



SINO BIOPHARMACEUTICAL LIMITED

中國生物製藥有限公司

(Incorporated in the Cayman Islands with Limited Liability)

(Stock Code: 1177)



2019

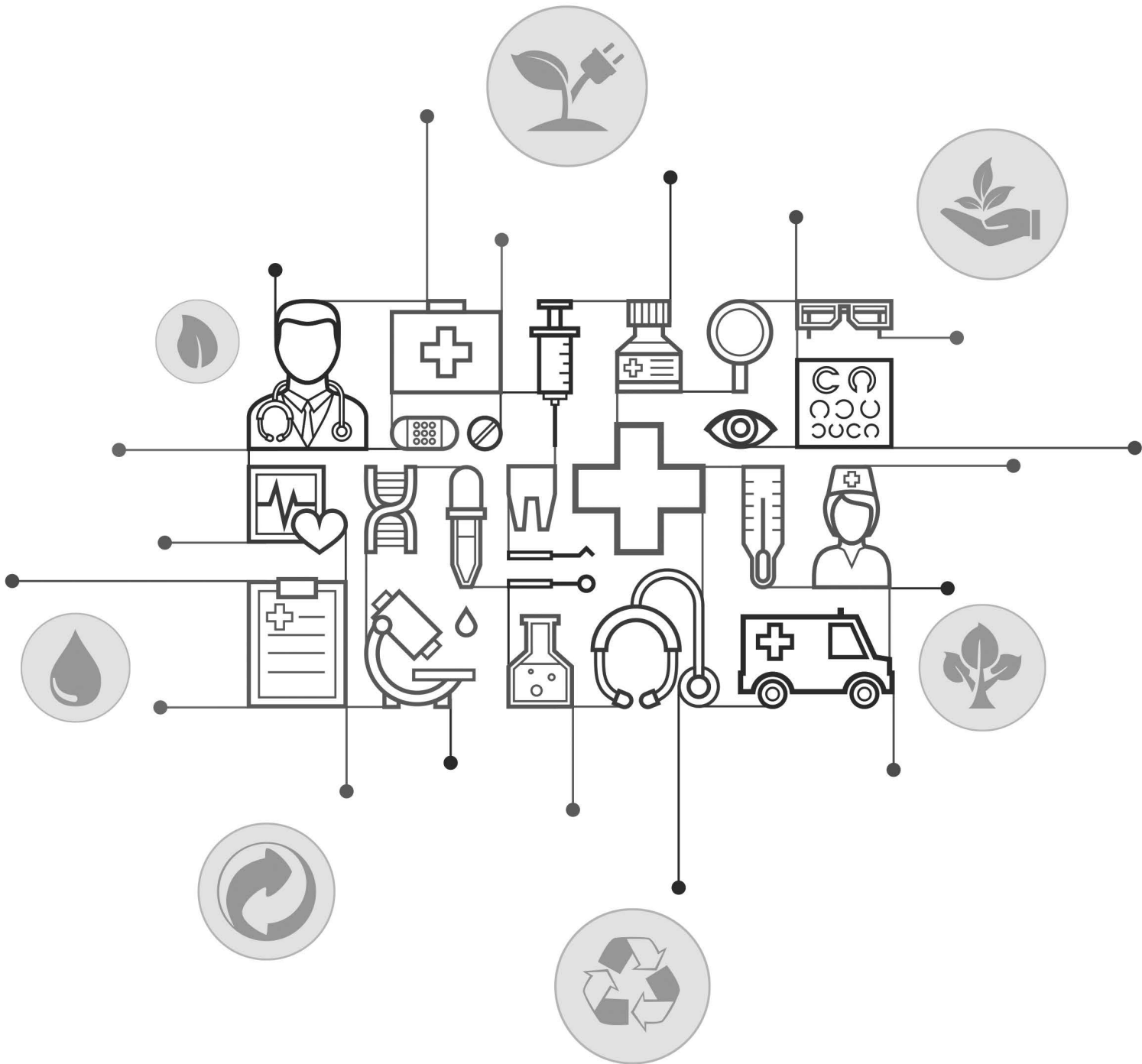
Environmental,
Social and Governance Report

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I. ABOUT THIS REPORT

Sino Biopharmaceutical Limited (the “Company” or “Sino Biopharmaceutical”), together with its subsidiaries (collectively, the “Group”), is a leading, innovative research and development (“R&D”) driven pharmaceutical conglomerate in the People’s Republic of China (“China” or “PRC”). Our business encompasses a fully integrated industrial chain in pharmaceutical products which covers an array of R&D platforms, intelligent production lines and a strong sales system. The Group’s products have gained a competitive foothold in various therapeutic categories with promising potentials, comprising a variety of biopharmaceutical and chemical medicines for treating liver disease, tumors, cardio-cerebral diseases, orthopedic diseases, digestive system diseases, infections and respiratory system diseases. In order to enhance our sustainable competitiveness, the Group attaches great importance to R&D breakthroughs and is positioned as an industry leader in terms of R&D expenditures and product innovation. The Group also actively builds up co-operations with leading domestic and overseas pharmaceutical institutes and enterprises, to bring about the ecological commercialization of world-frontier R&D results to benefit mankind. To take advantage of the development in technology and policy changes and capitalize on opportunities arising from extension of our principal business, the Group adopts a comprehensive strategic development plan in the greater healthcare field. Meanwhile, the Group actively utilizes new technologies in Big Data, Artificial Intelligence and Financial Technology to continuously enhance the efficiency of the management, R&D, manufacturing and sales activities.

Sino Biopharmaceutical hereby issues its environmental, social and governance report for the year ended 31 December 2019, which covers the Company and its subsidiaries including Chia Tai – Tianqing Pharmaceutical Group Co. Ltd. (“CT Tianqing”), Lianyungang Runzhong Pharmaceutical Co., Ltd. (“LYG Runzhong”), Nanjing Shunxin Pharmaceutical Co., Ltd. (“Nanjing Shunxin”), Beijing Tide Pharmaceutical Co., Ltd. (“Beijing Tide”), Nanjing Chia Tai Tianqing Pharmaceutical Co., Ltd. (“Nanjing CT Tianqing”) to report the practices, performance and development of the Group in corporate social responsibility in 2019 to our shareholders, staff, clients, partners and other stakeholders.

This report was prepared in compliance with the requirements set out in the Environmental, Social and Governance Reporting Guide under Appendix 27 to the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited.

Except where otherwise specified, this report covers the period from 1 January to 31 December 2019 (the “Reporting Period”) and focuses on aspects of the Group’s environmental and social performance. For information relating to corporate governance, please refer to the Company’s 2019 Annual Report.

II. STRATEGY AND MANAGEMENT OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE MATTERS

With continuous development and expansion of the scale of the enterprise and promotion of the internationalization process, the Group is progressively integrating sustainable development strategy into its overall development strategy system.

Our mission: Based on continuous innovation in research and development with improvement of quality, while providing customers with quality products and services to improve the quality of life, we will strive to maximise the investment return to shareholders and satisfy personal development needs of staff, and take up more social responsibility to contribute our development results to society.

Our objective: By working with industrial elites, we will make efforts to promote the development of social responsibility in the healthcare industry and make the Group a respected corporate citizen in the industry.

Our strategy: We will integrate the philosophy of sustainable development into our overall corporate development plan to fulfill social responsibility, to make the Group a leading enterprise with sense of social responsibility and philosophy of sustainable development in the healthcare industry, and at the same time integrate our sense of social responsibility and philosophy of sustainable development into every business segment of the Group to make it the basic principle of the behaviour of our staff.

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2.1. Participation of stakeholders

Based on the actual operation of the Company, our stakeholders are mainly governmental and industrial regulators, investors, customers, suppliers, employees, community, industry peers, media and the general public. In 2019, we communicated with the major stakeholders through various direct and indirect channels to better understand the environmental, social and governance matters relating to our business.

