

昭衍

JOINN

北京昭衍新藥研究中心股份有限公司
JOINN LABORATORIES (CHINA) CO., LTD.

(A joint stock company incorporated in the People's Republic of China with limited liability)

Stock Code: 6127

2021

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Contents

ABOUT THIS REPORT	2
BOARD STATEMENT	4
ABOUT JOINN	5
1. ESG Responsibility Management	6
2. Sustainable Operation	9
2.1 Innovative R&D	9
2.2 Supply Chain Management	9
2.3 Product Responsibility	12
2.4 Customer Service	14
2.5 Anti-corruption	15
2.6 Community Charitable Donations	15
3. Employment and Labour Practices	16
3.1 Employment	16
3.2 Health and Safety	19
3.3 Employee Care	20
3.4 Development and Training	21
3.5 Labour Standards	22
4. Environmental Protection	23
4.1 Emissions Management	23
4.2 Use of Resources	28
4.3 The Environment and Natural Resources	31
APPENDIX	33



About This Report

This report is the second environmental, social and governance (“ESG”) report published by JOINN Laboratories (China) Co., Ltd. (the “Company”, “JOINN”, “we” or “us”) to mainly introduce the Company’s environmental, social and governance efforts and its outlook for the future.

The board of directors and all directors of the Company warrant that there are no false representations, misleading statements or material omissions in this report, and they severally and jointly accept responsibility for the authenticity, accuracy and completeness of the information contained herein.

REPORTING PERIOD AND SCOPE

This report discloses the Company’s management approaches, initiatives and performance in environmental, social and governance aspects from 1 January 2021 to 31 December 2021 (the “Year” or the “Reporting Period”). Some of the contents herein are dated from before 2021 and into 2022, thereby increasing the reference value of this report. The scope of disclosure in this report covers all branches and subsidiaries of the Company, details of which are set out in the table below. The statistical scope of environmental data has been expanded from the relevant companies in Beijing in 2020 to the relevant companies in Beijing and Suzhou. In the future, we will further strengthen the statistical scope of environmental data.

No.	Name of company
1	JOINN Laboratories (Suzhou) Co., Ltd.
2	JOINN Laboratories, CA Inc.
3	JOINN Laboratories (HK) Limited
4	Suzhou JOINN Pharmaceutical Technology Co., Ltd.
5	Wuzhou JOINN Laboratories Co., Ltd.
6	Wuzhou JOINN Biotechnology Co., Ltd.
7	JOINN Laboratories (Delaware) Corporation
8	JOINN (Beijing) Pharmaceutical Technology Co., Ltd.
9	JOINN Laboratories (Chongqing) Limited
10	Biomedical Research Models, Inc.
11	JOINN Laboratories (Guangzhou) Co., Ltd.
12	Beijing JOINN Medsafe Pharmaceutical Technology Co., Ltd.
13	Beijing Shikang Qianyan Technology Co., Ltd.
14	Qichen (Suzhou) Biological Science and Technology Co., Ltd.
15	Guangxi Qianyan Biological Technology Co., Ltd.
16	JOINN (Beijing) Inspection Technology Co., Ltd.
17	JOINN Laboratories (Shanghai) Co., Ltd.
18	JOINN Laboratories (Wuxi) Limited
19	JOINN Yichuang (Suzhou) Laboratories Co., Ltd.
20	Biomere-Joinn(CA), Inc.

About This Report

MAJOR REFERENCE STANDARDS FOR THIS REPORT

The ESG Report published by the Company was prepared with reference to the Rules Governing the Listing of Stocks on the Shanghai Stock Exchange (revised in January 2022), the Guidelines of the Shanghai Stock Exchange for Self-discipline Supervision of Listed Companies No.1 – Standard Operation and the Environmental, Social and Governance Reporting Guide (hereinafter referred to as the “ESG Reporting Guide”) of The Stock Exchange of Hong Kong Limited (the “Hong Kong Stock Exchange”) contained in Appendix 27 to the Listing Rules.

This report is prepared in accordance with the following reporting principles:

- Materiality:** We identify major ESG issues through materiality assessment, and the relevant process and results have been disclosed in the ESG report;
- Quantitative:** Quantitative information on the environmental and social aspects with historical information has been presented in the ESG report with explanations on its purpose and impact, and comparative information will be provided in subsequent ESG reports;
- Consistency:** We use consistent disclosure and statistical methods. In this report, we have maintained the same disclosure and statistical methods for the information disclosed in the previous year’s report (which is also our first ESG report). For the information disclosed for the first time, we will use consistent methods to disclose ESG information in the following years to facilitate meaningful comparison year by year.

PUBLICATION

This report is available online in both Chinese and English. All stakeholders can access this report on the website of the Hong Kong Stock Exchange at www.hkexnews.hk. In case of any discrepancy, the Chinese version shall prevail.

CONTACT INFORMATION

We highly value the opinions of our stakeholders and the public about this report. Should you have any enquiry or suggestions, please contact the Company through the following means.

Address: A5 Rongjing East Street, Beijing Economic and Technological Development Zone
Tel: 010-67869966-1133
Email: jjafengsong@joinn-lab.com

Board Statement

JOINN is well aware of the importance of good corporate governance and risk management processes, including the management of ESG issues that are crucial to the sustainable development of the Company. The Board of the Company is the highest responsible and decision-making body for ESG matters, and assumes full responsibility for the Company's ESG strategy and reporting. The Board regularly reviews the completion circumstance of the targets and reviews the strategies and action plans for achieving the annual targets.

Based on the external social and economic macro environment and the Company's development strategy, the management team of JOINN dynamically evaluates the importance of ESG issues, discusses and determines the Company's risks and opportunities in environmental, social and corporate governance, and regards the management and improvement of key issues as the annual strategic work of sustainable development.

The Company gives top priority to R&D quality management through the materiality assessment of ESG issues. The Company adheres to the principle of "serving drug innovation, focusing on safety evaluation and monitoring of the entire life cycle of drugs", and attaches great importance to R&D quality management. At the same time, the Company attaches great importance to topics such as leading supply chain management, R&D innovation, employee development and training.

This report discloses in detail the progress and effectiveness of JOINN's ESG work in 2021. The board of directors of JOINN and all directors of JOINN warrant that there are no false representations, misleading statements or material omissions in this report, and severally and jointly accept responsibility for the truthfulness, accuracy and completeness of its contents.

About JOINN

Established in August 1995, JOINN is a leading CRO focusing on non-clinical drug safety assessment research and is expanding to provide comprehensive services covering drug discovery, preclinical and clinical trial stages along the drug R&D service chain. Our non-clinical studies refer to drug R&D studies, which are not clinical trials conducted in human subjects. These non-clinical studies cover all major stages of the drug development process, including pre-clinical and clinical trial stages of drug discovery. Based on our core capabilities in drug safety assessment, we have been expanding our service portfolio with an aim to become an integrated pharmaceutical delivery service platform capable of providing a comprehensive portfolio of CRO services covering non-clinical research, clinical trial and related services and research model animal business. Leveraging our project experience and scientific expertise, the Company aims to help customers reduce the R&D cost and risk and improve the overall productivity and efficiency of their global pharmaceutical development programs. With an operating history of over 25 years, JOINN has accumulated extensive experience in regulatory requirements for new drug applications, and is capable to conduct complex research projects in accordance with applicable GLP standards and guidelines promulgated by major jurisdictions around the world. JOINN is a national platform of “Major New Drugs Creation and Production for the 12th Five-year Plan” and a key laboratory for drug safety evaluation in Beijing. We have more than 20 years of track record in drug safety evaluation, with our extensive experience, we adopt international (FDA, ICH) technical standards, tailor-made trial design, and standardized quality control (GLP), and we are able to provide evaluation reports that meet the requirements of regulations (GLP) to the NMPA of China, the U.S. FDA and their counterparts in other countries.

Since its establishment, JOINN has been following the business philosophy of joint development of economy, society and environment, promoting sustainable business practices and fulfilling corporate social responsibilities, so as to better seize the opportunities brought by the development of the industry.

1. ESG Responsibility Management

1.1 COMMUNICATION WITH STAKEHOLDERS

The Company fully considers and effectively responds to the expectations and demands of stakeholders, and works with stakeholders to promote social development and share development results.

