YiChang HEC ChangJiang Pharmaceutical Co., Ltd.

宜昌東陽光長江藥業股份有限公司

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

Stock Code : 1558

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2018


Contents

ABOUT THIS REPORT

This is the fourth Environmental, Social and Governance (the "ESG") Report released to the public by YiChang HEC ChangJiang Pharmaceutical Co., Ltd. (the "Pharm HEC"). This report is an annual independent report for the period from 1 January 2018 to 31 December 2018 (the "Reporting Period") and aims at reflecting the development and practice in respect of environment, social and corporate governance in the year 2018 of Pharm HEC, reporting to stakeholders such as the shareholders, employees, the government, customers and consumers, partners and the community about the corporate operation, and its situation of carrying out the social responsibilities and environmental missions.

BASIS OF PREPARATION

This report has been prepared in compliance to the Environmental, Social and Governance Reporting Guide as set out in the Appendix 27 to the Listing Rules published by the Stock Exchange of Hong Kong Limited (the "Stock Exchange").

SCOPE OF REPORT

This report discloses the Company's environmental, social and governance risks and performance in accordance with the "Principles of Materiality" under the Environment, Social and Governance Reporting Guide. The disclosure scope of the report is consistent with that of the 2018 Annual Report of YiChang HEC ChangJiang Pharmaceutical Co., Ltd.

DATA SOURCE AND RELIABILITY STATEMENT

The financial data involved in this report is in line with the 2018 Annual Report of YiChang HEC ChangJiang Pharmaceutical Co., Ltd. Other information is all from official documents, statistics reports and related public information. All the information has been reviewed by the board of directors of the Company (the "Board") of the Company to ensure the accuracy and reliability of the information.

ACKNOWLEDGEMENT AND APPROVAL

The Board and the senior management team of the Company have approved this report and guarantee that there are no misrepresentations or misleading statements contained in, or material omissions from this report.

SALUTATION DESCRIPTION

For the ease of presentation and reading, YiChang HEC ChangJiang Pharmaceutical Co., Ltd. is referred to as "the Company", "our Company" or "Pharm HEC", and YiChang HEC ChangJiang Pharmaceutical Co., Ltd and its members under the scope of the combined statement are together referred to as "the Group", "our Group" or "we" in this report.

ACCESS TO THE REPORT

This report is published in both traditional Chinese and English, and the electronic version is available. The electronic version can be downloaded from the website of the Stock Exchange http://www.hkexnews.hk and the Company's website http://cj.hec.cn. In the case of any discrepancy in understanding the different versions, the traditional Chinese version shall prevail.

MESSAGE FROM SENIOR MANAGEMENT

Message from the Chairman

Promotion of the construction of ecological civilization and implementation of the concept of sustainable development has become the themes of the new era. For pharmaceutical enterprises, while pursuing operating results, it is more importantly to keep the social responsibilities that should be shouldered by enterprises in mind.

Tang Xinfa
Chairman of Pharm HEC

Dear investors,

The pharmaceutical industry is an important component of the national economy. With the improvement of people's living standards and the increasing emphasis on their own health, the size of China's pharmaceutical market has maintained rapid growth. The year of 2018 was full of challenges for pharmaceutical companies in China. At the beginning of the year, the National Healthcare Security Administration was officially established which marked the new stage of medical insurance reform. In the middle of the year, the vaccine event triggered close attention to drug safety. At the end of the year, the *Document on Centralized Procurement of Drugs in 4+7 Cities* was issued. Under this background, the regulators would continue to pay more attention to the quality of pharmaceutical products, the standard production system and the regulated operation of pharmaceutical enterprises, and would also promote the transformation of the industry to a standardized, normalized and efficient direction. Meanwhile, the regulators would further encourage pharmaceutical enterprises to increase investment in research and development ("R&D") and deepen the development of high value-added industries by expanding the scope of priority evaluation to accelerate the launching process for innovative clinical-needed drug and encouraging enterprises to promote drug innovation. In view of this, the consolidation of China's pharmaceutical industry is just around the corner. While pharmaceutical enterprises are facing more challenges, quality enterprises will also gain more historic opportunities for development.

In 2018, the Group progressed leaps and bounds in our business performance by recording a revenue of RMB2,510.48 million, representing a year-on-year increase of 56.75%, and profits and total comprehensive income attributable to equity shareholders of RMB942.54 million, representing a year-on-year increase of 45.66%. Reviewing the past year, apart from achieving breakthroughs in our performance, the Group was committed to safeguarding the interests of shareholders through the effective decision on and consideration of various proposals at Board meetings and general meetings and proactively holding results briefings; the Group created more valuable pharmaceutical products for the society through enriching product quantity and establishment of a perfect product quality management model to protect the rights and interests of customers and consumers; the upgrading of environmental protection equipment and improvement of environmental protection management reduced pollution of production to the surrounding environment and created a healthier working and living environment; through further optimization of energy production technologies, elimination of high-energy-consuming equipment, and adoption of reasonable energy-saving technologies, so that the Group achieved efficient use of resources.

In the future, we will further integrate the concept of "coordinated development of economy, environment and society" into all aspects of corporate development, insist on driving through scientific research and continue to improve product quality, to enhance the core competitiveness of the Group and make Pharm HEC become a top pharmaceutical enterprise with high-end R&D and production capacities, a sense of social responsibility and the concept of sustainable development in the pharmaceutical industry.

Chairman of Pharm HEC

Tang Xinfa

MESSAGE FROM SENIOR MANAGEMENT

Message from the General Manager

Energy conservation and environmental protection has been highly valued. Under new policies, we will further increase investment in energy-saving and emission reduction and strengthen technological transformation of enterprises, and adhere to the coordinated development of economic, social and ecological benefits. By implementing the abovementioned policies and ideas, we believe that the corporate social value will be further explored and the popularity will be further enhanced.

Jiang Juncai
General Manager of Pharm HEC

Dear investors,

On behalf of the Board, I would like to report on the Group's strategies and performance in environment, society and governance.

In terms of environmental construction, the Group is committed to the construction of ecological civilization and vigorous development of low-carbon industries, and strives to achieve low-energy, low-consumption and energy conservation and emission reduction through research and development of advanced technologies. In particular, in respect of treatment of the "three wastes", exhaust gas, waste water and solid waste are not discharged randomly, to minimize the discharge of waste water, waste gas and solid waste; at the same time, the Group properly handles production waste, domestic waste and construction waste, and does its best to achieve reasonable utilization of "waste" and recycling of resources; in addition, the Group will further transform scientific and technological achievements, popularize energy-efficient production equipment, and improve the efficiency of resource utilization to the greatest extent.

In terms of society, the Group proactively fulfills its responsibilities and makes contributions to society and implements the concept of social responsibility in all aspects of production and operating activities. In practice, the Group strengthens its legal awareness and practically abides by national laws and regulations to operate legally; it pays attention to product quality, enhances after-sales service, and fulfills contractual obligations to honor its own commitments and operate with integrity; besides, it improves the employment system to safeguard employees' legitimate rights and interests, proactively introduces outstanding talents, and has established a scientific incentive mechanism, to stimulate the work potential and consciousness of responsibility of the Company's employees; furthermore, the Group improves the healthier and orderly supply chain management system, to ensure that suppliers' quality and standards meet relevant requirements, striving to meet the highest standards in all aspects of product production and effectively protect the interests of the Group and customers.

In terms of governance, since its inception, the Group has been committed to the modern enterprise management system and constantly standardized and improved the modern corporate governance structure with clear responsibilities. It practically safeguards the interests of shareholders, investors, employees and customers through the proactive convening of and effective decision-making at the Board meetings. In order to improve the overall operational level and operational efficiency of the Company, the Group attaches great importance to risk control management and endeavours to raise the corporate governance capability to a new level by establishing an internal integrity system, internal control, risk control and special audit systems.

