management**

- Responsibility implementation: appoint each laboratory personnel as the person in charge of safety to enable
  the laboratory to meet the requirements of the management of chemical and biological safety protection levels;
- Process management: conduct full lifecycle sample management involving sampling, reception, inspection, retention and destruction, standardise instruments management, and establish management processes for laboratory instruments and equipment, standard substances, samples and inspections, thus ensuring the accuracy of trials;
- Information-based management: establish laboratory information systems such as LIMS and CDS, thus ensuring the compliance of trials.



## **Distribution, Storage and Transportation Management**

- System building: establish a distribution quality management system, to improve the quality management
  procedures involving initial orders from the customers, vaccine entry and exit, storage, transport, cold
  chain verification and complaints. In 2023, we developed 3 distribution quality management and procedural
  documents, and conducted 28 updates on management regulation documents such as the Regulations on
  Logistics Service Providers Management;
- Logistics network construction: establish consigned storage sub-warehouses in many regions, and work
  with mainline transporters to enhance distribution capacities and increase distribution efficiency. In 2023, we
  completed 10 regional vaccine warehouses in Jiangxi, Guangxi, Shaanxi and northwest across the nation,
  forming a nationwide shipping logistics network; all logistics providers have completed quality audits and filing,
  with 100% qualification audit pass rate;
- Transport validation: carry out domestic and international transport validation related to cell, toxic strain, stock solutions and finished products;
- GMP audit: in 2023, the Company accepted 7 internal and external inspections and audits, including inspections
  from the NMPA and the Tianjin Medical Products Administration, and internal audits and customers' audits, with
  no serious and major deficiencies found in vaccine storage, transportation;
- Training: organise skill and legal training for employees engaged in storage and transportation, conduct monthly
  quality assessment and business training for logistics carriers. In 2023, we completed 9 training sessions for all
  carriers, with no major deviations and quality events found in storage and transportation.



## **Release Management**

- Procedures for product release: three stages including the release of intermediate product/stock solution, release of finished products after self-inspection, and commercial release of finished products after passing the inspection of the national statutory drug inspection authority, with a focus on production process control and release status of materials;
- Procedures for the release of raw, excipients and packaging materials: inspect raw materials, excipients, and
  packaging materials in direct contact with pharmaceutical products, and issue the inspection report, release the
  qualified materials. In 2023, we developed the evaluation and release strategy for production consumables to
  ensure material traceability.



## **Technical Feasibility Assessment**

- Daily monitoring: conduct daily environmental monitoring of the workshop to ensure that the production environment during manufacturing operations meets requirements. In 2023, we conducted environmental monitoring of clean areas in alignment with domestic and international laws, regulations and guidelines, and carried out potential pollution risk identification;
- Information-based management: provide data for the production conditions of supplies in clinical trials, offer data for technology transfer and marketing registration and application, and publish the technical feasibility report.



### Lot Release Management

- Release application: submit the lot release application to the China National Institute for Food and Drug Control after the first stage of release of each batch of products;
- Product inspection: send samples and product information sampled by the Provincial Drug Administration to the designated testing agency for acceptance and testing, the products may only be marketed upon the second stage of release after being confirmed to be qualified.

To ensure vaccine quality and safety during production and distribution, CanSinoBIO has formulated internal systems such as the *Deviation Management Regulations* and the *Change Management Regulations* to conduct deviation investigation and identification, assessment and classification, correction and prevention, and deviation closure. The Company also regularly reviews the implementation of deviation, strictly controls deviation events such as process equipment abnormality and operation errors, and terminates the production or release of the batches that may affect product quality, with the aim to prevent the risk of reduced vaccine efficacy or adverse reactions due to errors.

## **Quality Inspection and Authentication**

To ensure product quality and safety, CanSinoBIO strictly follows national standards to conduct full lifecycle quality testing on all batches of our products, and carry out precautionary testing on products that may have quality or safety issues, covering all products including raw materials and excipients, packaging materials, intermediate products, semi-finished products, and finished products.

CanSinoBIO's Full Lifecycle Quality Testing on Products





We carry out real-time product testing data monitoring and trend analysis, clarify the process of handling atypical events for Out of Specification (OOS) as well as Out of Trend (OOT) events that are inconsistency with expected results, further investigate the atypical trend conforming to quality standards, and truly record the occurrence and handling of unanticipated events. We conduct product stability investigations according to laws and regulations, and carry out sample retention and regular observation for each batch of marketed products, to ensure the product quality within validity conforms to registration standards. In 2023, CanSinoBIO constantly improves the *Management Procedures for OOS/OOT/AD*, and enhances the comprehensiveness and timeliness of atypical events management by expanding the scope of application and optimising investigation procedures and processes.

## Processing Flow of AD or OOS and OOT Events



- In the event of atypical data (AD) in the laboratory, the experimenter shall report it to the department head and Out of Specification (OOS) administrator within 24 hours and leave the site as it is:
- The head of departments should identify the category and treatment process of AD, to determine whether it is a laboratory error through a series of steps such as basic investigations and hypotheses experiments;
- If it is caused by laboratory error, laboratory investigation must be conducted;
- If it is caused by product quality rather than laboratory error, it must be transferred to relevant production and warehouse for follow-up investigations;
- An overall review of all incidents must be conducted every year, follow up on the investigation progress, and classify the root causes.

Beyond that, CanSinoBIO continuously strengthens quality and safety awareness, conducts quality-related internal and external supervision and audits, and prevents potential risks in a proactive way. In 2023, CanSinoBIO promoted quality supervision and audit in an orderly manner, no serious deficiencies were found; all rectification activities were carried out as planned to ensure the standardised operation of quality system.

## CanSinoBIO's Quality Supervision and Audit Activities in 2023

#### Internal

6 internal quality audits, including quality management, production management, quality control, product release, material management, facilities and equipment management, validation management, data reliability management, etc.

15 clinical trial audits involving 7 clinical products and 9 clinical trial projects at home and abroad. The scope of audit included clinical trial site qualifications, researcher qualifications and training, drug management, sample management, and implementation of clinical trial process

5 audits on clinical PV suppliers and clinical monitoring service providers

#### **External**

- 1 vaccine inspection by the National Center for Vaccine Inspection
- 2 GMP compliance inspections by the Tianjin Pharmaceutical and Cosmetic Review and Inspection Center
- 3 production license inspections



## CanSinoBIO Conducted Clinical Trial Audits

In August 2023, we conducted our first online audit of overseas clinical projects to ensure the quality of clinical trials, covering informed consent, selection and enrollment, vaccination visits, blood sampling visits, sample management, drug management, and other links of clinical trial process. The audit was conducted in a flexible way through document upload systems, video communication, and presentation. The problems identified during the audit have been rectified on-site.



Audit Meeting for Overseas Clinical Project



## **Pharmacovigilance**

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

CanSinoBIO complies with laws and regulations such as the Law of the PRC on Pharmaceutical Administration, the Law of the PRC on Vaccine Administration, the Administrative Measures for the Reporting and Monitoring of Adverse Drug Reactions, and the Pharmacovigilance Quality Management Regulation, and formulated internal pharmacovigilance system documents such as the Constitution of the Drug Safety Committee, the Pharmacovigilance Management System, the Regulation for Pharmacovigilance Management during Clinical Trials, we have established a full lifecycle pharmacovigilance management system covering non-clinical stage, clinical stage and post-marketing stage.

In 2023, we optimized and updated our staff organization structure, related documents and processes, including the handling process of individual case safety report (ICSR), updated 32 post-marketing pharmacovigilance documents such as the Handling Process for Suspected Abnormal Reactions to Vaccination, and established 5 guidelines such as the Coding Instructions for Suspected Abnormal Reactions to Vaccination to provide reference standards for pharmacovigilance activities. Besides, we developed 8 clinical pharmacovigilance SOPs such as the Management and Operating Procedures for Drug Safety Risk during Clinical Trial, including drug safety risk management during clinical trials, safety signal management, clinical safety working group, risk control measures evaluation, etc., to continuously improve the pharmacovigilance system, provide safe and effective products to the public, and create long-term social value.

Pharmacovigilance Management





**Organizational Structure** 

We have established a Drug Safety Committee to handle pharmacovigilance-related major issues. A regular meeting is held every six months to conduct targeted discussions based on nature of the incident to ensure the prevention and control of safety incidents. In 2023, CanSinoBlO's Drug Safety Committee held a total of six meetings, three of which were regular meetings regarding work summaries and action plans, and the other three were temporary meetings for handling of emergencies.



**Quality Objectives** 

We have established six quality objectives for pharmacovigilance to standardise the operational process of pharmacovigilance work, provide guidance for pharmacovigilance work, and help improve the efficiency of pharmacovigilance management. In 2023, we updated and improved the quality objectives in the ICSR and regular safety update reports.



**Pharmacovigilance System** 

We have installed a global pharmacovigilance system—Deep-PV covering all data sources, to conduct real-time monitoring of data, assure efficient collection, evaluation, and reporting of drug safety information, integrate refined management into the whole process of pharmacovigilance work, help promptly understand the medication and potential risks, and control risks, thus solidifying barrier for public health and safety. Beyond that, we take advanced measures to protect privacy and sensitive information in pharmacovigilance system, and applied such means as access control, permission assignment, audit trail, authorization changes, e-signatures to ensure data security and protect the system against cybersecurity threats.

The Company conducts pharmacovigilance-related internal audits and external inspections, to identify and rectify potential risks and vulnerabilities, and ensure the compliance and efficient operation of pharmacovigilance system. In 2023, CanSinoBIO conducted an internal audit on its pharmacovigilance system and accepted special inspections from the Tianjin Medical Products Administration and the NMPA. We have completed all rectification works, and persist in improving the safety and effectiveness of pharmacovigilance system, protecting the rights and interests of vaccinators.

In July 2023, CanSinoBIO **passed** the special inspection of the NMPA on pharmacovigilance. This was our first time to receive national inspection, and our pharmacovigilance work was highly recognized by the inspection group of the NMPA, highlighting the leading position of the Company's pharmacovigilance system in vaccines.

Furthermore, CanSinoBIO organises comprehensive internal and external pharmacovigilance training sessions actively, to ensure that the products strictly comply with relevant standards and procedures in their full lifecycle, and improve the pharmacovigilance capabilities of ourselves and our partners through knowledge training, thus protecting the health and safety of the public.

#### In 2023

- We organised online training on basic knowledge of pharmacovigilance for all employees through the E-Learning system;
- We organised specialized internal training on pharmacovigilance, and participated in external pharmacovigilance training organized by institutes for advanced study and industry organizations, covering regulations, SOPs, safety data, safety risk management, etc.;
- We organised online training on basic knowledge of pharmacovigilance for all marketing employees of our partners, with the aim to ensure accurate and effective communication of product safety information.



## **Product Recall**

CanSinoBIO has established internal systems such as the *Management Procedures for Non-conforming Products* and the *Procedures for the Management of the Vaccine Traceability System*, prioritizes the safety of the public, traces the origin and destination of products, conducts necessary recall and elimination activities in a timely manner, with the aim to strict prevent potential risks. In 2023, the Company improved the *Recall Management Procedures for Marketed Products*, updated definitions of medical product recall and potential hazards, the time limit of recall work, the investigation and evaluation of potential hazard, as well as recall notice, strengthened post-marketing supervision, in a bid to protect consumers' rights and interests.

In 2023, CanSinoBIO reported **no** actual product recall.

2023 Environmental, Social and Governance & Corporate Social Responsibility Report



When the product is found to cause potential safety concerns or quality problems, the Quality Assurance Department analyses and assesses the necessity of recall

If the assessment result indicates that the product might be recalled, the Company convenes relevant departments to set up an investigation team and assess the potential safety risks of the product

.....

After the recall decisions are made, the Distribution Quality Department drafts the recall plan, and the Distribution Quality Department submit the recall plan and relevant report to the Drug Administration upon approval by the Quality Evaluation Committee

After all products are recalled, the Company shall confirm whether all recalled products are eliminated according to the process

After the recall is completed, the recall team shall write a finished recall report, summarizing and analyzing the completion of the recall during the Company's annual management review

After being approved by the Drug Administration, the products will be recalled at different levels. The business departments are responsible for informing customers of product recalls, the Commercial Supply & Distribution Division is responsible for product transportation and storage after the returns, and the Quality Assurance Department shall regularly submit periodic recall progress reports to the Drug Administration

The Company simulates real product recall scenario to improve the team's emergency response speed and ensure quick and effective action in practice. In 2023, targeting Convidecia Air® and Menhycia®, we simulated two recalls¹, including one domestic recall and one international recall, covering Class I and II recalls. The completion and timeliness rates of the two simulations reached 100%, which effectively proved the effectiveness of the product recall process.



<sup>&</sup>lt;sup>7</sup> Two simulated recall scenarios include discrepancies between product label dosage and actual dosage, as well as failed content testing for relevant indicators.

## **Culture of Quality**

CanSinoBIO highlights the construction of quality culture. and has developed responsibility management systems such as the Responsibilities of Quality Management Person and the Responsibilities of Quality Authorized Person, as well as SOPs for positions such as the Regulations on the Management of Employee GMP Training and the Regulations on the Management of Sampling Personnel Training. We have established a training system consisting of induction training, pre-employment training, extended training, annual GMP training, external training, etc., and conduct quality training for company, departments, and job positions in a multi-dimensional manner. We conduct quality culture education activities through online and offline means, and incorporate safety and quality responsibilities into annual performance assessment. In 2023, we conducted annual quality training for all regular employees and third-party employees<sup>8</sup>. We organised comprehensive training to enhance employees' understanding of the latest quality standards and processes, and conducted regular operational assessments for relevant employees to ensure that they meet job skills and requirements.

In 2023, CanSinoBIO's Quality Assurance Department organised and coordinated all departments under the GMP system to complete the internal training, and collated over

3,000 training files

organised 89 online training sessions

with 100% employee coverage



## The Company Organised Quality Exchange with On-site Group

In 2023, CanSinoBIO invited officers from on-site group to conduct quality training for employees engaged in quality-related works, covering regulations such as the Interpretation of Regulations and Key Inspection Points of Aseptic Simulation Test, the Fundamentals and Inspection Trends of Medium Simulated Filling, and the Analysis of Defective Items in NMPA Inspections over the Years, as well as deviation investigation methods and change principles, etc. In addition, the on-site group regularly conducts on-site inspections, thus providing rectification opinions from regulatory perspective to help the Company further clarify inspection priorities and improve its quality management level.





The On-site Group's Spot Examination



## The Company Organised Process Training Courses for Manufacturing and Technology Employees

In 2023, CanSinoBIO held 9 sessions of process training courses for the Manufacturing and Technology Operation Center, covering reaction tanks, centrifugation, ultrafiltration, chromatography, cleaning and sterilization, lyophilization, visual inspection, air conditioning systems, etc., with the aim to help improve employees' process skills and knowledge, ensure the employees correctly understand the process flow, enhance production efficiency, and reduce quality risks in production, with a total of 566 participants.





Process Training Course for the Manufacturing and Technology Operation Center

<sup>8</sup> It involves over 20 departments with full-time employees and third-party staff related to vaccine production and quality.

## **R&D** Innovation

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

The Company focuses on vaccine technology R&D and innovation, builds a quality team, and optimizes the R&D pipeline system to promote the development of multi-category and high-quality products. We have consistently achieved phased innovative results to help improve public health.