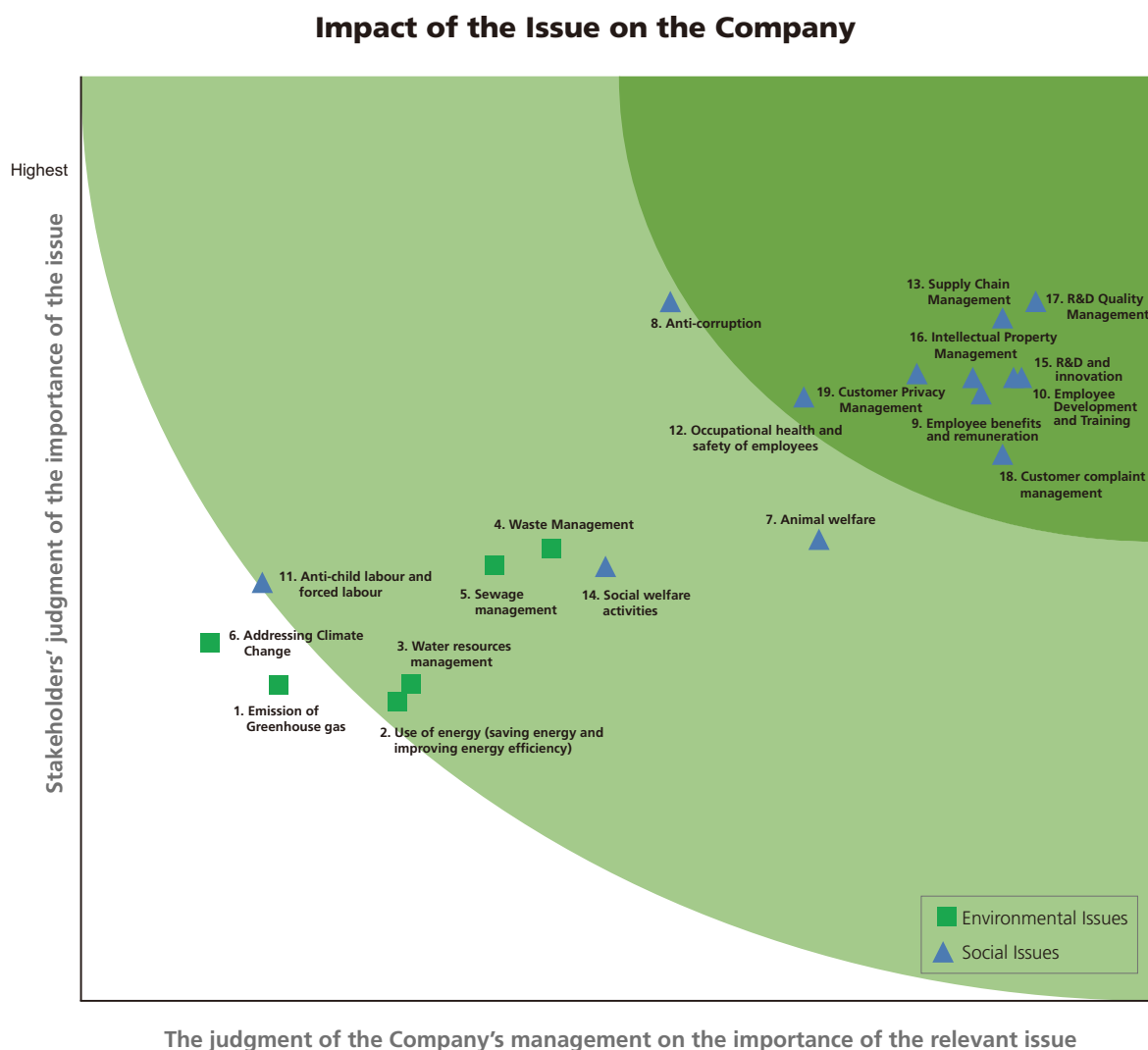
Stakeholders	Expectations of Stakeholders	Communication and Engagement Mechanism	Company's Response
Investors	<ul style="list-style-type: none"> • Increase in market capitalization and profitability of the Company • Continuous improvement of the Company's environmental and social responsibility performance 	General meetings, information disclosure, company website	<ul style="list-style-type: none"> • Publishing reports on a regular basis, disclosing information truthfully and adequately, striving to improve performance and create profits • Improve the level of corporate governance and risk management, convene general meetings, strengthen investor relations management, and strive to improve environmental and social responsibility management
Customers	<ul style="list-style-type: none"> • Outstanding product quality • Safeguard legal interests 	Entering into contracts and agreements, customer satisfaction survey	<ul style="list-style-type: none"> • Provide high-quality products and services • Establish a sound customer service system and customer feedback and complaint mechanism
Employees	<ul style="list-style-type: none"> • Safeguard employee remuneration and benefits • Caring for Employees' safety and health • Provide fair promotion and development opportunities • Improving communication mechanism and participating in company management 	Labor contract, employee satisfaction survey	<ul style="list-style-type: none"> • Strictly abide by the terms of labor contracts and improve the remuneration and welfare system • Provide a safe and healthy working environment • Provide employee development channels and organize employee training • Provide equal communication channels
Government	<ul style="list-style-type: none"> • Operating in compliance with laws and regulations and implementing national policies 	Participation in government-related conferences	<ul style="list-style-type: none"> • Strictly abide by relevant laws and regulations, continue to strengthen corporate compliance management, and respond to relevant national policies
Suppliers	<ul style="list-style-type: none"> • Honest, fair and impartial cooperation, mutual benefit and win-win situation to promote industry development 	Entering into contracts and agreements, holding bidding and supplier meetings regularly	<ul style="list-style-type: none"> • Adhere to open and transparent business principles, actively performing contracts and agreements, implementing an open and transparent procurement model, and creating a responsible supply chain
Peer companies	<ul style="list-style-type: none"> • Fair competition, honest cooperation, transparency and publicity of information • Comply with industry norms and promote industrial innovation 	Exchange and communication with industry-related research institutes, associations, mainstream media, etc.	<ul style="list-style-type: none"> • Strengthen exchanges and cooperation with peers to jointly create a healthy and orderly competition environment • Participate in industrial innovation research, achieve mutual benefit and win-win situation, make progress together, participate in industry evaluation, and provide suggestions for industry norms

1. ESG Responsibility Management

1.2 MATERIALITY ANALYSIS

JOINN attaches great importance to communication with stakeholders, establishes an efficient communication and feedback mechanism for stakeholders, listens to the opinions and suggestions of stakeholders such as government departments, shareholders, customers, employees and suppliers through different channels, identifies the feedback and expectations of stakeholders as regards the Company, improves the Company's ESG performance in a targeted manner, and effectively responds to the needs of relevant parties.

Materiality: In accordance with the requirements of the ESG Reporting Guide of the Hong Kong Stock Exchange and other relevant principles and ESG issues of general concern to the industry, the Company identifies and selects ESG issues related to the Company through different forms of exchange and communication with various stakeholders. With reference to the process of materiality analysis of the Global Reporting Initiative ("GRI"), the Company collected and recorded the issues of concern to major stakeholders of the Company and the results of materiality assessment of each issue through questionnaires, interviews and other forms, and prioritised the selected issues to understand the importance of ESG issues to internal and external stakeholders, determined the substantive (important) issues of the Company in environmental, social and governance aspects, and disclosed them in the report. (See below chart)



1. ESG Responsibility Management

List of material topics in JOINN Laboratories ESG Report 2021			
Very important			
17. R&D Quality Management	13. Supply Chain Management	15. R&D and innovation	10. Employee Development and Training
16. Intellectual Property Management	09. Employee benefits and remuneration	19. Customer Privacy Management	18. Customer complaint management
08. Anti-corruption	12. Occupational health and safety of employees		
Important			
07. Animal welfare	14. Social welfare activities	04. Waste Management	05. Sewage management
03. Water resources management	11. Anti-child labour and forced labour		
Related			
02. Use of energy (saving energy and improving energy efficiency)	06. Addressing Climate Change	01. Emission of Greenhouse gas	

2. Sustainable Operation

2.1 INNOVATIVE R&D

We are committed to providing innovative services to support our customers' most pioneering and complex new drug discovery programs in China and even globally. To achieve this goal, JOINN has been continuously investing to improve its service capabilities and actively participating in major government-backed research projects. Such investments have allowed us to remain at the forefront of the latest technology trend in our industry, develop novel solutions for our customers and maintain our competitive position. We strive to further enhance our technical capability through internal R&D, cooperation with universities and research institutions, collaboration with our customers and development and improvement of the technologies obtained by us.

