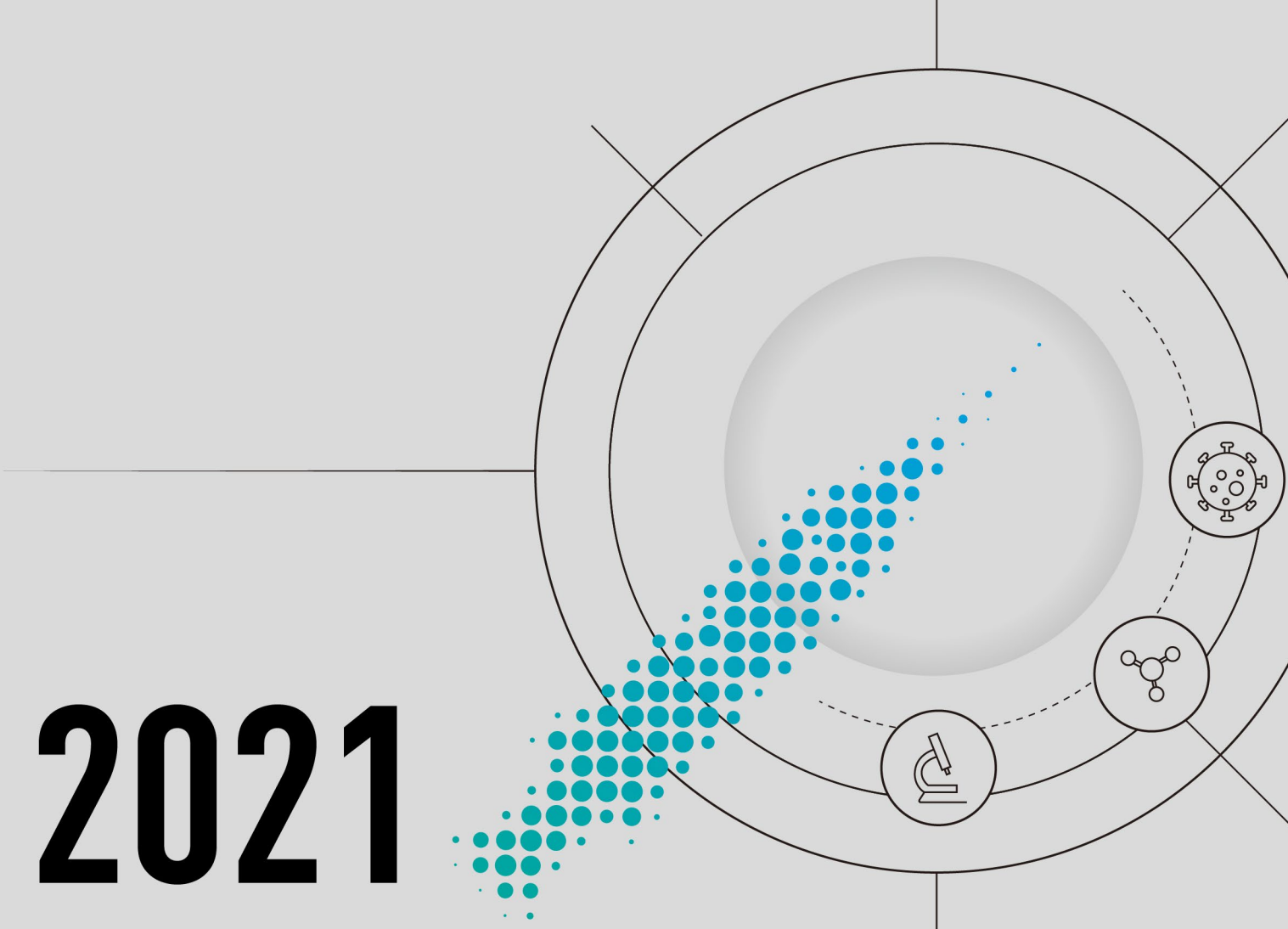


2021 CanSinoBIO

Environmental, Social and Governance Report

康希诺生物

Contents

About the Report

This is the third Environmental, Social and Governance (ESG) Report issued by CanSino Biologics Inc. (the "Company"). Following the principle of objectivity, normativity, transparency, and comprehensiveness, the Report provides a genuine disclosure of CanSinoBIO's ESG practices and performances to all stakeholders in such areas as business operation and development, environment conservation, and employees and community, as well as value chain optimization.

Basis of Preparation

The Report is prepared in compliance with the *Environmental, Social and Governance Reporting Guide* (the "ESG Reporting Guide") set out in Appendix 27 to the *Main Board Listing Rules* of the Hong Kong Exchanges and Clearing Limited ("HKEX").

Scope of Report

The Report involves the major R&D and manufacturing sites and workplaces of CanSino Biologics Inc., namely the office buildings, vaccine commercialization base phase I and vaccine construction base for COVID-19 vaccines in Tianjin, China. The Report covers the period from January 1, 2021 to December 31, 2021, with some reviews over previous years and the forecast of 2022 when necessary. Notes will be found in the text when the data scope is inconsistent with that in 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 were sourced from the annual financial statement of CanSino Biologics Inc. unless otherwise noted; whereas other data come 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 materiality analysis in 2021 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 discloses both positive and negative information to ensure balanced disclosures.

Consistency: The Report is the third ESG report published by CanSinoBIO. Data disclosed herein are for 2021 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 herein are counted as per 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.

Access to the Report

The Report in Chinese and English can be downloaded on the official website of CanSino Biologics Inc. (www.cansinotech.com) or on HKEX's website (www.hkexnews.hk). The Chinese version shall prevail in case of any discrepancy between the Chinese version and the English version.

For any questions or suggestions concerning the Report, please send emails to ir@cansinotech.com or call us at 022-58213766.

Board Statement

CanSinoBIO regards ESG and the philosophy of sustainable development as the bulwarks of its long-term and robust growth, as incorporating ESG factors into the decision-making and routine operations can largely improve its resilience. The Board of CanSinoBIO remains the decision-maker at the highest level, responsible for ESG practices across the Group. The Board attaches great importance to ESG by including it in the duty scope of the Audit Committee. With regular monitoring and supervision, ESG strategies, targets and policies will be effectively enforced.

The Audit Committee sets up an ESG Working Group to lead the management of every important ESG issue with support from other departments, so as to promote the implementation of the ESG concept. The Audit Committee regularly reports to the Board to ensure that the Board reviews and approves important matters related to ESG.

In 2021, CanSinoBIO has comprehensively improved the ESG governance when fully considering the social macro environment in and abroad and its own development strategy. It's also a move responding to the expectations from various stakeholders and the "carbon peaking and carbon neutrality" requirements raised by the country. In 2021, we set up an ESG Working Group to identify and evaluate major ESG issues and risks thereof incurred. The ESG Working Group strengthened ESG management in the supply chain, set targets for environmental conservation, and identified challenges and opportunities brought by climate change. The Board has reviewed the identification results submitted. In this way, we fully integrated ESG strategies into our routine management.

The Report details the progress and effectiveness of the ESG efforts made by CanSinoBIO in 2021. It was deliberated and approved at the Board meeting on May 25, 2022.

Chairman's Statement

Inspired by China's continued progress and the spirit of "Innovation for a Safer World," CanSinoBIO in 2021 continued to be a proactive practitioner of China' s national goals and made great contributions to the fair distribution of vaccines and the global public health as a whole. Convidecia, the trade name of Ad5-nCoV, was the first to be approved as an adenovirus vector novel coronavirus vaccine in China and has become one of the powerful weapons in the global fight against the pandemic. Two meningitis vaccines, namely Menphecia, the trade name of Group A and Group C Meningococcal Conjugate Vaccine ("MCV2"), and Menhycia, the trade name of Group ACYW135 Meningococcal Conjugate Vaccine ("MCV4"), were also approved for launch on the market. Our cutting-edge solutions and innovative technologies will protect the lives and health of more people. Based on 13 years' efforts to build the global reputation of CanSinoBIO as a vaccine manufacturer, we will move farther ahead to fulfill our mission of bringing "Health, Hope and Promises" to the broader world.

In 2021, CanSinoBIO reached a milestone in its promotion of sustainable development. During the reporting period, we set up an ESG Working Group under the Audit Committee and further developed the ESG governance structure composed of the Board, the Audit Committee, the ESG Working Group and all other departments. We have initiated a package of works: identifying ESG material issues and risks thereof incurred, improving ESG across the supply chain, formulating targets for environmental protection and responding to climate changes. Thus, ESG-based KPI management has become the cornerstone for us to improve our global competitiveness.

Our mission is "to provide the world with innovative, high-quality and accessible vaccines." As such, we work with numerous partners to fuel the Company's diversified, equal and efficient growth with ESG-related development concepts.

With the Board at the core of the governance structure, we insist on an efficient operating model in compliance with laws and regulations to protect the interests of shareholders and stakeholders. Our Board Diversity Policy sets a positive tone for overall team building, which helps pool extensive experiences in operations, technology, and human resources management. In general, we have raised the awareness of risk among all employees and directors of the Board. Under the guidance of such regulations as the CanSinoBIO Compliance Handbook, we have made concrete and thorough efforts to shape business ethics, fight against corruption and protect whistleblowers.

We keep innovating under strict business compliance and ethics. Our vision - "Innovation for a Safer World" - is strongly evidenced by every product we manufacture. CanSinoBIO was fully dedicated to the mass production of the COVID-19 vaccines in 2021. It was our first attempt on such a scale. Full life cycle quality management brings both challenges and opportunities. While comprehensively ensuring the supply of COVID-19 vaccines, we have optimized the efficiency of product management. By embracing third-party quality audits, the Company has strengthened its capacity-building for system-wide compliance, R&D innovation and cooperation across the industry. We actively shared our experiences during academic sessions. In 2021, Convidecia (our COVID-19 vaccine, Ad5-nCoV), Menphecia (our MCV2 vaccine) and Menhycia (our MCV4 vaccine) were approved to be launched. The most exciting part was when our research findings of phase III clinical trials for Convidecia were published in The Lancet, one of the most prestigious peer-reviewed medical journals in the world. Our total investment in R&D amounted to RMB879 million, representing a year-on-year increase of 105.1%.

As a responsible company operator, we have doubled our efforts in managing personnel safety, a robust supply chain, information security, marketing and clinical ethics. CanSinoBIO agrees that operational safety is highly important to its sustainable development. In 2021, we set an annual target for health and safety. We are proud to have reached the 1-million-hour milestone in construction, operation and maintenance without a single accident; ESG concepts have also been added to our supplier assessment approach, so as to further build a responsible supply chain in line with such standards as ISO 9001 certification of the quality management system certification. We have also conducted responsible academic marketing and customer service in an ethical, scientific and objective manner to improve customer satisfaction. We protected the privacy of subjects and managed information security in strict compliance with clinical ethics. To our delight, there were no lawsuits resulting from our clinical trials, nor were there any information leaks throughout 2021.

We have established a medium and long-term human resource development strategy to deal with the organizational and management challenges brought by the fast expansion. Consequently, every employee can feel the care from the "CanSino family" which is driven by the concept of "health commitment with you." We have expanded channels to bring in more professionals. For employees, we built more targeted promotion policies and provided a variety of support measures to advance their career paths. Our efforts resulted in being honored with China's Top 100 "Best Employer Award 2021" by Zhaopin, one of the most popular job-sourcing platforms in China. Our employees have played an indispensable role in accelerating the production of COVID-19 vaccines.

Upholding the ethos that humanity should co-exist harmoniously with nature, we aim to build an environmentally-friendly enterprise driven by the goal of "carbon peaking" and "carbon neutrality." As a result, we have fully achieved cleaner production in 2021. While strengthening environmental management, we have proactively responded to climate change and set environmental targets. We have also identified risks related to climate change, and regularly tracked our progress toward the target fulfillment. Together with employees, we continued to strive to protect the environment.

We take social responsibility very seriously and have empowered society with our products that have helped multiple countries build immunity against health risks. Backed by our faster research and development, we provided vaccines to countries with the most urgent needs and effectively distributed them to help fight the pandemics. We continue to use our expertise to benefit needy people by providing health science education, support in pandemic- and disaster-hit areas, and other assistance to underdeveloped regions. In 2021, we have helped multiple countries improve vaccine commercialization and contributed to a better global public health system with a fairer distribution of vaccines. Our RMB5.95 million investment in charity earned us the "Social Responsibility Award for Consolidating the Linked Results of Poverty Alleviation and Rural Revitalization in 2021."

Looking back on 2021, CanSinoBIO has surprisingly delivered on our ESG commitments. We firmly believe it is just a starting point for us to go further. In the 2022 New Year Message, General Secretary Xi Jinping said that "to ensure that everyone lives a better life, we must never rest on what we have achieved, and there is still a long way to go." As we continue to work together to defeat the pandemic, the world is indeed a community with a shared future. All employees of CanSinoBIO will continue to be committed to providing global solutions for infectious diseases. By improving corporate governance through ESG, we aim to narrow the gap between the vaccines made in China and those made in other countries to benefit more people.

Dr. Xuefeng YU
Chairman and Chief Executive Officer

2021 Highlights of ESG Performance

In 2021, CanSinoBIO has continued to improve the ESG management thanks to the top-down efforts made by the Board to raise the management's governance awareness. The endeavours have promoted a higher level of ESG and strengthened ESG management, which further enhanced the Company's performance and enabled us to assume more social responsibility.

Governance

- Established an ESG Working Group and perfected the ESG governance structure
- **No** lawsuit against corruption in the whole year
- **100%** of Board members accepted anti-corruption training
- Each Board member receives **1** hour of anti-corruption training and **1.5** hours of securities compliance training

Product

- **3** vaccine products were approved, Ad5-nCoV obtained the EU GMP certificate
- Invested RMB**879** million in R&D, a year-on-year increase of **105.1%**
- Owned **126** trademarks in and abroad, and filed **45** trademark applications; owned **31** patents and filed **18** patent applications
- Accepted **19** quality audits by the third-party
- **100%** of quality personnel attended professional training

Operation

- Set the target of health and safety, and completed **19** safety lectures and **105** training sessions
- **100%** of suppliers accepted training on safety and occupational health; **101** safety training sessions and **137** technical exchanges were held for suppliers
- **1** million hours of safe construction and operation and maintenance
- **100%** of suppliers signed the non-disclosure agreements (NDAs) and integrity agreement
- **No** information security incidents

Employee

- **49%** of employees are female
- **3** key management are female, accounting for **37.50%** of the management
- **100.8** hours of training per employee
- **96.58%** of employees accepted the training
- Honored with China's Top 100 "Best Employer Award 2021"

Environment

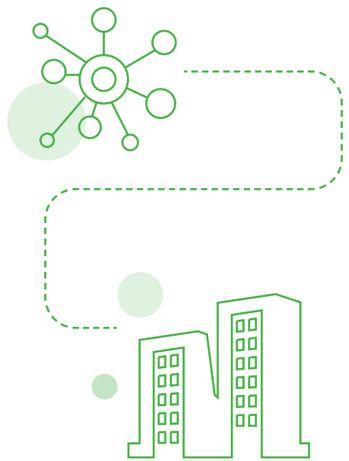
- Invested RMB**6.6821** million in environmental protection
- **84.14%** of reduction in GHG emission intensity over the previous year
- **86.54%** of declines in energy intensity consumption over the previous year
- Set the environmental targets and issued commitments for environmental protection
- Identified climate-related risks and formulated countermeasures

Community

- Invested RMB**5.95** million in charities
- Provided COVID-19 vaccines to pandemic-hit areas in response to the national allocation
- Established a cold chain logistics distribution system for vaccines serving all over the country and remote areas
- Exported vaccine products to Pakistan, Mexico, Malaysia, Argentina, Chile and other countries; obtained emergency use authorization or conditional marketing authorization in more than 10 countries
- Held more than **10** online academic activities and participated in various health science education
- Won the "Social Responsibility Award for Consolidating the Linked Results of Poverty Alleviation and Rural Revitalization in 2021" and the "Major Contribution Award on the National Vaccine and Health Conference" by the Chinese Preventive Medicine Association

About CanSinoBIO

Company Profile



Incorporated in TEDA West District, Tianjin in 2009, CanSino Biologics Inc. is a leading innovative biopharmaceutical company in China. CanSinoBIO was listed on the Main Board of HKEX (CanSinoBIO, HKEX:06185) in March 2019 and on the Sci-Tech Innovation Board (STAR Market) of the Shanghai Stock Exchange (CanSinoBIO, SHSE: 688185) in August 2020, making it the first listed "A+H" vaccine company.

Our management team brings together many renowned scientists and senior experts in the vaccine industry who have led international innovative vaccine R&D in such leading pharmaceutical companies as Sanofi Pasteur, Astra Zeneca and Wyeth (now Pfizer). The founders and core technicians have been engaged in the biopharmaceutical industry for 20 years on average.

Vaccine R&D

We only have 300 in-house R&D technicians but have developed pipelines for 17 innovative vaccine candidates in 12 disease areas.

Vaccine manufacturing

The technological platform with internal intellectual property rights adopted in vaccine commercialization base phase I and COVID-19 vaccine construction base in Tianjin is able to quickly prepare virus vector vaccines and bacterial vaccines; the manufacturing capabilities of mRNA COVID-19 vaccine are being developed in Shanghai.

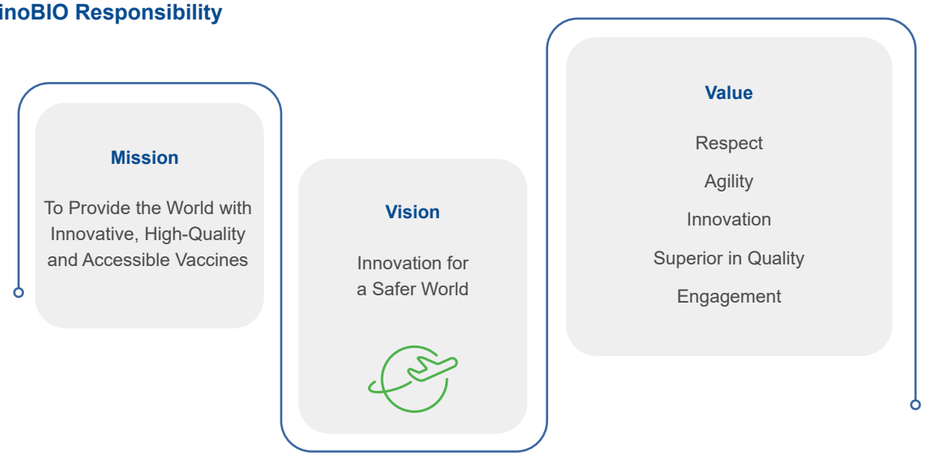
Collaborations

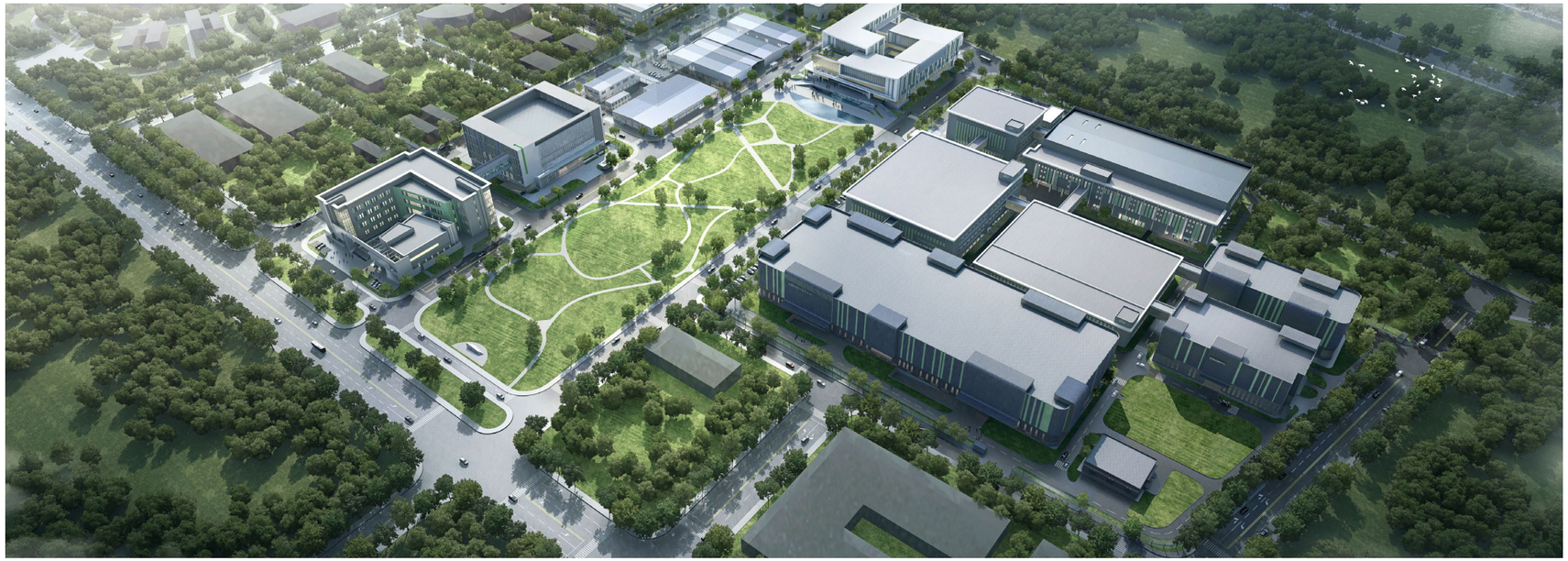
The Company has established partnerships with the National Research Council of Canada, McMaster University, BIRD-C, and Vaccitech.

Culture and Value

We fulfill the mission "To Provide the World with Innovative, High-Quality and Accessible Vaccines" to turn the vision of "Innovation for a Safer World" into real-world impact. We pursue the value of "Respect, Agility, Innovation, Superior in Quality and Engagement" to treasure the reverence and protection of life.