## **R&D Management**

CanSinoBIO promotes the high-standard implementation of R&D and innovation through the synergistic effect of internal controls and external regulations. We strictly follow the laws and regulations at home and abroad and the industry standards such as the Law of the PRC on Pharmaceutical Administration, the Law of the PRC on Vaccine Administration, the Good Manufacturing Practice - Appendix of Drugs for Clinical Experiments (Trial), the Guidelines for Quality Risk Management of Drugs Produced in Common Pipelines and the ICH Q10: Pharmaceutical Quality System and have formulated multiple management systems. In 2023, we revised the Management Procedures for Technical Solutions and Reports During R&D to further ensure the safety and compliance of the R&D process and products. The Company continuously improves the quality management processes during the R&D phase, adheres to scientific principles and technical specifications, and actively accepts the on-site guidance supervision of the Drug Administration.

CanSinoBIO provides guarantees for innovative R&D through its refined project management processes and reserves of talent pool. We have established a project management system to ensure the smooth progress of R&D projects. This system enhances the efficiency of R&D project management through visualised, standardised and process-oriented methods. The system has established an experience base to enhance the transparency of R&D experience and promote the overall process management by building the management modules for project approval, planning, knowledge base, and risk management. In order to ensure the smooth progress and orderly operation of each project, the Company assesses the urgency of work tasks based on project priorities to make reasonable arrangements and guarantees the steady progress of key projects as planned under the guidance of the standardised process. The Company requires each project team to regularly organise project meetings to report technical topics, communicate and discuss issues, solve problems encountered during the R&D process to ensure the smooth progress of R&D work.

In terms of team building,the Company proactively attract R&D personnel with innovative abilities and providing basic technical support for the expansion of R&D innovative pipeline based on master and doctoral talents experienced in biomedicine. As of December 31, 2023, the R&D personnel of the Group accounted for nearly 28.71% of total employees, and approximately 47.09% of R&D personnel had master's degrees or above.



As of December 31, 2023, the R&D personnel of the Group accounted for nearly

28.71% of total employees



approximately

**47.09%** of R&D personnel

had master's degrees or above

## **R&D Progress**

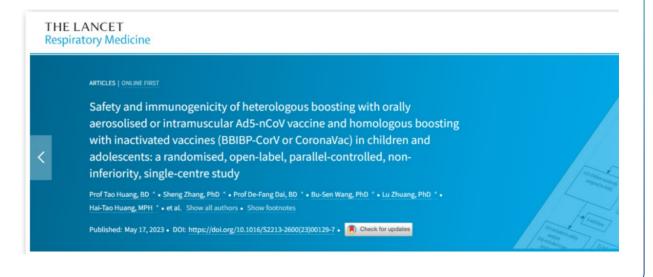
We adhere to market demand as our guiding principle and are committed to meeting the needs for human disease prevention. Our innovative vaccine R&D pipeline now covers a variety of vaccine products in more than ten disease areas, such as meningitis, pneumonia, DPT, COVID-19, Ebola virus disease, herpes zoster, tuberculosis, etc. In 2023, the Company further advanced the development of various vaccines in its pipeline, making positive progress in several areas such as PCV13*i*, PBPV, DTcP infant, Tdcp adolescent and adult, recombinant poliomyelitis vaccine, and recombinant zoster vaccine. In 2023, we invested RMB 0.662 billion in R&D and innovation, including expensed R&D costs and capitalised R&D costs.

We published the interim R&D and innovation outcomes in major journals, and actively participated in domestic and international academic exchanges. In 2023, the Company participated in and published 16 articles related to COVID-19 vaccine clinical trials and 1 article related to the Phase I clinical trial of DTcP vaccines (three components). 1 article related to the R&D and application status of Meningococcal vaccines at home and abroad has been accepted.



Immunization Advantages of Using CanSinoBIO Heterologous Boosting COVID-19 Vaccine for Aerosolised Inhalation by Children and Adolescents Aged Between Six and Seventeen Published in *The Lancet Respiratory Medicine* 

In 2023, CanSinoBIO published the "Safety and immunogenicity of heterologous boosting with orally aerosolised or intramuscular Ad5-nCoV vaccine and homologous boosting with inactivated vaccines (BBIBP-CorV or CoronaVac) in children and adolescents: a randomised, open-label, parallel-controlled, non-inferiority, single-centre study" 9 on the top international medical journal The Lancet Respiratory Medicine. The research results confirm that the heterologous boosting COVID-19 vaccine for inhalation Convidecia Air® for children and adolescents aged between six and seventeen features high immunogenicity and safety. It remains cross-neutralizing against the Omicron variants and induces higher levels of neutralizing antibodies than the inactivated vaccines.



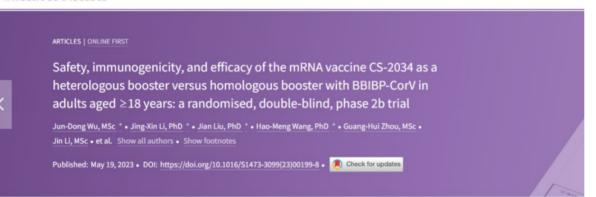
<sup>&</sup>lt;sup>9</sup> Safety and immunogenicity of heterologous boosting with orally aerosolised or intramuscular Ad5-nCoV vaccine and homologous boosting with inactivated vaccines (BBIBP-CorV or CoronaVac) in children and adolescents: a randomised, open-label, parallel-controlled, non-inferiority, single-centre study.

Responsible Governance

## Clinical Data of CanSinoBIO's New Generation of mRNA Vaccine Against the COVID-19 Variants Published in *The Lancet Infectious Diseases*

In 2023, CanSinoBIO published the latest academic paper "Safety, immunogenicity, and efficacy of the mRNA vaccine CS-2034 as a heterologous booster versus homologous booster with BBIBP-CorV in adults aged >=18 years: a randomized, double-blind, phase 2b trial" on the top international medical journal The Lancet Infectious Disease, which was also the first time that The Lancet published the clinical data of China's new generation of mRNA vaccine against the COVID-19 variants. The public data shows that CanSinoBIO's heterologous booster COVID-19 mRNA vaccine features high immunogenicity and safety and is superior to the inactivated vaccine.

## THE LANCET Infectious Diseases



## **Academic Exchanges and Cooperation**

The Company attaches great importance to scientific research cooperation, actively integrates superior resources, and comprehensively strengthens cooperation and exchanges with universities and research institutions to promote technological innovation and industrial development.

### CanSinoBIO's Highlight Projects of Scientific Research Cooperation in 2023



- CanSinoBIO cooperated with Dalian University of Technology to research the physicochemical characterization of aluminium adjuvant.
- CanSinoBIO cooperated with Fudan University to develop the recombinant adenovirus-based tuberculosis vaccine for inhalation.
- CanSinoBIO has established a long-term and stable strategic partnership with Joinn Laboratories (China) Co., Ltd., collaborating in areas such as drug R&D and evaluation, resource sharing (including facilities, instruments, and scientific technology), information sharing, and joint project applications.

<sup>10</sup> Safety, immunogenicity, and efficacy of the mRNA vaccine CS-2034 as a heterologous booster versus homologous booster with BBIBP-CorV in adults aged >=18 years: a randomized, double-blind, phase 2b trial.

In addition, we promote the formation of a positive internal R&D academic atmosphere, strengthen the understanding and communication between each departmental platform, regularly organise internal academic exchange activities, and foster an environment of mutual learning and collective progress among all departments, to facilitate the smooth R&D progress and fully exchange academic knowledge. In 2023, the Company organised a total of 8 academic salon activities, including the "Latest Advances in Mucosal Immunity & Mucosal Vaccine Research" and the "Application of Protein Advanced Structure in Vaccine Quality Control," with approximately 800 participants both online and offline.



The "Latest Advances in Mucosal Immunity & Mucosal Vaccine Research" Activity



## **Intellectual Property Management**

Responsible Governance

CanSinoBIO, in strict accordance with the laws, regulations and standards such as the Patent Law of the PRC, the Copyright Law of the PRC, the Law of the PRC against Unfair Competition and the Corporate Intellectual Property Management Code, formulated multiple internal rules and regulations such as the Intellectual Property Management System, Intellectual Property Contingency Plan, Copyright Management Regulations, Trademark Management Regulations, Patent Management Regulations, and Technical Secrets Management Procedure. The Company established an intellectual property organizational management structure led by the Intellectual Property Management Committee for comprehensively organizing intellectual property-related work.

In 2023, the Company took various measures to further enhance knowledge management, establishing a standardised process for the invention idea collection and management system IDM (Invention Disclosure Memo) and IP-DD (Intellectual Property Due Diligence). The invention idea collection and management system IDM, starting with details, integrates knowledge management into the project management system. Meanwhile, it categorizes invention ideas into patents and technical secrets for separate protection, comprehensively enhancing the Company's knowledge management capabilities. The IP-DD, starting from standardised management, achieves reasonable planning for conducting due diligence, clarifies the objectives and scope of due diligence coverage at different stages of project development, and comprehensively enhances the awareness of intellectual property risk prevention among the Company's project managers and participants.

While protecting its intellectual property, the Company carries out various tasks and ensures not to infringe on the intellectual property of others. The Company organises intellectual property investigation and research for product development projects and intellectual property due diligence for investment to ensure that new product development does not infringe on the intellectual property of others

and defines the management measures for its own innovation achievements. The Company actively promoted the "patent navigation" service, with a total of 27 related tasks carried out in 2023, clarifying the Company's key R&D areas and providing early warning of infringement risks before a project starts to actively prevent actions that may infringe on the rights of others and prepare the responses in advance. In addition, CanSinoBIO conducted 10 global freedom-to-operate (FTO) analysis projects which proposed customized suggestions about business strategy based on patent technology, thus helping the Company effectively reduce the risk of infringement of the patent.

The Company's outstanding practices in intellectual property are widely recognized. In 2023, the Company was awarded the title of National Intellectual Property Advantage Enterprise, completed the designation of national patent-intensive products, and was designated as a pilot for high-quality intellectual property creation. During the reporting period, our employees were employed as the first batch of experts in the Trade Secret Protection Expert Database of the Tianjin Economic-Technological Development Area. As the winner of the 23rd WIPO-CNIPA Award for Chinese Outstanding Patented Invention, the Company was invited to participate in the 2023 China International Patent Fair.



The Company was Invited to Participate in the 2023 China International Patent Fair as the Winner of the 23rd WIPO-CNIPA Award for Chinese Outstanding Patented Invention

CanSinoBIO is engaged in worldwide patent deployment, spanning multiple countries including China, the United States, the United Kingdom, France, Japan, and South Korea. The Company reasonably plans its intellectual property development strategy, formulates a medium and long-term strategic plan for the patent deployment of its mRNA technology, and strategically arranges its intellectual property to provide pioneering conditions for the cultivation of high-value patents. In 2023, the Company obtained a total of 16 authorized patents for its mRNA vaccine technology platform and inhalation vaccine technology platform, and other areas. In addition, the Company has also carried out overseas patent arrangements for adenovirus vaccine, mRNA vaccine and conjugate vaccine platform technology, covering multiple different countries or regions.

## Application and Acquisition of Patents in 2023

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

	New increased number in 2023				Cumulative number as of December 31, 2023			
	Patents applied (number)		Patents granted (number)		Patents applied (number)		Patents granted (number)	
	Domestic	Overseas	Domestic	Overseas	Domestic	Overseas	Domestic	Overseas
Invention patents	47	4	4	2	67	40	34	11
Utility model patents	2	1	9	1	2	/	15	1
Design patents	3	/	/	/	3	/	1	/
Total	52	4	13	3	72	40	50	12

CanSinoBIO encourages all scientific researchers to engage in invention and creation and strives to build a positive atmosphere for innovation. The Company assesses the degree of inventors' technological contributions according to the *Patent and Invention Creation Reward Regulations* and distributes mental incentives or material rewards to them. In 2023, the Company held the selection and awarding ceremony for the first CanSinoBIO Outstanding Patent Award, granting honors and awards to the relevant patent inventors. The Company attaches importance to fostering the awareness of intellectual property among its employees, especially R&D personnel and manufacturing personnel. We organise customized training around the exploration of project and platform intellectual property, the use of patent search systems, and patent infringement, among other topics. Additionally, we offer training on patent and literature search, as well as the practice and application of patent technology navigation, to all employees. In 2023, CanSinoBIO organised 16 intellectual property empowerment training sessions, with a total of 534 participants.



In 2023, CanSinoBIO organised 16 intellectual property empowerment training sessions



with a total of 534 participants

The Company actively undertakes governmental intellectual property projects, gives full play to its advantages in this area, and actively participates in industry co-construction and exchange cooperation in intellectual property protection. In 2023, we attended a total of 7 intellectual property conferences in the pharmaceutical industry, engaging in in-depth discussions with industry experts and peers, and learning about the latest intellectual property laws, regulations, and industry trends.

#### Highlights in Intellectual Property Cooperation in 2023



- Cooperated with Patent Examination Cooperation (Tianjin) Center of the Patent Office, CNIPA to complete two patent navigation projects.
- Undertook the high-quality intellectual property creation project in 2023 and successfully concluded the project.
- Won the title of National Intellectual Property Advantage Enterprise.
- Completed the identification and filing of patentintensive products in the Binhai New Area.
- Completed the identification of patent-intensive products in China.
- Contributed to the establishment of the Tianjin Nucleic Acid Drug Industry Intellectual Property Operation Center and promoting the development of the nucleic acid drug industry cluster.

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

CanSinoBIO listens to customer feedback through diverse communication channels, and properly responds to and handles safety incidents and adverse reactions while actively ensuring compliance of marketing practices. The Company is committed to establishing a relationship of mutual trust with customers and strives to provide customers with reliable products and services with high quality standards.

## **Service Assurance**

We establish smooth and diverse communication channels, actively listen to customers' demands and opinions, respond to product-related questions and consultations from human subjects, their families and healthcare professionals, optimize and improve products based on customer feedback and market conditions, to improve product quality and competitiveness. In 2023, we established a professional customer service team composed of our employees, dedicated to efficiently responding to and quickly resolving customer issues, aiming to provide an exceptional service experience to clients.



CanSinoBIO's hotline for vaccine products and services: 400-922-2099



Email for reporting adverse reaction: cansinoPV@cansinotech.com

To further enhance the quality of service, the Company strictly implements the *Management Procedures for Complaints* of *Marketed Products* covering all products to ensure that complaints are addressed in a timely and effective manner. Additionally, we strictly control access to customer information during the complaint management process to prevent information leakage. In 2023, the Company managed temperature anomalies during product storage and transportation by formulating the *Management Regulations for Customers' Feedback on Temperature Anomalies of Products*. In addition, the Company added the management requirements for the *Annual Complaint Analysis Report*, and proactively adjusted business and service strategies based on customer needs to ensure that customers' feedback was taken seriously and properly handled.

### **Customer Complaint Handling Process**



Provide feedback to the Distribution Quality Department within 24 hours, and the Distribution Quality Department will make urgent response measures within 24 hours upon any complaint

The Quality Assurance Department organises investigation teams to determine whether a complaint event is valid, and the type and level of substantiated complaints

Organise relevant departments to conduct investigations and follow up with corrective actions based on the investigation results

The Distribution Quality Department monitors the investigation progress and communicates the findings back to the customer

Resolve complaints within 30 natural days

In 2023, all complaints from the customers were effectively settled, with a complaint closing rate of

100% for several consecutive years

#### **AEFI Handling Process**

#### Data collection

Collect information on AEFI from different sources and preliminarily analyse and process them

#### Incidents evaluation

Type data in the safety database, and evaluate the anticipation, severity and relevance of the incident

#### Follow-up investigation

Further follow-up or investigation of incidents required by the Company

#### Incident reporting

Send the reports of eligible suspected adverse event following immunization to the county-level center for disease control and prevention where the AEFI<sup>11</sup> takes place within the time limit as provided for by laws and rules

#### Subsequent handling

Handle the cases demanding claims, such as obtaining investigation and diagnosis reports, organizing internal medical assessments, and supporting medical appraisal and insurance compensation

The Company actively protects recipients' rights to health and has purchased compensation insurance for adverse events following immunization of all vaccines marketed as required for compensating the adverse event following the immunization in the Vaccine Administration Law of the PRC. The insurance companies provide the corresponding compensation for any adverse events following the immunization of the Company's vaccines in accordance with standards in the Measures for Compensation for Adverse Event Following Immunization in each province. For an emergency case, the Company promptly assists the government departments and units in properly treating the patients and their families. In 2023, CanSinoBIO conducted training on the prevention of AEFI for its sales team and new employees. This training aimed to help participants understand the compensation process, principles, and conditions, continuously improve the team's professional capabilities, ensure that those patients receive timely and appropriate compensation and care and enhance public trust in the Company's vaccination efforts.