In terms of intellectual property management, the Company has formulated the Intangible Assets Management System to regularly check the value of intangible assets, evaluate the advancement of intangible assets such as patents and proprietary technologies, eliminate backward technologies, increase investment in research and development, promote technology upgrading, and continuously improve independent innovation capabilities. Intellectual property is crucial to our business. The Company develops and uses a number of patented methods for analysis, systems, technologies, trade secrets, know-how and other intellectual property rights in the course of its business.

2.2 SUPPLY CHAIN MANAGEMENT

The suppliers involved by the Company mainly include research model animals, reagent consumables, engineering infrastructure, instruments and equipment, IT (application system, software/hardware), MRO, services, etc. We have formulated the Standard Operating Procedures for Supplier Qualification Review, the Basic Management System for Procurement Business, the Supplier Management Regulations and other systems to regulate supplier management and establish a supplier market access and evaluation system.

2. Sustainable Operation

In terms of supplier access management, we would first organise selection of a sufficient number of suppliers as potential partners for cooperation, conduct written investigations on newly developed suppliers, and require suppliers to fill in the Supplier Information Registration Form to understand the background, qualification, production capacity, quality service quality, integrity and compliance management of suppliers, and organize on-site inspections to confirm whether they have the ability to provide materials and services that meet our requirements on cost, delivery period, quality, as well as integrity and compliance operation. Subsequently, the Company will organize appraisals on preliminary-selected suppliers, the contents of which include the evaluation of suppliers' qualifications, quality level, delivery capability, technological capability, service capability and performance capability. The Company has established six procurement methods:

- **Single-source procurement:** designate suppliers to ensure that the price is reasonable and on most preferable commercial terms;
- **Price inquiry and comparison:** select at least three suppliers and choose the one with the lowest price quotation;
- **Competitive negotiation:** technical score plus business score, the supplier with the highest comprehensive score will be selected;
- **Invitation for tendering:** inviting suppliers to participate in quotations based on business needs and nature, and the supplier with the highest comprehensive score will be selected;
- **Annual framework agreement:** to determine the supplier to be selected based on 1-3 procurement methods;
- **Order purchase:** implementation of the annual framework agreement.

In terms of supplier performance assessment and grading management, the Company's supplier management department organizes and establishes a supplier review team to conduct performance assessment on suppliers with large annual procurement amount. The supplier evaluation team shall review the suppliers based on their cooperation with us, focusing on scoring their material quality, price level, delivery, service, etc.

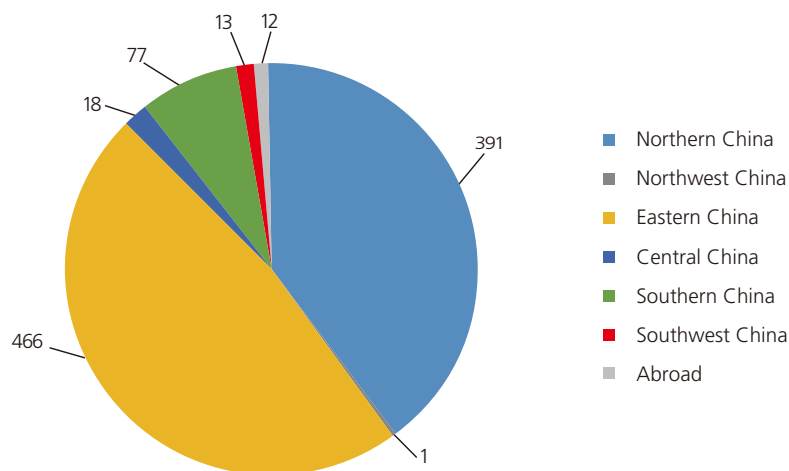
2. Sustainable Operation

With regards to the audit of suppliers, the Company will audit the suppliers of research model animals annually, and the Permit for Production of Research Model Animals, Quality Certificate of Research Models, Research Model Files and relevant quarantine inspection records of purchased research model animals will be inspected. All research model animal tests shall strictly follow the relevant welfare system. The operation in relation to the research model animal is subject to the approval of the ethics committee and follows the 3R principle, namely the replacement, reduction and refinement of the use of the research model animal on the premise of meeting the regulatory and scientific requirements. After the test, the research model animal will be handled reasonably according to the purpose of the test, such as transferring to the reserve research model animal for long-term feeding or organizing pathology inspection after euthanasia. In terms of GLP regulations, we have defined the types of suppliers within the scope of GLP regulations, and formulated corresponding written supplier questionnaire (written audit letter). In terms of supplier management, the Company has established rules for sourcing, pre-approval and access, and performance assessment, established SOP, and realized online data/approval through OA office platform, with information traceable and accessible.

The Company will consider the environmental performance of the products when selecting suppliers, ensure that the purchased products meet the requirements of the relevant environmental indicators, and give priority to the purchase of environmentally friendly products under the same conditions.

As of the end of 2021, the Company had a total of 979 suppliers. The below diagram sets out the number of suppliers by geographical distribution:

The 2021 Regional Distribution of Suppliers of JOINN



In the future, the Company will take the following considerations to further improve supplier management:

- Establish a supplier database and supplier categorization system;
- Setting standards for supplier pre-approval/admission/performance assessment for different categories;
- Based on the assessment results, formulate supplier grading and long-term development strategies.

2. Sustainable Operation

2.3 PRODUCT RESPONSIBILITY

The Company adheres to the vision of “serving drug innovation, focusing on the purpose of safety evaluation and monitoring of the whole life cycle of drugs, ensuring the safety of patients’ medication and protecting human health”. We have formulated the Standard Operating Procedures for Ordering Research Animals, the Standard Operating Procedures for Quality Control of Laboratory Animals and the Management Regulations on Project Management Process to establish a golden industry chain comprising unique pre-clinical research service of drugs, clinical experiments and related services, breeding and sales of quality research model animals and customization service of research model animals with gene editing, so as to provide one-stop quality services to customers.

The Company’s quality management system consists of four levels of documents:

1. The quality manual: being the programmatic document for the operation of the Company’s quality management system and the theme document of the management system. It mainly describes the Company’s quality policy, objectives, requirements of various elements of the management system, division of responsibilities, implementation methods and the basic standards that must be followed for various quality work;
2. The procedure document: being a supporting document of the Quality Manual, which stipulates the purpose, scope, responsibilities, requirements, systems and procedures of the activities and quality activities that can only be carried out by each department and position, and is a guiding document that relevant personnel should strictly follow when carrying out quality activities;
3. Standard operating procedures/policies: being specific implementation rules in testing activities;
4. The quality record and technical record form: being the original evidence and carrier for the effective operation of the management system to ensure that all quality activities and technical activities can be fully repeated.

2. Sustainable Operation

The research basis of the Company's new drugs comes from the legal norms, technical standards and technical guiding principles of domestic and international regulatory agencies and industry organizations, such as NMPA, US FDA, EMA, OECD, ICH, ISO, etc.

- **Pre-clinical drug research services:** Pre-clinical drug evaluation services are technical services with strict regulations and management, which requires not only good technical conditions, but also compliance with relevant quality control regulations. In order to guarantee the quality and efficiency of its services, the Company has established relevant service models based on the combination of regulatory requirements and its own characteristics:
- 1) Acceptance of engagement: The Company's professional marketing team is responsible for contacting customers, understanding customers' needs, formulating research plans, quotation and enter into contracts along with our technical departments;
 - 2) Implementation of the trial and provision of reports: The Company's technical department is responsible for organizing tests and numbering each test in accordance with the regulations and SOP requirements, formulating test plans, preparing test materials, conducting in vivo and/or in vitro tests, information processing as well as preparing and submitting summary reports;
 - 3) Archive of data: After the conclusion of the test, archive all original records to ensure the integrity of the test data;
 - 4) Registration support: After the completion of the trial, the Company shall cooperate with the regulatory department to conduct on-site inspection to verify the authenticity and completeness of the information. When necessary, the Company shall conduct technical discussions with the entrusting party and the regulatory department in the process of new drug evaluation.