CanSinoBIO Responsibility





Aerial View of CanSinoBIO Blueprint

Business Presence

CanSinoBIO is committed to the R&D, manufacturing and commercialization of vaccines. The Company specializes in antigen discovery, expression, purification and formula research, and also offers multiple services, including the proof of concept in preclinical evaluation, analytical method development, manufacturing technology development, industrialization and commercialization. Our team has built advanced laboratories for microbiology, molecular biology, cell biology, immunology and biochemistry. We also have animal labs. Based on our independent R&D and collaboration with partners, the CanSinoBIO R&D team has established five key platforms featuring such technologies as viral vector-based technology, synthetic vaccine technology, protein structure design and recombination technology, mRNA technology, and formulation and delivery technology, all with competitive R&D pipelines in place.

The Company's R&D pipelines cover 17 innovative vaccine products for 12 infectious disease entities, including meningitis, Ebola virus disease, DPT, pneumonia, tuberculosis, novel coronavirus (COVID-19), herpes zoster, etc. Among those, 8 of them are vaccine candidates in the phase of the clinical trial or clinical application. In the future, CanSinoBIO will continue to optimize our product portfolio to meet the needs of the market. The Company's R&D pipelines are set out below as of the date of the Report:

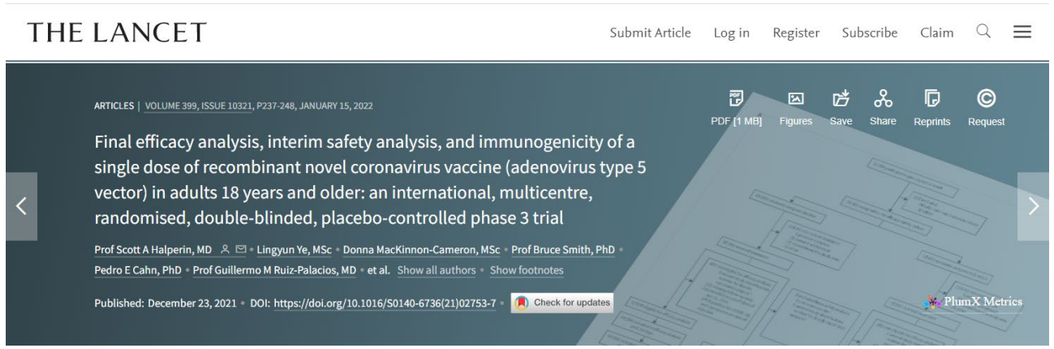
CanSinoBIO Vaccine Candidate

Publications

CanSinoBIO constantly coordinates the R&D efforts and produces constant results through academic exchanges and scientific collaboration. In terms of paper publication, in 2021, we published "*Preparation and Immunogenicity Evaluation of Recombinant Poliomyelitis Type 2 Virus-like Particles*". The research findings confirmed the feasibility of preparing effective virus-like particle (VLP) vaccines by using an insect cell-baculovirus expression system, which provided useful references for developing the Polio vaccine. Our R&D findings have been published in major prestigious academic journals at home and abroad many times. During the reporting period, our findings on meningococcal polysaccharide-protein conjugate vaccines were included in domestic well-known academic journals such as the *Chinese Journal of Vaccines and Immunization* and the *Chinese Journal of Preventive Medicine*. Our research papers about COVID-19 vaccines have been repeatedly published in *The Lancet*, *The Lancet Infectious Diseases*, *The New England Journal of Medicine*, *Nature Medicine* and other internationally famous medical academic journals.

Convidecia international, multicentre phase III trial were published in *The Lancet*

In December 2021, CanSinoBIO published the results[1] of the final efficiency and interim safety analysis of Convidecia's international multicenter phase III trial in The Lancet, a world-renowned influential medical journal. According to the finding, a single dose of Convidecia vaccine is efficacious and safe in healthy adults aged 18 years and older. One shot of Convidecia was 57.5% efficacious against infection and 91.7% effective against severe disease beginning 28 days postvaccination; one shot of Convidecia was 63.7% efficacious against infection and 96.0% effective against severe disease beginning 14 days postvaccination. There were no serious adverse reactions following the vaccination. The finished analysis outcomes of the Convidecia's international multicenter phase III trial meet the efficiency standard laid out by the WHO. In the clinical trial, there was no significant difference in the incidence of serious adverse events of vaccine recipients and placebo recipients. It also proved that Convidecia vaccine was efficacious to the older population aged ≥60 years.



[1] https://doi.org/10.1016/S0140-6736(21)02753-7

Stakeholder Communication

At CanSinoBIO, our sustainable development depends on stakeholder engagement and participation. That's why we focus on the demands of stakeholders. The Company continues to increase and improve communication channels for positive and candid exchanges with stakeholders. Considering our business nature and external changes in policies for environmental conservation, we have effectively identified ESG issues and integrated the demands of stakeholders into the corporate strategic planning and our business layout.

Communication Strategy

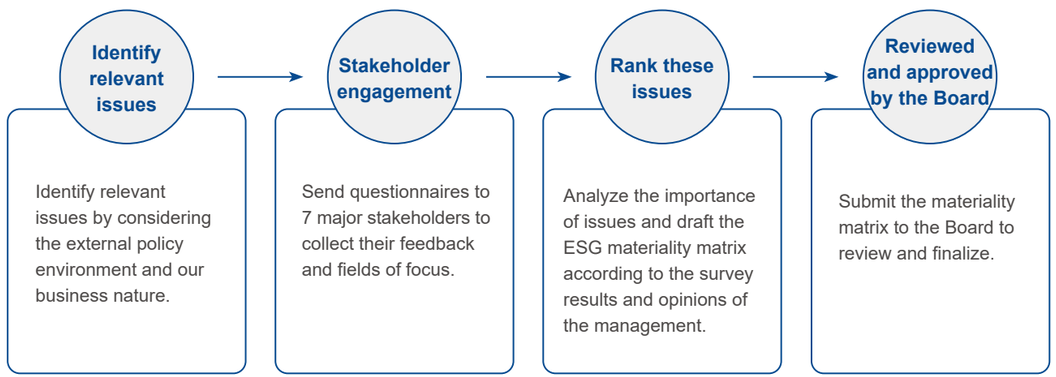
We regularly collect and summarize the opinions and suggestions from internal stakeholders including employees and senior managers; we also solicit the expectations and feedback from such external stakeholders as the government and regulators, shareholders and investors, customers and users, communities, suppliers and partners, media and NGOs through multiple channels. We'll keep the management updated so that they can make targeted responses.

Stakeholders	Demands	Our Response
Government and regulators	• Compliance with laws and regulations • Ensure product quality and safety • Accept the supervision from the government and promote the healthy development of the industry • Pay taxes and drive the regional economy	• Fulfill all obligations in accordance with laws and regulations • Report the operational performance on schedule • Continuously increase drug accessibility • Promote the synergy of upstream and downstream companies in the industry • Establish internal control mechanism for compliance operation • Pay taxes
Shareholders and investors	• Know the Company's business performance and governance norms; ensure strict risk control • Conduct business steadily to maximize returns on investment • Fair, impartial and open information disclosure	• Disclosure of compliance information • Investor communication through telephone, email and online conversations • General meeting of shareholders • Investor exchange meetings and on-site visits
Employees	• Protect employees' basic rights and interests • Care about employees' physical and mental health and safety • Provide training and career paths for employees • Generous benefit packages	• Employee communication meeting • Employee satisfaction survey • Solicit opinions and feedback from employees • Employee training • Employee welfare
Customers and users	• Protect consumers' basic rights and interests • Compliance with business ethics • Ensure product safety and timely recall faulty products	• Strictly follow the quality control of vaccine in the full process • Protect customer information and optimize complaint mechanism • Handle consumer complaints and opinions
Suppliers and partners	• Maintain a good and stable partnership • Operate in good faith and ensure product compliance • Sustainable supply chain	• Regular communication • Standardized 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 • Assume charitable responsibilities	• Compliantly disclose the data on environmental performance and set targets for environmental conservation • Establish complaint channels such as the official website and social media account • Launch charitable activities
Communities	• Put emphasis on the impact of production and operation on the local communities • Drive local economy and help vulnerable groups • Recycle more product packaging and waste to reduce environmental pollution	• Engagement in charity • Regular assistance in certain areas • Offer health science education

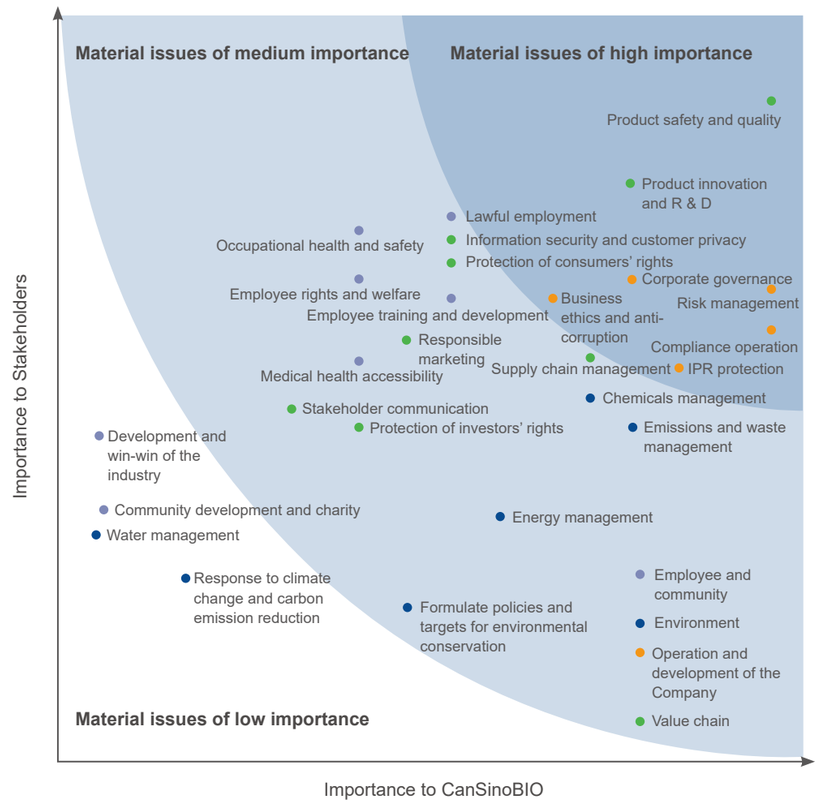
Material Issues

We determine material ESG issues to specify the key areas of sustainability practice and information disclosure. In line with our business prospect, we have identified 26 sustainability issues of substantive impact and collected feedback from stakeholders and management on these issues through 463 valid questionnaires. Based on the management's discussion and analysis, the Company has drafted the ESG materiality matrix for the Board to finalize.

the Process to Identify Material Issues



ESG Materiality Matrix of CanSinoBIO in 2021



Governance

- Governance Guarantee
- Business Ethics
- ESG Governance

CanSinoBIO always sees integrity and compliance as the foundation for the Company's operation. By formulating and updating the policies of the Board and improving the ESG management process, CanSinoBIO enhances corporate governance, combats corruption, and maintains integrity to comprehensively move on toward sustainable development.

Governance Guarantee

CanSinoBIO persists in compliance and efficient corporate governance as we continue to increase the corporate value and shoulder more responsibilities. We have strictly followed the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China* and the *Corporate Governance Code* set out in Appendix 14 to the Listing Rules of HKEX and other legal provisions related to corporate governance, ensuring the stable operation and guaranteeing the maximum interests of shareholders and stakeholders.

Governance Structure

As the core of the governance structure, the Board makes decisions for all material matters related to the Company's operation such as policy, strategy, budget, internal control and risk management. Therefore, we have set up three Board Committees (i.e. Audit Committee, Remuneration and Assessment Committee, and Nomination Committee) as the supervisory and executive arms of the governance structure. They are appointed and authorized by the Board and work effectively within their terms of reference. Currently, the Board is composed of five executive directors, three non-executive directors and four independent non-executive directors. We have made it a norm to hold at least one annual general meeting of shareholders and at least four regular Board meetings every year.

During the reporting period, CanSinoBIO held

8 Board meetings,

4 meetings of audit committees,

3 meetings of remuneration and assessment committees,

1 meeting of the nomination committee,

4 general meetings of shareholders,

7 meetings of supervisory boards.

Board Composition

We have formulated the Board Diversity Policy and continuously shape a diversified and professional Board from the perspectives of gender, age, cultural and educational background, professionalism, term of service, biopharmaceutical experience and recognition to the Company. We strive to make better decisions for the Company and increase the efficiency of the Board in a comprehensive and holistic view. The Board members have empowered the Company and the Board with thorough experience and expertise in important fields, including:

Expertise of Board Members

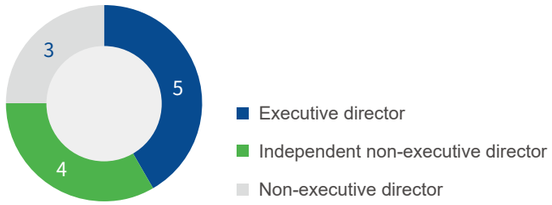
- Experience in the biopharmaceutical and medical industry
- Biopharmaceutical technology
- Human capital management
- Leadership and management ability
- Experience in the global capital market
- Experience in international operation

Information about Board Members

Board Members	Age	Term of Office	Committees Served
Xuefeng YU, Executive Director	58	From May 15, 2020 to the date when the current session of the Board expires	• Member of the Nomination Committee
Shou Bai CHAO, Executive Director	59	From May 15, 2020 to the date when the current session of the Board expires	• Member of Remuneration and Assessment Committee
Tao ZHU, Executive Director	49	From May 15, 2020 to the date when the current session of the Board expires	
Dongxu QIU, Executive Director	62	From May 15, 2020 to the date when the current session of the Board expires	
Jing WANG, Executive Director	41	From October 11, 2021 to the date when the current session of the Board expires	
Liang LIN, Non-executive Director	47	From May 15, 2020 to the date when the current session of Board expires	• Member of Remuneration and Assessment Committee
Nisa Bernice Wing-Yu LEUNG, Non-executive Director	51	From May 15, 2020 to the date when the current session of the Board expires	• Member of the Nomination Committee
Zhi XIAO, Non-executive Director	43	From May 15, 2020 to the date when the current session of the Board expires	
Shiu Kwan Danny WAI, Independent non-executive Director	58	From May 15, 2020 to the date when the current session of the Board expires	• Member of the Audit Committee • Member of the Nomination Committee
Zhu XIN, Independent non-executive Director	53	From May 15, 2020 to the date when the current session of the Board expires	• Member of the Audit Committee • Member of Remuneration and Assessment Committee
Shuifa GUI, Independent non-executive Director	57	From May 15, 2020 to the date when the current session of the Board expires	• Chairman of Remuneration and Assessment Committee • Member of the Audit Committee • Member of the Nomination Committee
Jianzhong LIU, Independent non-executive Director	58	From May 15, 2020 to the date when the current session of the Board expires	• Member of the Nomination Committee • Member of Remuneration and Assessment Committee

Board Composition

Position



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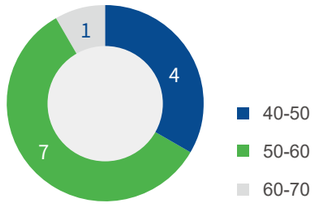
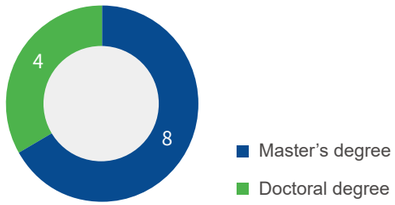
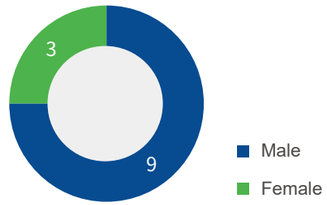


Cultural and educational background



Gender



In 2021, the Company held a variety of training both online and offline on securities regulations and compliance information for all Board members, the supervisory board members, directors and senior management. Video recordings of these training will also be shared in the Company to ensure our sustainable growth.

Business Ethics

CanSinoBIO strictly complies with the *Company Law of the People's Republic of China*, the *Anti-Monopoly Law of the People's Republic of China,* and the *Anti Unfair Competition Law of the People's Republic of China* and other laws and regulations related to anti-corruption and business ethics. We also formulate the *CanSinoBIO Compliance Handbook, Compliance Management System and Anti-Corruption Policies,* which is binding on all employees including directors, supervisors and senior managers. All of them are required to uphold the business philosophy of honesty, trustworthiness, legality and compliance. Anti-money laundering compliance is also added in the *CanSinoBIO Compliance Handbook,* in a way to resolutely prevent and curb bribery, extortion, fraud and money laundering of any form. What we do is to strictly regulate the business and managerial behaviors among the Company and its employees.

Risk and Internal Control Management Committee

As the Company's highest regulator for business ethics and anti-corruption, it oversees the business ethics and anti-corruption affairs.

Compliance BP Team

A Compliance BP Team under the Legal and Compliance Department identifies the risks of corruption and implements the compliance requirements of anti-corruption.

CanSinoBIO receives whistleblowing and active audits to supervise the implementation of anti-corruption and other systems. The Company sets up an Audit and Inspection Team for company-wide anti-corruption supervision and inspection. We have developed compliance-related whistleblowing and investigation mechanism with the formulation of the *Compliance Reporting and Investigation System*; we further announced the tip-off mailbox and hotline. We conduct a thorough anti-corruption investigation upon the clues and evidence provided by the informant. In addition, we give feedback within the specified time and take corrective or preventive measures depending on the seriousness of clues and other factors. The Company makes every effort to keep confidential the anonymous informants, real name informants and the clues they provide. We prohibit investigators from disclosing the information of informants and avoid any form of retaliation to fully protect the legitimate rights of informants. Even adequate legal assistance is available to them.

Tip-off hotline: 022-58213600-6218

Tip-off mailbox: complaint@cansinotech.com

During the reporting period, CanSinoBIO had **no** lawsuit against corruption in the whole year.

In 2021, we have organized a handful of training on business ethics and anti-corruption. The training includes the compliance training for directors, supervisors and senior management, the compliance training for the commercial operation center and the training on marketing materials management policy for all personnel of the commercial operation center. We have improved the awareness of anti-corruption among all employees, thus creating a working environment featuring honesty and integrity.

In 2021, **100%** of Board members in CanSinoBIO attended the anti-corruption training;

The Board members, management and entry-level employees accepted anti-corruption training for **1** hour per person.

We also offered securities compliance training for Board members and senior management, who had participated in this training for **1.5** hours per person.

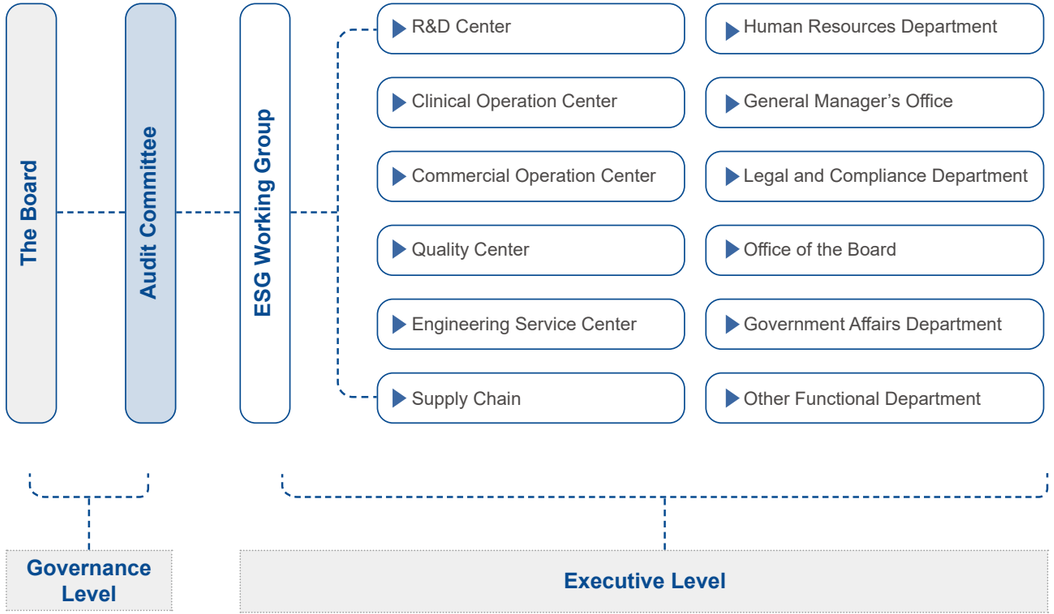
ESG Governance

CanSinoBIO regards ESG and the philosophy of sustainable development as the premise for its long-term and robust growth. We have incorporated ESG factors into the decision-making and routine operations, as we believe reliable risk identification and control can largely improve the resilience of the Company. Also, we are proactively engaged in stakeholder communication and listen to different voices. We give full authority to the Board which discusses and determines material ESG issues to comprehensively promote sustainable development.

ESG Governance Structure

The Company continues to optimize the ESG management system. We have set up an ESG Working Group in 2021 and included the ESG functions in the duty scope of the Audit Committee. We have formed an ESG governance structure composed 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 leads and coordinates all departments as an executive arm, which further clarifies the ESG duties for each department and strengthens the overall ESG management. At the same time, we strive to advocate the culture of environmental protection and social responsibility among all employees and promote the integration of the ESG concept into the operation for sustainable development.

ESG Governance Structure



Duties at Different Levels of ESG structure

The Board

Actively engaged in the management of ESG matters and supervise the Company's ESG progress and other important affairs to ensure the ESG-related risk management and internal control system runs appropriately and effectively.