## AEFI Compensation Procedure



Adverse reactions occur after the recipients are vaccinated



Report the reactions to vaccination area or disease control center



Investigation and diagnosis expert group of disease control organization draw conclusions from the evaluation



The Company accepts the conclusion from investigation and diagnosis, and provides corresponding compensation to the recipients through the insurance company

<sup>&</sup>lt;sup>11</sup> Adverse Event Following Immunization.

## **Responsible Marketing**

CanSinoBIO regards legal compliance as the primary prerequisite for carrying out related marketing business activities, strictly abides by the applicable laws, regulations, and industry standards in the regions where the business is conducted and ensures the standardization and stability of marketing management. CanSinoBIO has revised and updated a series of internal marketing compliance management manuals, including the *Manual of China Marketing Operation Standards* and the *Publicity, Promotion, Non-Promotion, and Personal Comment Compliance Management System* in strict accordance with the applicable laws and rules, such as the *Drug Administration Law of the PRC*, the *Vaccine Administration Law of the PRC*, and the *Advertisement Law of the PRC*. Moreover, the Company has formulated and issued the *Code of Sales Conduct*, requiring external partners, including agents, to carry out legal, honest, and science-based marketing promotions.

In 2023, CanSinoBIO had **no** lawsuits related to claims of false marketing.

In 2023, we optimized the marketing compliance management structure and methods by establishing a Commercial Operations Center Management Committee (the "COC Management Committee"). As the chief executive, the Chief Commercial Officer is responsible for formulating and supervising the implementation of responsible marketing strategies, reviewing marketing audit reports, and regularly reporting marketing activities to the Board of Directors. The COC Committee consists of the China Marketing Team and the PMO (Project Management Office) Team to implement the specific marketing tasks. In addition, we have established a marketing compliance management system that covers "pre-control, in-process monitoring, and post-event supervision and inspection", to achieve more efficient and flexible prevention and control of marketing compliance risks.

## Marketing Compliance Control System



- Establish a complete marketing compliance standard and compliance system
- Conduct marketing compliance risk assessment
- · Provide marketing compliance trainings



- Carry out marketing compliance performance management
- Promote close cooperation among all departments and form a joint marketing management mechanism



- Conduct an internal audit of commercial marketing covering the whole Company every year, including content output audit and audit of daily sales code of conduct
- Supervise and check the compliance of marketing activities and the effectiveness of risk control



In addition, to ensure the standardization and compliance of marketing materials, we have formulated the *Management Process for Approval of Promotional and Non-promotional Materials*, defining an "end-to-end" marketing material review and monitoring mechanism. This mechanism conducts a comprehensive and strict review of promotional materials to ensure that every step aligns with the Company's standards and regulatory requirements.

Initiating end

- Make sure that promotional and non-promotional materials<sup>12</sup> meet the requirements of internal policies and standards, ensure the integrity, accuracy and objectivity of cited data, and guarantee the appropriateness, accuracy, completeness and traceability of references
- Regularly carry out retrospective reviews to ensure that the publicity conforms to the actual situation and industry norms

Legal end

Review the promotional and non-promotional materials from the perspective of laws and compliance

Medical end

- Review the objectivity, scientific nature and accuracy of data and materials from a medical perspective, and ensure that the information of products and projects is clearly reflected
- Ensure the consistency of product information in the materials with the approved package insert

To enhance the responsible marketing awareness of all employees at CanSinoBIO, the Company organises diverse and comprehensive compliance marketing training for all employees and contractors through a combination of online and offline methods. In 2023, we conducted 70 compliance marketing training sessions, including the "Medical Live Streaming Training for the China Sales Division and Alliance Business Division", the "2023 Offline Empowerment for Promotion Pioneers", and the "2023 Sales Training for Convidecia Air®". There were 5,064 participants, with a total of 16,178 training hours and 100% employee coverage.

In 2023, we conducted 70

marketing training sessions

There were 5,064 participants

with a total of 16,178 training hours

with 100% employee coverage

<sup>&</sup>lt;sup>12</sup> "Non-promotional materials" refer to any information about diseases or products used in non-promotional occasions, such as academic conferences, expert advisory committees, and non-promotional exhibition booths.

# 04

# Employee Development

CanSinoBIO firmly believes that talent is the driving force of the Company's development. We provide our employees with competitive salaries and benefits and create an inclusive and safe working environment where individual values are fully respected and unleashed. Meanwhile, the Company offers comprehensive training and career development programs to support employees' professional growth, achieving the common progress of the growth of employees and the development of the Company.



# **Employment Management**

CanSinoBIO places great emphasis on compliance in recruitment and employment, fostering a diverse and equal working environment. We provide fair career opportunities for our employees, ensuring that every individual can showcase their talent and value.



CanSinoBio Won
"Aon's 2023 China Best ESG Employer"

## **Compliant Employment**

CanSinoBIO strictly abides by the relevant laws and regulations such as the Labor Law of the PRC, the Labor Contract Law of the PRC, and the Provisions on Prohibition of Child Labor. We support the United Nations Global Compact and the human rights provisions of the International Labour Organization (ILO). Committed to the principle of compliant employment, we have formulated and implemented internal rules such as the Personnel Recruiting Management System and the Employee Handbook to ensure compliance in recruitment and employment practices, fully protecting employees' rights and interests.

We firmly prohibit any form of child labor and forced labor and have taken a series of measures to prevent such situations. During the recruitment, we not only commission third parties to conduct background investigations on candidates, but also rigorously verify candidates' identity. We require candidates to pledge that all materials provided prior to employment are authentic and valid, and the Company reserves the right to terminate the employment contract at any

time in the event of false information. The Company strictly enforces reward and punishment mechanisms according to internal regulations such as the *Employee Handbook* and the *Instant Reward System*, offering timely rewards and recognition to individuals who excel in their daily work. For employee misconduct, the Company deals with violations according to the severity of the misconduct in a legitimate, reasonable, and empathetic manner. In addition, we have formulated and implemented an *Attendance Management System* to standardise work hours and overtime approval processes, ensuring employees' rest and leave time, and preventing child labor and forced labor at source. During the reporting period, there were no incidents of child labor or forced labor at CanSinoBIO.

In 2023, we were awarded the "Aon's 2023 China Best ESG Employer" by the Aon Group<sup>13</sup> again, demonstrating the outstanding performance of CanSinoBIO in ESG efforts and recognition of the Company's talent development strategy and human resources management.



As of the end of the reporting period, CanSinoBIO had a total of 1,494 employees, with 214 new hires within the year, of which women accounted for 40.19%. Among the total employees, the number of female managements reached 132, accounting for 47.48%, showing a gender-balanced workforce within the Company. Nearly 76.37% of employees hold a bachelor's degree or above, while more than 23.09% of employees hold a master's degree or above. In 2023, our Company's overall employee turnover rate <sup>14</sup> was 13.14%.

<sup>&</sup>lt;sup>13</sup> Aon Group is a global consulting service provider.

<sup>&</sup>lt;sup>14</sup> The statistical calibre of turnover rate only includes employees that left the Company voluntarily.

## CansinoBIO's Employment in 2023<sup>1</sup>





Number of Employee 1.494



Number of new salaried employee(s) this year (including those who joined and left)

214



Labor contract signing rate 100%

#### By gender



Male

735 49.20%

Female

759 50.80%

#### By age



30 below

380 25.44%

30 (inclusive) -50 (exclusive)

1.084 72.55%

50 and above

30 2.01%

## By employment type



Senior managers

2.01%

Middle managers

248 16.60%

Junior employees

1,216 81.39%

## Female management



Middle management-female employees

122

Senior management-female employees

10

## By job type

Managemer	nt personnel 215	14.39%	Quality personnel 190	12.72%
Production	personnel 265	17.74%	Sales personnel 362	24.23%
R&D persor	nnel 429	28.71%	Financial personnel 33	2.21%

## By educational background

Doctorate and above	29	1.9	4%	
Master		316	21.15%	
Undergraduate			796	53.28%
Junior college and below		353	23.63%	

#### By ethnic group

Han			1,415	94.72%
Chinese Minority	61	4.08%		
Foreign employee(s)	18	1.20%		

## By nationality

Chinese			1,476	98.80%
Overseas	18	1.20%		

<sup>&</sup>lt;sup>15</sup> The statistical calibre of employee turnover and turnover rate only include those who voluntarily left the Company.



Turnover rate 16 13.14%



Turnover<sup>16</sup> 226

#### By gender



Male 128 14.83%



Female 98 11.44%

## By age



30 below

88 18.80%

30 (inclusive) -50 (exclusive)

11.22%

137

50 and above

1 3.23%

## By employment type



Junior managers

**212** 14.85%

Middle managers

**13** 4.98%

Senior employees

3.23%

## **Equality, Inclusiveness and Diversity**

CanSinoBIO adheres to principles of fairness, justice, openness, and diversity, and insists on a market-oriented employment mechanism to conduct public recruitment. During talent selection, the Company considers a variety of factors such as the candidate's abilities, technical skills, gender, age, cultural and educational background, race, professional experience, independent thinking capabilities, depth of knowledge, and work experience, in line with the business demands and model model of the Company. We adhere to a merit-based selection principle to ensure that, while respecting employee diversity, suitable talents are selected fairly through objective evaluation criteria. We respect the diversity of employee cultures, strive to create a diverse and inclusive work environment, and will not tolerate any form of discrimination based on nationality, race, place of birth, gender, sexual orientation, economic status, political beliefs, or religion, eliminating employment discrimination. In 2023, CanSinoBIO had a total of 759 female employees, accounting for 50.80% of the workforce; minority and overseas employees totaled 79.

The Company strictly prohibits any form of harassment, including but not limited to physical, mental, verbal, and sexual harassment. We require all employees to respect others and forbid discrimination, insult, offense, abuse, humiliation, intimidation, or hostile behavior for any reason. If harassment, insult, discrimination, or any other misconduct is discovered, employees should immediately suppress such behaviors and report them to the Company. In addition, we have established a sophisticated complaint and reporting mechanism. Employees who suffer harassment can immediately report to the HR Department or their superior. Upon receiving complaints and reports, the Company will handle, investigate and deal with them promptly in accordance with relevant regulations, while strictly protecting the privacy of employees to ensure their rights and interests are not infringed.

## 1

Supporting Local Employment of People with Disabilities

CanSinoBIO actively responds to the *Three-Year Action Plan for Supporting Employment of People with Disabilities (2022-2024)*, and consistently provides job opportunities for people with disabilities. In 2023, the Company provided employment opportunities in public service positions for a total of 17 people with disabilities, helping them secure jobs while also realizing their self-worth.



<sup>&</sup>lt;sup>16</sup> The statistical calibre of turnover rate only includes employees that left the Company voluntarily.

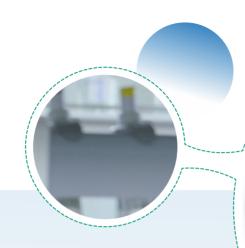
## **Talent Development**

CanSinoBIO values the personal growth of employees. The Company actively builds a comprehensive talent development system, and establishes systematic training plans and clear promotion pathways, offering employees diverse career development opportunities to help them enhance overall capabilities and realize self-worth.



CanSinoBIO believes talent is the cornerstone of the Company's development. The Company cares more about whether talent can align with the Company's behavioral values as we develop internal talent development strategies, emphasize talent team building, and evaluate professional skills and experience of the talent. In 2023, we officially launched the "Leadership Program", conducting comprehensive assessments and review of internal talents to identify high-potential individuals fitting our future leader profile. We also created tailored successor training programs to equip them with essential professional skills and management knowledge.

The Company values academic-industry cooperation consistently expands talent introduction channels and strengthens talent pool. We established a postdoctoral workstation to offer researchers excellent platforms for study and practice. In addition, we collaborated with Nankai University on a joint professional master's degree cultivation program. In 2023, CanSinoBIO attracted 4 people with a doctoral degree and 22 people with a master's degree.



The Company actively supports employees in applying for professional titles and honors. In 2023, we helped 29 employees in applying for professional titles, with 14 achieving senior titles and 8 obtaining intermediate titles. Furthermore, to further motivate professional development and knowledge enhancement, we transformed the special award bonuses for some employees from cash to a talent development fund, reimbursing corresponding amount of training expenses and book purchases.



In 2023, CanSinoBIO attracted

people with a doctoral degree and

22 people with a master's degree



## Leadership Program Phase I

In June 2023, CanSinoBIO officially launched Phase I of the Leadership Program, conducting a series of activities including potential assessments, behavioral event interviews, and talent review meetings to thoroughly evaluate employees' capabilities and potential. Moreover, the project specifically invited employees' direct managers to participate, jointly developing targeted subsequent training and development strategies, thereby comprehensively enhancing the Company's efficiency driven by talent.



## **Graduate Competence Enhancement Seminar**

On July 7, 2023, CanSinoBIO hosted an exchange event for the Class of 2024 graduates at the College of Pharmacy, Nankai University. The event deepened graduates' understanding of enterprise talent demand and job competence requirements. While helping them to enhance their employability, they also deepened understanding of CanSinoBio.







### Postdoctoral Defense Sessions

On December 27, 2023, CanSinoBIO invited an expert team from Tianjin University of Science & Technology to conduct a defense session for postdoctoral researchers concluding their projects and those at the mid-term stage. This initiative promoted communication and collaboration between academia and industry in professional fields and joint talent development. On the same day, leaders from Tianjin University of Science & Technology also presented letters of appointment of external doctoral supervisor to the experts of CansinoBIO.



# **Promotion Channels**

CanSinoBIO has established a comprehensive promotion system and designed specific career advancement channels for different types of employees, offering promotion opportunities to outstanding employees based on fair competition to maintain vitality and promote talent mobility. Moreover, the Company has designed two career development paths (professional channel and management channel), providing employees with diversified growth opportunities. The professional channel aims to cultivate experts with specialized skills, while the management channel aims to nurture employees with management capabilities and leadership.





Professional Development Channel at CanSinoBIO

Management

**Development** 

Channel



Senior Manager

Middle Manager

Junior Manager

Senior Employees

New Employees

(O)

Professional Development Channel Leading Expert

Expert / Senior Expert

Specialist

Experienced

Beginner

In 2023, we upgraded the promotion system for sales, and introduced a four-dimensional evaluation standard covering performance, learning, behavioral values, and capabilities, providing bi-annual promotion opportunities, which has effectively motivated the career development of 17 sales personnel. In addition, we introduced an interview stage for promotions at the level of senior director and above, overseen by a review committee composed of Executive Directors and the HR Department, ensuring rigorous and fair promotion. This initiative not only strengthened the recognition and reward for high-performance employees but also enhanced the quality of new employees in the management team, with a total of five employees at senior director level successfully promoted during the reporting period.