The following table sets out the channels of engagement for different stakeholders:

Stakeholders	Methods of communication
Governmental and industrial regulators	Government visits, supporting government projects, participation in policy development, industry collaboration
Investors	Board of directors, information disclosure, conferences, ordinary visits, website, mail, telephone
Customers	Academic seminars, new product launch conferences, customer services, telephone consultation, complaint handling
Suppliers	Standardized supplier management system, improved procurement tender mechanism, annual evaluation
Employees	Trade union, employee congress, training, safety management, cultural and sports activities, health examination, paid annual leave
Community	Community activities, charitable organizations, volunteer work
Industry peers	Trade organizations, forums and conferences
Media and general public	Information disclosure, public opinion monitoring, media communication mechanism, website

2.2. Importance assessment and determination of key areas

According to the core business model and operation procedures of the Company, and statutory requirements for information disclosure, we initially determined each environmental and social responsibility issue, at the same time, combined with the attention of various stakeholders, we had made materiality analyses and prioritised each issue, determined the importance and urgency thereof. The followings are the key issues in relation to the Group's environmental and social responsibility. The Group will give priority to such issues as the key areas for supporting its sustainable development.

Scope	Aspects
Environment	Strengthening construction of environment, health and safety management system Reducing the use of resources Reducing the impact on the environment
Society	Improving staff development and training Facilitating the health and safety of employees Strengthening supply chain management Paying particular attention to product responsibility Committed to contribution to society

There was no significant change in our business compared with the last year. The Group reviews the key environmental, social and governance issues faced by peer companies and assesses whether its own priorities in relation to the industry require any commensurate adjustment. After evaluation, the Group believes that the results of the previous importance analysis and the important areas of environmental, social and governance determined last year can continue to be used and can serve as the basis for the preparation of this report.

III. ENVIRONMENTAL PROTECTION

In pursuing economic development, to maintain sustainable development of the country and the enterprise by protecting the environment and realizing ecological civilization are also our concerns. The Group attaches great importance to energy conservation, emissions reduction and environmental protection, and will continue to put more efforts to protect the environment.

3.1. Construction of environment, health and safety (“EHS”) management system

■ EHS Management System

Taking CT Tianqing, a major subsidiary of the Group, as an example, the company has established a relatively comprehensive EHS management organization. The environment management affairs are handled by the safety production division which is equipped with special environmental protection personnel responsible for environment impact assessment of construction projects and “Three Simultaneous” (note) completion acceptance, environmental protection facility operation, environment monitoring, handling of environmental pollution incidents and other routine environmental protection related matters.

(Note: Article 41 of the Environmental Protection Law of the People’s Republic of China requires that the design, construction and production of the anti-pollution equipment should be done simultaneously with the main body of any construction project)

Meanwhile, CT Tianqing has formulated relevant environmental management system to have effective control and management on the company’s environmental factors, so as to ensure the effective operation of environmental protection work. The company has long set great store by the sustainable development strategy of establishing itself as an environmental-friendly enterprise, and has strictly controlled the emission of waste from production through a series of measures such as enhanced production process, technology advancement and adoption of environmental protection facilities, so as to eradicate the adverse impact on staff and the environment.



Case Study 1: Institutionalization and standardization of the EHS management of CT Tianqing

In 2019, CT Tianqing improved the construction of environmental protection, occupational health and safety production systems, and formulated the “EHS Management Manual”, “EHS Procedure Documents” and “EHS Management Regulations” to systematize, institutionalize and standardize the company’s occupational health and safety and environmental management processes, so as to prevent safety accidents effectively, and reduce the operational safety risks of the company.

During the Reporting Period, CT Tianqing passed the ISO9001 Quality Management System, ISO14001 Environmental Management System, ISO45001 Occupational Health and Safety Management System and ISO50001 Energy Management System certification after being audited by China Quality Certification Center. This represents a high recognition of the regularization and standardization of the company's product quality, energy management, occupational health and safety and environmental management.

Case Study 2: Nanjing CT Tianqing’s Safety and Environmental Protection Work Meeting

In March 2019, in order to effectively minimize the occurrence of safety accidents and eliminate hidden safety hazards, Nanjing CT Tianqing held a safety and environmental protection work meeting which was chaired by the company’s management, with the participation of the heads of the relevant departments such as the research institute, safety and environmental protection department, power department, engineering department, production department, transportation and insurance department, equipment maintenance department, storage center, and asset management department and their colleagues.



The meeting comprehensively summarized the safety and environmental protection management work in 2018, and arranged and deployed the work in 2019. The person in charge of each department reported on the self-examination and remedial work performed on safety and environmental protection in their respective modules, and signed the “Safety Production Responsibility Letter” and “Environmental Protection Responsibility Letter”. The management instructed the heads of the relevant departments to pay attention to national safety and environmental protection policies, laws and regulations, and at the same time improve the three-level management system of safety production and environment, integrate EHS management into daily management, and effectively increase relevant training and drills.

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3.2. Use of resources

As a pharmaceutical enterprise, water, electricity and steam are the major resources consumed by the Group. The Group strives to improve the environmental protection management system, effectively manage and control environmental factors, increase investment in environmental protection, and improve energy efficiency and reduce environmental impact by adopting energy-saving equipment, technological innovation, reasonable planning and design.

■ Energy consumption

The Company requires its subsidiaries to establish an energy-consumption equipment account and energy consumption account for each department by enhancing energy measurement, detailing tertiary measurement and comprehensively collecting and sorting out energy utilization data.

The resource consumption data for the Reporting Period is as follows:

Type of resources	Consumption		Consumption intensity (per RMB10,000 production value)	
	2019	2018	2019	2018
Total water consumption	2,186,194 cubic meters	1,409,234 cubic meters	1.0377 cubic meters	0.8186 cubic meters
Total electricity consumption	125,663,884 kWh	78,070,940 kWh	59.6492 kWh	45.351 kWh
Steam	252,815 tons	163,072 tons	0.1200 tons	0.0947 tons
Packaging materials	13,748 tons	9,291 tons	0.0065 tons	0.0054 tons

■ Energy conservation

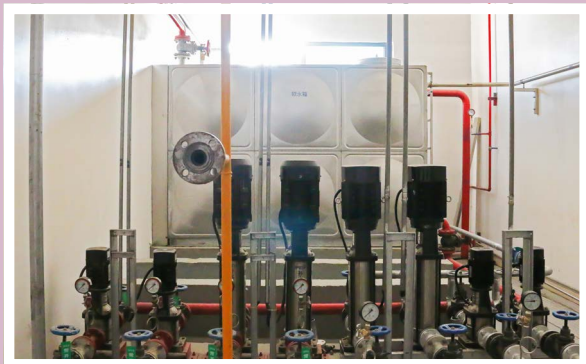
The energy consumption of the Group's subsidiaries in the process of production and operation is reduced through measures like adjusting product mix, eliminating backward energy-intensive products, using energy saving equipment and adopting rational energy-saving technology.

Case Study 1: Winter refrigeration unit switching project of CT Tianqing



The 7-12°C refrigeration unit was turned off in winter when the weather was cold, and the valve was switched to the standby cooling tower system on the roof of Building No. 9. The heat generated by the 7-12°C system was absorbed by the standby cooling tower to reduce the energy use of the entire system. According to the compressor and pump power of the 7-12°C system and the winter switching time (3 months for one workshop), 180,000 kWh of electricity had been saved for the whole year.

Case Study 2: Recovery and Reuse System of CT Tianqing's purified water



Purified water is used in the preparation and cleaning process of pharmaceutical production. Equipped with a purified water recovery and reuse system, the workshop of CT Tianqing recovers the purified water discharged from the purified water machine backwash, the condensate discharge system, and the distribution system storage tank before disinfection to the storage tank, and purified water will be collected in the boiler soft water tank for reuse, thereby reducing energy consumption in production boiler. In 2019, about 1,000 tons of pure water were recovered every month for production boiler, saving 12,000 tons of water for the whole year.