In the future, we will further integrate the concept of sustainable development into the Company's long-term strategy, and will continue to exert altruistic efforts to discharge corporate social responsibility to the greatest extent, further strengthen directors' responsibilities and the Board's leadership and decision-making, and constantly regulate the Company's operations and governance ability; we will pay more attention to risk management and strengthen the Company's internal and external integrity construction, to reduce production and operation risks. The Company will adhere to green and low-carbon development, safeguard the legitimate rights and interests of employees, and treat customers and suppliers with integrity, striving to achieve coordination in terms of economic, environmental and social benefits. The Company will use resources rationally to promote development and convert the limited resource advantages into product advantages to create more value for the society and customers.

General Manager of Pharm HEC

Jiang Juncai

MILESTONES IN 2018

1. COMPLETION OF REVIEW AND APPROVAL OF ESOMEPRAZOLE SODIUM FOR INJECTION BY THE NATIONAL MEDICAL PRODUCTS ADMINISTRATION FOR LAUNCHING INTO MARKET.

On 27 April 2018, the Esomeprazole Sodium for injection (40mg) (handling number: CYHS1200078E) and the Esomeprazole Sodium for injection (20mg) (handling number: CYHS1300825E) developed by the Group have been reviewed and approved by China Food and Drug Administration for launching into market. Currently, the market demand for the products is large while there are few manufacturers of the products in the PRC market. The approvals for the products will not only further enrich the product lines of the Group, but also provide patients with more options for pharmaceutical treatment and benefit the patients.

2. OSELTAMIVIR, BENZBROMARONE AND MOXIFLOXACIN WERE INCLUDED IN THE NATIONAL ESSENTIAL DRUG LIST.

According to the National Essential Drug List (2018 Version) (the "2018 National Essential Drug List") issued by the National Health Commission of the PRC on 25 October 2018, Oseltamivir (capsule and granule), Benzbromarone (tablet and granule) and Moxifloxacin (tablet and sodium chloride injection) were included in the 2018 National Essential Drug List, which will help increase the penetration of Oseltamivir products and Benzbromarone products in the market, enhance the growth potentials of sales of the Group's Kewei and Ertongshu products, and benefit the subsequent launch and promotion of the acquired assets of Moxifloxacin tablets in the market, which will benefit more patients.

3. THE COMPANY HAS BEEN INCLUDED IN THE HONG KONG STOCK CONNECT LIST UNDER THE SHENZHEN-HONG KONG STOCK CONNECT.

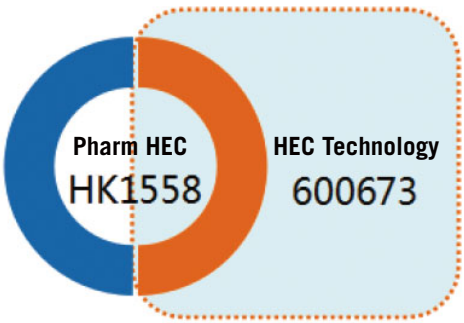
On 10 September 2018, the Company was included in the Hong Kong Stock Connect list under the Shenzhen-Hong Kong Stock Connect, which demonstrates the recognition of the business, liquidity of stock and future prospect of the Company by the investors in the capital markets, which is expected to further diversify the shareholder structure and increase the liquidity of the shares of the Company, so as to facilitate the realization of investment return in stock of the Company and enhance the Company's reputation in the capital market.

4. THE COMPANY BECAME A CONSTITUENT OF HANG SENG INDEX SERIES.

On 10 August 2018, the Company was selected as a constituent of the Hang Seng index series. The Hang Seng Composite Index offers a comprehensive Hong Kong market benchmark that covers about 95% of the total market capitalisation of the companies listed on the Main Board of The Stock Exchange of Hong Kong Limited. It reflects the high recognition of the capital market for the stability of the Company's pharmaceutical industry, liquidity of stocks and excellent growth, and also shows the full confidence in the potential of future development of the Company. It will help raise the Company's popularity and influence in the capital market and further attract investors' attention to the Company.

5. THE APPROVAL OF THE MATERIAL ASSET REORGANIZATION PROJECT

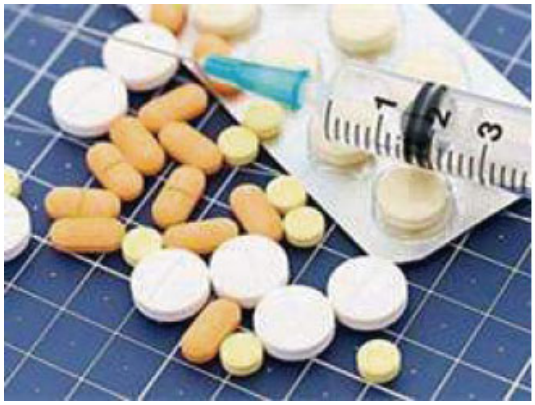
On 6 June 2018, the Listed Companies Merger and Reorganisation Review Committee of the China Securities Regulatory Commission (中國證券監督管理委員會上市公司併購重組審核委員會) convened the working meeting, at which the assets acquisition by issuance of shares by Guangdong HEC Technology Holding Co., Ltd. was unconditionally approved. HEC Pharm Co., Ltd. ("HEC Pharm"), as the transferor, and Guangdong HEC Technology Holding Co., Ltd., as the transferee, completed the equity transfer registration procedures on 24 July 2018. Since then, Guangdong HEC Technology Holding Co., Ltd. became the controlling shareholder of the Company.



Shares subscribed for 50.04%

6. PROPOSED ACQUISITION

On 10 July 2018, the Company entered into an acquisition agreement with Sunshine Lake Pharma Co., Ltd. ("Sunshine Lake Pharma"), pursuant to which the Company agreed to acquire, and Sunshine Lake Pharma agreed to dispose of the patents, the ownership of the domestic approvals for manufacturing and marketing and the right to sale of six pharmaceutical products in the PRC at a consideration of RMB505,200,000 (the "Proposed Acquisition").



HONORS

The Economy and Information Technology Committee of Hubei province promulgated the list of the invisible champion enterprises in various segments among the pillar industries in Hubei province, of which the Company was awarded the Invisible Champion Technology Giant (隱形冠軍科技小巨人).


证　书

湖北省支柱产业细分领域隐形冠军科技小巨人

（2018-2020）

企业名称：宜昌东阳光长江药业股份有限公司

主营产品：磷酸奥司他韦胶囊
磷酸奥司他韦颗粒

湖北省经济和信息化委员会

二〇一八年

东阳光集团宜都基地

Invisible champions refer to the enterprises that are less popular to the public in terms of their industry sectors or products but almost completely dominate their respective market segments, have a high market share and unique competitive strategies, and are often dedicated to a certain segment of the market.

ABOUT US

Corporate profile

The Group has a history of 18 years of operation since its establishment and is a pharmaceutical enterprise with strong R&D and innovation capabilities and great development potential in China. The Group has always believed in "serving the Chinese with a higher standard" since establishment, and attaches great importance to research and development, innovation and quality improvement of products.

The Group is among the top of China's domestic pharmaceutical industry in terms of R&D capability, production level and sales performance of pharmaceutical products for antiviral, endocrine and metabolic diseases, as well as cardiovascular diseases. At present, the Group's core product, Kewei (oseltamivir phosphate), is a first-line product in China's anti-influenza market with the highest sales volume in China from 2013 to 2018.