# **Talent Development System**

CanSinoBIO values the sustainable development of employees, improves, and implements the *Training Management System* to regulate aspects such as employee training planning, implementation processes, and effectiveness assessment. In 2023, we established an annual training plan that included 14 compulsories standardised courses and updated 20 general skill courses based on employee feedback. In addition, we adjusted course content according to employee needs and development goals, customizing compulsory and elective courses for different employee groups to make the training more targeted and practical. Furthermore, we encourage and support employees to upgrade their academic qualifications and improve professional skills, further promoting their career development.

We intensified the promotion and incentive of training programs. We sent training posters through emails and WeCom groups, and established a training reward mechanism to raise employees' awareness and encourage them to share training insights on the E-Learning platform, fostering exchanges and communication.



During the reporting period, the average training hours of CanSinoBIO per employees is

**72.70**, covering all full-time employees.



## **New Employee Orientation Plan**



- Offer a series of foundational training for new employees to help them quickly adapt to their jobs, familiarize themselves with regulations, culture, and business processes of the Company;
- Implement a "one-on-one assistance" model, where seasoned employees serve as "mentors" to help new employees
  to understand their responsibilities, master key skills, facilitate rapid growth, and smoothly fit into the team.

#### **First-Line Manager Growth Bootcamp**



Set up a training program covering 11 themes to enhance the communication skills and foundational leadership
abilities of first-line managers. Enable managers to draw from CanSinoBIO's successful experiences and promote the
comprehensive enhancement of management capabilities through online and offline training.

## **COC Leadership Consensus Bootcamp**



- Organise the COC Leadership Consensus Bootcamp to enhance the leadership, business insight, and strategic
  thinking abilities of middle and senior managers within COC. Invite colleagues from other departments that work
  closely with the COC team to participate, deepening mutual understanding, unifying management philosophies, and
  promoting effective cooperation in the future;
- In 2023, a total of 3 COC Leadership Consensus Bootcamps were conducted, with 50 participants in total.

## **External Training and Internal Sharing**



In 2023, a program integrating external training resources for high-potential employees was launched to optimize
resource allocation and ensure that the most suitable employees could access these valuable learning opportunities.
 Employees who have completed the training are required to share what they've learned with colleagues at sharing
sessions in the Company.



## Sharing Session for the 4th China Vaccinology Training

On December 22, 2023, the Company organised an internal sharing session for the 4th China Vaccinology Training, detailing the latest research progress in pneumonia epidemiology, currently marketed and in-development vaccines, and health economics data related to PCV vaccines. This event enhanced employees' understanding and knowledge of vaccines, promoting information exchanges and knowledge sharing across departments.



Internal Sharing Sessions



CanSinoBIO Employee Training in 2023



Average training hours per employee

Responsible Governance

72.70 hours

Percentage of employees trained

100%

Average training hours by employment type



Middle and Senior managers

**79.20** hours

Junior employees 71.21 hours

Percentage of employees trained by employment type



Senior managers 2.01%

Middle managers 16.60%

Junior managers 81.39%

Average training hours by gender



Male employees

**76.33** hours

Female employees 69.18 hours

Percentage of employees trained by gender



Male employees 49.20%

Female employees 50.80%

Responsible Governance

# **Employee Benefits**

CanSinoBIO actively enhances employee welfare by implementing comprehensive salary incentives and performance management, offering a variety of non-salary benefits. We care for our employees, pay attention to the needs of female employees, and consistently improve employee satisfaction through diverse union activities.





# **Salary Incentives and Performance Management**

In the process of enriching and maintaining a highquality talent pool, CanSinoBIO consistently improves fair and equitable salary and benefits system and incentive mechanisms. In 2023, the Company updated the comprehensive salary system and standardised various allowances and benefits. We strengthen a performanceoriented salary strategy to ensure that the efforts and contributions of outstanding employees are reasonably rewarded and recognized, enhancing the attraction and retention of existing talent while also improving the Company's competitiveness in the recruitment market.

In 2023, CanSinoBIO significantly upgraded the employee performance assessment system, introduced a dual-dimensional evaluation method, and developed the RAISE

behavioral values assessment standards tailored to the Company's characteristics for evaluating all employees. Meanwhile, we provide necessary guidance and support for employees' work through the performance evaluation and feedback process, promoting mutual development between employees and the Company.

In addition, the Company further improved the long-term incentive mechanisms in the comprehensive salary system while fully paying for pensions, medical insurance, unemployment insurance, work-related injury insurance, maternity insurance, and housing provident funds for all employees, ensuring their basic welfare needs. These mechanisms aim to attract and retain high-performance and high-potential talents, fully mobilize the enthusiasm

of employees, and effectively align the interests of shareholders, the Company, and the core team. This alignment fosters a shared focus on the Company's long-term development, ensuring shareholder interests while achieving sustainable corporate growth. The Company implemented an employee stock ownership plan in 2023, with participating employees accounting for 9.78% of the total workforce at the end of last month.

# Non-Salary Benefits and Employee Care

CanSinoBIO offers a variety of benefits beyond salary to all employees, focusing on their physical and mental health. We provide all employees with additional commercial insurance and overseas travel insurance and offer flexible commercial insurance benefit plans for their parents, spouses, and children. Meanwhile, we run an Employee Assistance Program (EAP), offering mental health support and counseling services to help employees cope with various life and work challenges. We also offer all employees regular annual health check-ups, ensuring that they can timely understand and maintain their health status.



During the reporting period, the coverage rate for employee health check-ups was

100%





# Free Vaccination for Employees' Children with Menhycia® Vaccine

The Company pays close attention to the health and welfare of employees and their families, offering free Menhycia® meningococcal vaccine for all age-appropriate children of employees. During the reporting period, a total of 60 children of employees have been vaccinated with Menhycia®.



During the reporting period, a total of

60 children of employees have

been vaccinated with Menhycia<sup>®</sup>.

The Company has established a flexible benefits platform themed "Health Care," allowing employees to choose benefits that suit their personal needs and preferences flexibly. In 2023, we expanded the self-selection function of the platform, offering employees a variety of goods including daily necessities, food, beverages, appliances, and furniture, and mailing services to their homes to meet the needs of different employees.

CanSinoBIO provides comprehensive care and support for female employees. We offer all female employees gift packages and flowers on International Women's Day, along with comprehensive maternity benefits including maternity leave, parental leave, maternity insurance, and a maternity bonus to address the concerns of working mothers. In 2023, we gave out maternity bonuses to 60 employees, totaling RMB40,000.



CanSinoBIO's Benefit Platform



Gift Packages and Flowers on International Women's Day

# **Employee Communication and Complaint**

CanSinoBIO values communication and interaction with employees, and has established multi-channel, multi-level communication mechanisms to ensure smooth flow of information and efficient decision-making.

CanSinoBio's Employee Communication Initiatives





#### Value Workshop

- Collected nearly 900 pieces of employee feedback through the Values Workshop, selecting 112 representative opinions.
- Developed 3 Quick-win and 3 Long-term projects based on employee feedback and established specialized project teams responsible for formulating and implementing improvement measures.
- Compiled and published the Values Q&A, communicated, and provided feedback to employees via email and WeCom.



### HR Assistant

- Provides employees with efficient and convenient comprehensive HR response services, breaking through the limitations of traditional human services in waiting and working hours, enabling employees to access needed information at any time.
- In 2023, 1,386 questions were answered on average per month, ensuring timely responses to employee inquiries and needs.



## HR Business Partners (HRBP)

- Each business segment within the Company is equipped with corresponding Human Resources Business Partners (HRBP), allowing employees to communicate directly with the HRBP of their segment whenever they encounter workplace issues.
- HRBP serve as a crucial communication bridge between employees and management, conveying employees' opinions and suggestions.

We have established a sophisticated employee complaint mechanism to ensure that they receive fair and timely solutions in the face of workplace conflicts or unjust treatment. Employees who encounter unfair treatment or infringements on their rights and interests can file a complaint. During this process, relevant managers will intervene to clarify employees' rights and interests and provide necessary assistance. Employees can submit written complaint through designated channels, detailing the situation and the expected resolutions, and provide relevant proof. Upon receiving a complaint, we will organise the relevant management team to jointly address the issue, ensuring timely feedback on the results and proper documentation. Throughout the process, all information is kept strictly confidential to protect employees' rights and interests.

# **Employee Complaint Process**



Encourage employees to properly file complaints by submitting a written complaint via voice@cansinotech. com, describing the unfair treatment and the expected resolutions with relevant proof, witness's names, contact, etc.



The HR Department promptly handles complaints together with the supervisor of the informant, feeds back the results, and keeps them filed.

# **Trade Union Activities**

CanSinoBIO has established a trade union to actively implement democratic management and protect employees' rights and interests. In 2023, the Company successfully reshuffled the trade union, with the new session of trade union committee democratically elected by employees, consisting of 7 members, including 3 representatives from the Women's Workers' Committee. The Company focuses on employee interests, protects employees' rights and interests, and respects employees' freedom of association. All our employees have the right to participate in trade union activities, organise trade unions, and negotiate collective contracts. In addition, we organise employee representative conferences to review corporate systems that may affect employees' rights and interests, ensuring that employees' voices are fully heard and considered.





### **Review Company Policies**

In September 2023, the Company organised an employee representative conference to thoroughly review the Company's recently updated *Employee Handbook*, among other policies. During the meeting, representatives actively voiced their opinions and suggestions. Subsequently, the trade union engaged in effective negotiations with the management to ensure these views were fully considered, thereby effectively safeguarding employees' rights and interests.

We organised a variety of trade union activities, including enhancing employee skills, helping employees in difficulty, caring for front-line employees, and focusing on the development of young employees. In 2023, the trade union of the Company gathered over 30 front-line shift leaders to participate in three sessions of management training classes organized by the trade union of Tianjin Economic-Technological Development Area, effectively enhancing the management skills of front-line shift leaders.

We established the *CanSinoBIO Trade Union Assistance System for Employees in Difficulty*, providing support and assistance to employees facing hardships within the Company. In 2023, we visited two employees suffering from serious illnesses, and provided each with an assistance fund of RMB14,000, along with other support and care.



## Hosting Family Day Event

In December 2023, CanSinoBIO hosted another Family Day Event, attracting nearly 80 families. The event invited employees' families to tour the Company's plant and the vaccine production process, allowing them to understand the working environment and daily tasks of the employees. This activity helped employees' families appreciate the responsibilities and dedication of the employees and allowed children to recognize the effort their parents put into producing high-quality vaccines. The Family Day Event deepened the understanding of employees' work among their families and strengthened the connection between employees and their families.





Family Day Event

# **Occupational Health and Safety**

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

CanSinoBIO consistently prioritizes the health and safety of employees and thoroughly implements the principle of "safety first". We have implemented an occupational health and safety management system and rigorously enforced it to maximize the safety and health of all employees and related personnel.

# **Occupational Health and Safety Management System**

CanSinoBIO strictly abides by laws and regulations such as the Law of the People's Republic of China on Work Safety and the Law of the PRC on the Prevention and Control of Occupational Diseases, and has formulated internal management systems including the CanSinoBIO Occupational Health Management System, the Worker Protection Materials Management System, the EHS Targets and Responsibility Management System, the EHS Rewards and Punishment System, the Safety Management System of Special Equipment, and the Hazardous Chemical Safety Management System. In addition, we have established a complete occupational health and safety management system in accordance with the requirements of the ISO 45001 - occupational health and safety management system and in combination with international guidelines such as the Guidelines on Occupational Safety and Health Management Systems proposed by the International Labour Organization. In 2023, CanSinoBIO did not receive any administrative punishment related to occupational health and safety.

In 2023, the Company fully implemented a comprehensive safety responsibility system, breaking down compliance and safety goals for each employee and integrating them into the employee performance evaluation system. Based on

the occupational health and safety management system, we focused on controlling the safety of construction projects, conducting key supervision and inspections of major projects like foundation pit and formwork. We implemented side supervision for dangerous operations such as tower crane installation and dismantling, material hoist installation, scaffold dismantling, and steel structure hoisting. We ensured risk disclosure through pre-shift meetings, weekly meetings and inspections, training, and technical disclosures. And we eliminated various pitfalls in a timely manner through daily on-site safety inspections and weekly joint inspections, with no accidents in 1.13 million work hours in construction projects. In production operations, we update risk identification and inspect for pitfalls annually, improve the dual prevention mechanism, and control risks within an acceptable range through substitution, engineering modifications, management measures, and emergency responses. In 2023, we invested a total of approximately RMB8.02 million in security. During the reporting period, there were no work-related fatalities, one work-related injury, which has been properly treated. This case resulted in 1.120 lost work hours in total.





In 2023, CanSinoBIO did NOT receive any administrative punishment related to occupational health and safety



with NO accidents in 1.13 million work hours



During the reporting period, there were NO work-related fatalities

# **Key Occupational Health and Safety Management Measures**

2023 is the year of "the Year of Intrinsic Safety Management" for safety management. We are fully aware of the importance of safe production, implemented comprehensive safety responsibilities, strengthened risk control, improved equipment integrity, and enhanced the awareness and capabilities of all employees based on a sophisticated safety management system and a detailed safety management framework.

#### Occupational Health and Safety Management Measures

#### Implementation of Comprehensive Safety Responsibilities

 Break down responsibilities into four levels: segments, centers, departments, and employees according to the Company's annual health and safety target indicators. Enter into targets and responsibilities in agreements, conduct assessments at year-end to ensure the implementation of safety responsibilities by all employees.

#### Risk Assessment

 Update risk identification every year, with 41 departments/ platforms independently completing risk identification. A total of 823 hazard sources were identified and updated, including 0 high risk, 46 medium risks, 340 general risks, and 437 low risks, with corresponding management and mitigation measures taken.

#### **External Audits**

 In 2023, we underwent 7 occupational health and safetyrelated external audits and inspections, identifying 73 deficiency items (with no severe non-conformities), all of which have been rectified.



# **Equipment Integrity**

- Conduct safety assessments during the design phase of new, modified or expanded projects to eliminate design flaws from the source.
- Ensure the integrity and reliability of our equipment through specialized technical modifications, preventative maintenance, and routine inspections, such as conducting modifications to fire sprinkler and smoke prevention systems.



### Occupational Hazard Monitoring

 Monitor occupational hazards in key areas such as production workshops, warehouses, and production quality control, with no occupational hazards discovered and all results meeting standards. Monitor occupational hazards in key areas such as production workshops, warehouses, and production quality control, with no occupational hazards discovered and all results meeting standards.

#### Risk Identification

- Conduct various forms of pitfall identification and rectification, including EHS BP special inspections, departmental self-inspections, and comprehensive inspections organised by the Company. Encourage full participation by employees to actively identify and cope with pitfalls.
- Special inspections and rectification: address representative and recurring hazards through special inspections and rectification in areas such as high-altitude work platforms, electrical safety, fire safety, and hazardous chemicals, achieving intrinsic safety.
- Comprehensive risk identification by all employees: encourage active participation in risk identification by personnel at all levels, with each department identifying no less than 2 pitfalls every month. In 2023, a total of 2,267 safety hazards were identified, with 2,248 addressed, resulting in a hazard rectification rate of 99.16%.

#### Additionally, we conduct training and awareness-raising initiatives in various formats to enhance the awareness and skills of all employees:



#### Daily Safety Knowledge Promotion

Conduct daily safety knowledge promotion activities, such as Daily Five Minutes on Safety, Monthly Safety Themes, safety video sharing, and hazard experience sharing, develop promotional videos for health and safety instructions in the plants, the *Employee EHS Handbook* and other materials to further clarify red lines of safety management in the plants and employee safety behavior standards.