The core to the Company's services is to scientifically evaluate the safety and effectiveness of drugs in strict accordance with the Good Laboratory Practice for Non-Clinical Laboratory Studies and other laws and regulations, reduce the risk of drug research and development of the entrusting party, improve the efficiency of drug research and development of the entrusting party, and support the scientific review of the regulatory department, so as to support the continuous innovation of the pharmaceutical industry.

In addition, the Company's system runs in the internal network, which is equipped with functions such as permission control, password strategy setting, and firewall isolation of the internal and external network. Our web firewall can effectively prevent scripting attacks. In addition, the Company conducts daily online backup and weekly off-line magnetic tape backup. The Company has relevant internal SOP and verification, and the computer system has been rated as Grade 3 or Grade 2 levels of protection, which can effectively reduce the possibility of loss or theft of the Company's R&D data and ensure the information security during the R&D process.

2. Sustainable Operation

- **Clinical trial and related services:** The clinical business segment of JOINN mainly provides early-stage clinical trial services (clinical trial I phase and BE trial), including regulatory/registration, medical writing, clinical monitoring/inspection, data management and statistical, as well as clinical trial institution services. Combined with the clinical biological sample analysis business of JOINN, we provide customers with a one-stop service model from pre-clinical evaluation to clinical trial. The Company has formulated strict processes of the procurement business and the relevant aspects from procurement application and approval to quotation request, selecting suppliers and payment are all effectively managed and controlled.
- **Breeding and sales of research model animals:** The Company has established a scientific research model animal procurement and supply system, especially to strictly control the quality of research model animals. In addition, the Company has also formulated strict processes of the procurement business, and aspects from procurement application and approval to quotation request, selecting suppliers and payment are all effectively managed and controlled.

During the Reporting Period, there was no violation of production and service responsibility which had material impact on the Company and no product sold was subject to recalls for safety and health reasons.

2.4 CUSTOMER SERVICE

In terms of customer service management, we have established the Customer Service Work Procedures. When customers clearly expressed dissatisfaction with the Company's work quality, the relevant departments will be responsible for entering such customer complaint information into the Customer Complaint Handling Record, which is implemented in accordance with the Complaint Handling Procedures.

In terms of customer satisfaction survey, we collect customers' feelings, opinions, suggestions and other relevant information on the quality of testing and services, and enter them into the Customer Satisfaction Survey Record in a timely manner. Information collection methods include questionnaire, telephone survey, symposium, customer visit reception, etc. The content of the satisfaction survey includes whether the service mode and service project meet the customer's requirements, whether the summary report is provided in a timely manner, whether the test results are accurate, whether the communication with the customer is timely, smooth and whether the work is conducted in an efficient manner, etc. We summarize customer feedback and register it in the Customer Feedback Handling Record, analyze customer feedback, and determine the final handling opinions based on the needs of the improvement of the management system. The department concerned shall be responsible for implementing opinions and notifying customers as to handling of the matter. In 2021, the Company did not receive any customer complaints.

In terms of customer privacy and confidentiality, the Company has formulated the "Administrative Measures for Sales Customers", which requires that confidential documents/information in computers must be password-protected, and confidential documents should not be brought to places unrelated to work, and confidential documents/information should not be discussed and transferred in public places, and confidential documents/information should not be disclosed to unrelated personnel inside and outside the Company in any way. Customer information is managed according to the project, and the project system is set up on a double-blind basis. The Company's system runs in the internal network with relevant SOP and verification, and the computer system is rated at Grade 3 or Grade 2 level of protection. At the same time, the Company has also set up measures such as system permission control, internal and external firewall isolation, web firewall prevention against scripting attacks, and frequent backup to protect customer information.

2. Sustainable Operation

2.5 ANTI-CORRUPTION

JOINN strictly abides by the Criminal Law of the People's Republic of China, the Anti-Money Laundering Law of the People's Republic of China and other anti-corruption and anti-money laundering regulations, and attaches great importance to the establishment of anti-corruption and bribery systems. The Company has formulated the Anti-fraud and Whistleblowing System for all staff in the Company's headquarters and its branches and subsidiaries to stipulate fraudulent acts and anti-fraud measures, and clarify that heads of all of its branches, subsidiaries and departments are the chief person responsible for anti-fraud matters therein. The internal audit department of the Company is responsible for the implementation of anti-fraud work of the Company and its branches and subsidiaries. In 2021, the Company thoroughly implemented the Anti-fraud and Whistleblowing System, and entered into agreements of integrity with its cooperating suppliers.

On 26 March 2021, we provided anti-corruption training materials such as the "Anti-Corruption System Practice Guidelines for Listed Companies" issued by the Hong Kong Independent Commission Against Corruption, the training materials provided by the Independent Commission Against Corruption, and the "Director Integrity Practice Guidelines", as our internal training and learning on anti-corruption for directors. In addition, we provide employees with the learning of the Anti-fraud and Reporting System, the Code of Conduct and Supervision Regulations for Procurement Operations and other systems to continuously strengthen employees' awareness of anti-corruption, so as to manage and control relevant risks.

We have set up effective whistleblowing procedures to ensure smooth whistleblowing channels are in place. We have made public the hotline and email address for reporting fraud. After receiving the report, the internal audit department will record the complaint and report, complete the preliminary verification of the clues within 7 working days, report to the superior and reply to the real-name whistleblower. The internal audit department conducts investigation and evidence collection, investigates and clarifies the facts of fraud, and reports the investigation results to the senior management responsible for the person being reported and the chairman of the Company. If the person being reported is found to have committed fraudulent activities, the Company will conduct unified research and decision, and deal with the person being reported according to the relevant reward and punishment measures in the employee handbook. During the year, the Company did not receive any complaint or report. In 2021, the Company confirmed that there were no corruption incidents or violations of relevant laws and regulations.

In the future, we will conduct internal training on anti-corruption and integrity for employees from time to time and continue to pay attention to the situation of the reports.

2.6 COMMUNITY CHARITABLE DONATIONS

Since its establishment, JOINN has always been committed to social responsibility. The Company participates in social welfare in the optimal form in line with the actual needs of the society, pays close attention to social dynamics, and actively participates in social welfare according to the needs of the society. Increasing the momentum of harmony and win-win for the society. In 2021, the Company held a donation activity for the "Hope House" of the Second Central Primary School in Changziying Town, Daxing District, Beijing. Materials donated include: 1 set of computer video equipment all-in-one (55 inches); 6 sets of art polygonal tables and chairs (hexagon shape); 18 sets of solid wood book stands; 2 intelligent robots; 2 sets of basketball stands for children; 20 sets of Five in a Row chess; 20 sets of Chinese Chess; 100 sets of diamond painting for children; 40 badminton rackets; 40 sets of crickets; 7 audio unit all-in-one machines; 100 sets of colour clay. In addition, the Company donated RMB1 million for the establishment of Zhongguancun Kexin Children's Drug Innovation Institute in 2021.

3. Employment and Labour Practices

3.1 EMPLOYMENT

JOINN strictly complies with the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, the Social Insurance Law of the People's Republic of China, the Individual Income Tax Law of the People's Republic of China, the Law of the People's Republic of China on the Protection of Women's Rights and Interests, the Regulations on Labor Protection of Female Employees, the Measures for Public Holidays for National Annual Festivals and Memorial Days, the Special Regulations on Labor Security Supervision and other relevant laws and regulations. In order to attract more talents who meet the Company's employment standards, we have formulated the Remuneration Management System, the Performance Appraisal Management System, the Commercial Insurance Welfare System and the Social Insurance and Housing Provident Fund Management System, etc., to continuously improve the talent employment mechanism, so that employee management can be standardized and based on rules and regulations, so as to fuel the Company's sustainable and rapid development.

We have formulated the Remuneration Management System. The Company's salary level has been continuously improved based on the principles of external competition, internal fairness, performance-oriented and comprehensive remuneration. The determination of remuneration is mainly based on the value of the position and supplemented by the personal qualifications of employees. The combination of the two sets up promotion channels for different positions. The Company's remuneration structure includes fixed remuneration, variable remuneration, subsidies and equity bonus. Since the listing of its A shares in 2017, the Company has launched 4 phases of share incentive scheme (A shares), covering core technical and management personnel, and the breadth and proportion of the incentive continued to increase. In 2021, the company moved on to launch the fourth phase of A-share restricted share incentive scheme to further integrate the interests of employees with those of the company and improve the sense of belonging and motivation of employees. We pay full remuneration to employees on time which is subject to adjustments on an annual basis according to the annual work targets.