3.3. Environmental impact

The impact of the Group's operation on the environment is mainly concentrated on the consumption of energy and raw materials as well as the production of waste water, exhaust gas and solid waste ("Three Wastes") in the process of production and operation. While taking a series of energy-saving measures, the Group also keeps lowering the impact on environment by strengthening the construction of environment management system, improving production technology, adopting advanced equipment, using clean energy and raw materials, conducting clean production knowledge training, and maintaining a green office, etc.

■ Emissions of Three Wastes

The pollutant data for the Reporting Period is as follows:

Type of emissions	Emission/discharge		Emission/discharge intensity (per RMB10,000 production value)	
	2019	2018	2019	2018
Water discharged	702,375 cubic meters	392,571 cubic meters	0.3334 cubic meters	0.2280 cubic meters
Chemical oxygen demand (COD) discharged	78.80 tons	39.52 tons	0.00004 tons	0.00002 tons
Solid waste disposed ^(Note)	4,221 tons	3,229 tons	0.0020 tons	0.0019 tons
Greenhouse gases emission	189,506 tCO ₂ eq	120,355 tCO ₂ eq	0.0900 tCO ₂ eq	0.0550 tCO ₂ eq

(Note: the quantity of non-hazardous waste generated by the office (household garbage) is usually small and the waste has been recycled as far as possible)

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■ Emissions reduction measures

In respect of waste water discharge, the waste water produced by the main production factories of the Group include that coming from production, cleaning, testing, air conditioners and domestic sewage. The composite waste water produced in the factories is processed by the sewage treatment station of the factories to meet the standard and discharged into the municipal sewage pipe network, and finally discharged outside after centralized processing in the sewage disposal plant.

The types of the solid waste include sludge, waste activated carbon, waste drugs, waste packaging materials, and household garbage, which are all collected by category, and entrusted to relevant unit for treatment. Of these wastes, hazardous solid waste are all entrusted to local units with business license qualified for the collection and treatment of hazardous waste to reduce any adverse impact on the environment.

In respect of exhaust gases, exhaust gases are produced from the smashing process in some workshops, with a small amount of dust from the packing section and water vapour from the drying section, which are all collected by the workshop pipeline for high-altitude emission via exhaust funnels. Of the exhaust gases, dust-laden exhaust gas will undergo high-altitude emission after being processed through cloth bag dusting system.

Examples of disposal measures for the Three Wastes:

	Waste water treatment and discharge	Exhaust gas treatment and discharge	Hazardous waste management
CT Tianqing	By optimizing the production process, improving the cleaning process, public utilities cooling wastewater and production wastewater recycling and other measures to reduce wastewater discharge.	Exhaust gas is collected by a dedicated channel in the workshop, treated by a dust removal system and discharged to meet the standard. The air conditioners purchased by the company use new refrigerants such as environmentally friendly material R134a to replace freon, thus reducing greenhouse gas emissions.	In accordance with the Environmental Protection Law and Law on the Prevention and Control of Environmental Pollution by Solid Waste of the PRC, an improved regulatory system is established, with the corresponding hazardous waste management plan reported to the environmental management department, and monthly declarations made. The storage warehouse should implement classified storage to prevent leakage, loss, and scattering. Transfer and disposal shall be carried out in a joint order transfer system, and the qualified units shall be entrusted for transportation, disposal or utilization, and report to the relevant environmental protection department for record.

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	Waste water treatment and discharge	Exhaust gas treatment and discharge	Hazardous waste management
LYG Runzhong	Water conservation actions are carried out to increase the utilization rate of tap water and reduce the amount of waste water generated. The water quality of workshop wastewater is strictly controlled, and the operating parameters of sewage treatment stations are adjusted reasonably for reduction of the total amount of COD emissions at sewage stations.	Control from the source, by controlling the run-off drippings, the exposure operation and the emission of volatile organic compounds. The waste gases of the workshop are collected and sent to waste gas treatment facility, and processed by liquid spraying, activated carbon fiber adsorption, ultraviolet photolysis and other processes.	Solid hazardous wastes and liquid hazardous wastes are stored separately, and hazardous wastes are stored in a standardized manner. At the same time, qualified units are entrusted for disposal. The hazardous waste warehouse is equipped with a gas sink and gas purification device, and the waste gases are treated by ultraviolet photolysis process.
Nanjing Shunxin	All microorganisms in the wastewater will be inactivated first. After inactivation, equipment cleaning water, fermentation centrifugal wastewater supernatant, and chromatography purification wastewater are delivered to qualified units for treatment as hazardous waste. Tablets, capsules and other production equipment cleaning water, sanitary cleaning, laundry wastewater, ground cleaning wastewater and animal laboratory cleaning wastewater after inactivation will enter the plant sewage treatment station, and will be recycled for use as green plot sprinkling.	The exhaust gas from testing is treated with water spray + ultraviolet photolysis + activated carbon adsorption and filtration, and then discharged to the atmosphere through the exhaust port 4 meters above the roof. The microorganisms-carrying air generated by the exhaust system of the fermentation production area is collected, and the filtering device filters out the living microorganisms in the air, and then discharges it through the 15-meter-high exhaust pipe on the roof.	The hazardous waste generated in the production workshop is collected in a special container, sealed and then sent to a microorganisms-killing cabinet immediately, and temporarily stored in the temporary storage room for solid waste. The inactivated hazardous waste is then delivered to the entrusted disposal unit for disposal in a strict and timely manner.

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Case Study: CT Tianqing expands the waste water treatment facilities for Haizhou plant

In order to meet the needs of waste water discharge treatment in the production process and ensure that the production waste water meets the discharge standard, in 2019, CT Tianqing built a wastewater treatment facility with a daily treatment capacity of 800 tons for its Haizhou plant. The waste water treatment facility adopts a mature treatment technology of hydrolysis acidification + anoxic + aerobic (biological contact oxidation method). The treatment effect is stable, and the COD of the discharged waste water is controlled at a level below 300mg/L, which is superior to the domestic standard B in Table I of “Waste Water Quality Standards for Discharge to Municipal Sewers” (GB/T31962-2015) (i.e., COD limit 500mg/L).



■ Green office and travel

The Group integrates the concept of green development into every line of corporate operation. The Group actively promulgates relevant systems to advocate ways of office work and travel that have minimal impact on the environment and reduce carbon footprint starting from saving water, electricity, office supplies and printing materials, and reducing oil consumption, which not only can save energy, improve energy efficiency and reduce pollution, but is also conducive to health.

The Group’s implementation of full digitalisation is gradually taking effect. The standardisation, integration and mobility of the IT system of various business areas has become normal. Measures such as holding more meetings by means of telephone and video, developing mobile business platform, using operation information from multiple areas for analysis and management aim at realising digital control of R&D, production, marketing and back office management so as to reduce resource consumption and enhancing efficiency in an orderly manner.

During the Reporting Period, the Group strictly complied with relevant laws and regulations of China such as the Environmental Protection Law, Law on the Prevention and Control of Environmental Pollution by Solid Waste, Law on the Prevention and Control of Water Pollution, Law on the Prevention and Control of Atmospheric Pollution, Law on the Prevention and Control of Soil Pollution and Law on the Prevention and Control of Environmental Noise Pollution, and there were no incidents of non-compliance with the relevant environmental regulatory requirements that had a material impact on the businesses of the Group.