#### Safety Training

Carry out targeted and tiered training, focusing on awareness for managers, tools and methods for safety teams, and behavioral standards for employees. Throughout the year, a total of 40 specialized safety training subjects were organised, with 22,491 persontimes. Among these, 13 training subjects were arranged for assessment, involving 11,205 participants, with a 100% pass rate in the assessments.



#### Safety Emergency Drills

A total of 32 emergency drills were organised throughout the year in accordance with emergency plans. The drills took various forms, including tabletop emergencies, specialized emergency drills, and comprehensive emergency exercises, covering fire evacuation, chemical leaks, chemical burns, mechanical injuries, sharp object injuries, and water and power outages. These drills tested the operability and effectiveness of the emergency plans while enhancing employees' emergency response capabilities.

We also place great importance on the safety training and education of contractors. We organise annual safety training for all contractors' management personnel, clarifying CanSinoBIO's construction operation standards and requirements. All construction personnel must take safety training and pass an assessment before entering the plant and starting to work. During the reporting period, a total of 656 contractor personnel were trained, with a 100% pass rate in the training assessments.

In 2023, we organised occupational health examinations for employees on duty to ensure their health. We completed the occupational health "Three Simultaneities" tasks for various projects in accordance with the regulations, conducted annual monitoring of occupational hazards and occupational disease examinations for employees on duty, found no abnormalities, and notified employees of occupational hazards.



During the reporting period, a total of

656 contractor personnel were trained,

with a 100% pass rate in the

training assessments

# Training Data on Occupational Health and Safety

Percentage of employees trained 100%

Average training hours of total employees 26,899 hours

Total training sessions 314 sessions

Number of total employees trained 1,494 persons

Number of male employees trained 735 persons

Number of female employees trained 759 persons

Number of senior managers trained 30 people

Number of middle managers trained 248 people

Number of junior employees trained 1,216 people



# Emergency Drill for Injuries Caused by Packaging Machinery

On June 7, 2023, CanSinoBIO organised an emergency drill for injuries caused by packaging machinery. This drill provided a scenario in which employees could suffer injuries during mechanical operations, and thoroughly tested the Company's emergency response and reporting processes. Throughout the exercise, employees proactively participated in and responded to emergency. The drill achieved intended objectives, providing valuable support for the Company's safe production.













Emergency Drill for Injuries Caused by Packaging Machinery

# 05

# **Low-carbon Actions**

CanSinoBIO adheres to a green and low-carbon development model, actively responds to the national strategic deployment of carbon peaking and carbon neutrality, and promotes green production. We keep strengthening our environmental management capacity by implementing efficient emission management and resource utilization strategies, striving to reduce our impact on the environment, and contribute to environmental protection and sustainable development.



# Response to Climate Change

In response to the national strategic deployment of carbon peaking and carbon neutrality, CanSinoBIO takes active measures to respond to the risks and opportunities brought about by climate change. We have comprehensively identified and managed climate change risks associated with governance, strategy, risk management, indicators and targets, with reference to the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD), and have been strengthening our capabilities to respond to the challenges of climate change, so as to contribute to the achievement of the goals of global climate action.

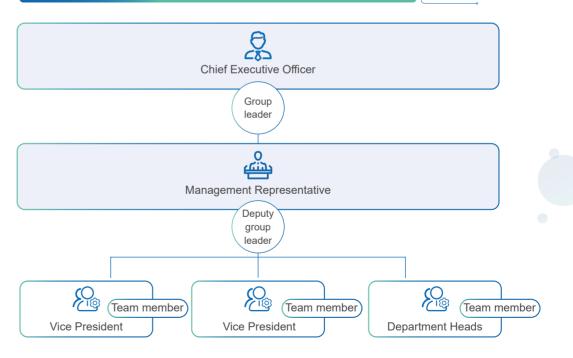
# **Governance**

The Board of CanSinoBIO is the highest responsible and decision-making body for ESG and efforts to address climate change as it oversees and reviews climate risks and opportunities. The Audit Committee is responsible for promoting the Company's environmental management and contributing to the achievement of environmental targets, while the ESG Working Group under the Audit Committee implements specific tasks and sets relevant environmental targets.

To further strengthen environmental and climate change management, the Company has established an Energy Efficiency Leading Group, which is led by CEO and includes Vice President, department heads, and other leaders. The group further enhances the management of the overall environmental efforts of the Company, which is conducive to the comprehensive implementation of climate change response efforts.



## Organization Chart of CanSinoBIO Energy Efficiency Leading Group



# **Climate Strategy**

CanSinoBIO deeply examined the risks and opportunities presented by climate change and has developed strategies and response measures from two perspectives: physical risk and transition risk.

Risk Type	Climate Risk Factor	Risk Description	Risk Response
	Acute physical risks and chronic physical risks	Extreme weather conditions caused by climate change is likely to affect the disease incidence and mortality rates, challenging human life and health. Natural disaster occurrences may lead to risks of disease transmission, further affecting the structural layout of the Company's products.	Keep monitoring and evaluating the potential impact of climate change and natural disasters on disease transmission.
Physical Risks	Acute physical risks	Extreme weather such as rainstorms, snowstorms and typhoons may cause secondary disasters like blackout and waterlogging in the city, which will negatively impact our operating sites, raw materials and product storage, and therefore the Company will face asset loss or business interruption.	<ul> <li>Actively monitor catastrophic weather, strengthen the formulation of emergency plans and improve the emergency response capabilities;</li> <li>Increase communication and contact with local authorities;</li> <li>Regularly inspect and maintain equipment and facilities to ensure their capacity to respond to natural disasters.</li> </ul>
	Chronic physical risks	Adverse factors such as temperature changes, sea level rise, and water shortages caused by climate change may lead to rising costs to our storage and transportation in cold chains logistics. The operations in coastal areas will face severe challenges.	<ul> <li>Fully assess the local climate risks and geographical location to avoid the potential risks that may be caused by natural disasters when selecting sites;</li> <li>Enhance the protection of operation sites in coastal areas;</li> <li>Timely assess temperature changes, and adjust conditions for cold chain transportation, to ensure stable storage and transportation.</li> </ul>

- Risk Type	Risk Factor	Risk Description	Risk Response
	Policy and regulatory risks	International and domestic environmental laws and regulations are becoming increasingly stringent. If the Company fails to comply with them, it will face compliance risks such as litigation or penalties.	<ul> <li>Watch for latest changes of environmental policies, laws and regulations at home and abroad, and strengthen compliance management based on the Company's actu- al conditions.</li> </ul>
Transition Risks	Technological risks	As environmental-friendly and energy-saving technologies continue to be improved, the Company may face increased financial costs when purchasing environmental-friendly and energy-saving equipment or implementing low-carbon transformation.	Take low-carbon and energy-saving measures in daily operations and manufacturing processto reduce carbon emissions in R&D, manufacturing, equipment maintenance, warehousing, transportation and supply, etc.
	Market risks and reputation risks	Against the backdrop of transformation towards low-carbon economy, the Company's capacity to respond to climate change will be an issue of concern to the market and customers. Stakeholders will expect more proactive response measures from the Company. Failure to respond to stakeholder demands or make timely adjustments will affect the reputation and value of the Company.	<ul> <li>Continuously strengthen information disclosure, enhance communication with stakeholders, meet stakeholders' de- mands through comprehensive and accurate information disclosure. Regularly disclose progress towards environ- mental objectives, and timely update environmental tar- gets, building an image of a low-carbon, environmentally friendly enterprise that actively undertakes social respon- sibility.</li> </ul>

Climate change also presents development opportunities for the Company. By improving resource utilization efficiency and reducing energy consumption through transformation, the Company has effectively reduced operation and production costs. Meanwhile, the Company has strengthened the concept of green operation and resource conservation, and actively implemented national environmental policies. On this basis, the Company is committed to constructing an environmentally friendly operating model, actively undertaking environmental responsibility, thereby earning a favorable corporate reputation.

# Risk Management

CanSinoBIO has integrated climate change risks into its ESG risk management framework to comprehensively evaluate the likelihood of climate risks and their impact on the Company, on the basis of which we have proposed mitigation strategy and adaptive response measures.

The principal risk and challenge that we are currently faced with is the government's unified regulatory requirement of shutdown during heavy pollution weather. CanSinoBIO is a company in the biopharmaceutical industry and produces low levels of pollutants in daily production and operations, which has minimal impact on weather and air. However, we still strictly comply with relevant regulations on production reduction. We have analyzed the impact of shutdown in heavy pollution weather on the Company, established an emergency office and a heavy pollution weather response leadership group led by the Chief Operating Officer. This team is responsible for unified scheduling and command of emergency measures during heavy pollution weather, establishing an emergency response mechanism, and enhancing rapid response capabilities. The Company has developed an Emergency Response Plan for Heavy Pollution Weather to improve the scientific, operational, and verifiable nature of the Company's emergency measures for heavy pollution weather. We have strengthened groundwork such as emergency investment and material support while coordinating emergency response in heavy pollution weather and measures for daily prevention. We regularly organise emergency drills to achieve an effective combination of routine management and emergency management.

In addition, we have developed the *Emergency Management Procedures on Water Cut-offs, Water Leaks and Industrial Steam Shutdown* for energy shortages caused by environmental emergencies. We continuously monitor natural disasters such as extreme weather, and promptly issue warnings and report to the leadership if anything unusual is detected. We implement effective prevention strategies, and periodically review the emergency equipment and facilities and carry out drills to ensure that they can work efficiently.

# **Indicator and Targets**

We have set environmental targets including the target of GHG emissions, and seek to lower GHG emissions by reducing energy consumption, using environmental-friendly materials, and encouraging employees and partners in the supply chain to practice a low-carbon lifestyle and operation model.

Our Scope 1 GHG emissions mainly come from directly owned or controlled energy consumption, while Scope 2 mainly comes from purchased energy consumption such as electricity and steam.



CanSinoBIO's GHG Emission Reduction Target



Scopes 1 and 2:

With 2021 as the benchmark year, total GHG emissions per floor area will be reduced by

40% by 2025 and 50% in 2030

## CanSinoBIO's GHG Emissions in 2023

Total GHG emissions (Scopes 1 and 2)<sup>17</sup>

Total GHG emissions per floor area

37,294.90 tCO2e

0.42 tCO<sub>2</sub>e per square meter

Direct GHG emissions (Scope 1)



Natural gas

2,335.90 tCO2e



Diesel fuel

3.98 tCO<sub>2</sub>e



Gasoline

166.11 tCO<sub>2</sub>e



Refrigerant

1,035.19 tCO<sub>2</sub>e

Indirect GHG emissions (Scope 2)



Purchased power

19,689.15 tCO<sub>2</sub>e



Purchased steam

14,064.58 tCO<sub>2</sub>e

<sup>&</sup>lt;sup>17</sup> GHG inventories include carbon dioxide, methane, nitrous oxide and hydrofluorocarbons, mainly produced from the purchased electricity, purchased steam, fuel, and refrigerant use. GHG emissions are presented in carbon dioxide equivalents and are calculated based on the *Guidelines for Accounting and Reporting of Greenhouse Gas Emissions by Enterprises - Power Generation Facilities (Revised 2022)* issued by the Ministry of Ecology and Environment and the *2006 IPCC Guidelines for National Greenhouse Gas Inventories* issued by the Intergovernmental Panel on Climate Change (IPCC).



# **Environmental Management**

CanSinoBIO actively undertakes environmental management responsibilities. We comprehensively strengthen environmental management, fully integrate environmental protection concepts into various aspects of production and operations, and effectively promote green and low-carbon development.

2023 Environmental, Social and Governance & Corporate Social Responsibility Report



# **Environmental Management System**

CanSinoBIO's Commitment to Environmental Protection

- ▶ To strictly comply with national and governmental laws and regulations, and establish scientifically reliable and systematic environmental management systems
- To put risk prevention first and identify environmental factors in products, processes, equipment and facilities; effectively control environmental factors and prevent pollution through inspection, maintenance and monitoring
- To realise the target of energy conservation and emission reduction by using green energy, introducing projects of energy conservation and recycling resources
- ➤ To promote the awareness of environmental conservation to our employees and encourage them to participate in relevant activities
- To provide our clients, contractors, and suppliers with assistance, guidance and audit regarding environmental protection

CanSinoBIO carries out environment management in strict compliance with environmental laws and regulations including the Environmental Protection Law of the PRC, the Law of the PRC on Prevention and Control of Water Pollution, the Law of the PRC on the Prevention and Control of Noise Pollution, and the Law of the PRC on the Prevention and Control of Air Pollution, and in compliance with requirements such as ISO 14001 Environmental Management System and ISO 50001 Energy Management System. We have developed and revised internal management systems, such as Environmental Management System, Water Resource Management System and Energy Management and Control System and Management System for Environmental Protection Equipment and Facilities. We undertake environmental management for all business and operational locations, and further optimize the environmental management systems.

CanSinoBIO's Environment, Health, and Safety Committee regularly conducts internal audits on the environmental performance of all business and operational locations of the Company. The management is regularly briefed on the audit results, and implements in-depth management and supervision of the business departments based on the audit results and their work status. The Engineering Service Center is responsible for undertaking specific work, providing guarantees for project construction and compliant operation, implementing various requirements for compliant disposal of wastewater, waste gas and solid waste ("Three Wastes"), and regularly checking the normal operation of environmental protection facilities. The Company constantly updates its environmental emergency plans and keeps them in record, supplements and updates the emergency team and emergency supplies, and further strengthens the capacity building and team building for environmental emergency response management.



During project construction and renovation, the Company strictly abides by the "Three Simultaneities" system of environmental protection facilities being designed, constructed and commissioned at the same time together with the principal part of the construction. The Company also strengthens environmental management requirements for contractors. When we enter into contracts with the contractors, we also enter into such agreements as the *Civilized Construction Requirements* simultaneously, requiring that all contractors shall enter into secondary treatment agreements with environmental sanitation and construction waste treatment plants, and have the construction waste transported to treatment plants in accordance with national regulations. Those efforts aim to ensure that the projects live up to relevant environmental management requirements.

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

The Company has formulated the EHS Targets and Responsibility Management System and the EHS Reward and Punishment Management System, emphasizing the reward and punishment management of EHS behaviors related to the environment. If there is any EHS behavior seriously violating the relevant regulations, it will affect the performance appraisal results.

#### In 2023, CanSinoBIO



Did **NOT** have any environmental violations or emergencies,

NO environmental administrative penalties.



Invested about

RMB 9.5 million in total on

environmental protection and management.



Underwent 7 external environmental inspections and did

NOT have any environmental violation risks.



Organised 9 emergency drills for the environmental emergency of chemical spillage, with a total of 109

participants, effectively enhancing the emergency response capabilities for environmental incidents.

# **Green Office**

The Company actively advocates green concepts and guides all employees to jointly practice low-carbon life and office model. We strengthen the management of electrical equipment such as lighting, air conditioners and computers in office areas, and reduce waste of electricity through posting energy-saving tips and specifying management departments for electrical equipment. We advocate paperless office and reduce lighting and air conditioning during non-dining hours in the employees' canteen, contributing to sustainable development.

We attach great importance to improving the environmental awareness of our employees and regularly conduct training on energy conservation and environmental protection, making environmental protection a conscious action for everyone. In 2023, the Company's environmental protection trainings covered a total of 1,400 employees. We maintain regular environmental publicity through WeChat groups, official account and other channels. We also organised employees to participate in the relevant activities of the environmental protection associations during the theme days of environmental protection and organised theme publicity within the Company to create an atmosphere in which all employees participate in environmental protection.