We have formulated the Social Insurance and Housing Provident Fund Management System. According to relevant national laws and regulations, the Company is required to pay social insurance and housing provident fund for employees. Social insurance includes pension insurance, medical insurance, unemployment insurance, work-related injury insurance and maternity insurance.

We have formulated the Commercial Insurance Benefit System. Commercial insurance is divided into three categories, namely supplementary commercial insurance, commercial insurance for trainees, and work safety liability insurance, primarily covering medical insurance, accident insurance, liability insurance and so on. With these commercial insurances, employees are offered with additional compensation for medical purpose and upon occurrence of accidents.

For employee promotion, we have formulated the Performance Appraisal Management System to promote consensus between the management and employees on the goals and how to achieve them, and to encourage employees to strive for excellent performance. The performance management process is made up of stages including performance goals, coaching, evaluation, feedback and application of performance results. The levels of appraisal results are divided into excellent, good, medium and unqualified. Based on the performance appraisal results, we incentivize employees in the forms of bonus, promotion, salary adjustment, reward and punishment, commendations, etc. The Company has set up ranking standards. In the first quarter of each year, all employees will be graded and scored to determine the rank and position in the new year.

For employee care, we encourage our employees to be united, positive and helpful to others. We offer employees with abundant and delicious working meals, clean and tidy dormitories, quiet and colorful study rooms, and cosy maternity rooms. We held birthday celebrations, reserved the entire theatre for our employees to watch movies every month before the pandemic, and encouraged all departments to organize activities such as travel and technical competitions. At the same time, employees could report various situations and work needs to their superiors or the human resources department at any time.

3. Employment and Labour Practices

As the demand for talents specialized in key technologies increases, we plan to continuously enhance the competitiveness of our welfare and remuneration packages in the future to attract more talents and strive to achieve greater operational efficiency.

We stick to the principle of “people-oriented” and providing effective care and protection for our employees. We strive to safeguard employees’ interests on leave, working hours, equal opportunities, diversity and anti-discrimination, insist on equal pay for equal work, gender equality, and ensure equal employment opportunities and labor security for employees of different nationalities, races, genders, religious beliefs and cultural backgrounds.

As of 31 December 2021, the Company had a total of 2,140 employees and 12 part-time employees. Relevant indicators of the Company’s employees in 2021 are as follows:

Distribution of Employees in 2021

Name of Indicators	End of 2021 (person)	Percentage of total number of employees at the end of the period
By gender		
Male	744	34.77%
Female	1,396	65.23%
By age		
Aged 30 and below	1,343	62.76%
30-50 years old	679	31.73%
Over 50 years old	118	5.51%
By region		
Beijing	575	26.87%
Jiangsu	1,328	62.06%
Guangdong	12	0.56%
Chongqing	8	0.37%
Guangxi	39	1.82%
Overseas	178	8.32%

3. Employment and Labour Practices

Employee Turnover in 2021

Name of Indicators	End of 2021 (person)	Percentage of the corresponding number at the end of the period	Employee turnover rate excluding those who joined and left during the year
By gender			
Male	217	35%	20%
Female	398	34%	18%
By age			
Aged 30 and below	457	41%	21%
30-50 years old	143	24%	16%
Over 50 years old	15	15%	14%
By region			
Beijing	157	30%	21%
Jiangsu	376	35%	16%
Guangdong	7	82%	47%
Chongqing	0	0%	0%
Guangxi	19	56%	12%
Overseas	56	35%	35%

In 2021, the Company did not have any violation in relation to remuneration packages, and did not have violation in relation to working hours and holidays.

3. Employment and Labour Practices

3.2 HEALTH AND SAFETY

JOINN strictly abides by the Production Safety 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 and other laws and regulations to ensure the occupational health and safety of employees. Some employees may contact hazardous chemicals such as ammonia, formaldehyde, methylic acid, acetic acid, acetonitrile, ozone, xylene and acetone in certain laboratories, and may be affected by noise when diagnosing the noise units. Therefore, the Company has formulated the following protection measures for employees who may be exposed to hazardous substances:

- Regular physical examination, regular training and regular assessment are conducted, the position of employees with occupational contraindications will be adjusted;
- Establish a training program on the Biosecurity Law for new employees involved in trial operations and conduct quarterly occupational health training for employees;
- Carry out regular biological safety drills;
- Conduct annual environmental and occupational health inspection;
- Annual occupational health examination for employees involved in occupational hazards.

The Company has formulated safety policies and regulations covering all operating procedures to ensure the safety standards of employees' behaviors and conducts regular training. The safety policies include OHS policy 1: OHS member composition and basic responsibilities; OHS Policy 2: Employee Occupational Protection Program; OHS Policy 3: Occupational Health and Safety Regulations and other related policies.

3. Employment and Labour Practices

During the COVID-19 pandemic in 2021, on the basis of paying attention to scientific protection and ensuring the safety protection of employees, the Company solved the actual needs of employees, continuously cared for the physical and mental health of employees, and took effective measures to protect the health and safety of employees:

- Distribution of medical surgical masks, 3M masks and 75% alcohol disinfectant wipes for COVID-19 protection supplies on a regular basis;
- Staggered working hours during the severe period of the pandemic;
- Check body temperature and scan health code for people and outsiders entering the Company's parks every day;
- Employee vaccination against COVID-19 (except for special circumstances where the relevant personnel is not suitable for vaccination).

Over the past three years, JOINN has zero work-related fatalities. In 2021, the number of working days lost due to work injury was 261 days¹, and 1 incident of fines or prosecution due to non-compliance with health and safety related laws and regulations.

3.3 EMPLOYEE CARE

In order to enhance the sense of belonging of employees, the Company has carried out a series of employee care activities to provide employees with a platform to show themselves and communicate, meet the spiritual needs of employees, and improve their happiness.

- **Birthday gifts for employees:** Although it is impossible to hold birthday parties and reserve the entire theatre for our employees to watch movie every month due to the pandemic, the Company's blessings and well-prepared birthday gifts remain unchanged; all departments are encouraged to organize activities such as tourism development technical competitions within the scope of policies.
- **Work meal and dormitory:** We provide employees with abundant and delicious work meals, clean and tidy dormitories, quiet and colorful books, cosy maternity rooms, and holiday condolences.
- **Annual meetings and travel:** Due to the policies under the pandemic, annual meetings were held online, and small-scale travel expansion activities were organized by departments on an online basis.
- **Employees' needs:** Employees can report all kinds of situation and work needs to their supervisors or the human resources department by mail, letter or face-to-face.

¹ Based on 8 working hours per day

3. Employment and Labour Practices

3.4 DEVELOPMENT AND TRAINING

With the further economic development of China, there has been an increasingly fierce competition among enterprises. In order to stand out from the competition, an enterprise must continue to sharpen its own competitive edges. Ultimately, the competition among enterprises is the competition for talents, which in turn is the competition in corporate trainings in some sense. The Company attaches great importance to the training, the improvement of the overall quality of employees and the recognition of corporate culture. It is the fundamental means for the Company to achieve development by building the Company into a learning-oriented organization and improving the core competitiveness of the Company, so as to ultimately achieve a “win-win” situation between the Company and its employees. The Company sticks to the co-development of itself and its employees, established a talent development and training system, improved the knowledge system and skill level of employees, and facilitated corporate training management and talent development, so as to promote the sustainable development of the Company. Currently, we have formulated Standard Operating Procedures for Staff Training and Assessment and other systems to continuously improve the Company’s training system.

After joining the Company, new employees are required to participate in employee introduction trainings, which aim to help new employees master various technical skills more quickly so that they can better integrate into the Company. In addition, we also carried out a series of training activities to effectively improve the knowledge and skills of employees, such as:

- Bioanalytical method training;
- Pre-clinical safety evaluation of biotechnology drugs ICHS6 Training;
- New drug non-clinical evaluation introduction and case analysis training;
- Trainings on quality control of bioanalytical testing.