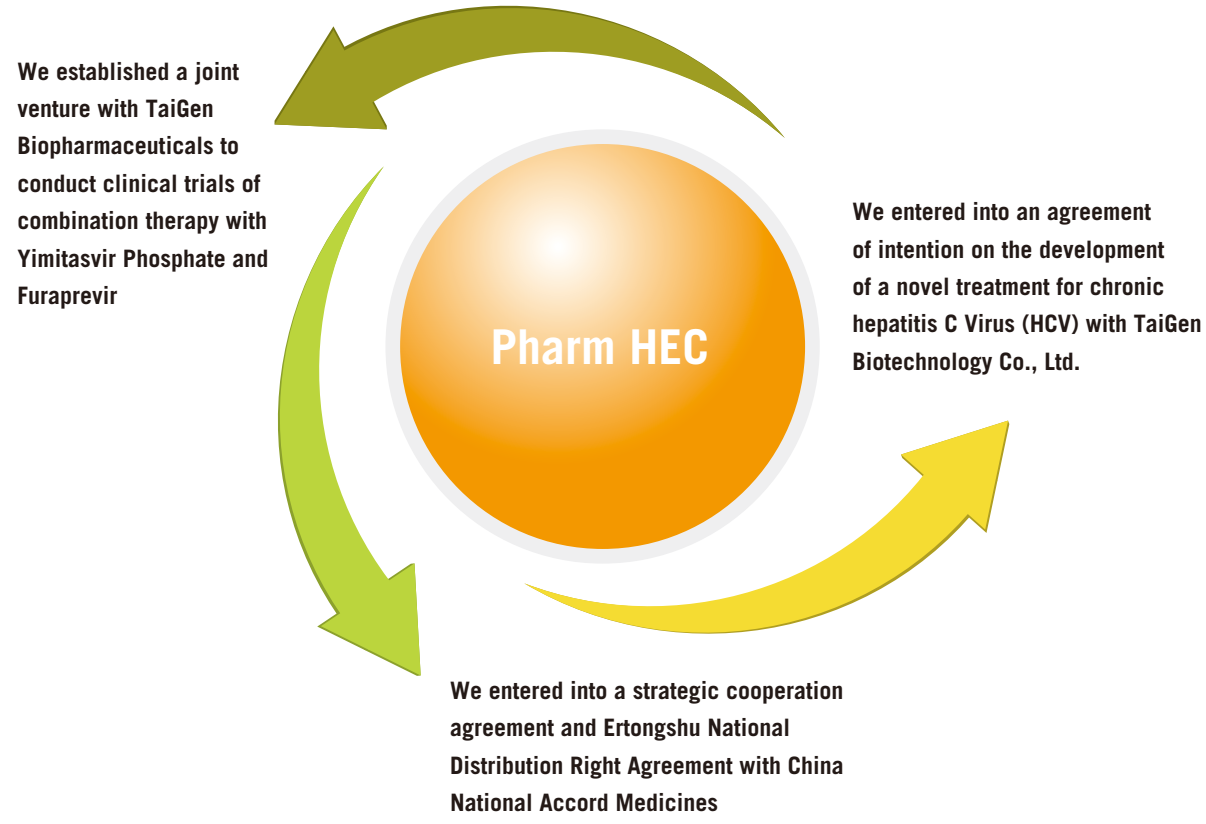
Cultural Vision

Pharm HEC strives to become a modern enterprise with a comprehensive R&D system, excellent product quality and perseverance. The Group has taken "For Everyone's Health" as its mission. The Group determines to improve the people's living standard and health with the support of scientific research. We fully understand our social responsibilities and regard caring for the earth and environment with heart and active participation in charitable services as our own duties.

The Group would not be able to develop without the support from the society. Only by giving back and contributing more to the society, so that the enterprise get a better development. In the future, the Group will further carry forward our spirit of innovation. The Group will reinforce our efforts in R&D in response to the demand arising from growing health consciousness of the public while securing safety and effectiveness of products at the same time. The Group will spend more resources in R&D in order to accelerate the launching of such products, hence to make a larger contribution to public health and create more value for the development of the pharmaceutical industry.

Meanwhile, the Group will continue to adhere to the principle of "contributing to the community, expressing gratitude to the community", spend more in charitable services and community investment, and support the development of charitable services so that we can contribute more and give back more to the community.

Partnership



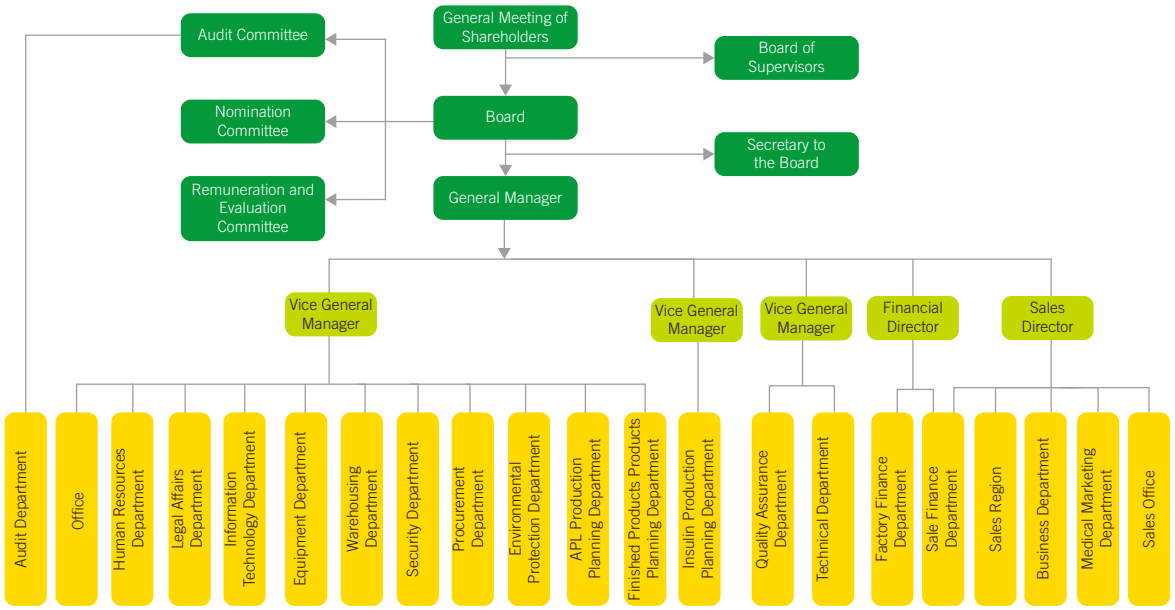
Organizational Structure

The Company is committed to improving our modern management system and ensuring high standards of corporate governance by strengthening our risk management system to maintain a sustainable, steady and highly efficient development.