Audit Committee

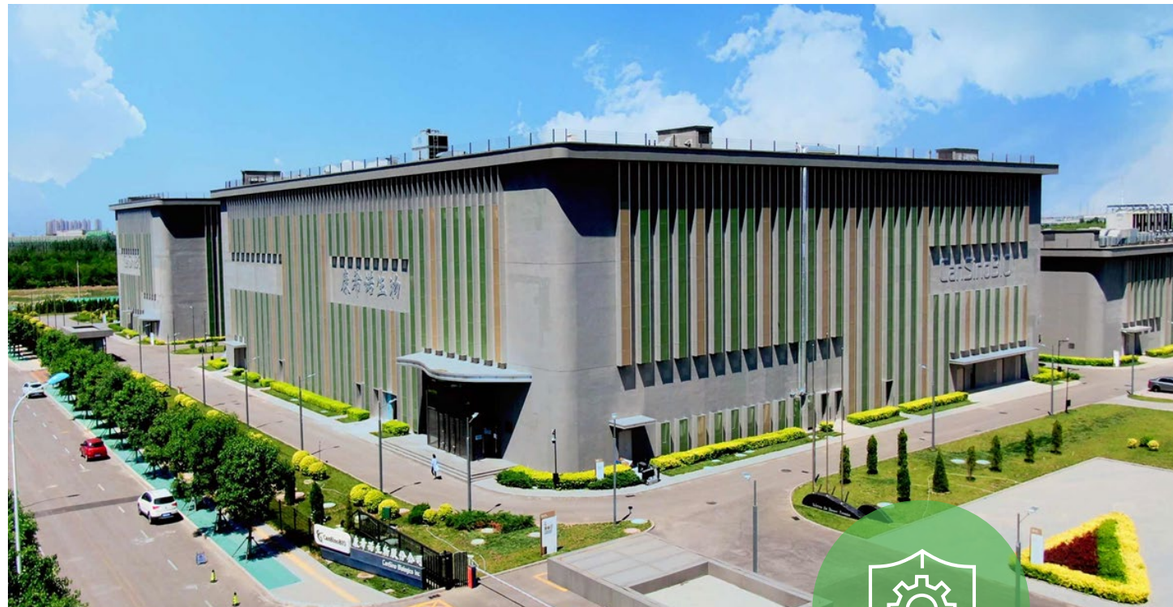
Regularly advice the Board on ESG matters;

Give suggestions on the Company's ESG strategies; identify major ESG risks and opportunities; approve and review ESG-related policies, and review the Company's annual ESG report.

ESG Working Group

Work as the ESG executive office of the Audit Committee and directly led by the Audit Committee;

Implement the Company's internal ESG management; sort out the existing ESG policies and improve the ESG policies on various issues; contact and communicate with relevant departments on the specific way to fulfill ESG tasks.



ESG Risk Management

To strengthen the Company's ESG risk management, we identify, analyze and control ESG risks, and gradually integrate ESG risk management into the comprehensive risk management system. All major ESG risks will be reported to the Board. The Board will assess the corresponding risks and formulate corresponding plans to ensure stable and safe operations.

ESG Risk Management Process

Risk identification

Identify ESG risk in the business process in the environment, society and governance aspects; establish an ESG risk database according to national laws and regulations and the nature of the industry.

Risk analysis

Evaluate and score the risk in the ESG risk database by the impacts of the risk and the possibility of occurrence; calculate the finished score for each risk based on questionnaire results, consultation with experts, scenario analysis, sensitivity analysis and other methodologies in combination with the reality.

Risk control

Classify, rank and compare each ESG risk according to the results of ESG risk identification and scoring; form an ESG risk matrix based on the importance of risks: critical, high, medium and low, so as to do the prioritization for each risk and take response measures respectively.

In 2021, the Company used the ESG risk management methodology and analyzed the top four ESG risks, namely the risk of corruption and business ethics, the risk of product safety and quality, the risk of intellectual property, as well as the risk of customer relationship management. Countermeasures have been taken in response to the risks identified.

ESG Risk Countermeasures

Risk in corruption and business ethics

- Strengthen the integrity governance, formulate and improve the *CanSinoBIO Compliance Handbook*, *Compliance Management System, Compliance Reporting and Investigation System* and *Anti-Corruption Policies*, activate tip-off channels, and protect informants with legal assistance to informants;
- Increase education and warnings on integrity and regularly organize anti-corruption training to raise the awareness of discipline and compliance among all employees.

For details, please refer to the "Business Ethics" of the Governance chapter.

Risk in product safety and quality

- Apply for the certification by the quality management system in China and abroad, and gain recognition;
- Regularly conduct the internal audit of the quality management system; actively accept the compliance audit by third parties, for instance, the audit by local drug administration, WHO, GMP, and partners with business connections and cooperation in China and abroad;
- Comprehensively follow up and cooperate with the professional inspectors dispatched by the National Medical Products Administration (NMPA) in all-round on-site review; identify and collect vaccine quality risks, timely inform the NMPA with appropriate rectifications and immediately make rectifications to ensure our product quality.

For details, please refer to the "Product Quality" of the Product chapter.

Risk in IPR

- Prepare internal management regulations, set up Intellectual Property Management Committee, and formulate the intellectual property development plan and strategy; strictly avoid infringing the intellectual property rights while protecting our own R&D findings and legitimate rights;
- Build an IPR risk management and control system and regularly collect and process IPR information; search, analyze and evaluate the IPR infringement information to accurately identify, review and prevent the IPR risk of the Company;
- Formulate the *Regulations on Awards for Patents, Inventions and Creations* and design the top patent awards to motivate employees to make inventions, apply for and protect IPR in the form of honorary awards;
- Sign intellectual property agreements and NDAs with new recruits, which define the ownership of the intellectual property generated during the employment to avoid potential disputes.

For details, please refer to the "IPR Protection" of the Product chapter.

Risk in customer relationship management

- Increase customer education and quality management, familiarize customers with product-related information, and further build their trust in our brand through such ways as science popularization, quality optimization, and academic promotion of products;
- Improve the current product complaint and recall procedures; receive customer feedback through various channels and the quality service by professional customer service teams, and make regular special improvements besides immediately solving customers' problems.

For details, please refer to the "Responsible Marketing" of the Operation chapter.

3 GOOD HEALTH AND WELL-BEING

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

17 PARTNERSHIPS FOR THE GOALS

Product

- Product Quality
- R&D and Innovation
- IPR Protection
- Industry-wide Collaboration

Adhering to the vision of “Innovation for a Safer World,” CanSinoBIO strictly controls the product quality and secures vaccine safety. Backed by the strong R&D prowess and mature technology platform, we focus on vaccine R&D and continue to make breakthroughs and innovations. We strictly safeguard intellectual property rights, maximize the R&D benefits for society, and actively cooperate with peers to invigorate the whole industry.

Product Quality

The Company has established a perfect product quality management system and implants quality management into every process of manufacturing and operation with strict quality inspection. At the same time, we are actively embracing internal and external audits on the quality system. Those audits help improve the awareness of quality and effectively control the vaccine quality during the full life cycle.

Management System

CanSinoBIO has established a management system subject to the quality control of vaccine manufacturing as per the *2020 Edition of the Pharmacopoeia of the People's Republic of China*, the *European Pharmacopoeia 10th Edition*, the *Good Manufacturing Practice (GMP)*, the *Good Manufacturing Practice of Drugs* by WHO, the guiding principles of FDA and ICH, as well as other relevant laws and regulations. The Company has set up a quality center in which the quality compliance department, quality assurance department and quality control department perform their due responsibilities. Comprehensively, we formulate the quality policies and targets.

The Company's vaccine manufacturing quality management system runs through the whole process, covering all links such as product design and R&D, manufacturing control, supplier management, material management, quality control and the release of products. We guarantee the conditions before and during vaccine manufacturing and handle deviations and abnormal events after manufacturing. We have created an overall management process on the basis of regulation establishment, process development, form-based presentation, and data utilization. We regularly carry out internal and external audits on the quality system to ensure its effective operation.

The Company has produced the *Quality Manual*. Meanwhile, we have formulated comprehensive quality standards for raw materials, excipients, packaging materials, intermediate products, stock solution, semi-finished products, finished products, water for pharmaceutical use and process steam. Our standards are beyond legal standards, national standards, industry standards, and those for registration and application. For specific products, we have prepared customized product quality standards, including the *Quality Standard of Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5 Vector)*, *Quality Standard of Group A and Group C Meningococcal Conjugate Vaccine (CRM197)*, and *Quality Standard of Group ACYW135 Meningococcal Conjugate Vaccine (CRM197)*.

Laboratory Management

Superior vaccine manufacturing starts with nuanced and complete laboratory and production management. Laboratory management is an important component to ensure product quality. The Company has formulated management documents for the management of samples, reagents, biological reference standards, instruments and equipment.

The *Regulations on Sample Inspection and Sampling*, the Regulations on *Sample Receiving, Distribution, Use and Disposal* and the *Regulations on Sample Retention* cover the management of samples during the full life cycle from sampling, receiving, inspection, sample retention to destruction, and each step must be recorded authentically and effectively.

The regulations on reagents and standards, like the *Regulations on Reagents and Drugs*, and the *Regulations on Biological Reference Standard and Chemical Reference Standards in Laboratory*, have detailed provisions on the supplier, standard traceability, as well as receiving and distribution process.

The *Regulations on Instruments and Equipment in Laboratory* clarifies the instrument management process, including instrument selection and procurement, metrological confirmation, maintenance, calibration and periodic validation, to comprehensively ensure the accuracy of the experiment.

Production Process Control

In terms of production, the Company comprehensively considers the conditions and technical requirements for vaccine production and thus makes strict regulations on equipment and facilities, material management and equipment operation. We also carry out environmental monitoring in the cleanroom to ensure that the environment for production meets the GMP requirements.

Validation of equipment and facilities

- The management, technology and operation regulations detail the output of equipment and facilities, which ensures that the equipment satisfies the stated specifications and delivers desired product quality;
- The Company confirms the constant conformance of equipment and facilities to the GMP requirements by revalidating them periodically, and files all revalidation records.

Metering

- Manage metering in compliance with the *Law of the People's Republic of China on Metrology*. 100% of metrology technicians are certified in validation or have qualified for the exams;
- Manage metering instruments by category and ensure that 100% of them are periodically inspected, all of which conform to the requirement for expected use within their shelf life.

Sampling

- The requirements for sampling tools, sample containers, aids, the environment and process are specified in the standard sampling regulations for raw materials and excipient and primary containers;
- Formulate applicable operating procedures for sampling in specific scenes, including process water sampling and microbiological sampling; make the production environment up to the standard from multiple dimensions.

Deviation Management

The *Deviation Regulations* formulated by the Company stipulates the series of processes to deal with deviation, including starting deviation investigation, identifying the problems, conducting the assessment and grading, conducting root cause analysis, and developing corrective and preventive countermeasures through to closing the deviation. Follow-up reviews will be regularly carried out on the implementation. In case of product deviation, the Company organizes relevant personnel to carry out urgent treatment, deviation investigation, deviation assessment, disposal of products, deviation closure, correction and prevention and other actions. If the results of deviation assessment possibly compromise the quality, the very batch of production may be terminated or all related finished products intercepted.

For abnormal incidents, out-of-specification incidents or out-of-trend incidents, the *Regulations on OOS*[2]*, OOT*[3]*, and AD*[4] formulated by the Company details the laboratory investigation process to ensure that those events can be investigated in the lab timely and effectively and handled properly.

The Process to Handle OOS, OOT and AD

In the event of abnormal data in the laboratory, the experimenter shall report it to the department head and OOS administrator within 24 hours and leave the site as it is;

The department head should identify the abnormality category and treatment process, to determine whether it is a laboratory error through a series of steps such as basic investigations and hypotheses;

If it is caused by laboratory error or product quality rather than human error, the Quality Center must conduct follow-up investigations over relevant production and warehouse;

The Quality Center shall conduct an overall review of all incidents every year, follow up on the investigation progress, and classify the root causes.

[2] OOS：Out of Specification
[3] OOT：Out of Trend
[4] AD：Atypical Data

Product Recall

To prevent product safety risks, CanSinoBIO has formulated complete product recall procedures. In the event of product recalls, the Company will act in accordance with the *Regulations on Recall of Products Marketed*.

Product Recall Procedures

When the product is found to cause potential safety concerns or quality problems, the Quality Assurance Department analyzes 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 being approved by the Drug Administrations, the products will be recalled at different levels. The Business Department informs customers of product recalls, the Marketing Support Department is responsible for product transport and storage after the returns, and the Quality Assurance Department shall regularly submit periodic recall progress reports to the Drug Administrations;

After the recall decisions are made, the Circulation Quality Department will draft the recall plan, and the Quality Assurance Department will submit the recall plan and report to the Drug Administrations;

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

After the recall is completed, the recall team shall write a finished recall report and analyze the recall process during the Company's annual management review.

During the reporting period, the Company did not report any actual product recall. Meanwhile, we simulated three recalls, including one international recall and two domestic ones. We fully implemented the recall process of Convidecia products. The simulations were based on such hypothetical scenarios as repeated drug traceability codes, wrong batch information to be delivered in the order, and incorrectly-printed expiration dates. The simulations successfully achieved 100% recall.

Audit of Quality System

The Company's quality system complies with the *Good Manufacturing Practice (2010 Revision)* and WHO regulations. In May 2021, the Company obtained a GMP certificate for Ad5-nCoV issued by the Hungarian National Institute of Pharmacy and Nutrition (OGYéI) and became China's first innovative vaccine manufacturer with EU GMP-certified new technology.

The Company regularly organizes internal audits on the quality management system. We update and revise the internal quality standards and rules with reference to industry regulations in and abroad. All processes of quality management are supervised in real time. In 2021, to strengthen quality risk management and ensure the steady and effective operation of the system, we have further improved the quality management system in terms of quality standard documents, vaccine manufacturing, facilities and equipment, validation, deviation control, change control, the release of products, product quality review, ADR monitoring and reporting, self-inspection, corrective and preventive actions (CAPA).

In 2021, we actively accepted the compliance audit by third parties, including GMP compliance inspection by local Drug Administration, WHO and GMP audit, vaccine inspection by Drug Administrations, and audits by partners with business connections and collaborations in and abroad. During the audit, the third party inspected the Company's on-site production, stability research, the release of raw materials and excipient, release of finished products, project implementation process, training for technicians, quality management documents, air conditioning system management, process water system, facilities and equipment, process validation and process control, as well as proposed rectification opinions. During the reporting period, there were no key defects exposed in all inspections and the rectifications after each inspection have all been completed on time.

In 2021, the Company accepted **19** quality audits by third parties, all going on well. There were no serious defects revealed in the audit results. The minor defect identified in the audit has been rectified timely.

Tianjin Food and Drug Administration sends inspectors to vaccine manufacturers in line with the *Notice on the Guidance on Sending Inspectors to Vaccine Manufacturers* by the state. Since the outbreak of COVID-19, our personnel has been following up all year round on the internal audit by the Tianjin Food and Drug Administration's On-Site Inspection Team. A smooth communication mechanism has been established to solve problems in a timely and effective manner, thus ensuring the compliance of all works. We have updated the daily manufacturing data in real time, from bacterial and virus species to finished products and product sales. Those latest data could timely remind the inspectors of the dynamic information in manufacturing, flow, inventory and others. We have ensured a sufficient supply of quality COVID-19 vaccines and made every effort to serve the overall pandemic prevention and control. During the sampling for lot release, we were in close contact with the on-site inspectors and immediately adjusted our work plans as the sampling plan changed, so as to jointly ensure the timely completion of lot release. The Company has effectively optimized the production and ensured workplace safety under the supervision of the on-site team.

Quality validation

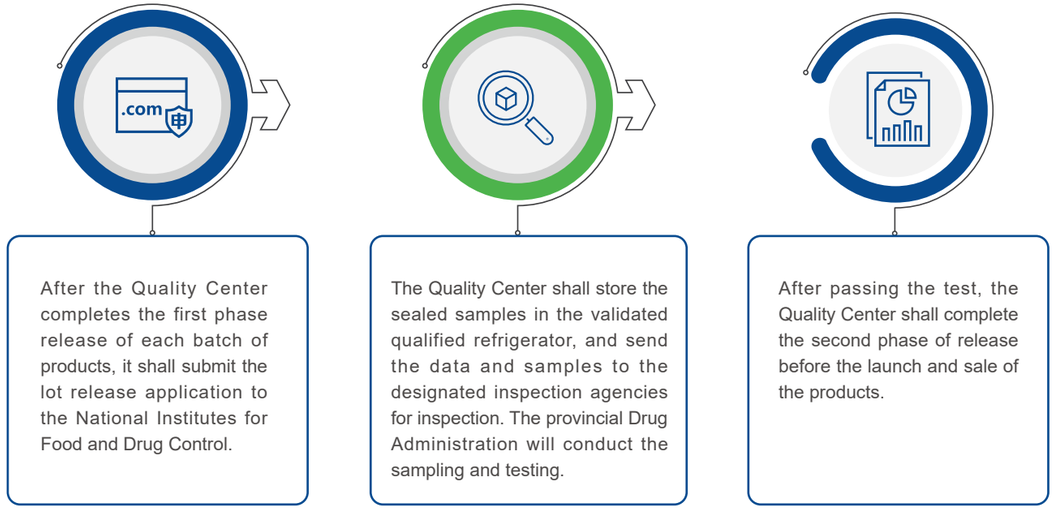
The Company has established a complete internal quality validation system strictly abiding by the highest quality standards for the whole manufacturing process from the release of materials to the lot release of drugs. We impose multi-level quality control before the product is launched in the market with the help of qualified audit and inspection agencies.

In accordance with the regulations on suppliers, relevant personnel shall establish and issue a bill of materials before the R&D process was confirmed. The materials at each phase starting with phase I clinical manufacturing must go through the release procedures. The raw materials, excipients and primary materials undergoing the initial process validation must be inspected before the lot release. The Company has formulated the *Regulations on Lot Release*, which specifies the release process of intermediate products, stock solutions, products to be packaged and finished products. Each batch of products must be approved and released by qualified personnel.

The release of vaccine products consists of three phases, namely the release of stock solution, the release of finished products after self-inspection and the commercial release of finished products after passing the inspection of the national statutory drug inspection authority. The key focuses of lot release in each phase are manufacturing process control, environmental monitoring results, batch manufacturing records, batch inspection records, deviation closure, release status of materials, etc.

In terms of the drug lot release management, the Company has made detailed specifications in the *Regulations on Lot release,* the *Standard Operating Procedures for Sampling and Sending Samples for Lot release* and the *Standard Operating Procedures for Sampling and Packaging of Contract Inspection for Vaccination for Emergency Use*. Before each batch of products is launched to the market or exported, the Company cooperates with the designated drug inspection agency for supervision and management such as data review, on-site validation and sample inspection. Products that fail the lot release in China cannot be launched or sold in the market. For the key steps such as collecting and sending the samples for lot release and vaccination samples for emergency use, the Company has formulated standard operating procedures and maintained communication between various departments within the Company to ensure the samples are smoothly transported through the cold chain.

Lot Release Process



In 2021, 100% of Convidecia and Menphecia products to be launched in the market were qualified for the lot release at one time, with no defects found.

Training on Quality

To improve the awareness of quality and enhance employees' expertise and skills, the Company has offered diversified training programs for all employees in the Quality Center. The training system covers three aspects: preparation training, on-the-job training and continuing education and training. The training is conducted in such forms as lectures, practical operation, discussion, audio-visual learning, self-learning and field visits. The annual compulsory training includes the topics of pharmacopeia, safety, regulations and experimental skills. The Company provides each employee with a training list and manual, which clearly and transparently stipulates the necessary skills to improve different job competence. For skill training, the Company will assess the results of training by means of practical operation. Superiors are required to supervise and guide the training. In addition, the Company also holds broader training projects, including continuing education, training on revised documents, annual newcomer training, online video courses and training by experts from foreign enterprises, which further enriches employees' skill set and knowledge.

In 2021, the Company organized

119

internal training on product quality assurance.

100%

of the quality personnel were involved.

The training mainly covers GMP system documents, GMP regulatory guidelines, changes, deviations, producing different drugs on the same production line and other topics. All trainees were qualified and the training plan was completed. A total of 35 new employees completed their induction training, including onboard training, policy information sharing, experimental skill training, as well as other external training.

R&D and Innovation

CanSinoBIO focuses on vaccine R&D and continuously responds to the medical and health needs of society with innovative results. The Company has created a strict R&D management system to fully ensure compliant R&D and improve the technical competence of R&D personnel. We have made continuous optimization and breakthroughs on the current technology platform, and the efforts are tremendously rewarding.

R&D System

CanSinoBIO strictly complies with domestic laws and regulations such as the *Law of the People's Republic of China on Pharmaceutical Administration*, the *Law of the People's Republic of China on Vaccine Administration*, the *Biosecurity Law of the People's Republic of China*, the *Regulations on Implementation of the Drug Administration Law of the People's Republic of China*, the *Regulations on Drug Registration*, the *Measures for Supervision and Administration of Drug Manufacturing*, the *Good Manufacturing Practice (2010 Revision)* and WHO's norms for the pharmaceutical industry. The Company also formulated the internal R&D management system in accordance with the technical guides in pharmacopoeia in and abroad. The Company's clinical operation quality management system regulates the procedures and specifications of clinical trials, covering all processes such as clinical trial design, implementation, recording, assessment, result report and document archiving, to ensure that all steps are well in line with laws and regulations.

The Company appoints internal supervisors to lead the scrutiny over clinical trials and hires the contract research organization (CRO) to assist in the process as appropriate. During our own inspections, we have drawn out the workflow, including the appointment of supervisors, supervision work plan, and preparation at the early stage, as well as on-site supervision and feedback. In order to ensure the smooth progress of the whole-process scrutiny and the integrity and authenticity of data records, we made detailed scrutiny requirements for different situations - trial vaccine management, sample management, adverse events (AE), serious adverse events (SAE) and pregnancy events, and clinical trial data management. If the CRO is engaged to carry out clinical trial scrutiny, our clinical operation center shall review and supervise the implementation of the supervision plans, SOPs, reports and records of the CRO.

To ensure the quality of the clinical trials, the Company appoints internal dedicated personnel or third-party agencies for the audit, that is, to conduct systematic and independent inspections of clinical trial-related activities and documents. The external audits aim to assess and determine whether the process of clinical trial-related activities or whether the recording, analysis and report of test data conform to the requirements of the test scheme, standard operating procedures, as well as the laws and regulations.