CanSinoBIO Actively Promotes Environmental Protection



CanSinoBIO Actively Organised Our Employees to Participate in Themed Activities on Environmental Protection

In 2023, during the theme days of environmental protection such as Tree Planting Day and World Environment Day, the Company actively organised employees to participate in public welfare tree planting, green hiking and other environmental activities to enhance their environmental awareness, promote green life, and contribute to building a harmonious and beautiful community.



CanSinoBIO Was Awarded with a Public Welfare
Tree Planting Certificate



CanSinoBIO's Employees Participated in Green Hiking on the World Environment Day



# **Energy Conservation and Consumption Reduction**

CanSinoBIO comprehensively promotes the energy management policy of "Continuously Scientific Consumption Reduction at the Source by All Employees" in operations and development, and creates an environment in which "everyone acts routinely in an economical way," to encourage all employees to practice the work and life mode that saves resources and reduces waste.

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

CanSinoBIO strictly abides by laws and regulations such as the *Law of the PRC on Energy Conservation* and the requirements of governmental departments. With reference to standards such as the *Energy Management System - Requirements and Guidelines for Use (GB/T 23331-2020)*, the Company has developed energy management systems such as the *Regulations of Energy Management*, the *Energy Management Guidelines*, and the *Regulations of Gas Fired Boiler Production and Operation* to carry out energy use management in an efficient way. In 2023, the resources used by CanSinoBIO in R&D, manufacturing and daily office operations mainly include electricity, natural gas, steam, gasoline, diesel, water, and packaging materials.

### CanSinoBIO's Energy Consumption Target



With 2022 as the benchmark year, the energy consumption for product production

of a single batch<sup>18</sup> will decrease by 10% by 2030

### CanSinoBIO's Water Consumption Target



With 2022 as the benchmark year, the water consumption for product production

of a single batch<sup>19</sup> will decrease by **10%** by 2030

We implement strict measures to measure and monitor energy and resource use. continuously improve information-based energy use management, and use energy monitoring systems to collect and track energy consumption data. We monitor the operation of key energy consuming equipment, compare energy consumption statistics with excellent practices in the industry, and analyze and improve technology after identifying problems to facilitate energy conservation and the achievement of energy consumption goals. In 2023, the Company implemented an intelligent operation and maintenance project for power stations, which makes it available to get real-time and cumulative energy consumption statistics through an intelligent platform, and has achieved visualization of electricity consumption statistics. At the same time, we conducted statistical and comparative analysis on the energy usage of each factory area, which is beneficial for further energy conservation and emission reduction work. The Energy Saving Working Group regularly holds energy efficiency management summary meetings, listens to the reports of energy conservation management personnel. We incorporate energy conservation into the performance appraisal of a department as well as an individual, as one of the performance indicators of cost reduction and efficiency improvement in the Company, and encourage employees to actively participate in energy conservation and emission reduction, thereby improving the overall eneray efficiency level.

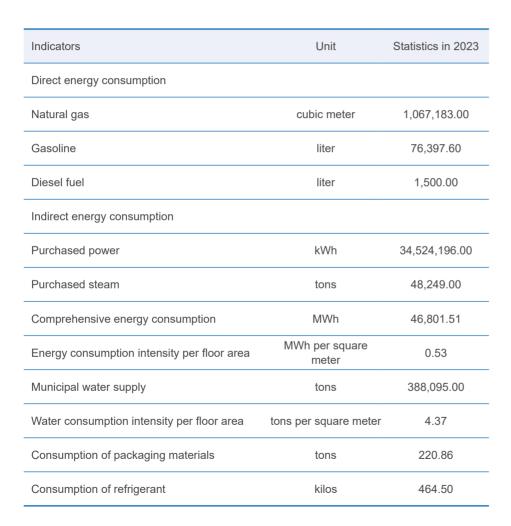
CanSinoBIO attaches great importance to refining its energy management. We comprehensively consider energy consumption performance when purchasing new equipment, and also strive to improve the energy efficiency of current equipment and facilities. In addition, we take advanced energy-saving measures ever since the initial stage of the project and plant construction to avoid unnecessary energy consumption modifications during use in the future. In 2023, the Company passed the energy consumption dual control self-assessment and energy measurement assessment organised by the governmental departments, and the assessment results of energy audit are still valid.

<sup>&</sup>lt;sup>18</sup> The energy consumption for product production of a single batch = The total energy consumption / The number of all product batches.

<sup>&</sup>lt;sup>19</sup> The water consumption for product production of a single batch = The total water consumption / The number of all product batches.

Responsible Governance

# Resource and Energy Use of CanSinoBIO in 2023



The Company continues to optimize and improve its electrical equipment. The Company has installed energy-saving lighting without affecting the lighting quality, including the use of solar street lights, and is gradually phasing out energy-extensive lighting. In addition, the Company has implemented more efficient management strategies for the operation of air conditioners in multiple areas during non-production hours. In 2023, the Company applied frequency conversion to some production equipment, effectively reducing electricity consumption. The Company has saved some natural gas by connecting to the municipal steam pipe network, and carried out a series of energy-saving work such as recycling heat from condensate water, and using concentrated water from manufacturing in cold towers, ensuring efficient energy utilization.

The Company's gasoline consumption is mainly concentrated in vehicle operation. The Company reasonably arranges the running time and route of commuter buses while meeting the commuting needs of employees. Employees who use vehicles for business trips are required to follow the Company's application and approval process and shall be subject to inspection by the Company's supervisory team to effectively reduce gasoline consumption and costs. For diesel-fueled equipment, the Company improves mechanical efficiency to reduce diesel consumption.

The Company's water resources mainly come from municipal water, and there have been no problems in obtaining suitable water sources. In 2023, the Company took multiple measures for water saving. We adjusted the parameters of water equipment such as the water purifiers, and conducted regular inspections and maintenance of water supply pipelines to prevent all kinds of wastage, such as leaking and dripping.

# **Discharge Control**

CanSinoBIO strictly manages and controls all wastes generated during R&D, manufacturing, and operations, such as waste gas, wastewater, and solid waste to actively reduce the impact of the Company's operations on the natural environment. In 2023, the Company updated and revised its waste gas and wastewater management systems to further strengthen emission management. The Company strictly adheres to clean production regulations in all business and operational locations and takes environmental measures for waste gas treatment; wastewater should be discharged to the local sewage treatment plants after standard treatment, and the relevant operation units are guided to develop operating procedures; noises in our factories are required to meet the standard, and solid waste is treated uniformly by professional institutions.

CanSinoBIO strictly complies with government emission requirements and is open to supervision and review. We have applied and obtained a Discharge Permit. We invite third-party institutions to audit emissions, and assess and analyze audit results annually. After that we rectify identified problems and follow up the rectification. 9 environmental compliance renovations were completed throughout 2023. In 2023, multiple pollutants<sup>20</sup> of the Company passed the detection of China Metrology Accreditation for Environmental Emissions (CMA).

In 2023, the Company fully achieved the previously set emission targets for waste gas and solid waste<sup>21</sup>, and updated the emission targets based on the actual situation.

Information Form	CanSinoBIO Pollutior	n Discharge in 2023
------------------	----------------------	---------------------

Name of main pollutants	Chemical oxygen demand(COD),ammonia nitrogen	
Discharge method	Discharged into the municipal sewage system	
Number of the discharge outlet	3	
Discharge concentration	500mg/L of chemical oxygen demand (COD), 45mg/L of ammonia nitrogen	
Exceeding standards emission	None	
Pollutant discharge standard	Integrated Wastewater Discharge Standard (DB12356-2018)	
Discharge amount examined	42.4263 tons of chemical oxygen demand (COD) and 1.4516 tons of ammonia nitrogen	

d CanSinoBIO's Progress in Achieving the Waste Gas Emission Target and the Updated Target



The waste gas emissions in 2023 have been reduced by 17.90% compared to the same

range in 2022; The target of reducing it by 10% has been achieved



With 2023 as the benchmark year, the waste gas emissions during product production of a single

batch<sup>22</sup> will be reduced by 10% by 2030

<sup>&</sup>lt;sup>20</sup> The wastewater indicators include biochemical oxygen demand (BOD), suspended solids (SS), total nitrogen, total phosphorus, fecal coliform count, total residual chlorine, chromaticity, total organic carbon, anionic surfactants, animal and plant oils, etc. The waste gas indicators include ammonia, hydrogen sulfide, volatile organic compounds, non-methane hydrocarbon, odor concentration, formaldehyde, particulate matter, sulfur dioxide, Ringmann blackness, etc.

<sup>&</sup>lt;sup>21</sup> The statistical criteria for the Company's emissions in 2023 have been changed compared to those of 2022. According to the calculation criteria for emissions in 2022, the Company's emissions statistics in 2023 have all reached the previously set targets

<sup>&</sup>lt;sup>22</sup> The waste gas emissions during product production of a single batch = The total waste gas emissions / The number of all product batches.

## CanSinoBIO's Progress in Achieving the Waste Target and the Updated Target



The hazardous waste generation in 2023 has been reduced by 21.23% compared to the same

range in 2022; The target of reducing it by 10% has been achieved



With 2023 as the benchmark year, the hazardous waste generation during product production of a single batch<sup>23</sup> will be reduced by  $\frac{10\%}{10\%}$  by 2030

## CanSinoBIO's Wastewater Target



With 2023 as the benchmark year, the wastewater pollutant emissions during the product production of a single

batch<sup>24</sup> will decrease by **20%** by 2030

The gas emissions of the Company mainly include GHG, particulate matter and nitrogen oxides from the use of purchased electricity, purchased steam and the burning of natural gases. We are committed to strengthening the management of daily exhaust emissions and effectively reducing the emitted pollutants. We conducted low nitrogen renovation on boilers to further reduce nitrogen oxide emissions. In 2023, the Company standardised the waste gas discharge outlets in the factories and updated the safety signs of environmental protection facilities in all factories. The Company makes full use of the online monitoring system for volatile organic compounds (VOC) to enhance the convenience and timeliness of monitoring. We upgraded the waste gas emission facilities to enhance their capacity to absorb harmful substances in waste gas, and reduce the emission of harmful substances.

The wastewater discharged by the Company mainly comes from industrial wastewater generated during R&D and manufacturing, and domestic wastewater generated during operations. The pollutants mainly include chemical oxygen demand (COD), ammonia nitrogen (NH3), and suspended solids (SS). When releasing wastewater, we strictly comply with the relevant requirements of the *Integrated Wastewater Discharge Standard* (DB12356- 2018) and ensure that the wastewater is discharged after standard treatment. The Company has built long-term monitoring system to supervise sewage discharge, prevent ground seepage, and control the generation, infiltration, and diffusion of pollutants. Meanwhile, in a bid to further improve their sewage treatment capacity, the Company has transformed the sewage discharge facilities in multiple operating locations including the industrialized vaccine manufacturing base, COVID-19 Vaccine Plant, and Rongsheng Building. And we have planned to construct a sewage station, which is expected to be put into use in 2024. The new sewage station will effectively improve our sewage treatment capacity and reduce pollutant emissions.



The Sewage Station Under Construction

Hazardous wastes generated by the Company include waste chemical reagents, waste organic solvents, waste liquid, solid hazardous wastes, and abandoned vaccines. The Company continuously improves its management and disposal methods for hazardous wastes to prevent environmental pollution. In 2023, the Company provided trainings on the classification and management requirements of hazardous wastes for employees in departments that generate hazardous wastes to help relevant personnel identify hazardous wastes and industrial wastes in the operations and clarify waste management requirements. We continued to implement the measure of weighing hazardous wastes for management. We conduct monthly statistical analysis of the quantity of hazardous wastes generated by each department, controlling hazardous wastes at the source to reduce the generation and discharge of hazardous wastes. We classify and temporarily store hazardous wastes, which are regularly transported by professional transportation service providers to qualified third-party hazardous waste treatment institutions for standardised disposal.

<sup>&</sup>lt;sup>23</sup> The hazardous waste generation during product production of a single batch = The total hazardous waste generation / The number of all product batches.

<sup>&</sup>lt;sup>24</sup> The wastewater pollutant emissions during product production of a single batch = The total wastewater pollutants / The number of all product batches.

## CanSinoBIO's Waste Disposal Measures



### Waste liquid and empty reagent bottles from the laboratory

Keep a record and store them in the designated temporary hazardous waste storage unit. 2 more temporary hazardous waste storage units were put into use in 2023.

#### Biological waste

The containers for biological waste are labeled as biological waste. After being sterilized in autoclaving, biological waste is collected for subsequent treatment with other hazardous wastes.

#### Contaminated substances

Contaminated substances are collected in designated hazardous waste garbage bags.

Non-hazardous Wastes

## Domestic waste, kitchen waste

To be collected and processed by a third-party organization with professional qualifications.

## CanSinoBIO's Key Performance Indicators for Emissions

	Total wastewater emissions	309,751.00 tons
	Chemical oxygen demand	15.82 tons
Wastewater	Suspended solids	1.43 tons
	Ammonia nitrogen	1.66 tons
	Total waste gas emissions	486,347,472.00 cubic meter
ر <u>::</u> ا ش	Non-methane hydrocarbon	2.30 tons
Waste gases	Oxynitride	1.97 tons
gases	PM (particulate matter)	0.02 tons
A	Total non-hazardous waste	180.24 tons
Non-hazardous waste	Total non-hazardous waste per floor area	0.0020 tons per square meter
	Total hazardous waste	651.79 tons
Hazardous waste	Total hazardous waste per floor area	0.0073 tons per square meter



# **Access to Health Care**

As a global vaccine supplier based in China, CanSinoBIO always adheres to the concept of jointly building a health community with a shared future. While pursuing innovative development of our products and technology, we cooperate with international organizations, governments, and enterprises to form a strong driving force for promoting the vaccine accessibility and contributing to human health.

# **Strategy and Commitment**

In view of the differences in medical and economic levels in different regions around the world, CanSinoBIO establishes fair medical mechanisms in developing countries and low-income areas to ensure universal access to its products worldwide, and assist in promoting global health equity. We closely concern the product and technology needs of developing countries, and expand vaccine accessibility in Southeast Asia, the Middle East, Latin America and other emerging markets through innovation and cooperation. The Company carries out sustainable vaccine R&D and innovation in more than 10 diseases, including meningitis, pneumonia, DPT, COVID-19, Ebola virus disease, herpes zoster, and tuberculosis. We promote localized research and production of products in developing countries through capacity building, training and communication, and collaborate with local enterprises to jointly promote product accessibility and equitable distribution.

We consider the coverage and accessibility of vaccines among healthy populations from the perspectives of vaccine accessibility and pharmaco-economics, and continuously explore solutions to global public health challenges. We improve product affordability to help global community enjoy high-quality treatment and services.

CanSinoBIO

Supporting the Doha Declaration on the TRIPS Agreement and Public Health.

Adhering to international and domestic fair pricing strategies, and pricing our products reasonably based on pharmaco-economics and the actual purchasing power of customers, referring to the pricing mechanisms of similar products at home and abroad with prices of products in countries of different income levels in line with local actual transparent prices.

Establishing the Scientific Advisory Board (SAB) to discuss research activities and progress related to access to health care. SAB is composed of authoritative experts in multiple professional fields such as public health and infectious diseases. They conduct in-depth discussions and provide professional suggestions on product R&D, access to health care, industrialization progress, and insights into industry trends, promoting the internationalization of innovative vaccines and helping the Company provide better services to the global public.