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IV. STAFF DEVELOPMENT AND PROTECTION OF THEIR RIGHTS AND INTERESTS

Adhering to the principle of people first, the Group continually optimizes its talent management system, respects and recognizes the personal value of its staff at all times, and provides a platform for self-development and self-enhancement of staff. We value the sustainable development of talents and through a variety of research and staff caring activities, we can understand the trends and needs of staff in-depth. We also provide various types of consultation, counseling, and training to help staff to improve performance and achieve career growth, and open up career development channels for staff, providing them with equal growth opportunities. We have strengthened the construction of an echelon of talents to pool together outstanding personnel. We will persistently care for the staff and practise democratic management, protect the health and safety of staff and foster good labour relation as well as positive corporate culture.

4.1. Employment

■ High-caliber, dynamic and talented team

As of 31 December 2019, we had a total of 23,475 employees, of which, 56% were male and 44% were female. The composition of our staff is characterized by relative balanced gender, younger age and high level of education.

Age structure of employees	Percentage	
	2019	2018
below 30	57%	59%
30 to below 40	31%	31%
40 to below 50	9%	5%
50 to below 60	3%	4-5%
above 60	<1%	<1%

Academic qualification of employees	Percentage	
	2019	2018
Doctor	1%	1%
Master	10%	9%
Bachelor	47%	47%
Others	42%	43%

■ Protection of the rights and interests of staff

During the Reporting Period, the Group strictly complied with the Labour Law, the Labour Contract Law, the Social Insurance Law, the Trade Union Law and other relevant laws and regulations of the China.

Both the Company and its subsidiaries have signed labour contracts with all of their staff, which have stipulations on prior notice period regarding consultation and negotiation and other relevant clauses. Prior notice will be given to staff when material operational changes that may have a significant impact on staff are to be implemented.

The Group has always laid emphasis on protecting the legitimate rights and interests of its staff with assured labour rights and interests from remuneration package, recruitment and promotion, development and training, health and safety, working environment and corporate culture as well as anti-discrimination, with an aim to fostering harmonious labour relation. It has been a consistent policy of the Group to fight against discrimination and advocate fair competition. Men and female employees enjoy equal pay for the same work. Female employees will have their jobs retained when they are in their pregnancy and lactation period. According to the law of the country, maternity leave is provided to female employees as well as male employees whose spouse has given birth. In addition, the Group does not tolerate child labour and forced labour, the principles and requirements of which were stipulated in the labour policies.

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The remuneration systems are established through a scientific and reasonable design, by taking reference to the local market and industry standard of the subsidiaries, the value of the post in concern and the performance of the staff. We strive to align personal income with enterprise benefits effectively, give full play to the role of salary protection and incentives, and promote the healthy and stable development of enterprise. The remuneration level of staff has an obvious competitive edge in the industry and the place where the enterprise is located.

■ Absorption of talents

The Group offers ample room for career development of its staff through human resource management measures such as improving the talents absorption mechanism, establishing platform for career development, and regulating incentive and promotion mechanism.

In respect of external recruitment, our subsidiaries continue to bring in domestic and foreign talents through various channels such as large recruiting websites, job fairs, campus seminars and head-hunting agencies. During the Reporting Period, the Group strengthened school-enterprise cooperation while integrated recruitment channels, strengthened employer brand building, promoted online management of the entire recruitment process, and encouraged internal recommendation by our staff, with remarkable results.

Case Study: Nanjing CT Tianqing launches school-enterprise cooperation to promote the cultivation of talents in the pharmaceutical industry and the transformation of scientific research results

In December 2019, Nanjing CT Tianqing entered into a Strategic Cooperation Agreement with College of Biological Technology and Engineering of Nanjing Tech University to jointly establish an “Employment and Entrepreneurship Practice Base”, adding a new chapter to the school-enterprise cooperation. To date, in addition to College of Biological Technology and Engineering of Nanjing Tech University, Nanjing CT Tianqing has reached strategic cooperation with many other well-known universities such as China Pharmaceutical University, Nanjing Medical University, etc. to gradually promote the cultivation of talents in the pharmaceutical industry and the transformation of scientific research results, and jointly build a new technological innovation system integrating production, education and research.

In determining the path of talents promotion, the Group strives to create a fair and open competition mechanism, build development platforms such as administrative sequences, technical sequences, and sales sequences, and set up corresponding hierarchies in each sequence to clarify the criteria of talent promotion and ensure each type of talents can get enough room for development in the enterprise.

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4.2. Development and training

As an innovation driven pharmaceutical enterprise, the Group attaches great importance on nurturing high quality staff. We continue to improve and optimize the training system, enrich training programs and content, so as to enhance the professional skills and overall quality of employees at all levels.

■ Comprehensive training system

Training courses are mainly developed in respect of the following four aspects: (1) leadership training – taking leadership training as the core, training programs are designed with specific target, and focusing on middle management staff; (2) occupational training – combined with the development of the “internal trainer” team, we actively develop professional capability training and general skills training; (3) new employees training – we help new employees to integrate into the working environment rapidly; (4) online enterprise school – it provides comprehensive online training resources and creates a good learning atmosphere.

During the Reporting Period, the Group actively promoted an online learning platform and developed a number of online courses series (including non-sales new employee induction training series, financial series, human resource management series, drug research and development series, etc.) after gathering the training needs of business departments, helped talents to improve their skills. At the same time, we gradually built a training informatization platform with a view to realizing the informatization management of the training business based on big data- using the combination of online and offline training effectively, the establishment of knowledge base and the implementation of online management of training programs.

■ Extensive training courses

A series of training courses targeting at the demand of the enterprise, employees and market development have created positive impact on enhancing the capabilities of implementation and management, as well as professional quality and skills.

Case Study 1: “Tiancai” Growth Training Camp of CT Tianqing Financial Sharing Center

The training camp streamlined the future development plan of the CT Tianqing Financial Sharing Center with focus on project design, shared vision, problem analysis and solving, communication and impact of projects. At the same time, reference was made to the structure and functions of the financial sharing center of the target multinational enterprise in order to establish new functional positioning and service mode of its own. The new positioning and establishment of functions and the launch of the financial information system will help the strategic transformation of the financial sharing center.



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Case Study 2: The “Three Grades Project”, CT Tianqing’s medical product knowledge scheme based on clinical pathways and guidelines

The “Three Grades Project” is a scheme based on clinical pathways and guidelines for interpreting the standardized diagnosis and treatment process of diseases, recognizing the status of enterprise’s products in clinical pathways and guidelines, strengthening the clinical application value of the products through evidence, and enhancing the clinical pathways of products at all levels of the health system.

In 2019, the “Three Grades Project” completed 3 pilot trainings and 3 backbone trainings with about 500 participants, which enriched the knowledge of office managers on clinical pathways and guidelines, and improved their medical slide presentation skills, thus helping the key personnel to more efficiently improve the team’s medical and product knowledge.



4.3. Health and safety

The Group is proud to provide employees with a safe working environment. We have always paid attention to the health and safety of employees, focusing on working protection and management of production safety, and consistently complied with relevant laws and regulations of China such as the Production Safety Law. We have used leading production equipment in the industry to regulate strictly the operation process under the pharmaceutical production quality control standards, and strengthened the training of production operation, training of production safety and safety inspection to provide a safe operating environment for employees. At the same time, we are concerned about the occupational health of employees and enhanced labour protection awareness of staff.

■ Showing concern for employees' occupational health

The Company requires its subsidiaries to improve construction of the occupational health management system from assessment of dangerous and harmful factors, protection of occupational health, health checkup, file management and so on. In each year, local qualified hospitals are selected to provide general health checkup for all employees and specific health checkup for female staff. In view of possibility of staff of the production department having exposure to occupational hazards in the course of work, the enterprise provided physical examination of occupational hazards for such employees. The above measures help employees understand their own health situation in time and avoid health risks as soon as possible.