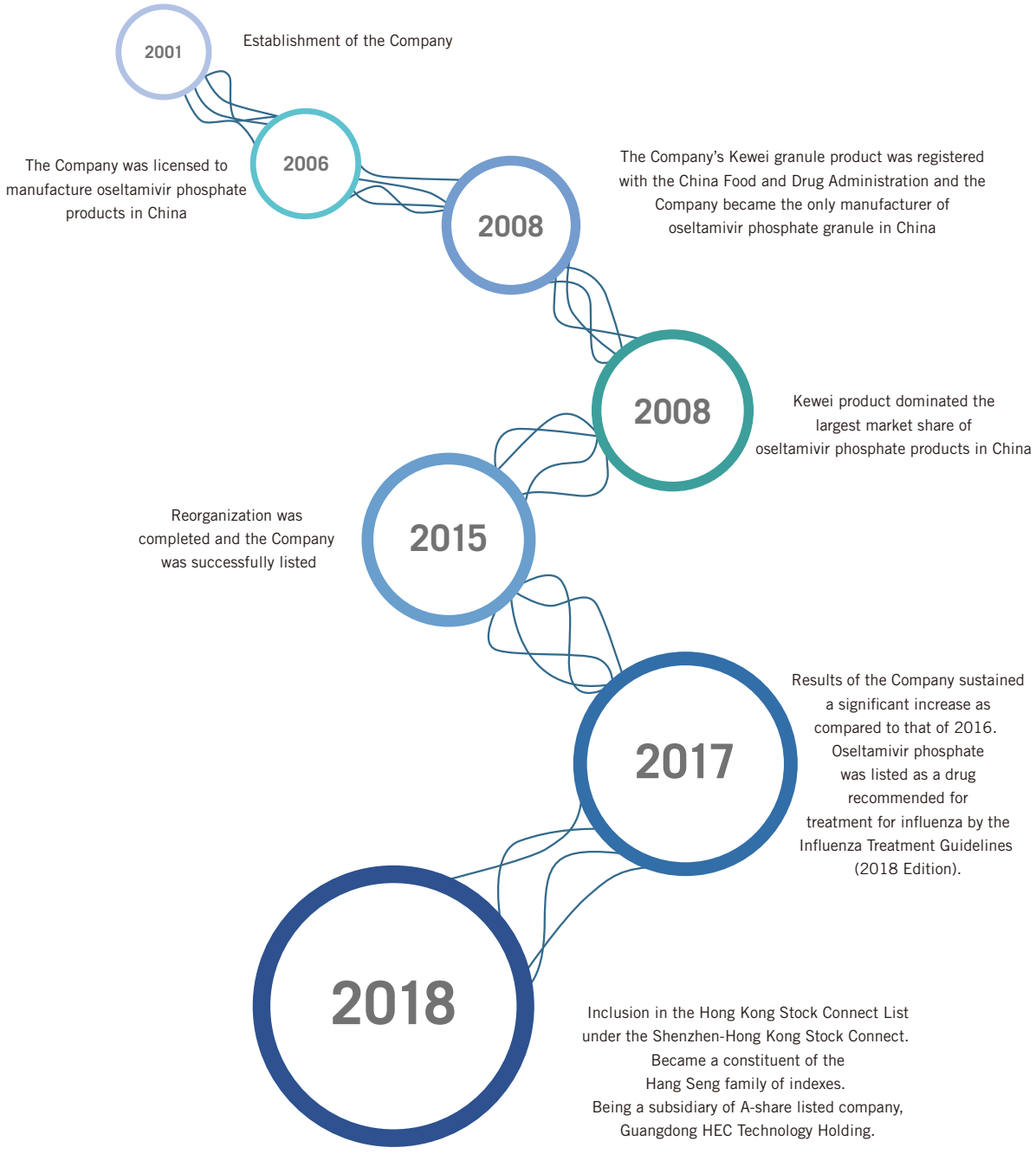
The Company has established a complete governance structure comprising general meeting of shareholders, board of directors (the "Board"), Board committees, managers and regulatory bodies. The Board currently has 9 directors, including 4 executive directors, 2 non-executive directors and 3 independent non-executive directors.

The Company strictly abides by the relevant laws and regulations including the Company Law of the People's Republic of China, the Listing Rules of the Main Board of the Stock Exchange, and the Articles of Association of the Company. The Board acts as a bond between the shareholders and management of the Company, and makes decisions on the material matters of the Company under the authorization granted at the general meeting of shareholders. The implementation of such decisions are carried out by the managers and all departments under the supervision of the board of supervisors and all risk control departments with a view to ensuring that all decisions are effectively implemented and the disclosure of material matters are in compliance with laws and regulations.

In 2018, the Company held 3 general meetings, 12 Board meetings, 3 meetings of the board of supervisors, 2 meetings of the Audit Committee, 3 meetings of the Nomination Committee, and 2 meetings of the Remuneration and Evaluation Committee.



History of Development



Business Network

To achieve a clear and precise product positioning, the marketing department of the Group has conducted market research and analysis and coordinated with other departments participating in marketing and promotion activities to formulate targeted marketing strategy for every product. In addition, the Group has established four sales teams to support its comprehensive sales strategy, i.e.:

- a self-operated sales team responsible for the academic promotion of core drugs in hospitals of class II and above;
- a self-operated sales team handling core drugs in general practitioner-based medical institutions;
- a self-operated sales team responsible for core drugs in pharmacies;
- an investment attraction and sales team responsible for all healthcare facilities.

As at 31 December 2018, the Group has a total of 2,690 staffs in its sales teams, and has established relationship with 678 third-party distributors, covering substantially all provinces and cities in China and formed a broad distribution network to bring more medicine resources for medical institutions and pharmacies, to benefit a wider population and improve the accessibility of pharmaceutical products.

Products of the Group

Well-known products	Common name	Therapeutic area	Revenue in 2018 (RMB million)	Percentage (%)
Kewei (capsule)	Oseltamivir phosphate	Anti-influenza medicine	629.21	25.06
Kewei (granule)	Oseltamivir phosphate	Anti-influenza medicine	1,617.68	64.44
Ertongshu	Benzbromarone	Medicine for treatment of excess level of uric acid and gout	98.70	3.93
Oumeining	Telmisartan	Medicine for treatment and prevention of hypertension	56.87	2.27
Xinhaining	Amlodipine besylate	Medicine for treatment and prevention of hypertension	30.22	1.20
Xining	Cetirizine hydrochloride	Medicine for treatment of allergy	42.72	1.70

CHAPTER I RESPONSIBILITY GOVERNANCE

1.1 RESPONSIBILITY STRATEGY

The sustainable development strategy of the Group is inseparable with the overall strategy of the Company. According to the Company's strategic plan, the Company formulates the short-term goal, medium-term goal and vision of the sustainable development strategy, and formulates the sustainable development strategy steps and approaches each year to continuously improve sustainable development management.

Strategic objectives of the Group:

Short-term goal: To further strengthen our market position in the anti-virus area and increase the awareness of our own advantageous

Medium-term goal: To expand our product portfolio in the strategic selected areas and develop and purchase other new product lines

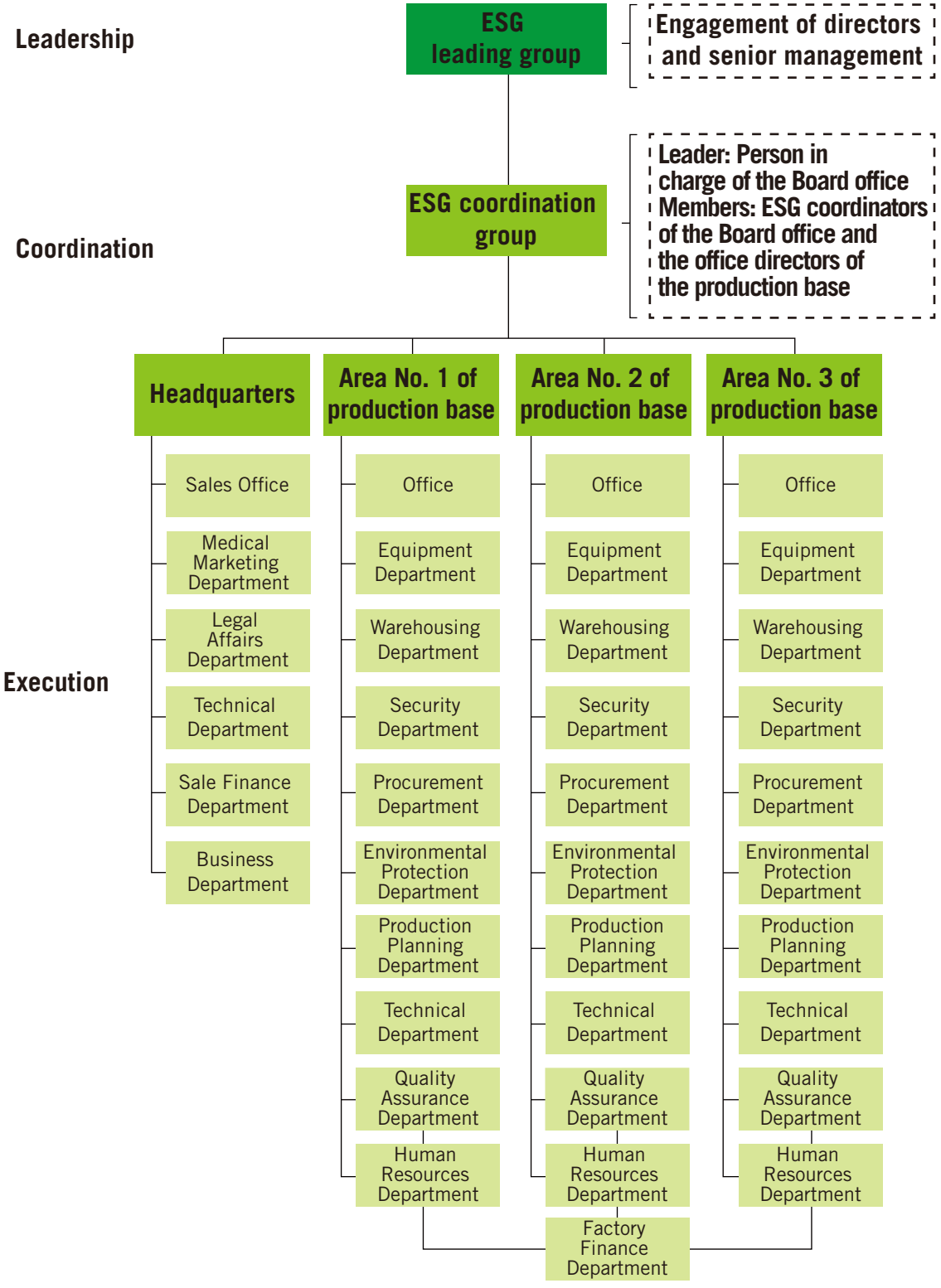
Vision: To improve domestic research development and production standards, strengthen the research and develop ability of new drugs with the aim of becoming a leading pharmaceutical enterprise in China