In 2021, apart from our own supervision and inspection, the Company was also open to external audits. We have closely communicated with the professional inspectors assigned by the NMPA to supervise our R&D center and submit to their surprise inspections. During our international business cooperation, the Company fully accepts various audits by cooperative partners to ensure that the project development conforms to the R&D specifications of both parties.

The Company has deployed a comprehensive pharmacovigilance management system with reference to laws and regulations such as the *Law of the People's Republic of China on Pharmaceutical Administration*, the *Law of the People's Republic of China on Vaccine Administration*, and the *Administrative Measures for the Reporting and Monitoring of Adverse Drug Reactions* and the latest standards in and abroad. Seeking to comprehensively control the potential drug safety risks in clinical trials, we have detailed many aspects of standard pharmacovigilance procedures during clinical trials, such as the scope of drug safety information, the time limit and forms for researchers to report drug safety information, the reporting and treatment of serious adverse events, the risk identification, assessment, control and management of drug safety information, the evaluation of the effectiveness of risk control, the communication of drug safety information, the management of drug safety system and entrusted management.

In line with the management and training requirements, we offer various training projects for all R&D personnel, including induction training, preparation training, continuing education training, annual training plan and external training. Each department prepares a checklist of on-the-job training on necessary management procedures and the standard operating procedures for position-specific responsibilities and needs. At the end of each year, each department shall prepare a summary of the employee training, including evaluating the completion and result, centrally archiving the training files, and reviewing and adjusting the on-the-job training checklist as it may be.

For new employees in the R&D center, the Company tights up training and assessment requirements:

- New employees shall participate in the induction training on the Company's profile, corporate culture, biosafety, data reliability, rules and regulations, etc. within the period of 30 days;
- New employees shall complete the preparation training covering all items involved in the company-level training checklist and on-the-job training list within 3 months upon entry. They shall finish all contents and pass the exams before they officially start their career in the Company;
- The assessment consists of written exams, practical operations and interviews. After each training, it is necessary to evaluate whether the expected training purpose is achieved;
- Those who fail to pass the examinations will have a make-up exam within 5 work days. If they fail to pass the make-up exam again, the Company will suspend their job duties or transfer their posts within a specified period.

In addition, we make efforts to create an environment favorable for academic exchanges and R&D in the Company and improve the technical competence of professionals. An academic group is formed by the management, scientists, or personnel above the aforementioned levels in the R&D center. Academic salons are regularly held to share and discuss the Company's research projects, professional academic knowledge and popular academic topics in and abroad. In 2021, a total of 9 academic salons were held. Those academic exchanges effectively broadened employees' knowledge and vision and inspired the R&D team to make more innovations based on cutting-edge technologies and market demand.

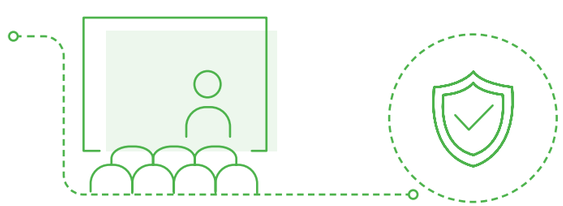
During the reporting period, the Company has invested RMB**879** million in R&D, marking an increase of **105.1%** compared with that of the previous year.

R&D Progress and Results

With a focus on vaccine R&D, CanSinoBIO has mature technological prowess in antigen discovery, expression, purification and formula research and also offers multiple services, including the proof of concept in preclinical evaluation, and analytical method development, manufacturing technology development and commercialization. The Company has established five key platforms featuring such technologies as viral vector-based technology, synthetic vaccine technology, protein structure design and recombination technology, mRNA technology, and preparation and drug delivery technology. We also own a wealth of core intellectual property rights and proprietary technologies related to vaccines.

Our vaccine pipeline, strategically designed to address the vast and underserved market worldwide, produce: (i) globally innovative vaccines to serve the unmet medical needs in China; (ii) potential first-in-class, domestic world-class vaccines with higher quality developed to replace the current primary vaccines in China; and (iii) potential best-in-class vaccines in China developed to compete with the imported products. Our team has built advanced microbial, molecular and cell biology, immunology and biochemistry, and animal laboratories. Based on our independent R&D and collaboration with partners, multiple competitive R&D pipelines have been established by the CanSinoBIO R&D team.

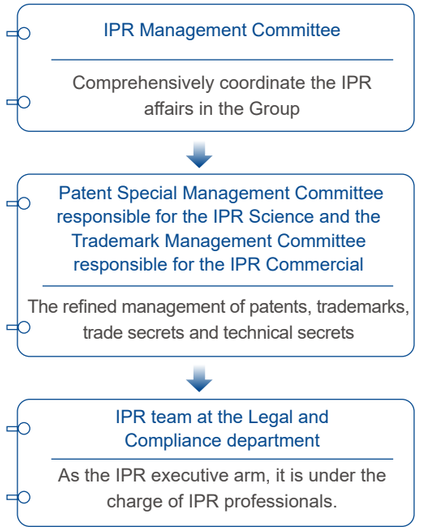
By the end of 2021, CanSinoBIO has developed 17 vaccine products for 12 disease entities, including the Ebola virus disease vaccine approved in 2017, the first adenovirus vector COVID-19 vaccines approved for conditional marketing authorization in China in 2021, as well as Menphecia (our MCV2 vaccine) and Menhycia (our MCV4 vaccine). In addition, there are 8 vaccine candidates in the clinical trial stage or CTA stage. In the future, CanSinoBIO will continue to optimize the R&D pipelines to meet the needs of the market.



IPR Protection

An IPR protection system is in place to resolutely protect the lawful rights and avoid IPR infringement in full accordance with the *Patent Law of the People's Republic of China*, the *Regulations on Enterprise Intellectual Property* and other intellectual property laws, and regulations and national standards. In 2021, we fully perfected the IPR management structure and newly formulated internal management procedures, for instance, *Intellectual Property Management System*, *Patent Regulations*, *Trademark Regulations*, *Copyright Regulations* and *Intellectual Property Emergency Plan* to effectively manage and protect intellectual property rights in patents, trademarks and copyrights. When applying for a patent, we require the inventor or designer to draft the *Patent Application* and *Technical Disclosure* and go through the follow-up approval process according to the search report.

The Company has set up an employee innovation reward system to encourage employees to enthusiastically make innovations and apply for patents. We have established the top patent awards to inventors who have greatly contributed to technology (or design) innovation and protection, which will also add extra bonuses to the annual KPI. In the *Regulations on Awards for Patents, Inventions and Creations*, the Company stipulates the ways, approaches and rewarding principles based on how the patents are applied and promoted. Appropriate encouragement and material rewards will be granted to inventors or designers who have made outstanding contributions.



IPR Management Structure

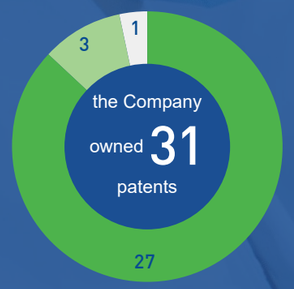
As of December 31, 2021

As of the same date,

the Group had filed 9 trademark applications in China

and 36 in other countries and regions, and also filed through Madrid International Trademark System.

As of December 31, 2021



As of the same date,

the Group had filed 15 patent applications in China,

2 in the European Union

and 1 in the United States.

Industry-wide Collaboration

Built on the current technology platforms and achievements, CanSinoBIO actively taps its own potential, constantly seeks opportunities to collaborate with the industry, and strives to reinforce complementary advantages with our peers. In 2021, we were engaged in project collaborations with peers, regulatory agencies, global non-profit organizations and other parties to make technological innovations in the pharmaceutical field.

CanSinoBIO Reached an Agency Cooperation Agreement with Pfizer

Menhycia MCV4, independently developed by CanSinoBIO, is the first vaccine of its kind in China to be included in the list of priority reviews by the NMPA and is also one of the core products out of our 17 innovative vaccines. Previously, tetravalent meningococcal conjugate vaccines have been widely used in developed countries, but it is unavailable in the Chinese market. The introduction of Menhycia to the market will fill the vacancy of 4 groups meningitis vaccines in China.

As of the end of the reporting period, CanSinoBIO has concluded a cooperation agreement with Pfizer and created a new model where Chinese innovative vaccine manufacturers dominate the R&D and manufacturing while the multinational partners are responsible for promotion. Pfizer will provide exclusive marketing for Menhycia MCV4 on the Chinese mainland.

Menhycia was exhibited at Hainan International Health Industry Expo

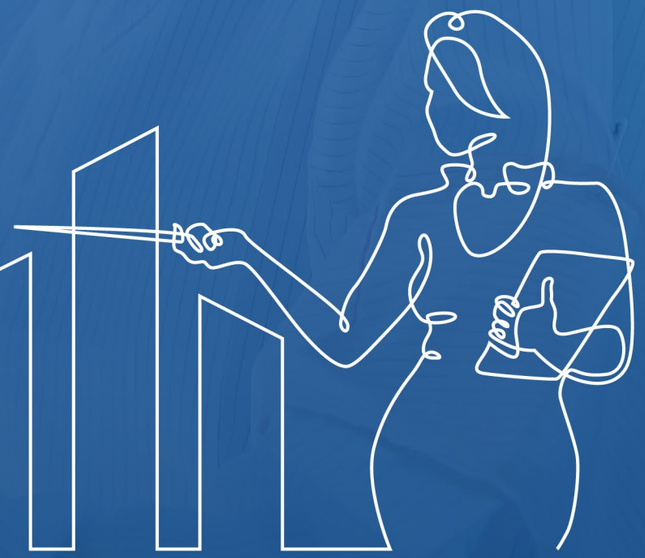
CanSinoBIO's Engagement in Vaccine Seminar of BRI Member Countries

The Asia and Pacific High-level Conference on Belt and Road Cooperation was organized by the Ministry of Foreign Affairs in June 2021, when the Belt and Road Initiative on Vaccine Partnership was launched by 29 countries. During this meeting, it was emphasized that unity and cooperation are the keys to conquering the pandemic while vaccines are an important tool in our hands. On September 1st, Chunlin SHEN, vice president of CanSinoBIO, shared and exchanged technological insights on the latest clinical progress of Convidecia on the Vaccine Seminar of BRI Member Countries.

As an active practicer of the mission and responsibility of “Health, Hope, and Promises,” CanSinoBIO ensures the Company’s safe operation sophisticatedly and comprehensively with a responsible management approach. We create a sustainable supply chain and maintain friendly partnerships with suppliers, which ensure the risks are controllable and value integrity and compliance and information security. Meanwhile, we conduct responsible marketing, and strictly tight up the compliance and standardization of clinical trials and animal experiments for the purpose of the Company’s healthy, stable and sustainable development.

Operation

- Security Management
- Responsible Supply Chain
- Information Security
- Responsible Marketing
- Ethics of Clinical Trials



Security Management

CanSinoBIO views the safety of employees and workplaces as the top priority of corporate development and vigorously observes the laws and regulations in the place where we operate. We establish the framework of the safety management system in accordance with the *Workplace Safety Law of the People's Republic of China*, workplace safety standardization, ISO 14001 and ISO 45001 and other standards, and timely modify the responsibility system. We also build the dual prevention mechanism, namely, graded risk controls and hazard investigation and handling, under the guide of "safety first, mainly by prevention." We develop management systems and operating procedures, such as *Hazard Identification and Risk Assessment Management System*, *Regulations on EHS Risk Investigation*, *Hazardous Chemical Safety Management System*, *Highly Toxic Products Management System,* and *Emergency Rescue Plan for Workplace Safety Accidents* to consolidate the foundation of safety management and continuously improve the safety management.

Safety Management System

CanSinoBIO highly recognizes how important safety management is during production and operation. Hence, we draw the safety management framework by establishing the EHS Department and Safety Team. Also, we assist each department to set up grass-roots safety officer organizations, hold all employees responsible for workplace safety, and improve overall safety.

Security Management Structure

Workplace safety committee

- Shoubai CHAO, the executive director, chief operating officer and deputy general manager, serves as the team leader, is the primary person responsible for the Company's safety management
- The Committee leads the company-wide safety affairs, and studies and makes decisions on major issues of safety management; sets annual safety targets

EHS Department

- Coordinate and supervise the safety management affairs; formulate and implement the workplace safety rules and regulations and operating procedures, the workplace safety education and training plans

Security team

- Assist each business segment to establish a grass-roots safety officer organization; train part-time safety managers within the departments, and sharpen managers' safety skills
- Communicate the safety targets, plans and requirements to the business segments to make sure those abovementioned are understood and implemented by employees
- Supervise the safety abnormality events and hazards, as well as their rectifications in the business segments

R&D, production, operation and other business segments

- Actively hold safety training to equip employees with sufficient ability to protect the safety
- Accomplish the Company's annual safety targets

CanSinoBIO sets health and safety targets and indicators in terms of the completeness of organization, compliance of operations and risk prevention; we further use them to assess different departments and reinforce the work target for front-line employees and the supervision responsibility for managers. In this way, we continuously perfect the safety management system and ensure operational safety. By the end of 2021, we have accomplished all health and safety targets and indicators for 2021.

The Completion of Health and Safety Targets and Indicators in CanSinoBIO

Health and safety targets and indicators in 2021

Compliance of operation

- No severe and major EHS events
- No new confirmed COVID-19 cases
- No theft and robbery events
- Lost worktime rate in production and operation[5] ≤1‰
- Lost worktime rate in construction[6] ≤1‰

Completeness of organization

- Establish and improve the EHS system for construction, production and operation

Continuous health and safety targets and indicators in 2022

Compliance of operation

- No severe and major EHS events
- No cluster of infections in the plants
- No theft and robbery events
- Lost worktime rate in production and operation ≤1‰
- Lost worktime rate in construction ≤1‰

New health and safety targets and indicators in 2022

Capacity building

- Employee engagement in special EHS training ≥ 90%
- The pass rate for EHS part-time personnel in the training ≥ 90%
- More than 6 EHS awareness activities

Hazards investigation

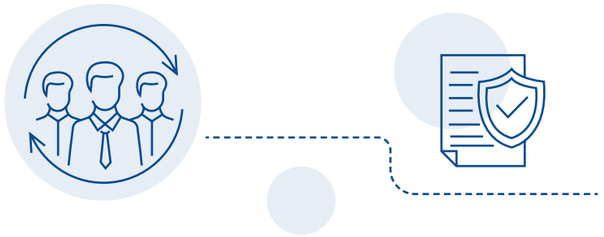
- Members of the safety committee conduct more than one investigation every year
- Each department conducts more than one investigation every month

[5] The calculation of lost workday rate in manufacturing and operation: the number of working days lost/total number of employees*250

[6] The calculation of lost workday rate in construction: the number of working hours lost/construction hours

Safety Risk Control

CanSinoBIO focuses on double prevention through hazards investigation and graded risk control with reference to the *Regulations on EHS Hazards Investigation*, *Hazard Identification and Risk Assessment Management System,* and other systems.



Hazards Investigation

We mobilize employees to mainly investigate and report the hazards existing in manufacturing activities such as whether manufacturing process technology and process are in compliance with standards, as well as flammable, explosive, toxic and hazardous substance manufacturing and operation sites. We also identify possible unsafe practices, unsafe states, management defects, environmental hazards and malfunction of equipment through interviews, document checking, observation on the site, instrument measurement and other means.

To encourage full employee engagement, we reward those who report hazards and give appropriate suggestions. Also, individuals and teams who cause accidents or losses due to their concealment of hazards or failure to take preventive measures or neglect of hazard control should be held accountable. We prepare the *EHS Hazard Inspection and Rectification Record* for all hazards revealed, and implement graded management according to their level of difficulty.

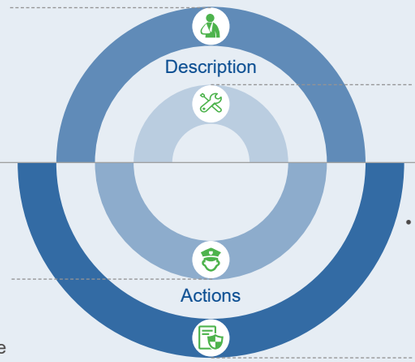
Hierarchical Hazards Management

Major hazards

- Include those practices or equipment defects that may cause casualties. They are difficult to correct; they have to be eliminated after the rectification and treatment for a certain time when the sites are completely or partially shut down.

Moderate hazards

- Defects that are less hazardous and difficult to correct and can be rectified immediately after being identified.



- The specific departments appoint the responsible person to rectify immediately or within a time limit, and timely oversee and check the results.
- For major hazards that threaten the lives of personnel and workplace safety and may cause accidents at any time, immediate shutdown will be taken to ensure safety.

- The departments prepare the hazards rectification plan and safety assurance actions and make actual rectifications in terms of contents, funds, personnel and scope. The EHS department checks the results.

Graded Risk Control

Around the comprehensive and systematical risk identification from multiple perspectives without omission, we identify the source of hazards and also engage personnel at different levels in this process. After the identification of hazard sources, we use the risk matrix, job safety analysis (JSA) and other methodologies to assess risks. According to the dimensions of the possibility of risk occurrence, the frequency of human exposure and the severity of the accidents, we classify the risk into four levels: major risk, high risk, moderate risk and low risk.

We control risks in the order of priority, namely, eliminating risks, isolating risks, using engineering to control risks, changing work habits and providing protective facilities. We also update the checklist of major risks and create the safety risk control and hazards investigation and handling handbook. Besides safety risk reminders are posted in clearly visible places, which indicate the dangerous and hazardous factors, risk level, safety control measures and emergency actions. We reduce and eliminate workplace safety accidents via risk pre-controlling at different levels.

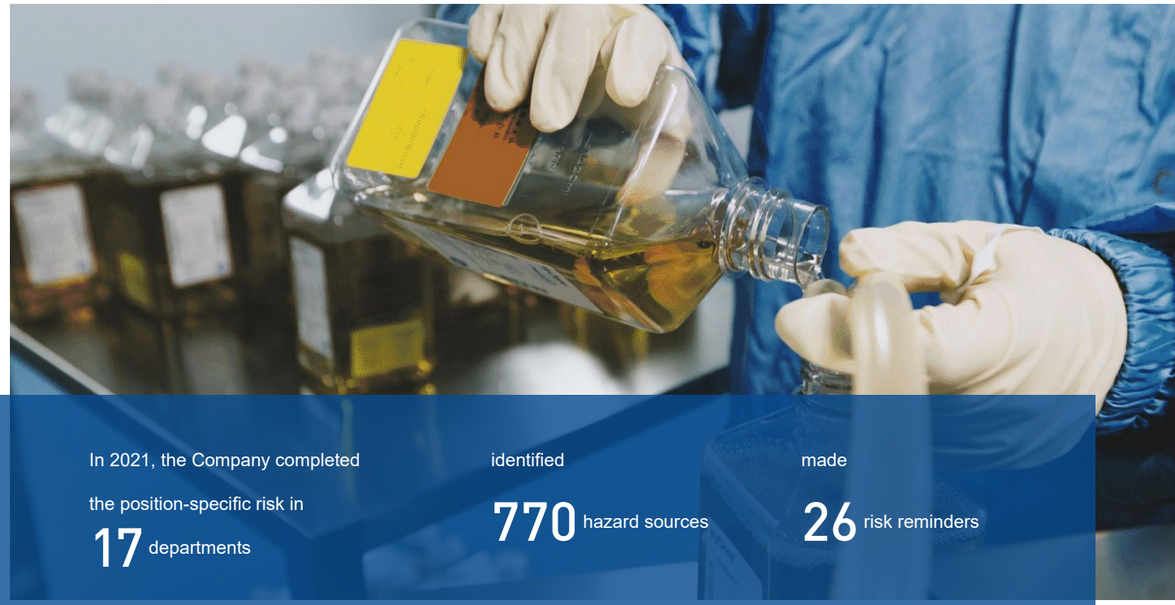
The Company regularly organizes professionals to check the implementation of risk management and control measures, records the results, urges the measures to be in place. We timely make adjustments for problems in such a process to ensure the safety of the Company and the normal operation of the laboratory.

仓储部安全风险告知卡

场所/设备/活动	风险等级/标识	责任部门/责任人
质厅	一般风险（黄色）	仓储部
	可能导致事故类型	责任人联系电话
	火灾、其他爆炸	

危险有害因素	警示标志
1.叉车充电时设备过热或产生电火花遇可燃物可发生火灾。 2.叉车充电时电线错接引起火花，特别是如果周围堆放可燃物时存在火势蔓延的危险 3.室内充电产生可燃气体，遇火源导致着火 4.叉车蓄电池短路而引起爆炸 5.叉车充电过程中空气不流通产生易燃气体聚集，遇火源爆炸	
安全管控措施	
1.充电时通风，防止可燃气体积聚； 2.充电前检查充电设备电源导线与插座，必须牢固可靠，导线、仪表、开关等正常完好，各电器电路保持良好接触； 2.设备、电缆、电线的绝缘、耐压等级应符合安装的要求； 3.叉车完成充电后应先放好充电电源线，并切断电源，再去掉叉车电瓶夹，冲洗电瓶，并复查导线接头位置； 4.固定的叉车蓄电池充电区域必须严禁任何烟火，不准存放任何易燃易爆物品和食品； 5.现场标识警告； 6.配置消防栓、灭火器、防火卷帘门、烟感	
应急措施	
1. 火灾：切断电源（电气火灾）；取出最近灭火器灭火，同时呼救。不可按时迅速撤离，报告主管，启动应急预案。 2. 叉车爆炸：人员佩戴防护用品，正确使用抢险救援器材，开启紧急通风系统，疏散人群，报告主管，启动应急预案，报告消防部门（119）。	
应急电话	消防控制室：022-58213600-6219　火警：119　急救：120

Example of Safety Risk Reminders



In 2021, the Company completed the position-specific risk in **17** departments

identified **770** hazard sources

made **26** risk reminders

Operational Safety Management

CanSinoBIO reckons operational safety as a key priority and establishes a perfect operational safety management system as required by safety risk control measures. The Company fully ensures laboratory safety, workplace safety, operational safety and fire safety, and increases the speed of emergency response.