Case Study: Occupational health management measures of LYG Runzhong

Improving the ability to investigate and handle hidden dangers: During the Reporting Period, all employees of LYG Runzhong studied the “Guidelines for Investigation and Handling of Risks and Hidden Dangers” and “244 Common Hidden Dangers in Chemical Enterprises” to improve their ability to investigate and handle hidden dangers and carried out in-depth investigation of hidden dangers. During the year, more than 20 overall inspections, special inspections and seasonal inspections were carried out to rectify various safety hazards in a timely manner.

Strengthening occupational health management: During the year, health management work was carried out on aspects such as “Three Simultaneous”, on-site governance, occupational health training and education, employee occupational health monitoring, occupational disease medical examination, and occupational hazard notification and labor protection.

The enterprises equip their staff with standard protective gear, and through technical improvements, have succeeded in reducing and controlling such workplace hazards as dust, chemicals and noise. Through such improvements in operating conditions, the health of employees can be assured. The enterprises carry out occupational hazard knowledge training regularly, urge employees to standardize the wearing of labor protection instruments, and raise employees' awareness of labor protection.

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■ Adhering to safe production

The Group strives to establish long-term safe production mechanism with the final goal of having zero incidents, constantly optimise safety management system, and enhance enterprise execution capacity and safety quality of employees.

All major subsidiaries of the Group have a sound safety production management system, so that all safety production activities have rules to follow; and continue to revise and improve the safety management regulations and management system file structure at all levels, focusing on sorting out risk operation systems such as hazardous operations and special equipment safety management, hazardous chemicals safety management, etc.. At the same time, EHS management at the production site is continuously strengthened, process monitoring is enhanced, and more efforts are put on safety inspections to rectify hidden dangers.

Case Study 1: Safety Production Month of CT Tianqing

In June 2019, CT Tianqing organized the “Safe Production Month” activity, making use of the campaign to promote the theme of “preventing risks, removing hidden dangers, and eliminating accidents”, and vigorously pushed ahead the building of a safety culture and created a good atmosphere for safe production and safe development. The “Safe Production Month” activities included safety activity promotion, safety warning education, safety training exams, safety knowledge contests, safety hazard investigation and disposal plan exercises.



Case Study 2: CT Tianqing holds an integrated emergency response drill

In November 2019, CT Tianqing held the annual integrated emergency response drill for its employees. The drill was based on the hypothetical background of a sudden fire breakout in the Lianyungang Research Institute. Leaders of the Lianyungang City Fire Brigade, Haizhou District Emergency Management Bureau, Haizhou Eco-Environmental Bureau, Haizhou Development Zone Management Committee and other departments participated in the organization and preparation of the emergency response drill together. Through the integrated emergency response drill, the ability of first-line employees to use fire-fighting equipment and extinguish the initial fire was improved, and the ability of emergency management personnel and emergency support teams to deal with emergencies in organization, command, and emergency response was examined. More than 300 people participated in the drill.



During the Reporting Period, there were no work-related fatalities of the Group.

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4.4. Democratic management and caring for employees

Workers representatives congresses are set up in all major subsidiaries of the Company to provide protection of collective negotiation rights for employees. The workers representatives congress is an important manifestation of enterprise democratic management, so that employees can participate in the management process, having the right to know, participate in, consult and decide upon the company's management affairs; this will not only strengthen the sense of ownership of our staff, and enhance their sense of responsibility and corporate spirit, but also capture the wisdom of employees to promote healthy growth of the company.

Case Study 1: Labor competition organized by CT Tianqing's Labor Union

During April and May 2019, the labor union of CT Tianqing organized a labor competition with the goal of "safe production, energy saving and consumption reduction, quality first and job innovation". Employees responded actively and put forward various reform suggestions to the company. The labor union received nearly 60 proposals with sound reasons, contributing to the realization of the company's work objectives and tasks for the year 2019.

In addition to providing employees with competitive salary, state-based paid leave and transportation subsidies, meal subsidies, special post allowance, high-temperature subsidies and festive gifts, the Group has also established a number of personalized benefit programs which can benefit the staff themselves or their families such as medical aid mechanism for critical illness. At the same time, we actively improve the working and living conditions of employees. For example, some subsidiaries have set up kindergartens to solve the problem of taking care of employees' children and set up a staff library with dedicated management to enrich the cultural life of employees.

Case Study 2: Caring for employees

During the year 2019, CT Tianqing offered condolences to 145 employees (households) suffering from sickness or families with deceased employees, and offered maternity hospitalization subsidies to 71 female employees. The Company distributed holiday items to all employees before two traditional festivals, the Spring Festival and the Mid-Autumn Festival. During the hot summer, the company distributed summer drinks to employees and went to the first-line high-temperature positions to distribute drinks, tea, towels and soap and other heatstroke items to them.



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Case Study 3: Beijing Tide won the “2019 China Top Human Resources Management Award”

The “2019 China Top Human Resources Management Award” ceremony hosted by Qianchengwuyou was held in Beijing in April. Among more than 3,000 participating companies, Beijing Tide, with its innovative development model and excellent talent management mechanism, continuously promotes the exploration and practice of human resource management from strategy to actual combat, and stands out from many outstanding enterprises and won the award. The award is one of the most authoritative and largest human resource selection activities in the PRC. The award-winning enterprise was selected after a detailed survey, questionnaire and data comparison and analysis of the human resources management of the participating companies.

During the Reporting Period, the Group did not have any significant incident of non-compliance with the requirements under relevant laws and regulations in relation to equal opportunities, discrimination, harassment, occupational health and safety, child labour and forced labour. The Group strictly complies with laws such as Production Safety Law, Occupational Safety and Health Ordinance and Fire Protection Law of the PRC.

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V. OPERATING PRACTICES

5.1. Supply chain management

■ Strengthening supply chain management

To guarantee the purchase and use of raw materials and services with stable and reliable quality and timely delivery, the Group tracks and coordinates the whole process of suppliers. All of the Group's principal subsidiaries have established strict management systems on suppliers to standardize the selection principles, audit and appraisal methods and approval procedures on suppliers (including suppliers of materials, distributors, and providers of transportation services), and established a supplier information database, systematic management including supplier classification, supplier strength survey, supplier credit records and other information.

The Group continued to strengthen the management on the purchase of materials. Based on the requirements of the new version of the Good Manufacturing Practice ("GMP") and the past performance of suppliers, it conducted classified and hierarchical management on suppliers. Major materials used for production were purchased from large and professional manufacturers. Our quality departments have led the establishment of a quality audit group to conduct audit and appraisal on new suppliers. They also conduct strict inspections and grading evaluations on the quality system and the production management system as well as the quality and timeliness of products delivery of existing suppliers on a yearly basis to determine whether such suppliers continue to be qualified.

The Group undertook control on its processes of receiving goods inspection, data entry, inventory placement, and "to be inspected" labelling. Goods that have passed the inspection shall be cleared in time, and only after passing the inspection can they be used normally.

5.2. Product responsibility

As a large pharmaceutical group integrating R&D, production and sale of pharmaceuticals, our business system covers the entire process from production of raw materials to sale of products. From the raw materials entering our plants to the processing of materials and the completion of product manufacturing, we conduct strict inspection on each segment and process with corresponding quality standards on internal control higher than national standards and all processes have to pass such inspection. In order to be responsible for our products and improve the availability of health products, we consistently improve product workmanship and management process while ensuring quality, so as to further reduce manufacturing cost and alleviate the burdens of patients.

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■ Continue to increase efforts on R&D and product innovation

The Group has always been focusing on R&D and innovation and considered them as the lifeblood for the development of the enterprise. It has increased the investment in R&D and concentrated on the rapid industrialization of R&D results for new products.