In order to ensure the realization of the strategic objectives, the Group has established a complete ESG management structure (as shown below). The division of responsibilities among the levels is clear, which provides a strong guarantee for further improvement and implementation of the Group's management.

Level 1: The ESG leading group composed of the Company's relevant directors and senior management is responsible for the overall control of the ESG management of Pharm HEC. It is mainly responsible for: setting ESG management objectives, strategic deployment of ESG medium and long-term planning, top-level design and regulations signing of ESG management system, ESG report approval, etc.

Level 2: the ESG coordination group, led by the secretary of the Board office, is composed of the ESG coordinators of the Board office and the office directors of the production base in Yidu (Area No. 1, No. 2 and No. 3). It is mainly responsible for overall plan of ESG work arrangements and promoting and implementing the following matters: publicity on the ESG strategy of Pharm HEC, conveying the Board's major resolutions on ESG work, planning annual ESG work plan, drafting ESG related policies, improving ESG indicator system, ESG related training and communication, and preparing annual ESG report, regular feedback to the ESG leading group on work progress and results, proposing recommendations on improvement of ESG work, etc.

Level 3: The ESG execution group includes the heads of relevant departments within the headquarters and the production base in Yidu and the ESG related functional departments. Each department sets up special personnel to be responsible for the practice of ESG management, the collection and submission of ESG information and data, and reporting the results of ESG practices, etc.


Leadership
ESG leading group
Engagement of directors and senior management
Coordination
ESG coordination group
Leader: Person in charge of the Board office
Members: ESG coordinators of the Board office and the office directors of the production base
Execution
Headquarters
Area No. 1 of production base
Area No. 2 of production base
Area No. 3 of production base
Sales Office
Medical Marketing Department
Legal Affairs Department
Technical Department
Sale Finance Department
Business Department
Office
Equipment Department
Warehousing Department
Security Department
Procurement Department
Environmental Protection Department
Production Planning Department
Technical Department
Quality Assurance Department
Human Resources Department
Office
Equipment Department
Warehousing Department
Security Department
Procurement Department
Environmental Protection Department
Production Planning Department
Technical Department
Quality Assurance Department
Human Resources Department
Factory Finance Department
Office
Equipment Department
Warehousing Department
Security Department
Procurement Department
Environmental Protection Department
Production Planning Department
Technical Department
Quality Assurance Department
Human Resources Department

1.2 RESPONSIBILITY COMMUNICATIONS

1.2.1 Communication Management

The Group made every endeavor to build an enterprise with a strong sense of social responsibility and is committed to safeguarding the interests of our shareholders, customers and consumers, benefitting our employees and bringing in healthy competition in the industry. To achieve this goal, the Group set up targeted channels for stakeholders to participate and raise their concerns, and implemented a series of effective measures to meet stakeholders' needs.

Profile of the Group's Stakeholder Engagement in 2018

Stakeholders	Concerns of stakeholders	Participation channels	Measures taken by the Company
Shareholders and investors	The Group's ability to continue as a going concern/protection of interests of shareholders and returns/truthfulness, accuracy and timeliness of information disclosure	General meetings of shareholders/Investor information sessions and site visit/roadshow/ information disclosure	Publishing the notice of general meeting of shareholders and resolutions and disclosing information pursuant to the requirements; conducting roadshow pursuant to the requirements to raise investors' recognition; announcement of the Group's contact points on the website and in the reports of Company to ensure effective and smooth communications
Management	The Group's operating strategies	Interview and survey conducted by third party institution	Assessing the major scopes of ESG which may have impact on the Group, and implementing the relevant measures in the daily operation

Profile of the Group's Stakeholder Engagement in 2018

Stakeholders	Concerns of stakeholders	Participation channels	Measures taken by the Company
Employees	Protection of fundamental interests/benefits and remuneration package/ working environment/room for career development/ occupational health and safety/realization of self-value	Labour association/ communication between employees and the management/OA platform/ internal mailbox of the Company/employee representative meeting/ suggestion box	Ensuring the rights to have equal opportunities of employment, to choose occupations, to be provided with a safe workplace and health protection, to be paid with remuneration and to rest in vacations; providing training and development opportunities for employees
Customers and consumers	Assurance of product quality and quantity/data confidentiality	Regular visits for communication/consumer satisfaction survey/ consumer complaints and comments handling	Signing confidentiality agreement and enhancing quality management; ensuring stable production and delivery; signing long-term product sales agreement with customers; regularly conducting product description and information disclosure; handling of consumers' complaints and opinions by relevant departments
Suppliers	Public tender/long-term stable cooperation/on-time payment	Tender meeting/negotiation meeting/daily communication	Organizing public tender to select suppliers based on merit and fulfilling the obligations under the contract; strengthening daily communication and maintaining long-term relationship with high quality suppliers without default payment

Profile of the Group's Stakeholder Engagement in 2018

Stakeholders	Concerns of stakeholders	Participation channels	Measures taken by the Company
Community and the public	Employment opportunities/ ecosystem/compensation and assistance	Jointly held community activities	Giving priority to local candidates in the recruitment to maintain the ecosystem in the district
Banks	On-time repayment/ business conditions/ operating risks/credit risk	Post-loan follow-up and daily communication	Making principal and interest payment as scheduled and cooperating in the process of loan review, approval and supervision
Industry players	Fair competition/cooperative development/sharing of technology and experience/ industry development	Seminars/exchange visits/ industry conferences	Facilitating fair competition, cooperating to achieve mutual benefits, sharing experience and promoting sustainable development of the industry
Regulatory authority	Compliance with governing regulations/compliant operation/information disclosure and reporting	Consultation/information disclosure	Strictly complying with governing regulations and disclosing and reporting information in a truthful, accurate and timely manner

The Group adheres to high technology, R&D and innovation, and continuously leads the industry in terms of industry scale, technology, quality and environmental competitiveness. The development of the Group is inseparable from the long-term tolerance, support and care of the community. Therefore, the Group sincerely invites people to visit factories, workshops, living areas and other places, and is open to the suggestions, supervision and criticism from people with a tolerant mind through openness, communication, mutual trust and co-construction. It continues to promote technological innovation and industrial upgrading, and makes unremitting efforts to boost local economy, promote employment, and build a pharmaceutical enterprise with strong strength, good environment and a strong sense of social responsibility!