Laboratory Safety

Toxic, corrosive, combustible and other hazardous chemicals will lead to great potential risks to laboratory safety. Therefore, CanSinoBIO has formulated systems, for instance, the *Hazardous Chemicals Safety Management System*, *Highly Toxic Products Management System*, *Explosive and Poisonous Hazardous Chemicals Management System* and *Qualification Requirements for the Procurement of Hazardous Chemicals.* Those policies specify the standard procedures for the full life cycle, namely, hazardous chemicals procurement, storage, use and disposal.

Hazardous Chemicals Procurement	Hazardous Chemicals Storage	Hazardous Chemicals Use	Waste Disposal
We choose chemicals equipped with useful chemical safety technical specifications and safety labels in Chinese and transport them carefully. We also take effective measures to timely control and clean up the leaked chemicals in case of leakage on the road to prevent greater safety hazards.	We store them by category in different warehouses and areas; establish and update the hazardous chemicals checklist, and control the number of hazardous chemicals stocked in laboratories and workplaces.	The department using hazardous chemicals should immediately use them after obtaining them; take necessary measures such as exhausting, ventilating, releasing pressure, preventing tempering and explosion, conducting and removing static electricity, discharging urgently, and using the automatic alarm.	We strictly prohibit the dumping of waste hazardous chemicals and uniformly recycle packaging boxes, paper bags, bottles and barrels, which are transferred to professional agencies for disposal.

To deal with the biosafety risk of infectious pathogenic microbes, we have prepared the *CanSinoBIO's Biosafety Manual in Laboratory* and established a Biosafety Committee to lead and oversee how much the biosafety norms are followed. We design and construct the laboratory in full accordance with biosafety standards, post biosafety signs in the prominent positions; pack, transport and preserve infectious substances in line with national and international regulations; in addition, we implement the emergency treatment plan for laboratory biosafety accidents in case of leakage, and remove infectious substances after high-pressure sterilization.

Workplace Safety

We strictly abide by the *Worker Protection Materials Management System*, *Management System for Warning Signs and Safety Protection* and *Plant Safety Management System.* We even post safety signs in clearly visible places according to national standards and risk assessment results. Furthermore, we file safety sign archives to better use, maintain and manage them, and regularly inspect and correct or change those signs that are discovered to not live up to the requirements. We are equipped with overall occupational health protection facilities and materials to comprehensively ensure workplace safety.

- For the work in confined spaces, provide gas masks, respirators and other tools, reduce working hours and prevent employees from poisoning and suffocation.
- For hot work and live-line work, provide protective glasses and insulating appliances which can isolate hazardous factors, and offer fire extinguishers within a certain distance to prevent employees from electric shock or fire accidents.
- For the work contacting high and low-temperature equipment, provide freeze-proofing or insulation gloves and professional de-icing tools to prevent burning or frostbite.
- For work with hazardous chemicals, provide special worker's protection materials.

Safety in Construction

CanSinoBIO is deeply aware of the importance of safety management on the construction site. To this end, we have prepared internal systems including *Regulations on Safety Inspection on the Site of Construction Projects*, *Contractor Safety Management System* and *Work Permit Management System* to manage the safety of construction and maintenance contractors. In the last three years, the Company had no work-related deaths. During the reporting period, the Company witnessed a mild work-related injury and lost 720 hours of workday due to one work-related injury.

Before contractors enter the site, we require all of them to sign safety agreements and submit safe construction plans to clarify the risk level and control measures in each project.

During the construction, the construction workers should accept safety training and gain work permits before they enter the site, and actively identify and correct unsafe conditions and practices in the work.

We conduct regular on-site safety reviews to confirm that the on-site construction is carried out according to the safe construction plans.

Safe Construction

CanSinoBIO Reached the One-Million-Hours Milestone in Safe Construction

In December 2021, CanSinoBIO held the event “one million hours of safe construction, operation and maintenance” to celebrate the success of construction projects and operation and maintenance management in the current stage. Based on the concept of safety first, the Company resolutely and strictly implemented the safety rules and regulations. Since the building of the COVID-19 vaccine plant was commenced in June 2020, we worked with the contractors to achieve the target of 1,087,272 hours of safe project construction, operation and maintenance.

The Celebration of Million Hours of Safe Construction

Fire Safety

To prevent casualties and property loss caused by fire accidents, CanSinoBIO has established fire control systems such as *Fire Inspection and Check System*, *Regulations on the Maintenance of Fire-Fighting Facilities and Equipment*, *Regulations on Fire Safety in Fire and Electricity Consumption*, *Regulations on the Organization of Volunteer Fire Brigade*. Moreover, we set up volunteer fire brigades, inspect the integrity of professional fire-fighting facilities, hold training on fire-fighting tools and fire evacuation drills to prevent fire accidents, and enhance all employees’ safety awareness.

Fire Drill

Inspection of Professional Fire-Fighting Equipment

Contingency Management

To deal with potential emergencies, CanSinoBIO has prepared the *Emergency Rescue Plan for Workplace Safety Accidents* and the *Regulations on Water Cut-off, Water Leak, and Industrial Steam Interruption* to standardize the emergency management with a sound process. According to different risk types, we formulate different types of emergency plans, for instance, drills on hazardous chemical leakage emergency and food poisoning, training on fire equipment operation, and drills on emergency evacuation. In this way, we improve our response ability in different situations despite the different requirements for protective equipment, handling procedures and personnel.

Drill on Chemical Leakage in the Secondary Manufacturing Department

Drill on Sulfuric Acid Leakage in QC Laboratory

Safety Education and Training

CanSinoBIO has prepared and issued *EHS Training Management System* and *Management System* for *the Safety for Special Operators*. We continuously improve the Company's safety level and culture through training courses, safety culture education, practical exercises and other means. We draw departmental custom training plans covering protective materials, use of chemicals, safety in forklifts and other aspects; we also actively invite internal and external lecturers for special training, evaluate the results via written exams, interviews, on-site questions, practical exercises by trainees, and improve the outcome of safety training.

In 2021, we completed **19** safety lectures and **105** training sessions.

Training model for safety

- On-site operation and explanation
- Emergency drill
- Learning by online courses and E-learning materials
- EHS education in the departments or teams
- EHS publicity and education: publicize a safety theme every week, such as preventing the slipping and tripping, carrying heavy loads, emergency response to leakage of hazardous chemicals, etc; release a safety video every week; disseminate 2 laboratory safety experiences every week
- EHS knowledge competition: assess employees' safety knowledge once a month and reward the winners

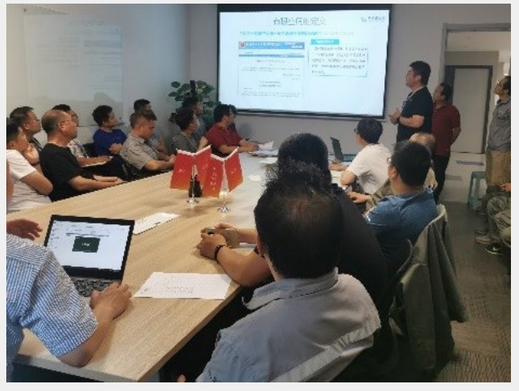
Safety training system

General courses

- Training on safety laws and regulations
- Training on safety management awareness and skills at the middle and grass-roots level
- Training on hazard identification, risk assessment and risk control
- Accident investigation and root cause analysis
- Safety training for new employees
- Code of conduct of safe practice
- Knowledge of electricity safety
- Training on the knowledge of fire safety and emergency
- Training on the knowledge of first aid
- Basic knowledge of occupational health
- …

Courses for professional competence

- Contractors' safety management
- Training on the knowledge of safe operation at the construction site
- Training on the knowledge of chemical safety
- Safety in special work
- Training on the knowledge of the safety in forklift operation
- Protection and safety of mechanical transmission equipment
- Safety in mechanical equipment maintenance
- Laboratory safety
- Biosafety
- Hazardous waste management
- Safety signs
- …



Safety Training

Responsible Supply Chain

CanSinoBIO continues to improve the supply chain risk management system and ensure business continuity and stability. We also specify the management processes and standards in supplier entry, assessment and evaluation, with an emphasis on suppliers' compliance management. Those initiatives can enhance the Company's supply chain management and facilitate sustainable supply chain development.

Supply Chain Risk Management

The novel coronavirus pandemic has caused the most serious global health crisis over the course of the past century. Currently, the pandemic prevention and control at home and abroad are still facing tough challenges. At the same time, affected by the tight supply of raw materials and limited logistics, a perfect vaccine supply chain system is the key to ensuring our normal operation. In 2021, the Company joined the Supply Chain Branch of the China Association for Vaccines and fully communicated and exchanged information with vaccine enterprises and personnel. The Company has supplied and stored materials appropriately through regular learning and communication as well as material coordination.

CanSinoBIO formulates supply chain risk management policies like the *Suppliers Management Procedures*. The Company sets up the risk assessment team. The Company also uses the sound supply chain risk analysis model and risk assessment mechanism to analyse the risks of different suppliers from many aspects: supplier risk identification, possible losses caused by risks and risk avoidance measures. Besides, we maintain active communication with suppliers to ensure a continuous and stable supply.

Business Continuity in Supply Chain

We identify the risks of manufacturing materials in commercial projects. Furthermore, we analyse the serious consequences of material shortage on manufacturing, the possibility of delayed supply and the detectability of delayed supply. On this basis, we form a risk evaluation matrix and the *Risk Assessment Report on Material Supply for Novel Coronavirus Vaccine Project*.

We formulate secure procurement plans, early warning mechanisms and alternative material schemes for materials with different risk levels. We reserve a certain amount of alternative materials as a guarantee of safety to further avoid the risks caused by delayed supply to production. Our supply chain risk response system, which is manageable for the long term and executable in the short term, solidly guarantees the stable material supply of the vaccine business. In 2021, the proportion of the high and medium risk materials was on the slide, while that of low-risk materials was rising. This shows that the supply chain risk was controllable.

Countermeasures to Supply Chain Risk During the Reporting Period

Overall planning system

For all materials, especially those for COVID-19 vaccines, we conduct the planned procurement and formulate the material procurement plan uniformly.

Routine maintenance and tracking system

Our dedicated personnel maintains and tracks the demand adjustment of materials, the status of purchase orders, the days during which the stock can satisfy the demand of production, and the handling solutions to improper use. In addition, we track and hold the key liaison responsible for each step.

Early warning communication mechanism

We discuss solutions to materials with supply risks and quickly adjust the procurement strategies to ensure continuous and stable production.

Secure stock

While ensuring production, we require a secure stock of materials, that is, the minimum stock to meet the maximum demand of production in two months. We immediately restock the materials when they are less than the secure stock to enhance the adaptability and flexibility of the supply chain.

Supply Chain Stability

We emphasize communication and collaboration with suppliers. We regularly discuss the bottleneck problems in production and supply to ensure stable supply across the supply chain. Conferences with key suppliers quarterly, monthly and weekly are regularly held; various topics are communicated and discussed, such as manufacturing techniques, maintenance, technical improvement and plant renovation, through phone calls, e-mail, video conferences, face-to-face communication and long on-site presence. Besides, we hold supplier conferences to maintain daily communication on the supply with key suppliers who produce direct materials and materials with high supply risk. In 2021, the Company organized 137 technical communications for suppliers.

Every year, we carry out various technical communications, product exhibitions and training with suppliers in various forms. The aim is to reduce supply chain security risks and ensure the safety and stability of the supply chain. Suppliers who will perform construction on the sites have to ensure that all employees have received safety training before beginning work. We make sure there is no injury during maintenance, unconventional operation and construction site.

Special Safety Training for Suppliers

In 2021, CanSinoBIO held training on EHS requirements and workplace safety standards for more than 10 suppliers, specifically in terms of climbing, confined space, and hot work, further improving the stability and safety of the supply chain.

Training for Suppliers

In 2021,

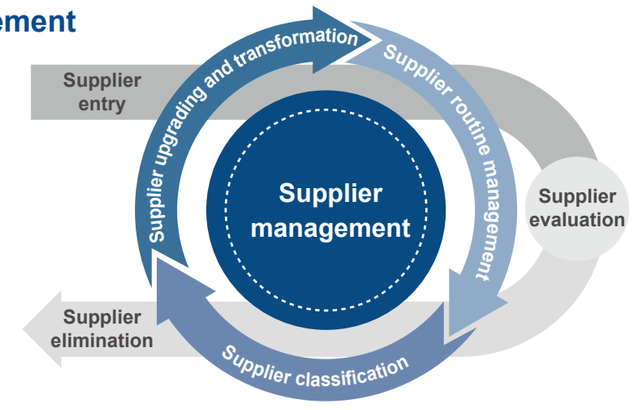
100% of suppliers accepted training on safety and occupational health

There were **101** supplier safety training sessions

Covering **467** safety training opportunities

Supply Chain Quality Management

CanSinoBIO follows exactly the *Bidding Law of the People's Republic of China* and formulates supply chain management systems including *Supplier Management Regulations*, *Procurement Management Regulations* and *Bidding Management System*. Furthermore, the Company establishes supplier archives and supplier management mechanisms covering supplier entry, evaluation, classification and elimination to better manage the supply chain.



Supplier Management Mechanism

Number of CanSinoBIO Suppliers in 2021

Suppliers from the Chinese mainland

2,052

Suppliers from Hong Kong, Macao and Taiwan

8

Overseas suppliers

75

Supplier Entry

In accordance with national occupational health and safety laws and regulations and industry standards, we screen suppliers by their supply capacity, qualifications, and goodwill. For example, whether they have obtained ISO 9001 certification of quality management system, ISO 14001 certification of the environmental management system, ISO 45001 certification of occupational health and safety management system requirements, etc. Those criteria are designed to give higher opportunities for entry to those with certifications and select suppliers with strong advantages and willingness to cooperate.

Supplier Evaluation

We keep our eyes on suppliers' performance in quality control, workplace safety, cooperation and timely delivery. For suppliers within the GMP system or important key suppliers, we set up an audit team composed of the quality department, production department, supply chain participants and key users. The team conducts an all-around audit on the supplier's qualification, the scale of production and the quality system. While paying attention to the supplier's quality, we also take the supplier's workplace safety, working environment for employees, environmental materials and corporate social responsibility as important standards. The Company conducts supplier audits in the form of questionnaires, on-site audits and live videos. The Company assesses key suppliers at least once a year, and non-key suppliers every two years or shorter. Also, the Company manages and classifies suppliers by different levels according to the assessment results, building a fair, transparent and sustainable supply chain.

By the end of the reporting period, the number of suppliers that have obtained the quality management system certification (such as ISO 9001 certification, etc.)

113

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.)

36

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.)

31

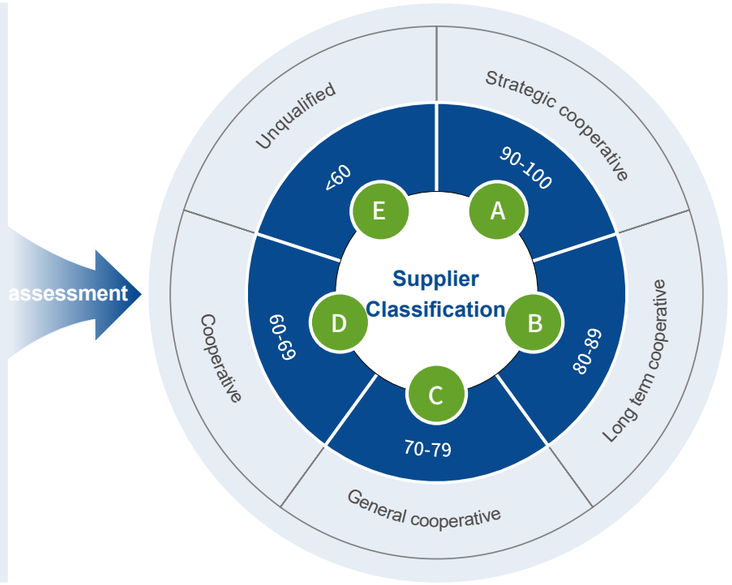
Supplier Classification

Key suppliers

The suppliers who satisfy the top 80% of procurements or provide important materials or services every year by procurement category

Non-key suppliers

Other suppliers except for key suppliers



Withdrawal of Supplier

We further implement a complete assessment mechanism and effectively avoid the risk of unstable supply. As such, we have established the *List of Qualified Suppliers* and the *Eliminated Suppliers List* and required suppliers who are assessed with the rating D to make overall rectification and provide rectification reports. Those who fail to rectify accordingly within three months after receiving the notice or who are still barely competent after rectification will be disqualified. In addition, we directly terminate the partnership with suppliers and are assessed with rating E. We disqualify the suppliers who have serious quality abnormalities, fabricate materials, or bribe our personnel to ensure the integrity and justice of the supply chain.

The Management of Supply Chain Compliance

CanSinoBIO regards sincere cooperation with the supply chain as an integral part of the Company's success and attaches importance to the management of supply chain compliance. Therefore, we formulate the *Supplier Code of Conduct* to regulate the practices of internal employees and suppliers. We require all suppliers to follow the highest ethical standards, including lawful operation, no child labor, basic human rights, equal treatment, business integrity, fair advertising and competition, identity protection and prohibition of retaliation, health, safety and environment. We strictly carry out audits on suppliers from the aspects above-mentioned.

CanSinoBIO is committed to building integrity and healthy partnerships with supplierr. Thus, we formulate anti-corruption measures for suppliers and build a sustainable supply chain. In 2021, 100% of suppliers were required to sign integrity agreements, and there were no lawsuits against corruption or unfair competition.

Anti-Corruption Measures for Suppliers

Whole-process supply chain anti-corruption management

- We accentuate the anti-corruption factors throughout the whole process including supplier entry, evaluation, graded management, withdrawal and qualification certification.

Signature of the integrity agreement

- The supplier promises no corruption during the collaboration and is liable legally for the consequences.

Punishment for violation

- We will restrict or terminate the payment and project collaboration to suppliers who have any form of bribery or paying and other improper practices, and list them on the blacklist of corruption for key monitoring.

Reporting and reward

- We publish the phone number, email address and mailing address for whistle-blowing. Suppliers are encouraged to report the breach of contract, obstructive behaviors and other corrupt acts of our employees.
- We give priority to those suppliers who actively report the misconduct of our employees with new project opportunities and payments.

CanSinoBIO signs NDAs with suppliers. We demand them to strictly keep confidential the internal actions, intellectual property rights and information related to project R&D and operations we provided to them because of partnerships. In the event of information leakage or irreparable loss, suppliers should be liable according to law.

In 2021, **100%** of suppliers became the signature of the NDAs.

Information Security

Protecting the information security and privacy of the Company, customers, subjects of clinical trials and other stakeholders is the bedrock of the responsible operation in CanSinoBIO. According to different situations and groups, the Company has formulated information and data security systems, implemented rigid management processes, and comprehensively protected data security during our operation and service. The Company asks all new employees to sign NDAs. During the reporting period, 100% of employees signed the agreement.

In clinical trials, CanSinoBIO closely monitors the safety and privacy protection of subjects. We screen the subjects through detailed and strict procedures. In addition, we fully explain the concept of informed consent, inform them of the potential risks of concealing their past medical history or concomitant medication, and sign the informed consent with them. In all materials submitted to the third party, we use the subject identification code as the only code to identify the subject in the clinical trials. When the researcher reports the adverse events and other test-related information of the subject, they give feedback by using the code instead of the subject's name to protect the subject's privacy.

In marketing activities, the Company ensures that customer information is fully protected during communication, and the customer complaint information is strictly kept confidential. The Company has dedicated personnel to file and summarize the customer complaint information regularly in strict accordance with the Company's document management procedures. That information is only available in special circumstances such as audits or NMPA inspections. During the reporting period, no violations of customer privacy and information security occurred in the Company.

Responsible Marketing

CanSinoBIO adheres to ethical, scientific and realistic product marketing and promotion through responsible marketing and academic marketing. By establishing a sound customer complaint management and safety incident handling mechanism, we are committed to effectively protecting the rights of customers and the safety of vaccine users across all parts of the whole process.

Marketing Mechanism

For product marketing, the Company insists on academic professionalism and customer orientation with an attitude of scientific and rigorous responsible marketing. At the early stage, we fully investigate and understand the real and accurate needs of doctors and subjects, and formulate a reasonable marketing plan. The Company formulates the operating specifications such as the *CanSinoBIO's Marketing and Operation Standard Manual* in strict accordance with the requirements of the *Law of the People's Republic of China on Pharmaceutical Administration*, the *Law of the People's Republic of China on Vaccine Administration*, the *Advertisement Law of the People's Republic of China* and other laws and regulations.

When making brand advertisements and marketing materials, the Company assures that all of them live up to the requirements of laws and regulations, and pass the complete medical compliance reviews. In 2021, the Company reviewed all the marketing materials related to Convidecia, Menphecia and Menhycia products and made ensue those compliant, transparent, true and accurate contents did not omit or misstate the strength of the products. We also protected personal information and other legitimate rights, and strictly followed the compliance of antitrust, recognition and testimony.

Besides, we stick to academic marketing and use various channels to reinforce the effectiveness:

- Hold sufficient special training for the sales team to equip them with professional knowledge and skillsets; actively encourage employees to put into action what they have learned and practice professional marketing;
- Communicate the Company's academic insights and product information by paying regular visits to professionals from the pandemic prevention and control center and vaccination clinics;
- Proactively participate in academic activities organized by third-party societies and associations, and accurately transmit academic insights and product information through medical professionals.

In 2021, the Company communicated product information to HCP through the meetings held by CanSinoBIO and sponsorship meetings, as well as academic activities such as visits. Specifically, the Company sponsored 15 external academic conferences, which attracted vast numbers of doctors, and favorably contributed to the following information promotion of products.

During the reporting period, the Company had

no lawsuits related to claims of false marketing.

Storage and Transportation Management

The Quality Department closely cooperates with the Marketing Department to strictly audit the vaccine storage and transportation and implement the whole-process control of the quality of products marketed. The Company manages the warehousing, outbound delivery, temperature and humidity of vaccines in line with warehousing, storage and transportation management procedures. To strictly follow the requirements of GSP storage, the Company has formulated the *Audit and Management Procedures for Logistics Service Providers* to effectively manage and audit all links of vaccine circulation and ensure product quality.