3. Employment and Labour Practices

In 2021, the Company trained a total of 18,333 employees, with a total of 52,395 training hours. The percentage of training hours by gender and level is shown in the following table:

Overview of Employee Training

Name of Indicators	End of 2021 (person-time)	Percentage of employees trained in the corresponding category	Average training hours (hours/time)
Male employees trained	5,948	71.10%	3.03
Female employees trained	12,385	76.65%	2.78
Non-management employees trained	18,039	76.53%	12.81
The management trained	294	40.74%	2.69

In the future, we will adopt a more flexible approach for staff training and empowerment and carry out various training tasks based on the development characteristics of the Company and the industry.

3.5 LABOUR STANDARDS

JOINN strictly abides by the Contract Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, the Law of the People's Republic of China on the Protection of Minors and other relevant laws and regulations, and strictly prohibits child labor and forced labor. During the recruitment process, we conduct strict verification and background checks on the identity certificates provided by interviewees. We treat employees of different nationalities, races, genders and ages equally, and prevent employment discrimination and use of child labor and forced labor. In addition, we encourage employees to report violations. On the basis of protecting the information of whistleblowers, we will immediately investigate and deal with such matters to eradicate all violations. We also effectively protect the legitimate rights and interests of employees and make reasonable arrangements for their working hours in accordance with the Company's regulations.

In 2021, JOINN did not have any cases of discrimination, child labor or forced labor.

4. Environmental Protection

Attaching great importance to environmental protection, the Company stresses the importance of environmental protection to corporate social responsibility and sustainable development and actively promotes the establishment, continuation and implementation of an environmental protection system. The environmental protection guidelines adopted by the Company is “insistence on environmental protection and social sustainability, prevention of pollution, active promotion of energy conservation and emission reduction, protection of ecological diversity and establishment of eco-friendly communities”. Environmental protection is one of the important social responsibilities of corporate citizens. On the basis of emphasizing the bottom line of legal and compliant operation, the Company takes all necessary measures to protect the environment and prevent pollution. Clean production, energy conservation and emission reduction are vigorously promoted. During project construction, the Company must consider the potential environmental impacts and make persistent efforts in environmental improvement to ensure that 100% environmental compliance and standardized discharge of pollutants are achieved for its business activities.

4.1 EMISSIONS MANAGEMENT

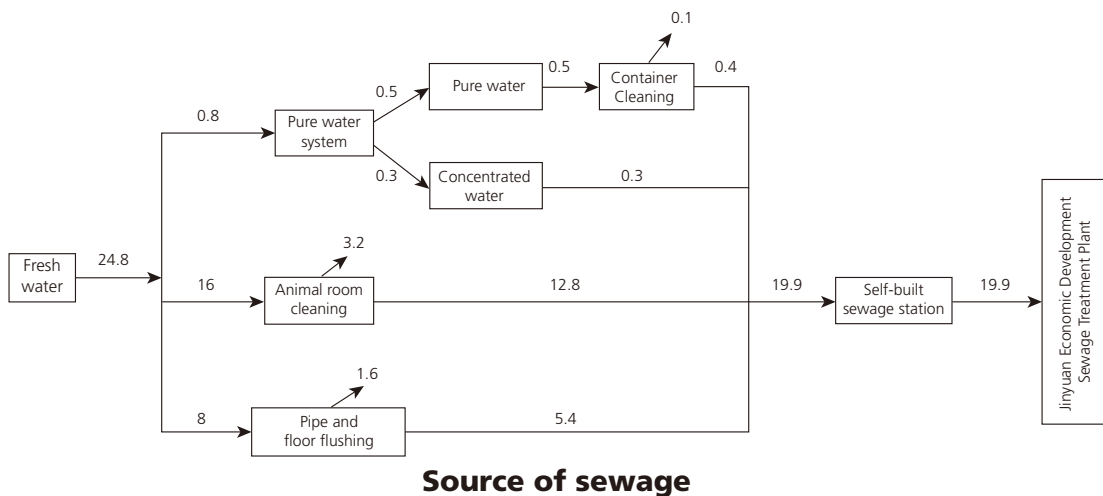
The Company strictly complies with the environmental protection policies, laws and regulations of national and local governments, strictly complies with the Environmental Protection Law of the People’s Republic of China, the Law of the People’s Republic of China on the Prevention and Control of Water Pollution, the Law of the People’s Republic of China on the Prevention and Control of Atmospheric Pollution and the Law of the People’s Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, and actively takes measures to manage emissions and fulfill environmental responsibilities. JOINN will continue to promote the concept of energy conservation, consumption reduction, green and environmental protection, and reduce emissions from the source. We will always take the promotion of emission management and environmental protection process as our long-term goal, and ultimately realize the circular economy concept and follow the path of sustainable development.

During the Reporting Period, the environmental management personnel of the Company carried out a full-coverage inspection on the environmental management of the Company, strictly controlled the discharge of sewage, wastewater, noise, exhaust gas and greenhouse gases in the Company’s factory area, and we also engaged a third-party testing company to carry out regular tests. There were no violation of environmental laws and regulations that had a significant impact on the Company during the Year.

4. Environmental Protection

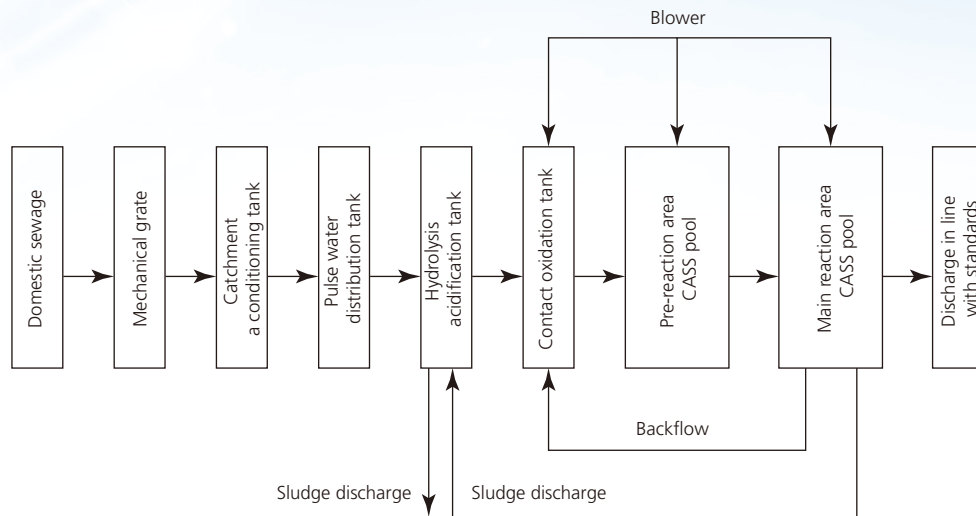
4.1.1 Wastewater Discharge Treatment

The Company's drainage mainly includes domestic sewage and production wastewater, of which the production wastewater is mainly the wastewater from cleaning of animal houses and laboratories, water consumed for washing of pipeline and ground, and the discharge of production wastewater is 19.9 m³/d (concentrated water is produced during the pure water preparation process, and the water production rate is 60%). In 2021, the Company discharged a total of 64,480 tonnes of wastewater.



In the process of sewage discharge, the Company complies with the relevant standards in the Wastewater Quality Standards for Discharge to Municipal Sewers (GB/T31962-2015), the Integrated Wastewater Discharge Standard (GB8978-1996), the Water Pollution Discharge Standard for Medical Institutions (GB18466-2005) and "Discharge limits for water pollutants discharged into the public sewage treatment system" in the Integrated Discharge Standard of Water Pollutants (DB11/307-2013), we have constructed our own wastewater treatment facilities (scale: 200m³/d, Phase I design treatment scale: 120m³/d), adopt advanced wastewater treatment process (septic tank pretreatment – wastewater conditioning tank – hydrolysis acidification – oxidation – secondary sedimentation tank – sterilization tank – activated carbon adsorption – discharge), and use 10% sodium sulfite plus 4% glycerin mixed solution as deodorant, the activated carbon filter tower in the treatment equipment is replaced once every 1-2 years based on the quantity of active chlorine. The Company conducts monthly sewage sampling and testing to ensure that the discharge standards are met.

4. Environmental Protection



Sewage treatment process

In the future, the Company will continue to strengthen the management of waste water treatment and discharge, pay attention to the use of disposal facilities, timely replace and update aged equipment, and increase the number of pollutant deepening treatment facilities, such as air flotation pond for sewage treatment and sewage deodorization tower, to improve the efficiency of waste water treatment.