Case: People from the community visited Pharm HEC

On 19 May 2018, the sixth "People from All Walks of Life Visit Pharm HEC" activity was successfully held. Nearly 60 people from all walks of life, including government and municipal units, enterprises, communities, banks, hospitals, schools, and individual households visited the factory workshops and staff's living quarters of the Group and engaged in in-depth communication and interaction themed on "openness, communication, mutual trust, and co-construction".

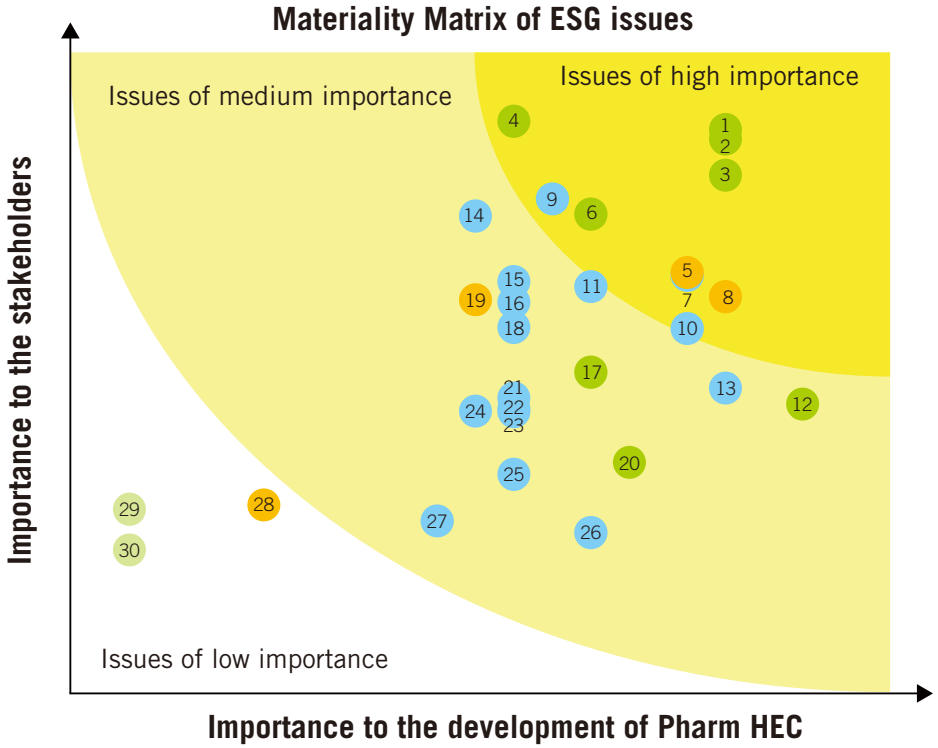
The staff's living quarters of Pharm HEC are located on the bank of the Qingjiang River and adjacent to area No. 1 of Pharm HEC. It is a warm home for the highly educated and high-tech talents and academic staff. The clean and orderly environment and beautiful scenery of trees in the community left a good impression on everyone.

At the main factory of "Pharm HEC", they visited the package production line and quality control center of oseltamivir phosphate (Kewei), the first-line drug for clinical application of anti-influenza virus, to feel the working environment of employees on site.

1.2.2 Materiality Assessment

In the preparation of the Group's 2018 Environmental, Social and Governance Report ("ESG report"), we collected feedbacks from all stakeholders through various channels to understand their views on the Group's ESG report, which forms the important basis for disclosing information in this report and formulating future strategies.

In this regard, we engaged a third party institution to maintain thorough communications with a wider range of stakeholder groups by various means such as questionnaire and interview. Through 331 completed questionnaire and on-site interview with the stakeholders, we are in full understanding of the needs and expectations of the management and all stakeholders. Based on the analysis of the data collected from the questionnaire, a materiality matrix of ESG issues was developed and has identified key issues, which are the principal concerns of the stakeholders, for the inclusion and disclosure in the Group's 2018 ESG report.



List of ESG key issues		
Issues of high importance	1	Up-to-standard discharge of pollutants
	2	Treatment of solid waste
	3	Investment of resources to reduce pollutant emissions
	4	Impact of business activities on the environment and natural resources and actions taken
	5	Environmental tax payment
	6	Energy saving
	7	Product and service quality
	8	Environmental strategy and goal setting
	9	Focus on employee safety and health
	10	Compliance with laws and regulations
Issues of medium importance	11	Staff training and promotion
	12	New product research and development and intellectual property protection
	13	Labour employment
	14	Transparency in information disclosure

List of ESG key issues		
	15	Information security
	16	Customer privacy protection
	17	Water conservation
	18	Drug recovery procedures
	19	Accountability mechanism
	20	Data on resource consumption
	21	Customer complaints and responses
	22	Green supply chain
	23	Anti-corruption measures and whistle-blowing procedures
	24	Employment
	25	Access review of suppliers
	26	Remuneration and benefits and staff care
	27	Relationship with the government
Issues of low importance	28	Party building
	29	Investment of more resources to support the development of surrounding communities
	30	Participation in charitable donations, disaster relief and other activities

1.3 COMPLIANCE IN OPERATIONS

1.3.1 Anti-corruption

The Group has always taken the anti-corruption as the focus of system establishment and has strictly complied with relevant national laws and regulations such as the *Anti-Money Laundering Law of the People's Republic of China, Anti-unfair Competition Law of the People's Republic of China and Provisional Regulations on the Prohibition of Commercial Bribery*, to standardize the discharge of duties by the Board, strengthen the integrity and compliance construction, and achieve steady development of the Group. In order to further promote the integrity of the Group's internal management, the Group formulated and improved our *Internal Control System, Integrity and Self-discipline Commitment* and held related trainings in accordance with national laws and regulations, ensuring that every employee strictly complies with the Company's integrity policies and takes the initiatives to prevent all unlawful acts. Meanwhile, the Group has also established an internal legal audit department to monitor corruption within the Group, regulate employees' self-discipline behavior and provide channels for employees to report any anti-corruption behavior, and keeps the information of whistle-blowers strictly confidential. While continuously improving the anti-corruption strategy, the Group provides anti-corruption training for employees and strengthens supervision to improve group governance.

In order to ensure the fairness, integrity and transparency of the relationship between the Group and partners, the Group regulates the behaviour of both of our supply and demand sides through the formulation of the *Agreement on Anti-Commercial Bribery between the Suppliers and Purchasers*, ensuring that both the supply and demand parties strictly abide by the anti-corruption deed signed by both parties. Under the premise of compliance with the national laws and administrative regulations, business cooperation shall be carried out on the principles of openness, impartiality, integrity and transparency. The Group formulated the *Agreement on Anti-Commercial Bribery of Sales Cooperation Parties* to ensure the fairness and orderliness of business activities with our business partners, and that the rules of market economy operation are complied with to purify the social atmosphere, stamp out corrupt and safeguard the fundamental interests of both parties.

During the Reporting Period, the Group did not incur any litigation cases involving corruption, bribery, extortion, fraud and money laundering.

Case: Signing transparent agreements with suppliers

In order to make the procurement more transparent, the Company adopts "transparent procurement". The procurement of and bidding for all bulk materials and large equipment are "transparent". At the same time, the Company enters into an *Anti-corruption Deed between Supplier and Demander of Materials* with the suppliers, which prohibits suppliers from making bribes and paying rebates to the Company's procurement personnel; the Company implements the "suppliers pre-selection" system in procurement, pursuant to which, for frequent procurements and procurements with the budget of less than RMB1 million, the Company pre-selects a batch of suppliers with excellent qualifications, good services and high reputation through open tendering and includes them into the special library for management to reduce human factors.

1.3.2 Operation Management

1.3.2.1 Internal control system

The Group has established a thorough internal governance system. By standardizing and improving our corporate governance structure, among others, the Board, general meeting of shareholders, board of supervisors and the managers supervise and restrict each other to maintain the quality of the Company's operation and development.