➤ Widening the R&D scope

The Group's several subsidiaries, namely Nanjing CT Tianqing, Jiangsu Chia Tai Qingjiang Pharmaceutical Co., Ltd. and Jiangsu Chia Tai Fenghai Pharmaceutical Co., Ltd., have been designated "Engineering Technological Research Centre for Treating Tumors and Cardio-Cerebral Phytochemistry Injections of Jiangsu Province", "Orthopedic Medicines Engineering Technological Research Centre" and "Engineering Technological Research Centre for Parenteral Nutritious Medicines" by The Science and Technology Committee of Jiangsu Province, respectively. Besides, named by the Ministry of Personnel of the PRC as a "Postdoctoral Research and Development Institute", the research center of CT Tianqing is also the only "New Hepatitis Medicine Research Center" in the country.

During the Reporting Period, the Group's R&D expenditure of RMB2.399 billion was charged to the statement of profit or loss, and the capitalized amount of R&D was approximately RMB253 million, in aggregate accounted for approximately 10.9% of the Group's revenue.

In 2019, R&D achievements of Sino Biopharmaceutical were outstanding:

- At the "China ChemPharm Annual Summit 2019", Sino Biopharm's subsidiaries, namely CT Tianqing, Beijing Tide, Nanjing CT Tianqing, Jiangsu CT Fenghai Pharmaceutical Co., Ltd., and CP Pharmaceutical (Qingdao) Co., Ltd., were included in the Top 100 List of "Outstanding Enterprises and Outstanding Product Brands in China's Chemical Pharmaceutical Industry 2019". CT Tianqing again led the "Ranking of Top 100 R&D Capabilities of Chinese Chemicals Enterprises in 2019" and ranked 2nd in the "2019 Top 100 Enterprises in the PRC Pharmaceutical Industry – Comprehensive R&D Strength".
- CT Tianqing ranked 16th and Beijing Tide ranked 41st in the list of the "2018 Top 100 Pharmaceutical Companies in China" released at the "2019 (36th session) National Pharmaceutical Industry Annual Information Conference".
- 8 new drug studies conducted by CT Tianqing were recognised as "National Major Innovative Drug Projects". The number of drug studies approved was among the highest in the country.
- The quality control ("QC") study "Shortening the Lyophilization Cycle of Product 'F'" presented by CT Tianqing won the International Quality Gold Award at the 44th International Convention on Quality Control Circles (ICQCC) held in Tokyo, Japan.
- A total of 28 products including Lenalidomide capsules, Abiraterone Acetate tablet and several indications of Anlotinib capsules that the Group researched and developed, obtained the approval for drug registration granted by the National Medical Products Administration. Over 40% of these products are oncology drugs and the competitive edge of our oncology product line has been substantially enhanced. Some 19 products have passed (or are deemed to have passed) the the "Consistency of Quality and Efficacy Evaluation for Generic Drugs" ("Consistency Evaluation"). 23 products obtained clinical approval. The Group has made 25 new production applications and filed 19 new clinical trial applications; some 26 new applications for the Consistency Evaluation have been accepted. The Group has obtained 83 invention patent approvals and filed 341 applications for invention patents.

Case Study: Obtained the “admission ticket” for the mainstream international market

In 2019, Tenofovir Disoproxil Fumarate Tablets, Fosaprepitant Dimeglumine for Injection, Fulvestrant Injection and other products were successively approved in the European Union (“EU”) and obtained Marketing Authorisation (MA). Ticagrelor Tablets tentatively obtained approval of abbreviated new drug application (“ANDA”) from the United States Food and Drug Administration (“FDA”). The medical device quality system of the anti-tumor pre-encapsulation preparation workshop passed the US FDA certification. The above-mentioned international recognition is an important milestone of the Group’s internationalization strategy and laid the foundation for its subsequent entry into the mainstream international market.

➤ Valuing the protection of patents

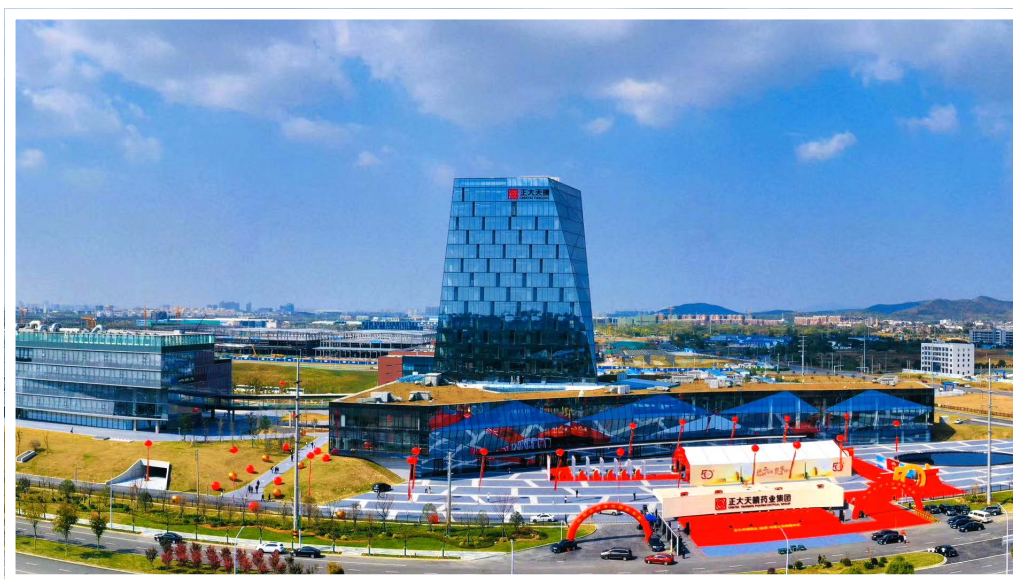
The Group also places emphasis on the protection of intellectual property rights. It encourages its enterprises to apply for patent applications as a means to enhance the Group’s core competitiveness. During the Reporting Period, the Group has received 101 authorized patent notices (83 invention patents, 3 utility model patents and 15 apparel design patents) and filed 375 new patent applications (341 invention patents, 8 utility model patents and 26 apparel design patents). Cumulatively, the Group has obtained 766 invention patent approvals, 23 utility model patents and 90 apparel design patents.

■ Improving intelligent production

The production plants of the Group’s principal subsidiaries are designed and constructed based on the international standards of the FDA of the United States and the EU GMP. The Group adopts world-class equipment for drugs production which makes up efficient and environment-friendly intelligent production lines to provide essential hardware safeguard for stable product quality and safety.

➤ Innovative drug and biopharmaceutical R&D and production bases were successively completed

Innovative drug R&D and production base of CT Tianqing with a total investment of RMB3 billion and an area of 520 acres was completed and put into operation during the Reporting Period, and the comprehensive strength of research and development of new drug of Sino Biopharmaceutical was greatly improved. The base is a key project invested and built by the Group to vigorously develop innovative medicines. It can be called a “medical industrial park with first-class hardware facilities, first-class research and development capabilities, and first-class cultural environment”.



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Case Study: Innovative drug R&D and production base received its first PRC GMP certificate

In October 2019, the solid preparation capsule line of workshop 1 of the innovative drug R&D and production base passed the GMP certification of the PRC. Workshop 1 contained 2 major product types of oral solid preparations and lyophilized powder injections, and 4 production areas. Workshop 1 adopts the production method of closed-type feeding. The sampling and sub-packaging of raw materials use isolation cover equipment, by which the risk of pollution and cross-contamination is effectively reduced. The materials are carried by the hopper between the processes, and the materials are transferred through the docking of closed valves. There is a separate flow of person and materials between each function, which effectively avoids the cross-risk of entry and exit of personnel and material.

In addition, the biopharmaceutical R&D and production base of CT Tianqing has been put into operation during the same period, and some workshops have started trial production. Costed a total investment of nearly RMB2.2 billion to build, the base occupies an area of 512 acres and includes production workshops for bioengineering, biodiagnostic reagents, peptide synthesis, fifth-generation cephalosporins and penem-type advanced antibiotics and medical devices. It uses the world's first-class equipment for production and R&D with high level of automation control. The project is a "Key Project in Jiangsu Province" and is a key project invested and constructed by the Group to vigorously develop anti-tumor drugs, antibiotics and other key areas, as well as the research and production of biological drugs.