4. Environmental Protection

4.1.2 Exhaust gas and Greenhouse Gas Emissions Management

The Company strictly controls the exhaust gas emissions in the Company's operation and production in accordance with the Emission Standards for Odorous Pollutants (GB14554-93), the Integrated Emission Standard of Air Pollutants (GB16297-1996), the Emission Standard of Air Pollutants for Boiler (GB13271-2014) and the Pollution Control Standard for Hazardous Waste Incineration (GB18484-2001).

The main sources of greenhouse gases and exhaust gases of the Company are odor (hydrogen sulphide, ammonia gas) and VOC generated by the animal room and exhaust gas (xylene) generated by the laboratory. In accordance with the internal management system, the Company sets up activated carbon adsorption devices to purify and treat exhaust gas, and regularly replaces the activated carbon. The exhaust gas is emitted after adsorption and purification by activated carbon, and the emission height is maintained at 15m, which is in line with the pollutant emission concentration, speed and height in the second period of the general air pollutant emission in the "Integrated Emission Standard of Air Pollutants" (DB11/501-2017) of Beijing municipality. According to the internal management regulations of the Company, the activated carbon replacement in the Company's Taicang laboratory is replaced on a quarterly basis. In order to quantify the exhaust gas emission indicators, the Company regularly engages qualified third-party enterprises to inspect the Company's exhaust gas every year, and accepts random inspection by the Environmental Protection Department of the Development Zone from time to time. Within the Company, the Company has established an environmental protection management team to clarify the responsibilities of environmental protection personnel, implement the environmental monitoring system and the pollutant discharge permit system.

Exhaust gas and greenhouse gas emissions in 2021

Type	Unit	Emissions in 2021
Exhaust Gas	kg	1,010
² Direct greenhouse gas emissions (Scope 1)	tCO ₂ e	272.99
Indirect greenhouse gas emissions (Scope 2)	tCO ₂ e	11,136.71
Total greenhouse gas emissions	tCO ₂ e	11,409.70
Greenhouse gas emission intensity	tCO ₂ e/person	5.33

² Calculation method of greenhouse gas emissions: Direct greenhouse gas emissions: the Company's energy consumption is multiplied by the emission factors. The emission factors are referred to ① China Energy Statistical Yearbook. ② IPCC2006; Indirect greenhouse gas emissions: the power consumption of the Company multiplied by the emission factor. The emission factor refers to the Guidelines for the Verification of Greenhouse Gas Emission Reports of Enterprises (Trial Implementation) issued by the Ministry of Environmental Protection;
Total GHG emissions: Direct GHG emissions and indirect GHG emissions summation.

4. Environmental Protection

4.1.3 Waste Management

The types of waste discharged by the Company include hazardous waste and non-hazardous waste. Hazardous waste mainly comes from medical waste, animal carcasses, laboratory organic waste liquid, waste activated carbon, etc. Non-hazardous waste mainly comes from domestic waste, packaging materials and waste paper. With reference to the Technical Specifications for the Prevention and Control of Hazardous Waste Pollution in Laboratory, we have formulated “SOP: ADM-B021-3 Standard Operating Procedures for Waste Liquid and Medical Waste Treatment generated in the Trial” to dispose of hazardous waste. The hazardous waste is collected by designated personnel and stored in a closed place. Safety signs such as hazardous waste signboards, labels, and prohibition of fireworks are posted, and qualified third-party companies are engaged for regular removal and disposal. The list of cleaning companies signed with the Company is as follows:

- **Hazardous waste:** Beijing BBMG Mangrove Environmental Protection Technology Co., Ltd., Beijing Xinxing Zhongcheng Environmental Technology Co., Ltd., Beijing Runtai Environmental Protection Technology Co., Ltd.
- **Domestic waste:** Beijing Xinjie Sanitation Services Co., Ltd.

In addition, the Company has actively formulated the internal SOP for the management of hazardous waste, namely the Standard Operating Procedures for Waste Liquid and Medical Waste Treatment Produced in the Examinations, so that the Company’s hazardous waste discharge in the production and operation process is legal and valid, and actively accepts the supervision of the regulatory authorities. In 2021, we entered the Company’s information in the Government’s Integrated Solid Waste Management System, completed the filling of the enterprise management plan, and the annual hazardous waste statement has also been reviewed by the regulatory authorities.

In the future, the Company will strengthen its waste discharge management capabilities in the following three aspects:

- Strengthen the level of waste classification and collection, avoid mixed collection, and reduce the difficulty of waste recycling and harmless treatment;
- Improve the environmental awareness of workers in the departments which generate waste, promote the importance of waste classification and collection, and reduce waste;
- Adopt new technologies and new processes to carry out harmless disposal of wastes in compliance with laws and regulations.

4. Environmental Protection

Waste discharge in 2021

Type of Waste	Data Unit	Intensity Unit
Medical waste	156,220 kg	73 kg/person
Sewage station sludge	26,500 kg	12.38 kg/person
Laboratory organic waste liquid	125,593.7 kg	58.69 kg/person
Waste activated carbon	11,160.12 kg	5.22 kg/person
Other hazardous waste	13,500 kg	6.31 kg/person
Total hazardous waste	332,973.79 kg	155.60 kg/person
Total non-hazardous waste	398,300 kg	186.12 kg/person

4.2 USE OF RESOURCES

4.2.1 Energy Utilization

The Company attaches great importance to the conservation of natural resources, strictly complies with the Environmental Protection Law of the People's Republic of China, the Water Law of the People's Republic of China, the Energy Conservation Law of the People's Republic of China and other laws and regulations, and strives to achieve the coordinated and sustainable development of people, resources and the environment.

Electricity and natural gas are the main energy consumed in the Company's production and in the daily life thereof. In addition, the Company's business vehicles consume a certain amount of gasoline. Natural gas is used to generate steam from boiler combustion and burn animal carcasses in incinerators. Electricity consumption is mainly related to the overall operation of the Company (including chiller units, air-conditioning fan units and other auxiliary equipment, experimental equipment, etc.). Natural gas is mainly consumed for boiler combustion to produce water steam (use of high-pressure items of vacuum sterilizer in animal laboratory cleaning, use of air conditioning in animal room for humidifying, as well as heating in winter) and incinerator to burn animal carcasses.

4. Environmental Protection

We have adopted a number of energy conservation measures to reduce energy consumption:

- Purifying air-conditioner is the main energy-consuming electrical appliance. We use the automatic variable frequency speed control technology to regulate the airflow speed which is controlled at the standard lower limit. Control the temperature range by setting the temperature of the research model room to a standard floor in winter and a standard ceiling in summer. We use a mini-split independent air conditioning system. The SPF research model animal room is divided into several zones, each of which is installed with several mini-split independent air conditioning systems. The rooms and their respective air conditioning systems are selectively occupied based on the increase or decrease in the species and number of research model animals kept, with an aim to avoid squandering.
- We choose energy-efficient machines and pumps. Phased-out machine and pump products already announced by the state are strictly forbidden. Under normal load, the operating conditions of machines and pumps should be in the high-efficiency zone of the performance curve and a reasonable adjustment method should be adopted. Driving machines should match the load of machines and pumps. Motors are reasonably selected to increase their load rate. Adopt frequency conversion speed adjustment device for machines and pumps with large load change.
- The shape coefficient of building structures is well under control to minimize heat consumption as long as the technical requirements are met.
- The natural lighting design is strengthened for buildings. Daylighting bands are installed on the roofs and double-level high and low windows are installed on maintenance walls to save electricity.
- Three-dimensional heat tubes are installed in the air-conditioning compartment to reduce energy consumption.
- We use green lighting products. Light sources, lamps and ballasts with high light efficiency, long service life and good color rendering are used. We choose reasonable illuminance for interior lighting of buildings and increase the proportion of high-efficiency and energy-saving fluorescent lamps.
- The humidity of the animal room is constantly controlled at around 50% to save steam.

In the future, the Company will continue to reduce the level of energy consumption, and carry out energy-saving transformation of the air-conditioning host shell on other floors.