The Company revised the *Internal Control System Manual* which is categorized into five chapters, 26 sections and 52 management rules based on the internal control elements, including internal environment, risk assessment, control activities, information and communication, internal supervision, etc. and their corresponding management rules. It helps to standardize the Company's management, improve the Company's operation management level, avoid the Company's risks, establish effective checks and balances and supervision mechanisms within the Company, and guide the Company to organize and carry out the construction, operation and maintenance of the internal control system to ensure the standard, orderly and efficient work of the Company. The improvement of the system can effectively prevent the risk of internal control management and further standardize the working processes of the Company's businesses to ensure the steady development of all business lines.

At the same time, we have compiled the *Internal Control Evaluation Manual* based on the *Internal Control System Manual*. The main contents of the evaluation manual are divided into six chapters, including general rules, annual inspection evaluation, self-evaluation, internal control evaluation methods, identification of internal control defects and internal control evaluation report, of which 24 important process evaluation worksheets provide basic standards and basis for the self-assessment of the major risks of various business management processes and the implementation of control measures, which in turn can strengthen the internal control execution, identify internal control deficiencies in a timely manner, propose and implement improvements, and effectively control the Company's major risks to improve our management.

1.3.2.2 Risk control system

Risk control is the pre-condition and foundation for standardized operation of companies and is an effective guarantee for comprehensive risk management. The Company has established and improved the operation mechanism of compliance management. In the past year, through the enhanced office automation approval system, the information system was fully utilized, and the management system and process were incorporated into the office automation system to reduce human intervention, thereby providing real-time monitoring, reducing errors, improving work efficiency, and reducing the probability of fraudulent behaviour.

In the meantime, in terms of capital operation, the Company has always strictly complied with the *Company Law of the People's Republic of China, the Securities Law of the People's Republic of China* and the *Listed Companies Information Disclosure Management Measures* governing the listed companies. A set of strict internal approval procedures is in place to regulate information disclosure by the Company. The information disclosed has been strictly reviewed by professional institution and the legal department to ensure that the information disclosed meets the regulatory requirements.

1.3.2.3 Special audit

In order to ensure that our operation is in compliance with laws and regulations, the Company's auditing department undertakes the responsibility to track and review the implementation of the defects rectification found in the supervision and evaluation, as well as the implementation of the management recommendations and internal control inspection rectification recommendations made by the external auditors. The Company's auditing department is entitled to supervise and direct the rectification scheme, verify the effectiveness and appropriateness of the control measures, make recommendations for improvement and requests relevant departments to make necessary adjustments to the rectification measures to ensure the realization of risk control targets. The management of the Company will authorize relevant departments to investigate and analyze the internal control defects identified during the supervision by the external regulatory and internal and external audits and carry out corresponding rectification measures and reviews the implementation of each such measure.

CHAPTER II LEAN QUALITY

The Group attaches great importance to quality management and strictly follows the internal and external management systems, to control the internal quality control process. With the focus on R&D and innovation and with high standards and strict requirements as the basic principles, the Group endeavours to provide customers with excellent products and services.

2.1 CREATE SUPERIOR QUALITY

2.1.1 Concept of product liability

The concept of product liability is critical to the development of business and the establishment of brand image and accumulation of reputation. Only undertaking product liability and strengthening product quality, so the enterprise could sustain a long-term development. As a premium enterprise in the pharmaceutical industry, we have been adhering to the principle of being responsible to the company as well as the patients, doing our best to ensure zero defect product quality, while providing comprehensive after-sale services for our products, in order to protect the interest of our customers and patients.

2.1.2 Product quality management

The Group strictly complies with laws and regulations promulgated by the PRC, such as the *Drug Administration Law of the People's Republic of China*, the *Regulations for the Implementation of the Drug Administration Law of the People's Republic of China*, the *Provisions on the Administration of Pharmaceutical Directions and Labels*, the *Good Manufacture Practice of Medical Products and the Administrative Measures for Drug Recalls* by CFDA. Meanwhile, in order to improve the procedure of quality check and product recall, the Group has established a quality management system according to regulations such as the *Pharmaceutical Industry Quality System*, the *Good Manufacture Practice of Medical Products*, which is embodied in our *Quality Manual*, to ensure that the Group possesses the ability to steadily provide products that meet the requirements of customers and applicable laws and regulations. Through effective application of the management system, including continuously improving the process of the system, we increase customers' satisfaction and fulfil our promise to the society and stakeholders.

The Group has been continuously paying attention to the management of quality throughout the whole life cycle of products. In the processes such as product R&D, technology transfer, manufacturing, product distribution and sales, monitoring and research on the adverse reactions upon product launching etc., specific quality management processes are established to ensure the controllability of quality during the whole process of R&D, production, sales and recall of drugs.

The Group has been carrying out strict quality control which permeated the entire production process, including the incoming inspection of raw materials, control of production process, and quality control measures for intermediate and end products. The basic procedure is as below:

For investment in products, to ensure the comprehensiveness and effectiveness of product quality control, the Group has devoted more resources in terms of labour and materials. For labour, we put more efforts in introducing talents, and increasing quality control staff and quality assurance staff. For materials, the Group continued to increase the purchase and input of equipment, reagent and consumables, ensuring that the inspection equipment, reagent and consumables sufficiently fulfil the needs of inspection. Through inputting to aspects such as labour and materials, the comprehensiveness and effectiveness of drug quality control are ensured.

For product recall, the Group has established an internal *Administrative System for Drug Recalls* in accordance with the *Administrative Measures for Drug Recalls* issued by CFDA to ensure that once quality issue or potential safety risks of drugs are discovered, we can quickly and efficiently take measures to recall the products according to the relevant procedures, in order to protect the interest and health of consumers.

2.1.3 Certification for product quality

The Group has always emphasized the production quality of the drugs and operation of management, strictly complying with the laws and regulations of the PRC in all aspects, from the production process of active pharmaceutical ingredient (API), to the product packaging, delivery and quality control.

1. Special inspection and certification of freeze-dried preparation

In June 2018, the Company's freeze-dried powder injection accepted the GMP special on-site inspection organized by the Department of Pharmaceutical and Cosmetic Production Supervision of the Food and Drug Administration of Hubei Province. During inspection, the inspectors conducted a key inspection on the source and quality control of the raw and auxiliary materials used for production of freeze-dried powder injection, the consistency and stability of the production process, the control of the key aspects and the sterility assurance level of the production process, the reliability of data, etc. and no serious defects and major defects other than 8 general defects were identified. The Company's quality management system was certified to meet the requirements of GMP. In response to the defects identified in the on-site inspection, the Company has completed rectification as required.

2. Certification of procurement quality standards

Based on the needs of production process and improvement of product quality, the Company has formulated procurement quality standards that are stricter than the national statutory standards for the production materials (including active pharmaceutical ingredients, pharmaceutical excipients and pharmaceutical packaging materials), and signed quality agreements containing procurement quality standards with the material suppliers. Upon arrival, the materials will be subject to inspection and released according to the procurement quality standards. The Company has completed the determination of the procurement quality standards for 76 kinds of purchased materials, and will continue to promote the determination and optimization of procurement quality standards.

2.1.4 After-sales services

In order to enhance the health and safety offered by our products and services, and allow the customers to experience better services, the Group has established systems and procedures such as the *User Service, Handling of User Complaints, Management of Product Returns, Drug Recalls*, and *Regular GMP Self Inspection*.

The sales department is responsible for after-sales services, collecting information about customers' satisfaction and other relevant information and notifying the quality department. The quality department is responsible for handling the relevant issues (including user complaints, user service information etc.), encouraging the adoption of advice given by customers which are beneficial to improving the Group's management system, and organizing product returns or recalls. During the reporting period, the Group has not had any behaviours in violation of laws and regulations related to product liability.

In 2018, the Group has not experienced any complaint about product quality.

2.1.5 Safeguarding the rights and interests of customers

The Group adheres to the philosophy of dedicated service, strictly abides by the *Law of the People's Republic of China on Protection of Consumer Rights and Interests* and other laws and regulations, and has formulated relevant internal policies to safeguard customers' rights and interests and promote sustainable consumption. For customer information, the Group has set up dedicated full-time personnel to manage customer information to protect customer information and protect customers' interests.