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■ Improving product quality management

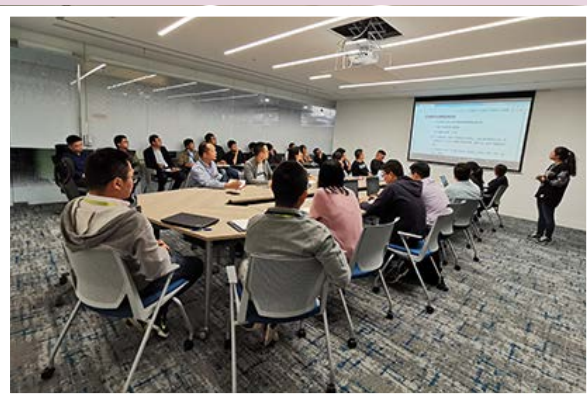
The product quality management system of the Group covers all processes from products R&D to technological transformation and from materials supply to production, manufacturing and products circulation. With the deepening of internationalization strategies, the Group's principal subsidiaries continue to perform international certification for various products. Continuous improvements were made on plant facilities, quality control and workmanship according to the international standards of GMP of the EU and FDA of the United States.

We adhere to the bottom line of quality and produce high quality drugs that patients can trust. During the Reporting Period, the Group continued to promote the improvement of quality control level and the construction of quality system, promoted the closeness of quality standards to internationalization, and strived to improve the technical level of all quality control personnel. We carried out preparations for the launch of new products in time to ensure the smooth progress of production and inspection, providing a strong support for the rapid launch of new products. In respect of products under Consistency Evaluation, we actively organized work such as methodology validation, process validation, dissolution curve comparison research and stability inspection research.

Case Study 1: Nanjing CT Tianqing's "Quality Month" activity

In order to improve the overall quality management level of the enterprise and the awareness of the quality responsibility of all employees, and promote the achievement of various quality indicators, Nanjing CT Tianqing's 2019 "Quality Month" activity under the theme of "Tianqing Quality, Co-creation and Sharing" was successfully held in two factories in Hengguang Road and Huiou Road in October.

The project took a series of activities as a starting point to achieve the purpose of using quality awareness to guide daily work. Among them, after studying the "Quality Management Group Activity Guidelines", each workshop and department further sorted out the problems that need to be solved urgently or with room for optimization in the job positions or the business process, identified the issues, and initially formulated solutions. At present, it has successfully covered 14 workshops and departments, and completed nearly 30 projects for project establishment and preliminary implementation. At the same time, in order to establish a quality brand within the enterprise and motivate all employees to move closer to a more reasonable and efficient quality management system. The production quality system has selected a total of 14 high-quality star teams and processes, and finally 5 "Quality Star Teams" were selected through representative reports, responsible person comments, and collective ratings, which set off a good atmosphere where everyone values quality and pursues quality.



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Case Study 2: CT Tianqing continued to carry out QC group activities

CT Tianqing has always regarded QC group activities as an important means to carry out overall quality management and effectively implement quality improvement. Major causes of quality problems can be found through scientific activity programs, and through analyzing major causes, proposing improvement plans, implementing countermeasures and reviewing results, key problems in the production and R&D process are finally solved, for the purpose of cost reduction and efficiency and technical improvement.

The “Shortening the Lyophilization Cycle of Product ‘F’ ” project won the International Quality Gold Award at the International Convention on Quality Control Circles (ICQCC), another 5 projects won the first prize at the national level, 9 projects won the national excellent award, and 14 projects won the provincial excellent award.



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■ Improving the availability of drugs

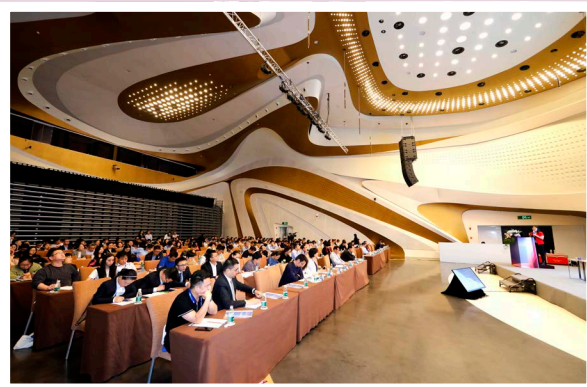
The Group strictly abides by relevant laws and regulations of the state and emphasizes customer services during the promotion of products and services. We have established an efficient business network and improved the efficiency of decision-making and professional promotion to improve the availability of products and help patients in more regions to have access to our products and services in more effective ways.

Case Study 1: Building an efficient business network

The Group has a complete professional and academic promotion system and a professional service system and sales network. It has more than 500 corporate liaison offices or offices in large and medium-sized cities across the country, and over 13,000 representatives of academic promotion personnel and business promotion personnel who represent the Group to conduct drug information transmission, communication and feedback work in the market and professionally formulate product promotion plans and programs, communicate medical product related information to medical personnel, assist medical personnel in rational use of drugs, and collect and send feedback on the clinical use of the Company's products.

Case Study 2: Established a smooth communication channel

The Group promoted medical staff, patients and other customers' understanding of us and our products through new product launch meetings, academic seminars and exchange meetings. We have opened communication channels such as customer service hotline, quality consulting hotline, and online consulting platform to answer questions from customers and consumers through online and offline services.



The Group strictly complied with laws and regulations which materially affect its product safety, advertising, labeling, etc., including such as Drug Administration Law and the Regulations for the Implementation of the Drug Administration Law, Product Quality Law, the Law on the Protection of Consumer Rights and Interests, and Good Manufacturing Practice for Medical Products, and it did not commit any significant non-compliance on product safety during the Reporting Period.

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5.3. Anti-corruption

The Group operates with the highest business ethical standards, highly values the building of integrity and is committed to preventing corruption. Based on the business nature and actual situation of the enterprise, we have established an appropriate regulatory and internal control system to curb corruption and fraudulent behaviours in any forms. Meanwhile, we actively infuse the staff with the integrity and law-abiding concept and require our staff to keep high ethical standards and strictly abide by current laws, regulations and relevant practice requirements.

Integrity, law-abiding and anti-corruption clauses with binding effects have been set out in the employment contracts of our staff. The staff manual also sets out the Group's aspiration and guidance on preventing corruption and fraudulent practices by the staff. We encourage the staff to directly report any behaviors breaching professional ethics to the senior management or the Department of Human Resources. We will keep the information of the informers strictly confidential and ensure that the informers will not be discriminated or retaliated.

The Group's principal subsidiaries have established stringent systems on the purchase of materials, which regulated the principles for selecting and evaluating suppliers and the approval procedures on purchasing. We make use of the bidding and tendering processes to ensure fairness and openness of purchasing. For the sale of products, the enterprises have prepared detailed code of conduct on the promotion of drugs by the sales staff, which provided clear guidance on the communication and promotion activities of the staff with professionals on pharmaceuticals and health, academic specialists and other external parties to completely eradicate any inappropriate or illegal activities.

In addition, the Group has set up an internal audit department. While conducting regular and special audits, If any suspected fraudulent cases are detected, further investigation will be carried out and reported to the heads of the units.

During the Reporting Period, we were not aware of any significant non-compliance with the relevant laws and regulations in relation to bribery, extortion, fraud and money laundering.

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VI. CONTRIBUTION TO SOCIETY

As a responsible corporate citizen fulfilling the enterprise objectives of “benefit the country, benefit the general public and benefit the enterprise”, in addition to relying on the provision of quality products and services to the society and solving the life and health issues of countrymen, the Group is committed to continuously improving the social welfare platform and actively participating in social welfare activities to make contribution to the society.