Customer Service

We have established a complete management mechanism for customer complaints and security incidents to safeguard the rights of customers and ensure the safety of vaccine users. The Company defines the different responsibilities among various departments for different types of safety events and customer complaints, which can handle complaints and events in a begin-end cycle. The Company also demands all employees to be ready to receive the complaints and incidents and assisted the pharmacovigilance personnel in the collection, recording and internal reporting of safety information.

According to the *Complaint Management Procedures for Products in the Market*, the Company stipulates that any department should give reply to the complaints and organize its people to formulate emergency measures within 24 hours after receiving customer complaints with some follow-up investigations and rectification. We mandate that all complaints should be handled and closed within 30 days and solved in a timely and effective manner.

In 2021, the Company's customer complaints were effectively settled, and **100%** of complaint was concluded.

Adverse Reaction Handling

For the adverse reactions to vaccination, the Company follows the complete processes: information collection, event evaluation, follow-up investigation, event reporting and handling of safety events we collected according to the *Monitoring System for Suspected Abnormal Reactions to Vaccination*. Our final aim is to ensure that all safety events are properly handled.

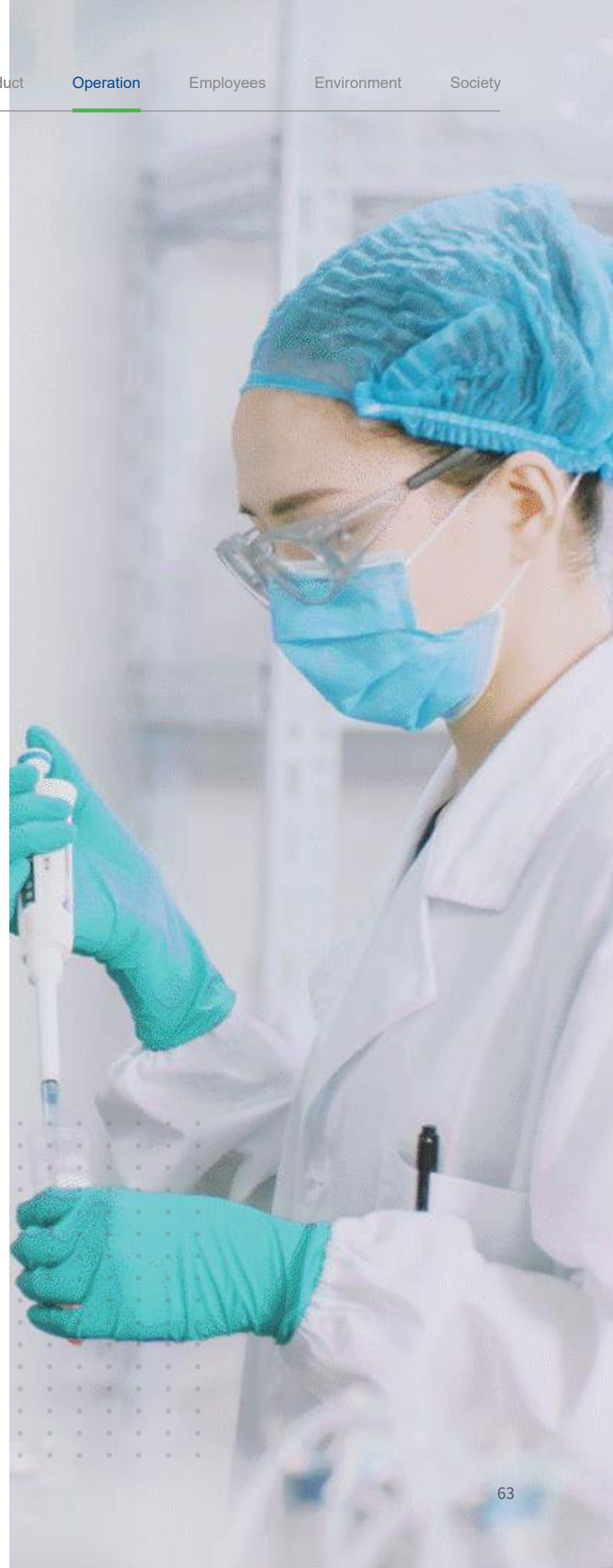
We strive to build a more complete customer service system. Therefore, the Convidecia, Menphecia and Menhycia products are covered by the compensation insurance for abnormal reactions to vaccination and vaccine quality liability insurance. In light of those cases classified as abnormal reactions, we compensate users in accordance with the *Law of the People's Republic of China on Vaccine Administration* and the current *Compensation Measures for Abnormal Reaction of Vaccination* in all provinces.

During the reporting period, the Company had **no** serious casualties related to products.

Ethics of Clinical Trials

In all clinical trial projects in which we are involved, we strictly manage the compliance and standardization of clinical trials and animal experiments in line with the management norms and ethical standards for clinical trials, as well as the R&D ethics. When the clinical trial projects are underway, the Company persists in the medical ethics principles in the *Declaration of Helsinki*, the *Guide on Ethical Review of Drug Clinical Trials*, the *Good Clinical Practice for Drug Trials (GCP)*, the *Guidelines for Quality Control of Vaccine Clinical Trials*, the *Technical Guides on Vaccine Clinical Trials* and other clinical trial regulations at home and abroad, as well as the ethical and moral requirements specified in ICH. We first validate and confirm the registration application materials and the original records and documents of clinical trials. Then we evaluate whether the trials, data records and result reports are consistent with the trial scheme and laws and regulations of drug clinical trials while also checking the authenticity and consistency of application materials to pay full attention to the protection of subjects. In a bid to ensure that all trials are up to the standards at home and abroad, we monitor all clinical trials and actively cooperate with the Ethics Committee for review. During the reporting period, there were no lawsuits related to clinical trials.

For the research involving animal experiments, we have also formulated exhaustive internal operating procedures to standardize the animal experiments from many aspects, including animal house facility, disinfectants, the health of animals for experimentation, the ways to grab animals, and blood collecting. The experiments must be conducted in strict compliance with the ethical provisions of experimental animals.



Employees

- Employment Management
- Occupational Health
- Talent Development
- Employee Welfare

As a company’s partners and family members, employees are important for the steady development of a company. At CanSinoBIO, we have established an employment management system to assure the equality and diversity of its employees, and genuinely safeguard their legitimate rights and interests and care for their occupational health and safety. We value the training of employees by providing appropriate promotion opportunities and improving the security scheme for remuneration and welfare to create a cordial work environment.

Employment Management

We strictly follow relevant laws and regulations such as the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China,* and the *Provisions on Prohibition of Child Labor*. With reference to international conventions of human rights and labor standards like the *UN Guiding Principles on Business and Human Rights*, we formulate and perfect our internal regulations. Our *Personnel Recruiting Management System, Work Attendance Management System,* and *Employee Handbook* specify that child labor and incidents of forced labor are forbidden. We are ready to protect the basic rights and interests of our employees by means of information review, background investigation by the third-party institution, the signature of the letter of commitment, regulated working hours and overtime approval procedures. In the case of any violation, we will terminate the labor contract with the employee who violates our rules in accordance with laws and regulations and the *Employee Handbook*. In 2021, we had no cases of child labor, forced labor, or other illegal incidents.

We take a firm stand against the vicious competition, and sexual, age, ethnic, or any other discrimination, and are determined to put an end to the discrimination in courses such as recruitment, promotion, training and dismissal of employees and will ensure equal opportunities for all. At the same time, the Company, with its businesses expanded all over the world, actively attracts talents from diverse educational, ethnic and nationality backgrounds. As of the end of the reporting period, CansinoBIO had a total of 1,404 contract employees, among whom female employees accounted for 49%, including 3 key management are females, accounting for 37.5% of the management. More than 22% of employees hold a master's degree or a higher degree. We have, therefore, implemented diverse employment policies and procedures. In 2021, the overall turnover rate of employees was 8.24%[7].

CansinoBIO keeps optimizing its talent philosophies and the talent management system in line with its adherence to the principle "Respect, Equality, and Care." We intend to build an innovative organization with quick-thinking talents and a working environment where employees are dedicated to making their contributions readily. In 2021, CansinoBIO was honored with China's Top 100 "Best Employer Award 2021" by Zhaopin.

CansinoBIO was honored with China's Top 100 "Best Employer Award 2021" by Zhaopin

[7] This percentage is the employee turnover rate in areas we operate in China, and no employees leave overseas operating areas.

CansinoBIO's Employment by Category in 2021

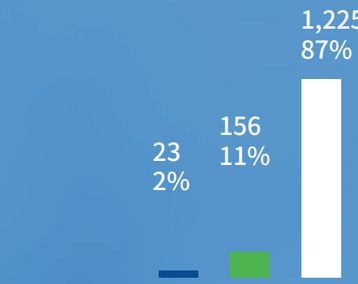
Number of new contractual employees this year (including those who have left)

807

Number of Employees

1,404

By position

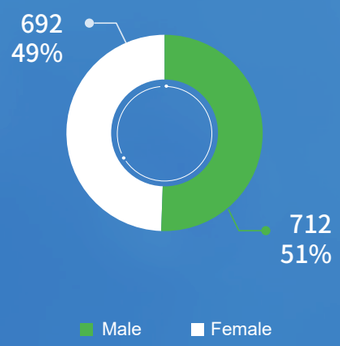


Female management

Senior managers: 8 female 35%

Middle managers: 74 female 47%

By gender



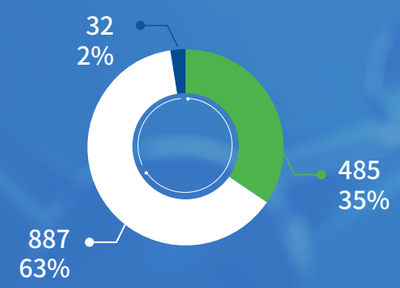
By job type

- Managers 232 16%
- R & D technicians 298 21%
- Quality personnel 168 12%
- Production personnel 444 32%
- Sales personnel 232 17%
- Financial personnel 30 2%

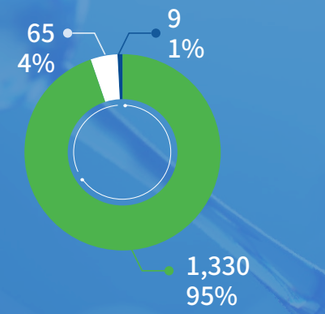
By educational

- Doctor and above 22 2%
- Master 293 21%
- Undergraduate 687 49%
- Junior college and below 402 29%

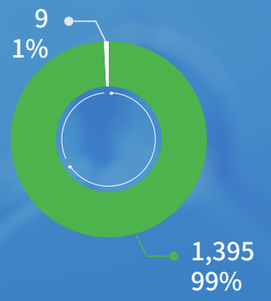
By age



By ethnic group



By nationality

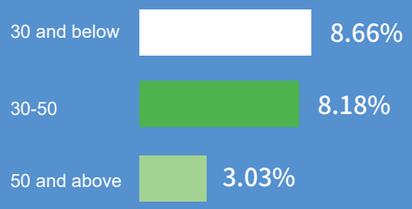


CansinoBIO's Turnover of Employees by Category in 2021[8]

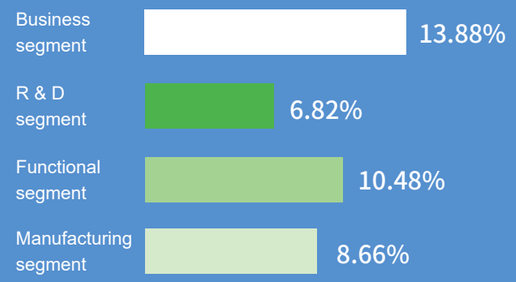
Overall turnover 8.24%

By gender

By age



By job type



[8] Only employees who are employed by employment contracts

Occupational Health

CanSinoBIO highly values the occupational health and safety of its employees. We strictly observe laws and regulations including the *Labor Law of the People's Republic of China*, the *Fire Control Law of the People's Republic of China*, the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*, the *Production Safety Law of the People's Republic of China* and *the Regulation on Work-Related Injury Insurance*. In addition, we also act under internal norms including the *CanSinoBIO EHS Strategies and Codes of Conduct* and the *Declaration System of Occupational Hazards*. Our systematic approach to institutionalized occupational safety management is established in line with ISO 45001 Occupation Health Safety Management System. We strive to provide a healthy and safe working environment for employees by giving priority to health and safety in the process of designing and introducing new products, new processes, new equipment and new facilities.

Measures for Occupational Health Management

Identify position risks and detect occupational hazard factors

Actively promote all departments to identify current sources of occupational hazards, summarize and publicize the hazard factors in different departments and offices, and post relevant warning labels. At the same time, we have formulated and implemented measures to manage and control risks relating to occupational hazards.

Health monitoring for employees when on board, on-the-job and on departure

Carry out occupational health monitoring, and simultaneously create dedicated occupational health archives for employees.

- **On-board:** Pre-employment physical examination will be arranged for employees who will be engaged in activities with occupational hazard risks and special health requirements.
- **On-the-job:** Annual physical examination will be arranged for employees exposed to occupational hazard factors and greater risk factors.
- **Departure:** Occupational health examinations will be organized and completed for employees who have engaged in activities with occupational hazards before their departure.

On the basis of ensuring the occupational health of employees, CanSinoBIO attaches great importance to pandemic control. We have improved pandemic response procedures and implemented preventive measures by developing closed-loop management in the project area. Besides, we constantly improve employees' awareness of prevention and ensure the health of employees in the workplace.

Measures for Pandemic Prevention and Control

Early Warning of the Pandemic

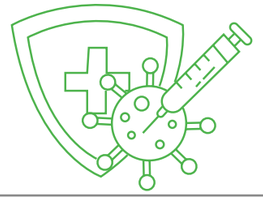
- Strengthen management and access control over personnel and vehicles, implement filing and review process for external personnel access;
- Employees must report their health monitoring data, smart health QR codes, travel QR codes, and body temperatures are taken before access to the factory. Preventive measures will be adopted according to relevant policies in case of any abnormal situation;
- Quarantine areas are zoned in all factories with supplies for pandemic prevention and contingency plan.

Putting Preventive Measures into Practice

- Formulate *Regulations for COVID-19 Prevention and Control Management* and *Operating Procedures of Preventive Disinfection of Commodities;*
- Provide employees with high-quality protective equipment such as medical masks, goggles, and gloves.

Education on Pandemic Prevention

- Provide education on pandemic prevention and control and timely share relevant policies and information through Enterprise WeChat, Official Account and working groups so as to improve employees' awareness of pandemic prevention.



Talent Development

CanSinoBIO attaches equal importance to the growth of employees as to the success of the Company. We continue to improve the talent development system from human resource management, performance assessment, talent development, talent training and other aspects. We are eager to provide smooth development plans for employees, who are the solid human resources for the sustainable development of the Company.

Human Resource Management

CanSinoBIO implements the medium and long-term strategy for human development. Our focus is on the organizational strategic culture, leadership, compliance management of human resources and other aspects. We continue to optimize our human resource management strategy and enhance digital information management of personnel, which supports the Company to operate efficiently and move faster toward our goal of commercialization and internationalization.

Standardized Personnel Management

In 2021, we conducted the project "CanSinoBIO Personnel and Organizational Management Optimization", which involves 1-3 years of optimization dimension and direction, dedicated to building a standardized personnel and organizational management framework and operation system.

According to interviews with management and staff survey, we focused our work on three aspects: specifying organizational strategies, developing a short-term incentive system and leadership.

Digital Information Management of Personnel

In 2021, we moved forward to digital information management, intending to improve efficiency of personnel management.

This digital system will provide accurate information of personnel, helping business managers to manage their teams efficiently, which will become an important foundation for future development strategies.

Strategies of Attracting Talents

In order to support the Company's goal of commercialization and internationalization, we introduced excellent talents with profound experience and international vision in the fields of R&D, marketing and production.

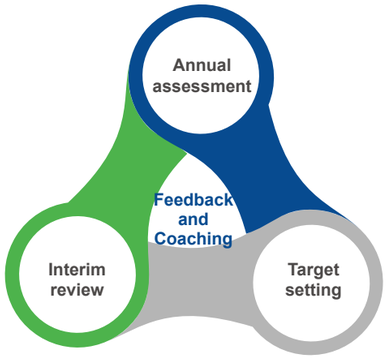
In 2021, we started the strategy of a dual development channel for employees, expanded our recruitment overseas encouraged internal self-recommendation to attract more talents.

Performance Assessment

CanSinoBIO constantly improves the evaluation mechanism of employees' performances, making it possible to conduct a performance management cycle on the basis of target setting, interim review and annual evaluation. Employees' work results, actions and professional qualities can be assessed in a comprehensive way. In addition, we make use of the BEST feedback model[9] to feedback employees with evaluation results timely, helping them make improvements and future-oriented development.

In 2021, we set up and improved performance coaching procedures and a face-to-face interview mechanism, and published a feedback and coaching manual. We developed an action improvement plan based on evaluation results and employee opinions to track and check the improvement effect.

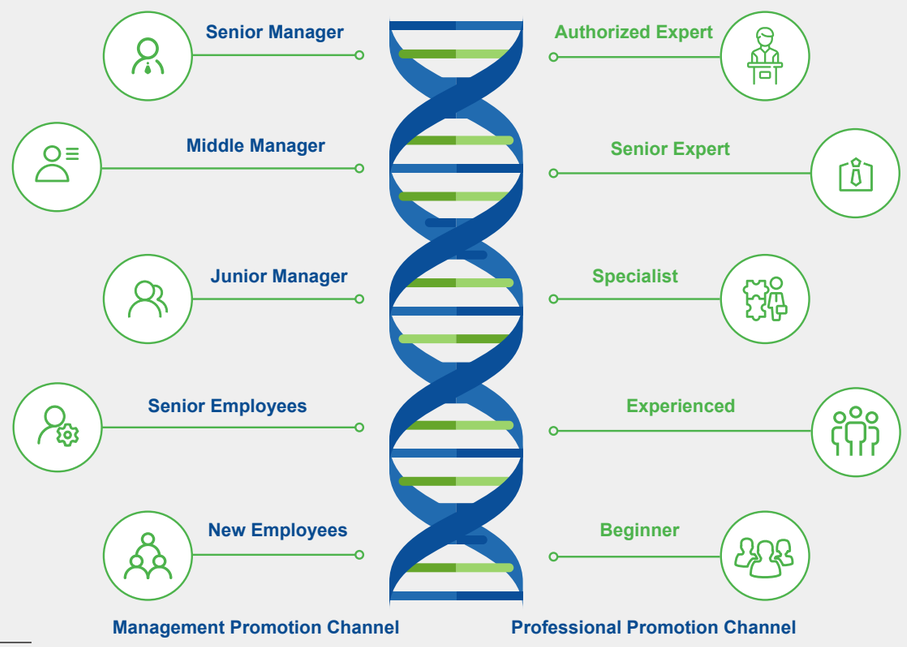
Performance Cycle Management System



Career Development

To better provide employees with more incentives and challenging opportunities for their career development, we offer a dual development channel combining "management development" and "professional development" for employees. We encourage them to adjust and select suitable orientations to help them grow based on corporate development needs and their own competence.

Dual Professional Development Channel



[9] BEST feedback model refers to behavior description, express feelings, solicit suggestion and talk positive outcomes.

Employee Training

To pool more talents and build talent teams, we continue to improve our employee training system. We create a three-level training system, namely, company-wide training system, department-wide training system, and position-specific or individual training system, centered on the principles of "systematic, institutionalized, initiative, diversified, and putting into practice." We provide a variety of training courses tailored to employees at all levels involving chief executives, new employees, interns, and others to enhance their skills and professionalism. The training includes safety training, compliance training, training on professional qualities and competence, leadership training, etc.

In 2021, CanSinoBIO provided a total of **100.8** hours of training for every trainee

over **90%** satisfaction from employees

Key Training Projects in 2021

Leadership Training

This project was provided for all chief executives with diversified training programs including five lectures by external experts, group activities, and after-class assignments to improve their management skills and leadership.

Annual Employee Training

It was designed for all employees. It improves their professional skills and meets their training needs with 25 courses at 6 levels such as business knowledge build-up, GMP awareness enhancement, safety awareness, office operating system, English and comprehensive skills.

Training for New Employees

It was designed for fresh employees and interns. Its aim is to help them to know company profiles, product knowledge, safety awareness, quality awareness, IT operations, departmental training, and job-specific training, etc. through online courses and face-to-face symposiums. In addition, the Company was active in providing on-the-job training for new employees so as to help them fit in with us. As a result, 96% of fresh graduates and 92% of interns chose to stay.

CansinoBIO's Employee Training in 2021[10]

Average training hours per employee		100.8
Training hours per capita by position	Per capita training time for middle and senior managers	66.1
	Per capita training time for junior employees	105.8
Training hours per capita by gender	Per capita training time for male employees	95.2
	Per capita training time for female employees	106.5
Proportion of employees trained		96.58%
Proportion of employees trained by position	Proportion of trained senior managers	0.96%
	Proportion of trained middle managers	10.69%
	Proportion of trained junior employees	88.35%
Proportion of employees trained by gender	Proportion of male employees	50.59%
	Proportion of female employees	49.41%

[10] Exclude the EHS training statistics.

Employee Welfare

CanSinoBIO provides employees with competitive remuneration and listens to their voices readily. We are committed to creating a decent work environment and atmosphere, making all employees feel warmth in the Company.

Remuneration and Welfare

The Company also makes employees' remuneration and welfare well safeguarded by adhering to a market-oriented principle of remuneration combined with short-term and long-term incentives. We also implement a stock incentive plan for employees to improve their motivation for work through multiple channels.

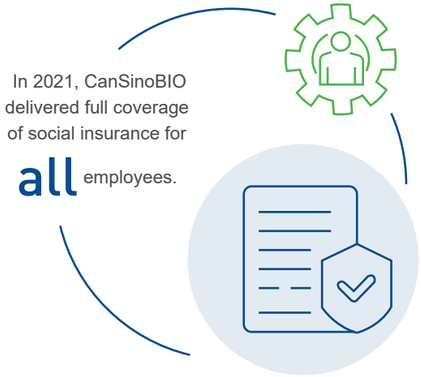
Improve the *Remuneration and Welfare Management System* to regulate remuneration composition and adjustment mechanism as a way to provide fair, just and competitive remuneration.