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

CanSinoBIO is developing vaccine products for more than 10 indications, including meningitis, pneumonia, DPT, COVID-19, Ebola virus disease, herpes zoster, and tuberculosis. From the first guadra-valent meningococcal conjugate vaccine in China to the world's first COVID-19 vaccine through "oral inhalation", we keep innovating and improving the efficiency and applicability of vaccines, and strive to ensure that our vaccine products can benefit a wider range of people and regions.

In addition, CanSinoBIO conducts exchanges and cooperation with governments and local enterprises in developing countries, accelerates technological export through technology transfer, and promotes the popularization of technology in R&D, manufacturing, and other aspects in developing countries, improving the accessibility of Chinese technology in resource scarce areas, striving to improve health inequality and contributing to global health. We have helped Convidecia® filling manufacturing line in Malaysia obtain GMP certification, and continue to expand the capacity building in developing countries and low-and middle-income regions.



Reached strategic cooperation with Indonesia on technical R&D of tuberculosis vaccine. contributing "Chinese forces", in tuberculosis prevention and control in Indonesia and the world:

Entered into a strategic cooperation agreement with Etana, an Indonesian biopharmaceutical company, to carry out localized cooperation on tuberculosis vaccine, MCV4 and other products in Indonesia:

Entered into an innovative vaccine cooperation agreement with SPIMACO in Saudi Arabia to promote the entry of the Company's quadra-valent meningococcal conjugate vaccine into the Middle East and North African markets;

Convidecia® was officially registered as a pharmaceutical product in Hong Kong. In addition, Convidecia® received the Halal Decree in Indonesia, signifying that the Company has gained access to the globally recognized Muslim market.



The Company continues to collaborate within the pharmaceutical supply chain system globally, establishing safe and efficient distribution systems in countries and regions such as China, Southeast Asia, the Middle East, and Latin America to ensure stable supply of raw materials and products in areas with insufficient services. In 2023, CanSinoBIO actively optimized risk control during transportation and completed 7 transportation validations covering both international and domestic shipments. Additionally, we established a GS1 traceability system that complies with international standards and is applicable to exporting countries, collect and display product information in the form of coding for packaging, promoting the efficiency and transparency of supply chain systems in developing countries, and striving to meet local demand promptly.

Leveraging its professional advantages, CanSinoBIO provides professional trainings for healthcare workers in developing countries, covering diverse content such as laws and regulations, clinical trials, and pharmacovigilance. We contribute to the improvement of the

local basic public health by imparting the latest professional skills and medical knowledge, in a bid to provide more comprehensive and professional medical technology and services for the local people.

The Company encourages and supports the development of pharmacovigilance capabilities in developing countries, and enters into pharmacovigilance agreements that comply with local laws and regulations with overseas partners, including individual case reports, regular safety update reports, risk management plans, and risk management measures to jointly ensure the safety and accessibility of products, and ensure that the public receives high-quality medical services. In 2023, the Company entered into a pharmacovigilance agreement with Argentina and conducted trainings on cluster events for Argentine partners online upon execution of the agreement, which not only enhanced the pharmacovigilance capabilities of the partners, but also further ensured the safety of the products.



# CanSinoBIO Conducted Training on MCV4 for National Institute of Biotechnology Malaysia (NIBM)

In 2023, CanSinoBIO communicated with and provided training for the technical personnel from the NIBM in Malaysia. Accompanied by us, the guests visited the Company's MCV4 production workshop. We introduced the scientific research knowledge on mRNA and the production process of MCV4, and issued training certificates to NIBM technical personnel after the training.



On-site Visit



**Group Photo of Both Training Parties** 



# **Social Empowerment**

CanSinoBIO values the realization of social value, continuously pays close attention to social welfare undertakings and public health undertakings. We collaborate with various sectors to carry out diversified public welfare activities, practicing corporate philosophy with practical actions, and contributing our professional strength to building a healthy and mutually supportive society.

# **Health Science Education**

Leveraging our professional advantages, CanSinoBIO actively carries out characteristic public welfare activities with corporate characteristics. We adhere to the concept of "Innovation for a Safer World" and carry out health knowledge popularization.





## CanSinoBIO Supported the Third Conference on Cross-Innovation in the Medical Meteorological Environment

In July 2023, we provided RMB100,000 to support the Third Conference on Cross-Innovation in the Medical Meteorological Environment held by the China Health Promotion Foundation, facilitating the cross integration of medical science, meteorology, and environmental science, and contributing to the improvement of the overall national health level. In this way, CanSinoBIO actively supports the initiative of "Healthy China 2030" and has made positive contributions to promoting the development of social health.



CanSinoBIO supports the Third Conference on Cross-Innovation in the Medical Meteorological Environment



## CanSinoBIO Joined the TEDA Biomedical Industry-Education Consortium

On October 10, 2023, the Founding Meeting of Tianjin Industry-Education Consortium was held in TEDA, focusing on talent cultivation and high-quality development of industrial economy. CanSinoBIO actively participated and vigorously promoted industry and education integration and talent cultivation. Through innovative cooperation models and demand driven approaches, we aim to create an efficient and sustainable industry and education integration system and cultivate high-level vaccine R&D talents to facilitate the high-quality development of Tianjin's biopharmaceutical industry, and create a new future for the industry.



Founding Meeting of Tianjin Industry-Education Consortium



CanSinoBIO was One of the Organisers of Tianjin (Economic-Technological Development Area) Nucleic Acid Drug Industry Alliance Exchange Conference

On December 12, 2023, CanSinoBIO, in collaboration with Tianjin International Joint Academy of Biomedicine, Medical and Health Bureau of TEDA, and Tianjin (Economic-Technological Development Area) Nucleic Acid Industry Alliance, jointly held the First Anniversary Special Meeting of Tianjin (Economic-Technological Development Area) Nucleic Acid Drug Industry Alliance and the first Supply and Demand Exchange Meeting of Nucleic Acid Drug Industry. The meeting promoted upstream and downstream exchanges in the nucleic acid drug industry chain. The participants jointly explored and planned the high-quality development path of Tianjin's nucleic acid drug industry.



Promotion Meeting of Nucleic Acid Industry Alliance Project

# **Public Welfare and Charity Activities**

2023 Environmental, Social and Governance & Corporate Social Responsibility Report

In accordance with the Charity Law of the PRC, the Law of the PRC on Donation to Public Welfare and other laws and regulations, CanSinoBIO has formulated and implemented the Donation Management System, which aims to ensure the transparency and compliance of the Company's donation activities and focus the Company's public welfare and charity activities on improving the quality of health care and strengthening education and promotion of public health projects.

In 2023, CanSinoBIO actively supported various charitable associations and foundations by assisting them in public welfare services such as providing assistance to hospitals, the disabled, the elderly, orphanages, schools, and disaster relief. We joined hands with various sectors by participating in and supporting these activities to promote the development of public welfare undertakings together.



In 2023, CanSinoBIO invested a total of approximately

RMB 413,000 in charitable donations.



# **Content Index of ESG Reporting Guide of Hong Kong Stock Exchange**

ESG KPI	Disclosure Indicator	Location	
A: Environmental			
A1 Emiss	ions		
General [	Disclosure	P89-90	
A1.1	The types of emissions and respective emissions data.	P96	
A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P88	
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P96	
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P96	
A1.5	Description of emission target(s) set and steps taken to achieve them.	P94-95	
A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	P95-96	
A2 Use o	f Resources		
General Disclosure		P92-93	
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in' 000s) and intensity (e.g. per unit of production volume, per facility).	P93	
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P93	
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	P92	
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	P92	

ESG KPI	Disclosure Indicator	Location	
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	P93	
A3 The E	nvironment and Natural Resources		
General [	Disclosure	P89-90	
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P89-90	
A4 Clima	te Change		
General [	Disclosure	P84-87	
A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	P84-88	
B: Social			
B1 Employment			
General Disclosure		P66-78	
B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	P66-67	
B1.2	Employee turnover rate by gender, age group and geographical region.	P68	
B2 Health and Safety			
General Disclosure		P79-82	
B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P79	
B2.2	Lost days due to work injury.	P79	
B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	P80-82	

ESG KPI	Disclosure Indicator	Location
B3 Development and Training		
General [	Disclosure	P69-74
B3.1	The percentage of employees trained by gender and employee category (e.g., senior management, middle management).	P74
B3.2	The average training hours completed per employee by gender and employee category.	P74
B4 Labou	r Standards	
General [	Disclosure	P66, P68
B4.1	Description of measures to review employment practices to avoid child and forced labour.	P66, P68
B4.2	Description of steps taken to eliminate such practices when discovered.	P66, P68
B5 Supply Chain Management		
General [	Disclosure	P37-40
B5.1	Number of suppliers by geographical region.	P39
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	P37-49
B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P39
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P40

ESG KPI	Disclosure Indicator	Location
B6 Produ		
General [	Disclosure	P47-64
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	P54
B6.2	Number of products and service-related complaints received and how they are dealt with.	P61
B6.3	Description of practices relating to observing and protecting intellectual property rights.	P59
B6.4	Description of quality assurance process and recall procedures.	P54
B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	P45
B7 Anti-co		
General [	P34-35	
B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	P35
B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	P35
B7.3	Description of anti-corruption training provided to directors and staff.	P35
B8: Comr		
General Disclosure		P101-102
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	P101-102
B8.2	Resources contributed (e.g. money or time) to the focus area.	P102

# **GRI Content Index**

Statement of use	CanSinoBIO has reported in accordance with the GRI Standards for the period [January 1, 2023 to December 31, 2023].
GRI 1 used	GRI 1: Foundation 2021

Indicator	Description	Page
	2-1 Organizational details	P02-03
	2-2 Entities included in the organization's sustainability reporting	P01
	2-3 Reporting period, frequency and contact point	P01, P111
	2-6 Activities, value chain and other business relationships	P01-03, P37-40, P61-62
	2-7 Employees	P66-68
	2-8 Workers who are not employees	P39
	2-9 Governance structure and composition	P27-29
GRI 2	2-10 Nomination and selection of the highest governance body	P27-29
General Disclosures	2-11 Chair of the highest governance body.	P27-29
2021	2-12 Role of the highest Role of the highest governance body in overseeing the management of impacts	P27-29
	2-13 Delegation of responsibility for managing impacts	P11-12, P27-29
	2-14 Role of the highest governance body in sustainability reporting	P08-12, P27-29
	2-15 Conflicts of interest	P33-35
	2-16 Communication of critical concerns	P14-15
	2-17 Collective knowledge of the highest governance body	P29
	2-18 Evaluation of the performance of the highest governance body	P31
	2-25 Processes to remediate negative impacts	P34, P61-62, P68

Indicator	Description	Page
	2-26 Mechanisms for seeking advice and raising concerns	P34, P61-62, P68
	2-27 Compliance with laws and regulations	No major violation punishments during the reporting period
	2-28 Membership associations	P39
	2-29 Approach to stakeholder engagement	P14-15
	3-1 Process to determine material topics	P14-15
GRI 3: Material Topics 2021	3-2 List of material topics	P15
'	3-3 Management of material topics	P15
GRI 203:	3-3 Management of material topics	P24-25, P98-102
Indirect Economic	203-1 Infrastructure investments and services supported	P24-25, P98-102
Impacts 2016	203-2 Significant indirect economic impacts	P24-25, P98-102
GRI 204: Procurement	3-3 Management of material topics	P37-40
Practices 2016	204-1 Proportion of spending on local suppliers	P37-39
GRI 205: Anti-	3-3 Management of material topics	P34-35
corruption 2016	205-3 Confirmed incidents of corruption and actions taken	P34
GRI 301:	3-3 Management of material topics	P37-40, P92-93
Materials 2016	301-1 Materials used by weight or volume	P93
	3-3 Management of material topics	P89, P92-93
GRI 302:	302-1 Energy consumption within the organization	P93
Energy 2016	302-2 Energy consumption outside of the organization	P93
	302-3 Energy intensity	P93

Indicator	Description	Page
	3-3 Management of material topics	P89, P92-96
GRI 303: Water	303-1 Interactions with water as a shared resource	P92-93
	303-2 Management of water discharge-related impacts	P94-95
and Effluents 2018	303-3 Water withdrawal	P93
	303-4 Water discharge	P96
	303-5 Water consumption	P93
	3-3 Management of material topics	P87-88, P94-96
	305-1 Direct (Scope 1) GHG emissions	P88
GRI 305: Emissions	305-2 Energy indirect (Scope 2) GHG emissions	P88
2016	305-4 GHG emissions intensity	P88
	305-7 Nitrogen oxides (NO $_{\mbox{\tiny x}}$ ), sulfur oxides (SO $_{\mbox{\tiny x}}$ ), and other significant air emissions	P96
	3-3 Management of material topics	P94-96
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	P94-95
	306-3 Waste generated	P96
GRI 308:	3-3 Management of material topics	P38-40
Supplier Environmental	308-1 New suppliers that were screened using environmental criteria	P40
Assessment 2016	308-2 Negative environmental impacts in the supply chain and actions taken	l .
	3-3 Management of material topics	P66, P68, P77-78
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	P67-68
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	P75-76
GRI 403: Occupational Health and Safety 2018	3-3 Management of material topics	P79-82

Indicator	Description	Page
	403-1 Occupational health and safety management system	P79
	403-2 Hazard identification, risk assessment, and incident investigation	P80
	403-3 Occupational health services	P80-81
	403-5 Worker training on occupational health and safety	P81-82
	403-6 Promotion of worker health	P80-82
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	P80
	403-9 Work-related injuries	P79
ODI 404	3-3 Management of material topics	P69-74
GRI 404: Training and	404-1 Average hours of training per year per employee	P74
Education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	P72-73
GRI 405:	3-3 Management of material topics	P29, P68
Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	P29, P68
GRI 406: Non-	3-3 Management of material topics	P29, P40, P68
discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	P68
GRI 408: Child	3-3 Management of material topics	P40, P66
Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	/
GRI 409: Forced or	3-3 Management of material topics	P40, P66
Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	/
	3-3 Management of material topics	P101-102
GRI 414: Supplier Social Assessment 2016	413-1 Operations with local community engagement, impact assessments, and development programs	P101-102
	413-2 Operations with significant actual and potential negative impacts on local communities	1

Indicator	Description	Page
	3-3 Management of material topics	P38-40
GRI 414: Supplier Social Assessment	414-1 New suppliers that were screened using social criteria	P40
2016	414-2 Negative social impacts in the supply chain and actions taken	I
	3-3 Management of material topics	P47-55
GRI 416: Customer Health and	416-1 Assessment of the health and safety impacts of product and service categories	P54
Safety 2016	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	l .
	3-3 Management of material topics	P63-64
GRI 417:	417-1 Requirements for product and service information and labeling	P64
Marketing and Labeling 2016	417-2 Incidents of non-compliance concerning product and service information and labeling	/
	417-3 Incidents of non-compliance concerning marketing communications	l .
GRI 418:	3-3 Management of material topics	P45
Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	l .