4. Environmental Protection

4.2.2 Use of Water Resources

The use of water resources of the Company mainly involves wastewater from cleaning of animal houses and laboratories, flushing water of pipes and ground, water production of pure water equipment, replenish cooling water of refrigeration machines in summer and daily use. As the Company is not listed as a key unit of water conservation management, the Company only needs to regularly report monthly water utilisation targets on the water management platform of Beijing Water Authority in accordance with the municipal requirements. The Company's goal in energy and water resources management is to improve the effective utilization of energy and water resources, and to maximize the environmental and economic benefits of energy and water resources on the premise of meeting operational activities. The water resources consumed by the Company in production, manufacturing and office operation are all from the municipal pipe network, and do not involve water sourcing issues.

In terms of effective water conservation, the Company has adopted the following measures:

- We enhance water measurement management. Production water measurement devices inside the workshop and wastewater measurement devices at workshop discharge outlets are installed; maintenance of water supply, water facilities, equipment and apparatus is strengthened to strictly prevent water dripping and leakage. Water use efficiency is improved to save water resources;
- The cooling water of the chiller is replenished with river's water for cooling in summer;
- For domestic water use, we vigorously adopt water-saving technologies and water-saving water apparatus without using phased-out water apparatus explicitly specified by the state, and install water-saving facilities or apparatus. Some of the treated wastewater can be used for greening and road sprinkling, thus water consumption is largely reduced.

At the same time, due to the nature of our business, there are no packaging materials in the operation of the Company.

Energy and Resources Consumption and Intensity in 2021

Type of energy	Consumption Unit	Intensity Unit
Petrol	21,251 Litre	9.93 litres/person
Electricity	28,935,300 kWh	13,521.17 kWh/person
Water	162,066 m ³	75.73 m ³ /person
Steam	92,735.35 million KJ	43.33 Million KJ/person
Natural Gas	103,350 m ³	48.29 m ³ /person

4. Environmental Protection

4.3 THE ENVIRONMENT AND NATURAL RESOURCES

4.3.1 Effective Response to Climate Challenges

While the Company strives to avoid the impact on the environment caused by operation and production, in response to the growing extreme climate challenges, the Company has formed a set of emergency procedures of “risk detection-release of early warning information-early warning action-emergency plan”. The Company also issued corresponding emergency plans and filed them with the Environmental Protection Bureau of the Development Zone to effectively ensure the stability and sustainability of the Company's operations. The specific implementation plans are as follows:

- Fire and Explosion Emergency Plan
- Hazardous Waste Emergency Plan
- Emergency Plan for Prevention and Control of COVID-19 Pandemic
- Emergency Plan for Dispersal of Poisonous Matters
- Emergency Plan for Environmental Emergencies of JOINN Laboratories (China) Co., Ltd.

The Company's daily measures for natural disasters effectively minimize the impact of natural disasters on the Company's production and operation:

- Before winter, carry out heat preservation of water supply pipelines and increase the pressure of water supply temperature measurement, strengthen the frequency of circulation inspection and prepare for anti-freezing work in advance;
- Before the rainy season of each year (end of May), the Company will engage a qualified third-party enterprise to conduct a lightning protection test on each building of the enterprise, and take measures to avoid thunderstorms, set roofing needles and lightning belts.

In addition, the Company actively responded to the national goal of carbon peak and carbon neutrality, advocated low-carbon travel, afforestation, and purchased new energy vehicles.

4. Environmental Protection

4.3.2 Animal Welfare

The Company's business involves reproduction and sale of research model animals. The main species of the research model animals are mice, rats and non-human primates. Many lifesaving advances in medicine and human health were drawn from the scientific discoveries using research model animals. We are committed to helping improve the quality of human life while ensuring the highest standards of benefits for research model animals as far as possible. We have set up an animal welfare committee to review each trial plan. At the same time, we have formulated animal welfare and IACUC policies to identify and deal with relevant issues in a timely manner. So far, we have not received any objection and concern from animal protection organizations. As one of the world's leading providers of non-clinical drug development services and other services toward human safety, we accept both the legal and the moral obligation to be a leader in assuring that research model animals in our facilities are treated in accordance with all applicable rules and with high standards of respect and compassion. In addition to laws and ethics, this responsibility is also important from a scientific perspective as non-compliance with these rules and standards would affect the scientific professional conduct. We also follow the principles below:

- We treat our research model animals humanely and with respect. We follow our internal policy on research model animal welfare, and respect the contribution of our research model animals to life-saving development;
- We strictly comply with all applicable laws and regulations for research model animal welfare. We employ alternative scientific methods to using research model animals where appropriate;
- We endeavor to minimize stress or discomfort to research model animals and endeavor to follow the best practice of the industry whenever feasible;
- We comply with the standards and requirements of AAALAC. We train employees who handle research model animals to utilize the best techniques and procedures, and apply consistent control measures to ensure compliance with our internal policies on research model animal benefits.

HKEX ESG REPORTING GUIDE CONTENT INDEX

Environmental, Social and Governance Reporting Guide		Content of the Report
Subject Area A. Environmental		
Aspect A1: Emissions		
A1	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	4.1 Emissions Management
A1.1	The types of emissions and respective emissions data.	4.1 Emissions Management
A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4.1 Emissions Management
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4.1 Emissions Management
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4.1 Emissions Management
A1.5	Description of emissions target(s) set and steps taken to achieve them.	4.1 Emissions Management
A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	4.1 Emissions Management

Appendix

Environmental, Social and Governance Reporting Guide		Content of the Report
Aspect A2: Use of Resources		
A2	General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials.	4.2 Use of Resources
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	4.2 Use of Resources
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	4.2 Use of Resources
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	4.2 Use of Resources
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	4.2 Use of Resources
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	N/A
Aspect A3: The Environment and Natural Resources		
A3	General Disclosure Policies on minimising the issuer's significant impacts on the environment and natural resources.	4.3 The Environment and Natural Resources
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	4.3 The Environment and Natural Resources
Aspect A4: Climate Change		
A4	General Disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	4.3 The Environment and Natural Resources
A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	4.3 The Environment and Natural Resources

Environmental, Social and Governance Reporting Guide		Content of the Report
Subject Area B. Social		
Employment and Labour Practices		
Aspect B1: Employment		
B1	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	3.1 Employment
B1.1	Total workforce by gender, employment type (for example, full-or part-time), age group and geographical region.	3.1 Employment
B1.2	Employee turnover rate by gender, age group and geographical region.	3.1 Employment
Aspect B2: Health and Safety		
B2	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	3.2 Health and Safety
B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	3.2 Health and Safety
B2.2	Lost days due to work injury.	3.2 Health and Safety
B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	3.2 Health and Safety
Aspect B3: Development and Training		
B3	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	3.4 Development and Training
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	3.4 Development and Training
B3.2	The average training hours completed per employee by gender and employee category.	3.4 Development and Training

Appendix

Environmental, Social and Governance Reporting Guide		Content of the Report
Aspect B4: Labor Standards		
B4	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	3.5 Labour Standards
B4.1	Description of measures to review employment practices to avoid child and forced labor.	3.5 Labour Standards
B4.2	Description of steps taken to eliminate such practices when discovered.	3.5 Labour Standards
Operating Practices		
Aspect B5: Supply Chain Management		
B5	General Disclosure Policies on managing environmental and social risks of the supply chain.	2.2 Supply Chain Management
B5.1	Number of suppliers by geographical region.	2.2 Supply Chain Management
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	2.2 Supply Chain Management
B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	2.2 Supply Chain Management
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	2.2 Supply Chain Management

Environmental, Social and Governance Reporting Guide		Content of the Report
Aspect B6: Product Responsibility		
B6	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	2.3 Product Responsibility
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	N/A
B6.2	Number of products and service related complaints received and how they are dealt with.	2.4 Customer Service
B6.3	Description of practices relating to observing and protecting intellectual property rights.	2.1 Innovative R&D
B6.4	Description of quality assurance process and recall procedures.	2.3 Product Responsibility
B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	2.4 Customer Service
Aspect B7: Anti-corruption		
B7	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	2.5 Anti-corruption
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.	2.5 Anti-corruption
B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	2.5 Anti-corruption
B7.3	Description of anti-corruption training provided to directors and staff.	2.5 Anti-corruption
COMMUNITY		
Aspect B8: Community Investment		
B8	General Disclosure Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	2.6 Community charitable donations
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	2.6 Community charitable donations
B8.2	Resources contributed (e.g. money or time) to the focus area.	2.6 Community charitable donations