Comprehensively and systematically utilize results of performance evaluation; establish a linkage mechanism between performance and allowances, bonuses, salary adjustment, promotion, equity, etc., to create a sound competitive environment.

Adopt employees share incentive plans for core talents to spark their working enthusiasm and R & D innovativeness. In 2021, the *2021 Restricted Stock Incentive Scheme* was approved in the the Board meeting of the Company, which completed the framework of equity incentives, salary incentives and job performance appraisal incentives. Those incentives not only brought value-added benefits to employees but also enhanced the values of the Company. Employees are guided to contribute to the development of the Company in the long term, whose enthusiasm, creativity and cohesion are further improved.

Non-monetary Welfare

The Company offers good non-monetary welfare to employees by caring for their lives, and continuously improving their sense of happiness and belonging so as to create a warm working environment.



Statutory Welfare

Five insurances and (including endowment insurance, medical insurance, unemployment insurance, employment injury insurance, and maternity insurance) and housing fund; and paid annual leave

Special Welfare

Provide the annual physical exam, work lunch, free company shuttle bus, communication allowance, high temperature and heating subsidies, personal accident insurance, birthday gift, congratulations for new babies, team building activities

Care for Female Employees

Provide our female employees with gifts on International Women's Day on the March 8th, as well as a nursing room

Help Employees in Need

Provide consolation money for employees in need, and organize employees to donate money to relieve the pressure of medical expenses for employees in need

Employee Communication

CanSinoBIO develops and improves *Employee Appeal System*. Meanwhile, employees are encouraged to solve problems and settle disputes through internal communication and an appeal system to create and maintain a good working atmosphere. At the same time, we encourage active connections between management and employees by organizing employee representatives' communication meetings with workers' representatives, and sessions for new employees. Employees' suggestions or opinions on updated management systems and improved corporate performance can be heard to meet their needs.

Procedures of Employees' Appeal

We encourage employees to appeal in a rational way, for example, by submitting their appeal in writing to voice@cansinotech.com in which they should clearly list unfair treatments they suffer as well as their expected results and provide evidentiary materials and contacts.

The Company will deal with the appeal together with the immediate superior of the applicant to give feedback and archive.

Communication Channels for Employees

Employee Communication Meeting

On December 30, 2021, CanSinoBIO held a communication meeting for all employees for the year 2021. The core management of the Company answered employees' questions covering the Company's operation, R & D layout, working skills, career planning and other issues. The conference helped employees deeply understand the future development of the company.

Symposium for New Employees

In order to help new employees better fit into the Company, we organized a symposium between new employees and management to understand the practical difficulties and doubts of new employees. At the same time, we encouraged new employees to give feedback and suggestions on management procedures, organization authorization, internal communication, on-the-job training, supplier management, electronic informatization and other aspects. We intended to pool employees' wisdom and enhance their sense of belonging.

Online Communication Platform

We provide online and offline communication platforms, such as complaint boxes, Voice email-box, questionnaires, and WeCom platform "See CanSinoBIO" to understand their needs, and actively listen to their voice. A specially-assigned person is appointed to track and answer the questions and disclose responses and feedback on employees' claims on a timely basis.

CanSinoBIO attaches great importance to the impacts on the environment caused during the development and research. We are committed to being an eco-friendly enterprise with green operations through practical actions to realize the visions of “carbon peaking” and “carbon neutrality.” We continue to promote efforts for environmental management by improving the internal system of enhanced monitoring of energy use and management of waste discharge. We are dedicated to sustainable development to avoid climate-related risks and respond to climate change through energy conservation and emission reduction.

Environment

- Environmental Management
- Response to Climate Change
- Management of Resource Use
- Waste Management

Environmental Management

We are in strict compliance with relevant environmental laws and regulations including the *Environmental Protection Law of the People's Republic of China*, the *Law of the People's Republic of China on Prevention and Control of Water Pollution*, the *Law of the People's Republic of China on Solid Waste Pollution Prevention*, the *Law of the People's Republic of China on the Prevention and Control of Environmental Noise Pollution*, and *Law of the People's Republic of China on the Prevention and Control of Air Pollution*, we also have established an *environmental management system*, formulated management-based documents including *Environmental Management System*, *Water Resource Management System* and *Energy Management and Control System*. Relevant measures related to environmental management have been taken in all factories and operation bases, mainly focusing on evaluating the environmental effects of installations for the prevention and control of pollution at a construction project must be designed, built and commissioned together with the principal part of the project ("Three Togethers"), green office and environmental protection promotion. In 2021, we totally spent RMB6,682,100 on environmental protection and management.

When working on project construction, CanSinoBIO strictly designs, builds and commissions installations for the prevention and control of pollution at a construction project together with the principal part of the project ("Three Togethers") to implement various environmental measures. Based on ISO 14001 environmental management system and ISO 50001 energy management system and other standards, we have set up the Environment, Health, and Safety (EHS) Committee and an executive arm to conduct special environmental inspections monthly and environmental performance auditing on a regular basis. The aim is to ensure procedures compliance for new projects and disposal of waste water, waste gas and solid waste (referred to as "three wastes") during the operation and finally ensure complete and effective facilities for environmental protection. Inspection results will be reported to corporate management for review and supervision. The EHS Committee supervises and manages the environmental management in each business department. It also regularly follows up on the implementation of environmental management and sets environmental targets.

CanSinoBIO sets environmental targets to promote sustainable development after taking into account relevant requirements and guidelines, actual situation, scientific calculation method and assessment criteria. We break down targets and use quantitative indexes to track the implementation process and progress.

CanSinoBIO's Environmental Targets

CO_2 Emission Reduction

- Scope 1 and 2 emission[11]: To continue the stricter emission monitoring during R&D, production and operation, proactively save energies, and reduce GHG emissions and carbon emissions.

Energy Conservation

- To optimize the manufacturing and R & D facilities and improve energy efficiency;
- To manage the use of energy to avoid unnecessary energy consumption and waste.

Water Consumption Reduction

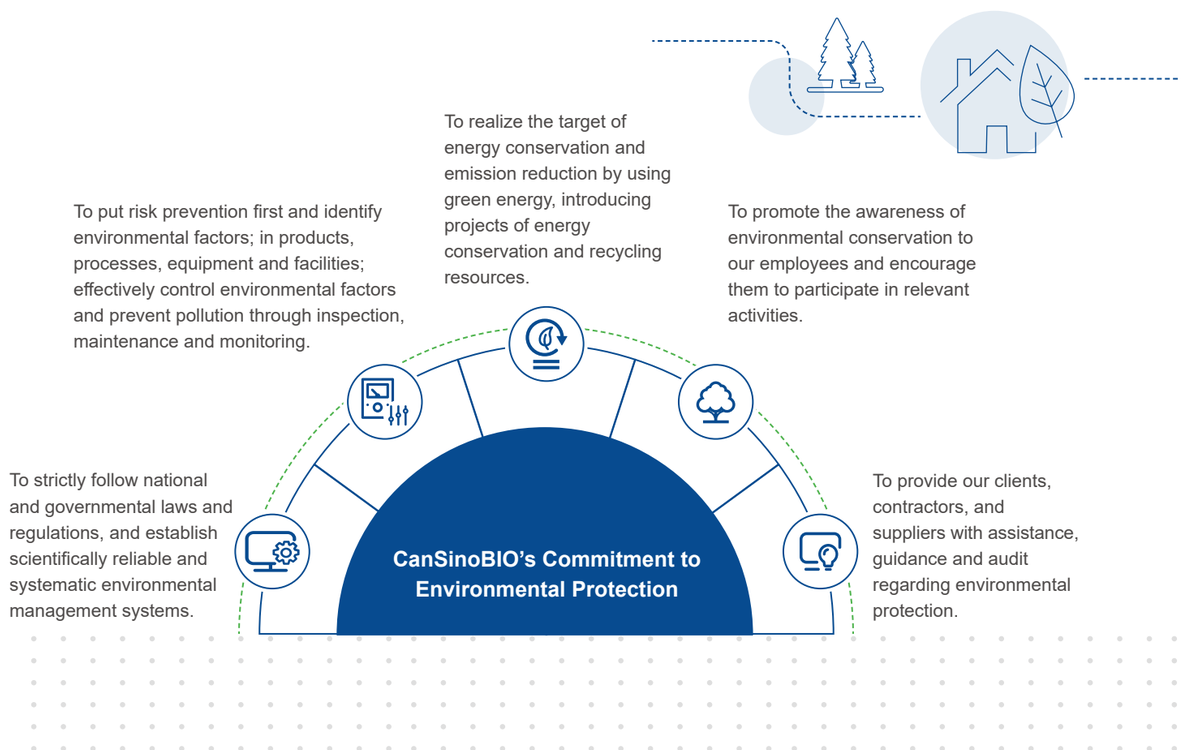
- To strengthen the promotion of water conservation, encourage water recycling, and apply water saving devices and reduce water consumption.

Waste Discharge Reduction

- 100% of wastes are harmlessly treated;
- To put more effort into advocating food saving and opposing waste, reduce food loss and kitchen waste. Enhance green office campaign to reduce office waste.

[11] Scope 1: refers to the greenhouse gas emissions generated by the Company's direct combustion of petrochemical fuels or during the transportation and the greenhouse gases directly emitted during manufacturing. The Scope 1 emission source of the Company includes gasoline, diesel and natural gas. Scope 2: refers to the indirect greenhouse gas emissions caused by the purchased energy of the Company, such as the purchased electricity or steam used by the Company. The Scope 2 emission source of the Company includes purchased electricity.

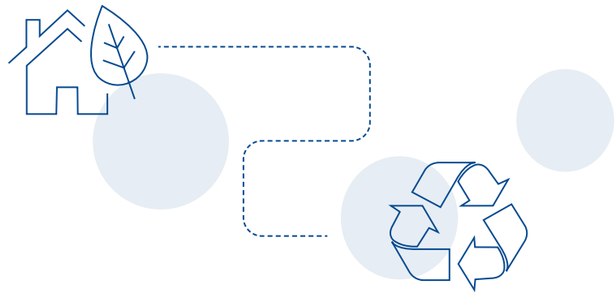
Besides the *New Contingency Plan for Environmental Emergencies in Enterprises and Public Institutions*, we also worked positively toward the identification and check of environmental risks. We identified 6 units with risks including the storehouse for dangerous articles and manufacturing workshops. As a result, we regulate materials that might harm the environment, conduct periodic patrol inspections on the units with environmental risks, and provide supporting physical facilities and contingency measures for prevention and control of risks. Where any environmental emergency occurs, an environmental monitoring group should be set up with EHS managers as the team leader to monitor and assess conditions on site and to prepare for the collection of pollutants and treatment of wastes.



Response to Climate Change

Climate change presents a severe challenge to the whole world. CanSinoBIO will take climate change as the top agenda for its development to reduce its CO_2 emissions. We attach importance to risks and opportunities brought by climate change, and actively shoulder our social responsibility as an enterprise to reduce emissions.

CanSinoBIO has already preliminarily identified the potential risks and opportunities raised by climate change from physical and transition risks and developed relevant solutions.



CanSinoBIO's Identification and Response to Climate-Related Risks

Physical risks

Acute physical risks	A series of chain reactions, such as possible power failure and urban waterlogging that are caused by extreme weather or climate events including blizzards, typhoons and rainstorms, may affect the corporate assets or the normal operation of the supply chain.	• Paying close attention to catastrophic weather events and improving the contingency plan for extreme weather; • Staying in good communication with the local government; • Strengthening the management of operation facilities with reinforcement or maintenance according to local climate conditions.
Chronic physical risks	Long-term changes in climatic factors, including temperature changes, sea-level rise, and water shortages, may lead to the increased cost of cold chain logistics and threat to coastal operations from the shortage of available water resources.	• Taking geographic location into account when a site is selected, to provide special protection for operations in coastal areas; • Adjusting conditions of cold chain transportation timely according to the temperature change, to ensure the smooth transportation.

Transition risks

Policy and regulatory risks	Given increasingly strict laws and regulations of environmental protection at home and abroad, the company may face compliance risks of legal action and punishment when failing to meet regulatory requirements.	• Always focusing on national laws and regulations of environmental protection and national policies of energy, and actively identifying emission sources and reducing our own carbon emissions.
Technological risks	With the continuous innovation of low-carbon technologies, the company adopts low-carbon technologies and possibly invests more in upgrading equipment to keep up with the market demand or innovation.	• Attentive to low-carbon operational technologies in order to reduce carbon emissions from construction, operation and maintenance of our platform, cold chain transportation and other links.
Reputational risks	With the transition to a low-carbon economy, stakeholders expect the company to take proactive actions in the management of climate risks and improve the transparency of information disclosure. company's reputation will be affected as a result of its failure to respond well to these demands.	• Working actively to respond to the national call for "goals of carbon emission peaking and carbon neutrality,",and to communicate with stakeholders to set and disclose targets of emission reduction.

To deal with the energy shortage resulting from environmental emergencies, we formulate *Regulations on Water Cut-off, Water Leaks, and Industrial Steam Interruption*. In addition, an emergency force is created to respond quickly and solve unexpected environmental problems. We submit the early warning and information of extreme weather and other natural disasters through various channels; we conduct scenario analysis on possible environmental events with actual cases, assume the most serious impact that may be caused, and conduct consequence analysis to make response measures; we investigate and maintain the emergency facilities to ensure the normal operation. In the future, the Company will continue to strengthen its ability to manage climate risks and opportunities and seeks to minimize the impact of climate change.

Management of Resource Use

CanSinoBIO strictly follows the *Law of the People's Republic of China on Energy Conservation* to manage the use of energy in processes of production and operation. We measure and monitor energy consumption by systematically recording energy use data, and take highly effective methods of energy management according to the actual operation of the Company. Within the company, we work to strengthen the awareness of all employees to shape their cost management philosophy and practice thrift, creating an environment in which "everyone acts routinely in an economical way." Our resources used in our manufacturing, R&D and daily office activities mainly include power, gasoline, diesel fuel, natural gas, water resource and product packaging. In 2021, 265 tons of packaging materials have been used accumulatively.

Statistics of CanSinoBIO's Resource Use in 2021[12]

Purchased power (KWh)

28,165,380.00 2021 | 18,015,990.00 2020

Natural gas (cubic metre)

3,878,006.00 2021 | 2,133,453.44 2020

Gasoline (liter)

62,854.00 2021 | - 2020

Diesel fuel (liter)

2,027.00 2021 | 300.01 2020

Energy consumption intensity per floor area (MWH/square meter)

1.08 2021 | 8.06 2020

Municipal water supply (tons)

333,439.00 2021 | 245,291.00 2020

Water consumption intensity per floor area (tons/square meter)

5.12 2021 | 48.10 2020

[12] The Company hasn't officially started mass production till 2021. Therefore, the types of resource consumption increased, and the total consumption also rose significantly compared with that in 2020. The indicators marked with"-"are not included in the statistics in 2020.The floor space of Company's buildings (the Company's buildings include office buildings and factories in operation) increased rapidly in 2021, so the intensity of floor space per unit was significantly lower than that in 2020.

CanSinoBIO's GHG Emissions 2021[12]

Total GHG emissions (Scopes 1 and 2)[13] (tCO_2e)

35,159.36 2021 | 17,340.87 2020

Total GHG emissions per floor area (tCO_2e per square meter)

0.54 2021 | 3.40 2020

Direct GHG emissions (Scope 1)

Natural gas (tCO_2e)

8,488.36 2021 | 4,514.50 2020

Diesel fuel (tCO_2e)

5.37 2021 | 0.78 2020

Gasoline (tCO_2e)

136.66 2021 | - 2020

Indirect GHG emissions (Scope 2)

Purchased power (tCO_2e)

26,528.97 2021 | 12,825.58 2020

All departments should use resources strictly within the budget. The Company will include the budget enforcement into the scope of performance assessment and firmly requires our employees to develop a sense of responsibility to control operating costs. We established an Energy Management Group in the headquarters to set energy consumption targets and track its progress. Members of the group are appointed to be responsible for electricity, steam and other energy to develop energy statistics, energy use analysis and rectification. We drew the equilibrium diagram to collect statistics on energy use at each point according to existing measurement methods. In key areas, the statistics were specifically collected daily and analyzed monthly. In addition, we strengthen cooperation with professional energy management companies to promote the construction of energy management systems and EHS information-based system. We also rely on online platforms for registration, recording and tracking of energy use and waste discharge to manage resource utilization scientifically.

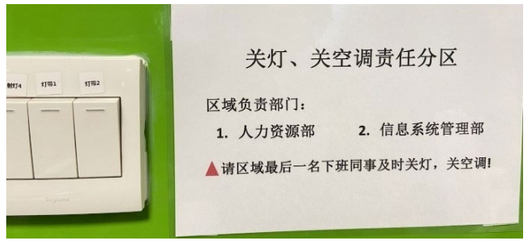
[13] GHG inventories include carbon dioxide, methane and nitrous oxide, mainly produced from the purchased power and fuels. GHG emissions are presented in carbon dioxide equivalents and are calculated based on the 2019 Baseline Emission Factors for Regional Power Grids in China for CDM and CCER issued 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).

We have made various efforts to promote the realization of the goals of carbon peaking and carbon neutrality, including carrying out the management of low carbon and energy conservation in an all-around way. We threw out a reasonable suggestion for equipment operation to reduce its operation period under the condition of compliance. Furthermore, we developed new factories and projects with reference to the latest experience in the industry, starting to manage energy conservation from the starting point to avoid energy waste caused by another renovation. In the office area, we attach great importance to energy conservation and resource recycling. For example, we encourage double-sided printing and printing with used paper in the case that business secrets are not involved.

In order to reduce power consumption, we have reformed and updated a large number of electrical equipment, replacing the original highly consuming equipment with energy-saving lamps under the condition of ensuring the lighting effect. Air conditioners in some areas are operated less frequently in the case of no production, to down power consumption. Electric motors of some equipment are used at different frequencies, with the fan working with a synchronous belt, which can reduce 2%-3% of energy consumption. Also in the work area, we have posters beside switches of lamps, air conditioners and other equipment to be as a reminder for saving energy, forming a good habit of turning off lights when leaving out.

In terms of natural gases, we improved the condensate recovery system with a 60% of high efficiency of condensate recovery, and greatly increased the efficiency of the boiler to use fewer natural gases. On the basis of ensuring the commuting of employees, we reasonably optimize the operation hours and route of the shuttle bus. For vehicles needed in the Company's business travel, employees need to strictly follow the application and approval process on the OA system and set up a supervision team for inspection to reduce the cost of vehicle use and effectively reduce the gasoline consumption. We have improved the diesel mechanical efficiency of some equipment and reduced the demand for diesel.

In terms of water resources, we have improved the operational parameters of the water purifier to reduce water consumption. We also have strengthened the maintenance and overhaul of water pipelines to prevent unnecessary waste caused by leakage or other reasons. In daily office work, we also pay attention to enhancing employees' awareness of water conservation. On "World Water Day," we put a publicity board in the office area to call on all employees to save water resources together.



Poster for Energy Conservation in CanSinoBIO Work Area

Publicity Board on "World Water Day"

Waste Management

At CanSinoBIO, we have regulated and refined its management of the generation and discharge of waste gases, wastewater and solid wastes in the process of production and R&D. It has formulated *Regulations of Hazardous Waste Management* and other institutional documents to manage and control waste discharge. The Company constructs projects in accordance with relevant requirements of clean production and harnesses the discharge of waste gases and other pollutants by taking corresponding measures for environmental protection. Wastewater from the production will be treated by the regional wastewater treatment plant with a proper management process. Noises in our factories are required to meet the emission standard, and solid wastes are rationally disposed of.

We make sustained efforts to reform and upgrade the discharge system, open to the supervision and review of authorities. We strictly follow the stipulations specified by the Discharge Permit issued by the authority with the limitation on the emission to 500mg/L for chemical oxygen demand (COD) and 45mg/L for ammonia nitrogen. Every year, we invite professional organizations to assess our emission situation and rectify problems timely, further improving our ability of emission management when ensuring compliance. In 2021, the industrial volatile organic compounds (VOCs), waste gases and industrial wastewater produced have passed the Detection of China Metrology Accreditation for Environmental Emission (CMA).

The main emissions of the Company mainly include Greenhouse Gas ("GHG"), particulate matter and nitrogen oxides from the use of purchased electricity and the burning of natural gases. We continue to strengthen the management of waste gas for emission reduction. In 2021, we set the target of completing the transformation of the low-nitrogen boiler and putting relevant work into practice. At the same time, we gained access to the municipal steam pipeline, which thus replaced two 6.6-ton gas-fired boilers and effectively downed the concentration of nitrogen oxide emission. We upgraded parts of the existing equipment used for waste gas treatment, including the exhaust system, activated carbon tank, and exhaust funnel, which ended up improving the capacity of equipment of absorbing hazardous substances in exhaust gases, further discharging cleaner emissions. We also refined refrigerants by replacing the original refrigerants with the greener R507 refrigerant to control GHG emissions. In addition, we standardized the construction of the discharge outlet where we put a signboard for the reminders.