# **List of Internal Systems**<sup>25</sup>

System	ESG Reporting Guide by HKEX
Environmental Management System	A1 Emissions, A3 the Environment and Natural Resources
Management System for Environmental Protection Equipment and Facilities	A1 Emissions, A3 the Environment and Natural Resources
EHS Targets and Responsibility Management System	A1 Emissions, A3 the Environment and Natural Resources
EHS Reward and Punishment Management System	A1 Emissions, A3 the Environment and Natural Resources
Regulations of Hazardous Waste Management	A1 Emissions
Wastewater Pollution Control system	A1 Emissions
Waste Gas Pollution Control system	A1 Emissions
Water Resource Management System	A2 Use of Resources
Energy Management and Control System	A2 Use of Resources
Regulations of Energy Management	A2 Use of Resources
Energy Management Guidelines	A2 Use of Resources
Regulations of Gas Fired Boiler Production and Operation	A2 Use of Resources
Emergency Response Plan for Heavy Pollution Weather	A4 Climate Change, B2 Health and Safety
Emergency Management Procedures on Water Cut-offs, Water Leaks and Industrial Steam Shutdown	A4 Climate Change, B2 Health and Safety
Personnel Recruiting Management System	B1 Employment
Instant Reward System	B1 Employment
Attendance Management System	B1 Employment
Training Management System	B1 Employment
CanSinoBIO Trade Union Assistance System for Employees in Difficulty	B1 Employment

System	ESG Reporting Guide by HKEX
Performance Management System	B1 Employment
Employee Handbook	B2 Health and Safety
CanSinoBIO Occupational Health Management System	B2 Health and Safety
Worker Protection Materials Management System	B2 Health and Safety
EHS Goals and Responsibility Management System	B2 Health and Safety
EHS Rewards and Punishment System	B2 Health and Safety
Safety Management System of Special Equipment	B2 Health and Safety
Hazardous Chemical Safety Management System	B2 Health and Safety
Training Management System	B3 Development and Training
Contractor Safety Management System	B5 Supply Chain Management
Supplier Management Regulations	B5 Supply Chain Management
Supplier Performance Management Procedures	B5 Supply Chain Management
Management Procedures for Supplier Blocking, Unblocking and Withdrawal	B5 Supply Chain Management
Management Procedures for Supplier Development and Registration	B5 Supply Chain Management
Management Procedures for Supplier Access	B5 Supply Chain Management
Supplier Code of Conduct	B5 Supply Chain Management
Trial Guideline on the Review of Science and Technology Ethics	B6 Product Responsibility
Regulations for the Administration of Affairs Concerning Laboratory Animals	B6 Product Responsibility
Feed and Padding Management Regulations	B6 Product Responsibility

<sup>&</sup>lt;sup>25</sup> This table only includes internal systems and key systems relating to each ESG topic disclosed in the Report as the part of the Company's all internal system lists.

System	ESG Reporting Guide by HKEX
Management Regulations for Employee Dress Changing in Animal Quarters	B6 Product Responsibility
Standard Operating Procedures for Environmental Management of Animal Quarters	B6 Product Responsibility
Standard Operating Procedures for Goods in and out of Animal Quarters	B6 Product Responsibility
Standard Operating Procedures for Quarantine of Laboratory Animals	B6 Product Responsibility
Deviation Management Regulations	B6 Product Responsibility
Change Management Regulations	B6 Product Responsibility
Management Procedures for OOS/OOT/AD	B6 Product Responsibility
Constitution of the Drug Safety Committee	B6 Product Responsibility
Pharmacovigilance Management System	B6 Product Responsibility
Regulation for Pharmacovigilance Management during Clinical Trials.	B6 Product Responsibility
Product Price Management System	B6 Product Responsibility
Coding Instructions for Suspected Abnormal Reactions to Vaccination	B6 Product Responsibility
Management and Operating Procedures for Drug Safety Risk during Clinical Trial	B6 Product Responsibility
Management Procedures for Non-conforming Products	B6 Product Responsibility
Procedures for the Management of the Vaccine Traceability System	B6 Product Responsibility
Recall Management Procedures for Marketed Products	B6 Product Responsibility
Responsibilities of Quality Management Person	B6 Product Responsibility
Responsibilities of Quality Authorized Person	B6 Product Responsibility
Intellectual Property Management System	B6 Product Responsibility

System	ESG Reporting Guide by HKEX
Copyright Management Regulations	B6 Product Responsibility
Trademark Management Regulations	B6 Product Responsibility
Patent Management Regulations	B6 Product Responsibility
Technical Secrets Management Procedure	B6 Product Responsibility
Management Procedures for Complaints of Marketed Products	B6 Product Responsibility
Management Regulations for Customers' Feedback on Temperature Anomalies of Products	B6 Product Responsibility
Marketing and Operation Standard Manual	B6 Product Responsibility
Publicity, Promotion, Non-Promotion, and Personal Comment Compliance Management System	B6 Product Responsibility
Code of Sales Conduct	B6 Product Responsibility
Management Process for Approval of Promotional and Non- promotional Materials	B6 Product Responsibility
Compliance Handbook	B7 Anti-Corruption
Anti-Corruption and Fraud Management System	B7 Anti-Corruption
System of Conflicts of Interest	B7 Anti-Corruption
Employee Receiving Gift Management Process	B7 Anti-Corruption
Reward Process for Non-compliance Reporting	B7 Anti-Corruption
Donation Management System	B8 Community Investment

# **ESG Data List<sup>26</sup>**

# **Environmental**

Indicator	Unit	2023	2022	2021
GHG Emission				
Total GHG emissions (Scopes 1 and 2)	tCO₂e	37,294.90	30,517.25	35,159.36
Total GHG emissions per floor area	tCO₂e per square meter	0.42	0.35	0.54
Natural gas	tCO₂e	2,335.90	5,779.84	8,488.36
Gasoline	tCO₂e	166.11	129.36	136.66
Diesel fuel	tCO₂e	3.98	7.25	5.37
Refrigerant	tCO₂e	1,035.19	123.93	1
Purchased power	tCO₂e	19,689.15	18,030.93	26,528.97
Purchased stream	tCO₂e	14,064.58 6,445.94		1
Discharge and Emission				
Total wastewater emissions	tons	309,751.00	238,153.00	266,751.00
Suspended solids	tons	1.43	3.57	3.38
Chemical oxygen demand	tons	15.82	8.10	4.98
Ammonia nitrogen	tons	1.66	0.56	0.58
Total waste gas emissions	cubic meter	486,347,472.00	407,700,000.00	517,216,680.00
Oxynitride	tons	1.97	1.57	1.49
Non-methane hydrocarbon	tons	2.30	0.50	0.52
PM (particulate matter)	tons	0.02	0.18	0.17

Indicator				
mulcator	Unit	2023	2022	2021
Total non-hazardous waste	tons	180.24	158.53	31.63
Total non-hazardous waste per floor area	tons per square meter	0.0020	0.0018	0.0005
Total hazardous waste	tons	651.79	307.15	240.34
Total hazardous waste per floor area	tons per square meter	0.0073	0.0035	0.0037
Resource and Energy Use				
Natural gas	cubic meter	1,067,183.00	2,640,585.26	3,878,006.00
Gasoline	liter	76,397.60	59,495.58	62,854.00
Diesel fuel	liter	1,500.00	2,736.00	2,027.00
Refrigerant	kg	464.50	81	1
Purchased power	kWh	34,524,196.00	31,616,569.00	28,165,380.00
Purchased stream	tons	48,249.00	22,113.00	1
Comprehensive	MWh	46,801.51	83,874.56	70,698.05
Energy consumption intensity per floor area	MWh per square meter	0.53	0.95	1.08
Municipal water supply	tons	388,095.00	391,308.00	333,439.00
Energy consumption intensity per floor area	tons per square meter	4.37	4.42	5.12
Package	tons	220.86	391.00	265.00

<sup>&</sup>lt;sup>26</sup> Data marked "/" were not included in the statistics that year.

# Social

Indicator	Unit	2023	2022	2021
Employment				
Number of employees	employee	1,494	2,291	1,404
Number of new salaried employees this year (including those who have left)	employee	214	948	807
Number of employees by gender				
Male	employee	735	1,232	712
Female	employee	759	1,059	692
Proportion of employees by gender				
Male	%	49.20	53.78	51
Female	%	50.80	46.22	49
Number of employees by employment type				
Senior managers	employee	30	30	23
Middle managers	employee	248	264	156
Junior employees	employee	1,216	1,997	1,225
Proportion of employee by employment type	•	•		
Senior managers	%	2.01	1.31	2
Middle managers	%	16.60	11.52	11
Junior employees	%	81.39	87.17	87
Number of employees by age				
30 below	employee	380	803	485
30 to 49	employee	1,084	1,458	887
50 and above	employee	30	30	32

Indicator	Unit	2023	2022	2021
	Offic	2020	2022	2021
Proportion of employee by age				
30 below	%	25.44	35.05	35
30 to 49	%	72.55	63.64	63
50 and above	%	2.01	1.31	2
Number of employees by nationality				
Chinese	employee	1,476	2,279	1,395
Overseas	employee	18	12	9
Proportion of employee by nationality				
Chinese	%	98.80	99.48	99
Overseas	%	1.20	0.52	1
Employee Turnover <sup>27</sup>				
Overall employee turnover rate	%	13.14	17.32	8.24
Turnover rate by gender				
Male	%	14.83	20.52	9.18
Female	%	11.44	13.27	7.24
Turnover rate by age				
30 below	%	18.80	20.34	8.66
30 to 49	%	11.22	15.82	8.18
50 and above	%	3.23	3.23	3.03
Turnover rate by region				
Chinese	%	13.28	17.32	8.24
Overseas	%	0	0	0

<sup>&</sup>lt;sup>27</sup> Data includes only employees who left voluntarily

	i	i	i	
Indicator	Unit	2023	2022	2021
Turnover rate by job type				
Commercial plate	%	15.42	32.41	13.88
R&D plate	%	7.74	7.59	6.82
Functional plate	%	11.11	11.31	10.48
Technology operations and products supply plate	%	16.97	16.01	8.66
Employee Health and Safety				
Number of work-related injuries	employee	0	0	0
Proportion of work-related injuries	%	0	0	0
Lost work hours	hour	1,120	24	720
Employee Development and Training				
Average training hours for all employees	hour	72.70	149.2	100.8
Percentage of employees trained by gender	*	•	•	•
Male	%	49.20	48.4	50.59
Female	%	50.80	51.6	49.41
Average training hours per employee by gend	er	•	•	
Male	hour	76.33	65.1	95.2
Female	hour	69.18	68.0	106.5
Percentage of employees trained by employm	nent type	•	•	•
Senior managers	%	2.01	1.28	0.96
Middle managers	%	16.60	12.31	10.69
Junior employees	%	81.39	86.41	88.35
Average training hours per employee by empl	oyment type	•	*	
Senior and middle managers	hour	79.20	51.5	66.1
Junior employees	hour	71.21	69.0	105.8
	*			

Indicator	Unit	2022	2022	2021
	Unit	2023	2022	2021
Supplier Management				
Number of suppliers by region				
Chinese Mainland	supplier	1,148	1,197	2,052
Hong Kong, Macao, Taiwan	supplier	10	10	8
Overseas	supplier	71	62	75
Supplier's certification				
Supplier with quality management system certification (ISO 9001, etc.)	supplier	150	150	113
Supplier with <i>environmental management</i> system certification (ISO 14001, ISO 14064, etc.)	supplier	55	55	36
Supplier with health and safety management system certification (ISO 45001, etc.)	supplier	55	54	31
R&D and Innovation				
Investment in R&D	RMB '00 million	6.62	7.90	8.79
Patents granted	item	62	37	31
Anti-Corruption				
Anti-corruption training hour for all employees	hour per person	4.69	3.5	1
Anti-corruption training hour for board members and senior management	hour per person	3	1	1
Participation rate of anti-corruption training for board members	%	100	100	100
Cases of corruption-related litigation	case	0	0	0
Community Welfare				
Total amount of charitable donations	RMB '0,000	41.30	131	595
		A		A

# **Definition**

Term	Definition
HKEX	The Stock Exchange of Hong Kong Limited
NMPA	The National Medical Products Administration of China or, where the context so requires, its predecessor, the China Food and Drug Administration or CFDA
Vaccine	An active immunity preparation for the prevention of infectious diseases, which is made of pathogenic microbes (such as bacteria, rickettsia, viruses, etc.) and their metabolites through detoxification, inactivation or genetic engineering
Antigen	Substances that can cause immune responses in humans and animals, which can not only produce antibodies and primed lymphocytes by stimulating the immune system to have specific immune responses but also combine and react with antibodies and primed lymphocytes. It is usually a protein, but polysaccharides and nucleic acids can also be used as antigens
Conjugate vaccines	The polysaccharide-protein conjugate vaccine was prepared by containing polysaccharides conjugated to the carrier protein by chemicals
mRNA vaccine	A vaccine which is based on the mRNA structure corresponding to antigen protein in the pathogen, transmitted to human cells through different transmission approaches and after translation, which can stimulate cells to produce antigen protein and produce specific immune responses
Ad5-nCoV	Ad5-nCoV Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5 Vector), including two types of products, Convidecia® and Ad5-nCoV for inhalation
Convidecia	Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5 Vector) for intramuscular injection, whose trade name is Convidecia®
PCV13i	13-valent pneumococcal polysaccharide conjugate vaccine (CRM197, TT carrier)
PBPV	Recombinant pneumococcal protein vaccine
Ad5-nCoV for inhalation	Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5 Vector) for inhalation, whose trade name is Convidecia Air®
MCV	Meningococcal conjugate vaccine, used to prevent infection caused by meningococcal bacteria

Term	Definition
MCV2	Groups A and C Meningococcal Polysaccharide Conjugate Vaccine (CRM197), whose trade name is Menphecia®
MCV4	Groups ACYW135 Meningococcal Polysaccharide Conjugate Vaccine (CRM197), whose trade name isMenphecia <sup>®</sup>
DPT	Pertussis, diphtheria, tetanus
DTcP	Diphtheria, tetanus, and acellular pertussis (components) combined vaccine, adsorbed
Tdcp	A vaccine for adolescents and adults (aged 10 and above) that can prevent pertussis. Its TT antigen content is slightly increased compared to the DTcP vaccine under research for infants and young children, but it contains less pertussis and DT antigens
GMP	Good Manufacturing Practice for short
EHS	Environment, Health, and Safety for short
CRM197	A well-defined diphtheria toxin mutant protein, in which one of its amino acids is mutated from glutamic acid to glycine
Clinical trial	Systematic research on drugs in the human body, for example, patients or healthy volunteers, to confirm or reveal the effects, adverse reactions and/or absorption, distribution, metabolism, and excretion of experimental drugs, aiming to determine the effectiveness and safety of experimental drugs
HCP	Healthcare professionals
ICH	International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use
Adjuvant	Substances that can assist antigen response and modulate immune reactions

# Reader's Feedback

Thank you for reading the 2023 Environmental, Social and Governance & Corporate Social Responsibility Report of CanSino Biologics Inc.. We highly value your opinion to the Report. In order to improve the company's performance in the environment, society, and governance, we welcome your opinions and suggestions on the Report, so that we could further improve the Report.

1. Your overall co	mment on the Rep	ort					
☐ Excellent	Good	☐ Ordinary	☐ Not good	□ Bad			
2. Your comment	on the readability	of the Report					
☐ Excellent	□ Good	☐ Ordinary	☐ Not good	□ Bad			
3. Your comment	on the structural a	rrangement of the F	Report				
☐ Excellent	□ Good	☐ Ordinary	☐ Not good	□ Bad			
4. Does the content disclosed in the Report fulfill your expectation?							
☐ Yes	□ No	☐ Not clear					
5. Are CanSinoBl	O's ESG performa	nces fully reflected	in the Report?				
☐ Fully reflected		☐ Partially reflected		☐ Not reflected			
6.If you have othedown below.	er opinions and su	ggestions on the 20	023 Environmental,	Social and Governa	ance & Corporate Social Responsibility Report of CanSino Biologics Inc., please kindly write them		
Your Name:					Address: 401-420, 4th floor, West District Biomedical Park, 185 South Street, West District,		
Your Tel:					Economic and Technological Development Zone, Tianjin, China		
Your Company: <sub></sub>					Fax: 022-58213677		
Your Email:					Website: https://www.cansinotech.com.cn/		
Your Address:					Tel: 022-58213766		