■ Establishing community service platforms and performing responsibilities of a corporate citizen

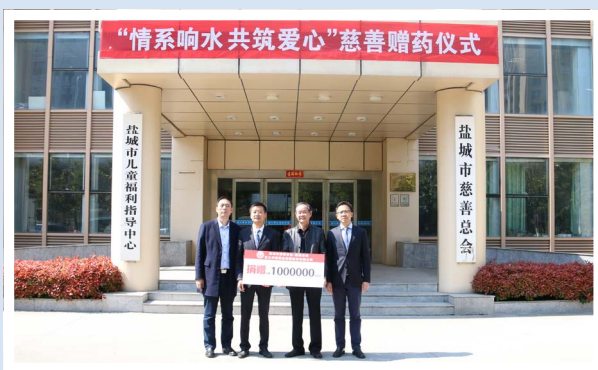
The Group’s principal subsidiaries have made contributions to the community in recent years through donations to students, earthquake relief, local poverty relief and other charitable activities. Meanwhile, they have actively established and improved platforms for community work, continued to care about the people’s livelihood and the vulnerable groups, and carried out poverty alleviation, medical assistance and education assistance activities.

Case Study 1: CT Tianqing Education Subsidies



In order to support the cultivation of talents, CT Tianqing established “CT Tianqing Education Subsidies” in Nanjing University, Shandong University, China Pharmaceutical University, Lanzhou University, Shenyang Pharmaceutical University, Nanjing Medical University and Nanjing Tech University, etc. In 2019, a total of RMB 1.2 million was provided to 328 students from such universities.

Case Study 2: Charity Medicine Donation Campaign “Love Xiangshui, Build Love Together”



After the explosion in Xiangshui County, Yancheng City, Jiangsu Province, CT Tianqing promptly established contact with the health department, medical institutions, and charities to communicate about the donation of medicines. Finally, the donation was completed through the Yancheng Charity Federation. After detailed understanding of the distribution of the injured and their medication needs, CT Tianqing urgently allocated antibiotics linezolid glucose injection (Tianli), tigecycline for injection (Tianjie) and other urgently needed drugs (worth about RMB 1 million in total) and delivered them to the hospital in a timely manner to care for life.

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Case Study 3: “Caring for Life and Caring for Health” First Aid Training Activity

In response to the national strategic layout of “Healthy China”, and to protect the health of Chinese people, Beijing Tide carried out the first-aid training activity on the theme of “Caring for Life and Caring for Health” in 2019.

This series of training aimed to improve the knowledge and skills of first aid for pharmacists and medical store managers through scientific and intuitive teaching methods. Through systematic learning, students can help others who are in a critical situation. The training activities were carried out in more than 30 cities across the country, including Beijing, Shanghai, Shenzhen, Changsha, etc., benefiting more than 100,000 persons. During the same period, three live broadcast events were launched, and the total number of live broadcast viewers exceeded 10,000.



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■ Focusing on hepatitis and improving the prevention and treatment of hepatitis in China

CT Tianqing, a subsidiary of the Company, has been a leader in drugs for hepatitis in China and accumulated rich product lines and technical resources in the field of liver disease treatment. Apart from providing patients with safe and effective products, it also takes active steps for improving the prevention and treatment of hepatitis in China. It has launched the “CTTQ Liver Disease Research Fund” and the “Hepatitis B elimination clinical research platform in China” since 2011 to create more social benefits in the diagnosis and treatment of hepatitis.

Case Study 1: Tianqing Liver Disease Research Fund



Since its establishment in 2011, the Tianqing Liver Disease Research Fund has received extensive attention. As of the end of 2019, the research fund has received 2,112 project applications, funded 248 projects, assisted 84 projects, and received 153 completed projects, covering 29 provinces and cities in the China. The research fund has become a public welfare scientific research project with a large number of applications, large influence and wide coverage in the field of liver disease in China.

2019年天晴肝病研究基金科研课题开题报告会



Case Study 2: Hepatitis B Elimination Clinical Research Platform in China

The “Hepatitis B Follow-up and Clinical Research Platform” was initiated by the National Health and Family Planning Commission under auspices of the Chinese Foundation for Hepatitis Prevention and Control. The Hepatology Branch of the Chinese Medical Association is responsible for its operation, with CT Tianqing providing exclusive support. The platform plays an important role in the standardization of hepatitis B prevention and treatment, promotion of resource sharing and improving the quality of medical care, and has a positive significance in strengthening the public health service function of public hospitals and promoting the integration of medical and prevention.

As of the end of 2019, 53 hospitals were participating in the platform, with nearly a total of 200,000 patients registered, and total follow-ups numbering more than 460,000. The project hospitals published 3 SCI (Scientific Citation Index Paper) articles, and launched 6 international exchanges through participating the Asian Pacific Association for the Study of the Liver (亞太肝病學年會) and The Liver Meeting (美國肝病學年會).



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Case Study 3: Thousands of People with Doctors' Hearts, Willing to Sacrifice for Livers – A project for the prevention and treatment of liver diseases

The “Thousands of People with Doctors' Hearts, Willing to Sacrifice for Livers – A project for the prevention and treatment of liver disease” was established by the Chinese Society of Hepatology, CMA in 2018, with full support from CT Tianqing. The project is dedicated to promoting the standardization for diagnosis and treatment of liver cirrhosis and liver cancer in China, with a view to launch standardized and practical technical trainings for hepatitis doctors at county level hospitals as breakthroughs to raise the level of prevention and treatment of liver disease in China.

In 2019, the project launched a total of 60 activities involving more than 50 hospitals with the participation of nearly 9,000 county level hospital doctors and grassroots doctors, and the livestream covered more than 50,000 persons. Accordingly, it was recognised as the “Outstanding Chinese Pharmaceutical Enterprise Social Responsibility Projects 2019” at the “2019 (36th session) National Pharmaceutical Industry Information Annual Conference”.



■ Together we fight against the epidemic and survive through the hard times

At the beginning of 2020, after the outbreak of the novel coronavirus pneumonia epidemic in China, the Company promptly donated RMB10 million to the Chinese Academy of Medical Sciences affiliated to the National Health Commission to jointly accelerate the emergent prevention and treatment specialized research and help fight the battle against the novel coronavirus. Subsequently, during the epidemic, the Group rapidly activated the supportive actions for the battle against the epidemic – to safeguard the medicine supply and comprehensive safety prevention and control internally; and to offer frontline emergency support externally and launch a series of on-going actions of donation, donating funds, supplies (protective materials such as protective clothing, masks and medical gloves), medicines (including respiratory medicines, anti-infective medicines, analgesics and other necessary medicines against the epidemic) and negative pressure isolation ambulances, to make contribution to defeat the epidemic. As of 1 March 2020, the Company and its subsidiaries have cumulatively donated cash and materials of nearly RMB22 million.

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KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity.	3.3. Environmental impact	8
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity.	3.3. Environmental impact	8
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity.	3.3. Environmental impact	8
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KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	3.2. Use of resources	7
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	3.2. Use of resources	7
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KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	3.3. Environmental impact	8

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KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Not disclosed for this reporting period	N/A
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KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Not disclosed for this reporting period	N/A
KPI B6.2	Number of products and service-related complaints received and how they are dealt with.	Not disclosed for this reporting period	N/A
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	5.2. Product responsibility	21
KPI B6.4	Description of quality assurance process and recall procedure.	5.2. Product responsibility	21
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	5.2. Product responsibility	21
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KPI 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.	5.3. Anti-corruption	28
KPI B7.2	Description of preventive measures and whistleblowing procedures, how they are implemented and monitored.	5.3. Anti-corruption	28
Aspect B8 Community Investment			
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.	6. Contribution to society	29
KPI B8.1	Focus areas of contribution.	6. Contribution to society	29
KPI B8.2	Resources contributed to the focus area.	6. Contribution to society	29

KPI: Key Performance Index