CanSinoBIO's Discharge Permit

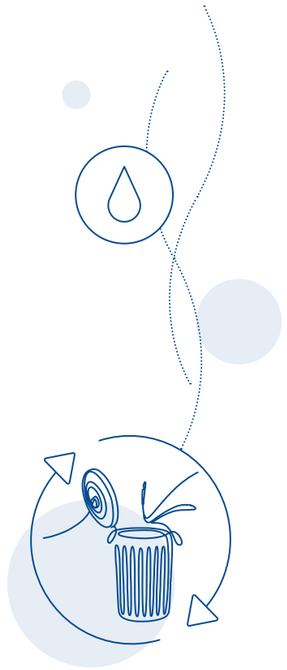
CanSinoBIO's Facility for Waste Gas Emission

The Company discharges wastewater in accordance with the *Integrated Wastewater Discharge Standard* issued by Tianjin city, mainly involving industrial wastewater in R&D and production processes as well as domestic wastewater in the operation without exceeding discharge standards. In view that the wastewater mainly contains biochemical oxygen demand (BOD), chemical oxygen demand (COD), ammonia nitrogen (NH3), suspended solids (SS), etc., we renovated the sewage treatment station currently in the Tianjin factory of the fact that we optimized the front sedimentation process and the anaerobic process, contributing to more efficient sewage treatment. We put up a signboard at the sewage discharge outlet and installed flowmeters as well as online facilities to monitor pH and COD. all the data are connected online with the main control room of the plant and the Bureau of Ecology and Environment in Tianjin Economic and Technological Development Area. In addition, we have invested more than RMB3 million in planning and constructing a sewage treatment station with a new and efficient treatment process, which is expected to significantly reduce pollutant emissions after its completion in 2023. In order to avoid sewage penetrating into the ground as far as possible, we built long-term monitoring well to supervise sewage discharge, controlling pollutants with regard to its generation, penetration, diffusion, emergency response based on the principle of "controlling from the source, zoning prevention and control, pollution monitoring, and emergency response."

CanSinoBIO's Online Monitoring Facility

Hazardous wastes mainly include waste chemical reagents, waste organic solvents, contaminated wastes, etc. We strictly manage hazardous wastes according to our internal systems to prevent environmental pollution caused by the leakage of hazardous chemicals. In the process of production, non-conforming products stored, expired drugs, nonstandard raw materials and returned goods are collected and preserved by our store department and waste semi-finished products and waste drugs at designated points are managed by assigned personnel. Disposable packing bags, hazardous accessories and other adsorption materials or cleaning materials contaminated by hazardous wastes are placed into the designated garbage bags for treatment.

We set up temporary storage places for hazardous wastes on the construction site, including empty reagent bottles and waste liquids separately collected from labs with detailed recordings. Biological wastes used in biological laboratories shall be collected in labeled containers and collected as hazardous wastes after disinfection or inactivation in an autoclave; animal carcasses in labs are collected and refrigerated by the experimental department. Pre-treated hazardous wastes will be transported to a professional third-party company qualified with the hazardous waste disposal certificate for further treatment. In 2021, two special trainings on hazardous wastes are organized for 25 workers internally. General solid wastes mainly include domestic wastes and kitchen wastes, which are also collected and treated in compliance with professional third parties.



CanSinoBIO's Key Performance Indicators for Emissions[14]

Waste water

Total waste water emissions (tons)

2021	266,751.00
2020	196,232.80

Chemical oxygen demand (tons)

2021	4.98
2020	14.72

Suspended solids (tons)

2021	3.38
2020	-

Ammonia nitrogen (tons)

2021	0.58
2020	1.08

Waste gases

Total waste gas emissions (cubic meter)

2021	517,216,680.00
2020	-

Non-methane hydrocarbon (tons)

2021	0.5234
2020	-

Oxynitride (tons)

2021	1.49
2020	3.30

PM (particulate matter) (tons)

2021	0.17
2020	-

Non-hazardous waste

Total non-hazardous waste (tons)

2021	31.63
2020	56.81

Total non-hazardous waste per floor area (tons/square meter)

2021	0.0005
2020	0.011

Hazardous waste

Total hazardous waste (tons)

2021	240.34
2020	79.29

Total hazardous waste per floor area (tons/square meter)

2021	0.0037
2020	0.016

[14] The Company hasn't officially started mass production till 2021. Therefore, the types of emissions and discharges increased, and the data in those indicators also rose significantly compared with that in 2020. The indicators marked with"-"are not included in the statistics in 2020. The floor space of Company's buildings (the Company's buildings include office buildings and factories in operation) increased rapidly in 2021, so the intensity of floor space per unit was significantly lower than that in 2020.

CanSinoBIO proactively takes social responsibilities and practices its original aspirations and mission to deliver a healthy life for all. We have been constantly carrying out the R&D and promotion of high-quality innovative vaccines and providing guarantees to product supply. In addition, we offer vaccines and the filling technology to other developing countries, making our contributions to improving vaccine availability worldwide. We make our efforts to help and support the undeveloped regions at home and abroad that we are deeply concerned and make progress together with them.

Society

- Inclusive Medical Care
- Social Empowerment

Inclusive Medical Care

As a vaccine researcher and manufacturer, CanSinoBIO is committed to fulfilling the demand for disease prevention, taking quality, accessible, high quality and innovative vaccines as a bridge, to make people embrace a healthy life and be full of hope. We carry out research and judgment on the direction of medium and long-term vaccine R&D and integrate our technology platform strategy and the world's urgent demands for vaccines. We regularly report the annual R&D plan of our potential new products to the Board for review. Besides, we spare no effort to help and support undeveloped regions with technologies to improve their capacity for vaccine research and manufacturing, which strengthens our international cooperation and communication to build immune barriers around the world.

Acceleration of Innovation and R&D

Having been specializing in the vaccine industry for many years, we have gathered many senior vaccine scientists and technical specialists in our R&D team and established a Scientific Consultation Commission containing prestigious vaccine specialists and scholars. Besides, an external team with thousands of lecturers has been built with powerful innovation and R&D capabilities, providing technical support and guarantee to CanSinoBIO's promotion of inclusive medical care. Multiple Board members boast rich professional experience in the biopharmaceutical and medical industry, as well as biopharmaceutical technologies. Based on the concept of inclusive vaccine, they would help the Company to transform the R&D advantage so vaccines that are urgently needed in the world.

We proactively promote new types of products and are dedicated to providing quality vaccines to prevent the public from pandemics. Ebola vaccine, meningococcal vaccine, and COVID-19 vaccine are all CanSinoBIO's practices of its concept of inclusive medical care. We have obtained new drug application approval (NDA approval) in China in a short term for Ad5-EBOV, a recombinant Ebola virus vaccine developed based on our virus vector-based technology, which became the only Ebola virus vaccine that was approved for emergency use and national stockpile in Asia.

Menhycia, a self-developed MCV4 vaccine, is the first and the only meningococcal conjugate vaccine that covers A, C, W135, and Y serum groups in China. It has helped to upgrade the existing immune strategies with meningococcal conjugate vaccines, expanded the coverage of pathogenic serum in age groups with a high incidence, and thus filled the gap of this vaccine in China. The self-developed Menphecia, our MCV2 vaccine, provided a better option for preventing children under two years old in China and other countries in the world from epidemic meningitis, which marks another critical milestone for CanSinoBIO to practice the R&D and supply of high-quality innovative vaccines.

Our COVID-19 vaccine could provide effective protection with only one dose, which greatly improved the vaccination efficiency. Besides, its advantages in heterologous vaccination have also been proven by many clinical researchers. Convidecia has been approved by the Joint Prevention and Control Mechanism of the State Council as the first adenovirus vector COVID-19 vaccine in the heterologous vaccination in the PRC, which provides further immune protection to the vaccinated population. We have also started the research and development of the first adenovirus-vectored COVID-19 vaccine for inhalation to provide good vaccination protection with a reduced inhaled dose, a brand-new vaccination method. In doing so, these achievements we made have provided valuable experiences for the R&D of non-injection new vaccines and other adenovirus-vectored vaccines, which are currently under research and development.

The Atomization Device for COVID-19 Vaccines for Inhalation

Ensure Effective Distribution

At CanSinoBIO, we have learned the actual demands of vaccines in different regions thoroughly and overcome various difficulties to improve the accessibility of vaccines. Particularly, many other developing countries and underdeveloped regions, due to limitations on the vaccine preservation equipment and transportation capability, have difficult access to high-quality vaccines in time. For example, when conducting the R&D on Ebola vaccines in West Africa, due to high temperature and unstable power supply, it is impossible to preserve the vaccines at ultra-low temperature. Under such a condition, we have developed brand-new technologies with our enhanced technology advantage to enable Ebola vaccines to be preserved for two weeks at room temperature of 37℃ , which guaranteed the safety and effectiveness of the vaccines and improved the vaccine availability. We have continuously been breaking the technological barriers to enable the COVID-19 vaccine to be kept constantly stable at 2 – 8℃. Thus, that makes it possible for the COVID-19 vaccines to be preserved and transported via the normal cold chain, making remote regions easy access to vaccines.

We have improved the all-dimension availability of vaccines in more regions, making more people have access to vaccines and forming a complete and efficient delivery system for vaccines. We proactively cooperate with high-quality distributors and coordinate with local authorities to ensure vaccines are accessible in emergency use and daily supply. We have also reached cooperative relationships with logistic companies that have a strong capacity for cold chain transportation and professional service. We even have jointly built a nationwide cold chain vaccine distribution system. As of the end of the reporting period, we can deliver vaccines to regional logistics centers and some districts and counties via the national traffic network, and to remote regions via aviation transportation.

Provide Help to Fight Against COVID-19 Overseas

We closely take care of the health demands of humankind to protect all with our products. In 2021, we provided vaccines to many other developing countries and introduced vaccine filling technologies and experiences. We further helped mid and low-income countries improve vaccine availability and drove the upgrading of the vaccine industry in other developing countries to build immune barriers in the whole world.

Facing the widespread of COVID-19 in the world, CanSinoBIO has sent R&D teams to countries and regions that suffer the most, to guide local researchers to carry out the clinical trials on COVID-19 vaccines, combining the vaccine R&D technologies in China and local situations. Our efforts have obtained excellent fruits and effectively helped locals to fight against the COVID-19. We will keep cooperating with all partners to jointly help the fair distribution of COVID-19 vaccines in the world and to contribute to the improvement of the global public healthcare system.

In 2021, our vaccines have been approved for emergency use authorization or conditional marketing authorization in more than 10 countries, and vaccination has been taken in many countries, including Mexico, Pakistan, Chile, Argentina, Malaysia, etc. Our vaccine that is effective with one dose helped to complete vaccinations swiftly. Particularly, it made vaccination in remote regions more available. With deep technological exchanges and R&D cooperation, we have realized joint manufacturing of vaccines with overseas partners in local areas. We have realized the localized vaccine manufacturing in Pakistan and Mexico. Besides, the filling manufacturing line in Malaysia has been issued a GMP certification by the local authority. Meanwhile, we will also further promote technology transfer to other countries.

Mexican Residents are Vaccinated with CanSinoBIO's COVID-19 Vaccines

Social Empowerment

At CanSinoBIO, we make full use of our advantages to discuss industrial experiences with peers and proactively organize health science education to take the responsibility for the pharmaceutical industry. At the same time, we try our best to help the development of poverty areas in which we are concerned. In 2021, we won the "Social Responsibility Award for Consolidating the Linked Results of Poverty Alleviation and Rural Revitalization in 2021."

Health Science Education Program

CanSinoBIO proactively delivers the knowledge of vaccination and disease prevention to the public and shares our R&D experiences with peers. In 2021, we attended many conferences, such as the 12th Academic Conference on Infectious Diseases, and Hainan International Health Industry Expo. Also, live-stream health science education on new media platforms has been organized to make it accessible to more audiences. We also proactively organized offline external academic conferences by inviting prestigious industry scholars to give lectures and gathering many professional physicians in our activities. We supported the convene of academic meetings at provincial, municipal, and district levels as well as more than ten online academic activities, where many specialists were invited to jointly publicize health knowledge. We also posted articles about vaccination via WeChat and regularly updated the latest information related to vaccination for various provinces and cities, making the public more access to information on vaccination. In April 2021, CanSinoBIO was granted the "Major Contribution Award on the National Vaccine and Health Conference" by the Chinese Preventive Medicine Association.

CanSinoBIO Attended the 12th Academic Conference on Infectious Diseases

CanSinoBIO Supported Online Activities for Health Science Education

Internet Healthcare

CanSinoBIO proactively enhances external cooperation to explore the organic integration of the internet and medical care. We have reached a strategic cooperation relationship with such internet platforms as Beijing Jingdong Health Co., Ltd. and Baidu Health (Beijing) Technology Co., Ltd. We integrate the advantageous resources of both sides to expand the ecology by combing vaccines and "Internet +" to jointly explore digitalized solutions for “Internet + Disease Prevention.” We have also jointly developed digital platforms and services for the building of specialized internet hospitals, mass disease education, vaccination education, the appointment for vaccination, etc. In addition, we also, together with partners, jointly promoted the development of online-and-offline-integrated solutions for disease prevention, diagnosis and treatment, regulation, and payment of medical care. That created health education and health value-added services on internet platforms. Furthermore, the solutions provide convenient and efficient healthcare services for people in need and deliver more quality and healthy life to users.

Support to Fight Against Pandemics

Facing the constant outbreaks of COVID-19 in China, we not only accelerated the R&D and manufacturing of vaccines to support pandemic prevention and control with our technologies and products but also aided pandemic-hit areas with vaccines. Our employees have also been fighting against the pandemics on the frontline to practice the social responsibility for the “CanSino family.”

At the end of March 2021, there was a new round of pandemics in the border areas in Yunnan Province. CanSinoBIO adjusted the domestic supply plans swiftly in responding to the national emergency allocation and packed and transported more than 100,000 vaccines overnight to the pandemic-hit area safely and timely. The supply provided a powerful guarantee for the vaccination of the mass population in Ruili City and other border regions and effectively helped the protection of the life and health of the locals.

CanSinoBIO’s COVID-19 Vaccines Reached the Pandemic-hit Area in Yunnan Province

CanSinoBIO’s Employees Voluntarily Participated in Pandemic Prevention and Control

In front of the outbreaks of COVID-19, CanSinoBIO’s employees proactively participated in the voluntary work in pandemic prevention and control. They did everything they could to jointly build solid barriers for pandemic prevention together with medical staff and the local community. Our employees made our contribution with “CanSinoBIO clout” to building the pandemic prevention and control net. They overcame various difficulties and challenges and fought against the pandemic on the frontlines in different regions, showing their great love and sense of responsibility.

CanSinoBIO’s Employees Fought Against the Pandemic on the Frontlines

Charity

CanSinoBIO has been practicing its social responsibilities. We participated in charities, helped regions in poverty, took care of the livings of people in disaster areas and the re-building of post-disaster reconstruction work, and encouraged employees to participate in charity activities. During the Chinese Spring Festival and Mid-Autumn Festival, we purchased the local specialized foods in Hubei Province, product packages from Henan Province and other poverty alleviation products, which are provided to employees as holiday benefits, to support poverty alleviation and economic growth. In 2021, we in total invested RMB5.95 million into charity.

CanSinoBIO Donated RMB5 Million to Flood-Stricken Area in Henan Province

In July 2021, Henan Province suffered from heavy rainfall, resulting in severe waterlogging in many cities. Caring for people living in the disaster-hit area, CanSinoBIO instantly contacted the Tianjin Red Cross Society donating RMB5 million to disaster-hit areas in Henan Province. The donations comprehensively facilitated the healthcare and pandemic prevention and control in such areas and demonstrated our humanitarian spirit by helping each other in times of trouble.

The Donation Ceremony of CanSinoBIO for Flood-hit Area in Henan Province

CanSinoBIO’s Charitable Donation in 2021

Fighting against floods in Henan Province and post-disaster reconstruction
RMB5,000,000

Build playgrounds of two primary schools in Binhai New Area in Tianjin by Tianjin Binhai New Area Charity Association
RMB600,000

Assistance mobilization by Tianjin Association for Science and Technology
RMB300,000

Poverty alleviation in Tianjin Economic and Technological Development Area
RMB50,000

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B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P57
Aspect B6: Product Responsibility		
General Disclosure		P28-P36, P40, P60-P63
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	P33, P62
B6.2	Number of products and service related complaints received and how they are dealt with.	P62
B6.3	Description of practices relating to observing and protecting intellectual property rights.	P40
B6.4	Description of quality assurance process and recall procedures.	P30-P36
B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	P60, P63
Aspect B7: Anti-corruption		
General Disclosure		P22-P23
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.	P22-P23
B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	P22-P23
B7.3	Description of anti-corruption training provided to directors and staff.	P23
Aspect B8: Community Investment		
General Disclosure		P89-P95
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	P89-P95
B8.2	Resources contributed (e.g. money or time) to the focus area.	P89-P95

List of Internal Systems

System	ESG Reporting Guide by HKEX
Environmental Management System	A1 Emissions, A3 the Environment and Natural Resources
Regulations of Hazardous Waste Management	A1 Emissions, B2 Health and Safety
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
Environmental Monitoring and Control System	A3 the Environment and Natural Resources
New Contingency Plan for Environmental Emergencies in Enterprises and Public Institutions	A3 the Environment and Natural Resources
Regulations on Water Cut-off, Water Leak, and Industrial Steam Interruption	A4 Climate Change, B2 Health and Safety
Personnel Recruiting Management System,	B1 Employment
Training Management System	B1 Employment
Work Attendance Management System	B1 Employment
Remuneration and Welfare Management System	B1 Employment
Performance Management System	B1 Employment
Employee Promotion System	B1 Employment
Internal Recommendation and Reward System For Employees	B1 Employment
Employee Accommodation Benefit Policy	B1 Employment
Employee Appeal System	B1 Employment
Hazard Identification and Risk Assessment Management System	B2 Health and Safety
Regulations on EHS Risk Investigation	B2 Health and Safety
Safety Education and Training Management System	B2 Health and Safety
EHS Training Management System	B2 Health and Safety
CanSinoBIO EHS Strategies and Codes of Conduct	B2 Health and Safety
Hazardous Chemical Safety Management System	B2 Health and Safety
Highly Toxic Products Management System	B2 Health and Safety
Emergency Rescue Plan for Workplace Safety Accidents	B2 Health and Safety
CanSinoBIO's Biosafety Manual in Laboratory	B2 Health and Safety
Regulations on Safety Inspection on the Site of Construction Projects	B2 Health and Safety
Work Permit Management System	B2 Health and Safety
Management System for Warning Signs and Safety Protection	B2 Health and Safety

Management System for the Safety for Special Operators	B2 Health and Safety
Emergency Evacuation Management System	B2 Health and Safety
Emergency Rescue Plan for Workplace Safety Accidents	B2 Health and Safety
Regulations on COVID-19 Containment	B2 Health and Safety
Declaration System of Occupational Hazards	B2 Health and Safety
Management System for Domestic And Overseas Assignment	B3 Development and Training
Dual Professional Development Channel System	B3 Development and Training
Contractor Safety Management System	B5 Supply Chain Management
Supplier Management Procedures	B5 Supply Chain Management
Supplier Management Regulations	B5 Supply Chain Management
Supplier Code of Conduct	B5 Supply Chain Management
Biding Regulations	B5 Supply Chain Management
Bidding Management System	B5 Supply Chain Management
Product Price Management System	B6 Product Responsibility
Quality Manual	B6 Product Responsibility
Pharmacovigilance Management System	B6 Product Responsibility
Pharmacovigilance Quality Management System	B6 Product Responsibility
Regulations on Sample Receiving, Distribution, Use and Disposal	B6 Product Responsibility
Regulations on Reagent Tests	B6 Product Responsibility
Deviation Regulations	B6 Product Responsibility
Regulations on OOS, OOT, and AD	B6 Product Responsibility
Regulations on Recall of Products Marketed	B6 Product Responsibility
Product Risk Management System	B6 Product Responsibility
Handling Procedures for Suspected Abnormal Reactions to Vaccination	B6 Product Responsibility
Intellectual Property Management System	B6 Product Responsibility
Patent Regulations	B6 Product Responsibility
Trademark Regulations	B6 Product Responsibility
Regulations on Awards for Patents, Inventions and Creations	B6 Product Responsibility
Copyright Regulations	B6 Product Responsibility
Intellectual Property Emergency Plan	B6 Product Responsibility
CanSinoBIO's Marketing and Operation Standard Manual	B6 Product Responsibility
CanSinoBIO Compliance Handbook	B7 Anti-Corruption
Anti-Corruption Policies	B7 Anti-Corruption

Definitions

Term	Definition
HKEX	The Stock Exchange of Hong Kong Limited
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
Adenovirus	A linear nonenveloped viruses with double-stranded DNA, which will infect both cells during mitosis and those not during mitosis, especially epithelial cells. A common tool to modify genes
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
MCV2	Group A and Group C Meningococcal Conjugate Vaccine (CRM197), whose trade name is Menphecia®
MCV4	Group ACYW135 Meningococcal Conjugate Vaccine (CRM197), whose tradename is Menhycia®
Ad5-nCoV	Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5 Vector), whose trade name is Convidecia®, a novel coronavirus vaccine based on replication-incompetent human adenovirus type 5
Ad5-EBOV	Recombinant Ebola virus disease vaccine (adenovirus vector)
PCV13*i*	13-valent pneumococcal polysaccharide conjugate vaccine (CRM197, TT vector)
PBPV	Recombinant protein-based pneumococcal vaccine
DPT	Pertussis, diphtheria, tetanus
DTcP	Diphtheria, tetanus and acellular pertussis (components) combined vaccine, adsorbed
Hib	Haemophilus Influenzae Type B
GMP	Good Manufacturing Practice for short
EHS	Environment, Health and Safety for short
CRM197	The nontoxic variant of diphtheria toxin
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
Sanofi Pasteur	Sanofi Pasteur Co., Ltd. is a multinational pharmaceutical company headquartered in France
CRO	Contract research organization
HCP	Healthcare professionals
ICH	International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use

Reader’s Feedback

Thank you for reading the 2021 Environmental, Social and Governance 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 comment on the report

☐ 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 arrangement of the report

☐ Excellent ☐ Good ☐ Ordinary ☐ Not good ☐ Bad

4. Does the content disclosed in the report fulfill your expectation?

☐ Yes ☐ No ☐ Not clear

5. Are CanSinoBIO’s ESG performances fully reflected in this report?

☐ Fully reflected ☐ Partially reflected ☐ Not reflected

6. If you have other opinions and suggestions on the 2021 Environmental, Social and Governance Report of CanSino Biologics Inc., please kindly write them down below.

Feedback sheet of 2021 Environmental, Social and Governance Report of CanSino Biologics Inc.

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