In 2018, the Group did not receive any complaints on infringement of customers' privacy or lost of customer information, complaints from the regulatory authorities, or complaints from external individuals or organizations regarding customers' privacy.

2.2 FOCUS ON R&D AND INNOVATION

The R&D strength is an important indicator to measure the strength of an enterprise, and it is also the inexhaustible motive force for an enterprise to achieve long-term and sustainable development. Since its establishment, the Group has strictly complied with the *Drug Administration Law of the People's Republic of China*, the *Measures for Administration of Drug Registration* and the *Good Manufacture Practice of Drugs*. In 2018, the Group continued to promote the progress of drug research and development, and achieved many breakthroughs in the field of drug research and development.

Research and development progress in 2018:

1. Anti-virus therapeutic area

The Group's non-structural protein ("NS") 5A inhibitor Yimitasvir Phosphate, a National Class 1.1 innovative drug, in combination with Sofosbuvir have completed Phase III clinical trials subjects enrolment and is scheduled to submit New Drug Application ("NDA") in 2019. The Phase II clinical trial for NS3/4A protease inhibitor Furaprevir jointly developed with TaiGen Biopharmaceuticals Co. (Beijing), Ltd. ("TaiGen Biopharmaceuticals") in combination with Yimitasvir Phosphate has been completed and Phase III clinical trial will commence soon and is expected to submit NDA in 2020.

2. Endocrine and metabolic diseases area

In the area of endocrine and metabolic diseases, the Group is dedicated to the R&D of insulin products and has a comprehensive insulin product line, which covers both the second and the third generation of insulin. The latest progress of the insulin products during the Reporting Period is as follows:

The key endocrine and metabolic types	Current stage	Planned launch time
Recombinant Human Insulin Injection	Submitted NDA	2019
Isophane Protamine Recombinant Human Insulin Injection (Pre-mixed 30R)	Phase III clinical trial	2020
Insulin Glargine Injection	Phase III clinical trial	2020
Insulin Aspart Injection	Phase I clinical trial	2021
Insulin Aspart 30 Injection	Phase III clinical trial	2021

The Group has established a complete R&D system for insulin products, which is developed in accordance with standards on biosimilar drugs adopted in Europe and the United States with quality equivalent to originator drugs. The production of pharmaceutical products adopts a yeast expression system which is advanced in technology and easy for large scale production. The results of clinical trials show that the statistics of recombinant human insulin injection developed by the Group compared with the originator biologics are highly consistent in terms of effectiveness, safety and stability. Meanwhile, the Group has established good relationships with many clinical trial centers and its R&D pipeline products have been recognized by patients and clinicians in terms of efficacy and safety.

3. Intellectual property rights protection

The amount of and the ability to protect intellectual property rights are important indicators to measure the competitiveness of the Company. The Group has always attached great importance to the application and protection of intellectual property rights, and continuously increased investment in scientific research and focused on patent innovation. In 2018, we were awarded three national invention patents including the method for synthesizing isomers of oseltamivir phosphate (《一種磷酸奧司他韋異構體雜質的合成方法》), the method for quality detection of glipizide capsules (《一種格列吡嗪膠囊的質量檢測方法》), the pichia fermentation method for enhancing the expression of insulin and its analog precursors (《一種提高胰島素及其類似物前體表達的畢赤酵母發酵方法》).


发明专利证书


发明专利证书


发明专利证书

CHAPTER III GREEN DEVELOPMENT

3.1 Environment management

The Group has strived to reinforce the environmental protection construction and followed the relevant environmental laws and regulations such as the *Environmental Protection Law of the People's Republic of China*, the *Atmospheric Pollution Prevention Law of the People's Republic of China*, the *Law of the People's Republic of China on Environmental Impact Assessment*, the *Law of Prevention and Treatment of Water Pollution of the People's Republic of China*, the *Law of the People's Republic of China on Prevention and Control of Pollution From Environmental Noise*, the *Environmental Protection Tax Law of People's Republic of China*, the *Energy Conservation Law of the People's Republic of China* and the *Law of the People's Republic of China on Prevention and Control of Pollution From Environmental Noise*.

For the purpose of providing a better working environment, protection of employees' health as well as guarantee of effective implementation of environmental management policies, the Group has formulated Environmental Management System which stipulated the basic principles of environmental protection, including:

(I) With the participation of all employees, we prioritize the protection and focus on the prevention. Our guiding principles call for comprehensive management, public participation, and taking up responsibilities for the damage;

(II) We combine our efforts on resource protection with damage control. By coordinating our planning, we manage every specific case, focus on key issues, implement our program on a step-by-step basis, and hold the polluters responsible for the cleanup process;

(III) We invest a reasonable amount of capital in the cleanup of the "three kinds of waste" by strengthening the introduction and assimilation of new technologies and new equipment. We continue to enhance our usage of resources, reduce waste, and minimize the production of pollutants, thus striving to protect our environments;

(IV) With regards to the products or technological processes that generate considerable amounts of pollution, we aim to identify the causes so as to improve our technological or operational processes, we adopt the clean production processes available, reduce and prevent the generation of pollutants, and try our best to make use of any waste generated;

(V) We strengthen our environmental protection by minimizing the impact on neighboring residents and proactively taking up our corresponding social responsibilities;

(VI) Environmental protection is a shared responsibility. Every employee shall have the right to tackle the issues of pollution, damage to our environment or the ecosystem as well as the responsibility to report to the management or the relevant authorities and protect the environment and the Company's resources.

In addition, the Environmental Protection Department, a dedicated department set up by the Group, is responsible for the comprehensive management and daily management of waste gas, wastewater, noise and solid waste to ensure that the discharge of which satisfies the prescribed standards. The department also studies and addresses the problems faced by us during our environmental protection work, plans for investigation of pollution incidents, coordinates the contingency responses to environmental incidents, checks the implementation of environmental regulations and monitors daily operation of environmental protection governance facilities and performance of emission standards.

As at the end of 2018, the Group had no environmental pollution accidents; and achieved 100% classified and standardized treatment rate of industrial waste; 100% lawful and standardized processing rate of hazardous waste and 100% standardized discharge of sewage, waste gas, dust and noise pollution. The total amount of pollutants discharged and the concentration of pollutants discharged were all in line with the requirements; six departments including the oral solid dosage workshop completed environmental protection knowledge training according to the training plan, and the completion rate was 100%.

3.1.1 Environmental Management System Documents

The list of environmental policies of the Group is as follows:

No.	Document No.	Document Name
1	I-EHS202-00	Management Regulations for Environmental Factors Identification and Evaluation Management
2	I-EHS203-00	Management Regulations for Laws and Regulations and Other Requirements
3	I-EHS204-00	Management Regulations for Environmental Objectives, Indicators and Management Plan
4	I-EHS205-00	Management Regulations for Environmental Information Exchange
5	I-EHS206-00	Management Regulations for Environmental Protection Training
6	I-EHS207-00	Management Regulations for Environmental Documents
7	I-EHS208-00	Management Regulations for Imposing Influence on Relevant Parties
8	I-EHS209-00	Management Regulations for Environmental Protection Operation
9	I-EHS210-00	Management Regulations for Emergency Preparedness and Response
10	I-EHS211-00	Management Regulations for Environmental Monitoring and Measurement
11	I-EHS212-00	Management Regulations for Non-compliance, Correction and Prevention
12	I-EHS213-00	Management Regulations for Environmental Records
13	I-EHS214-00	Management Regulations for Internal Audit

Currently the Group has passed the Yichang City Environmental Protection Bureau's review on the *YiChang HEC ChangJiang Pharmaceutical Co., Ltd. API GMP Technology Upgrade Project Environmental Impact Report* submitted by the Group. The Group has been strictly complying with the various environmental protection measures and requirement under the project, such as strengthening the measures against emissions and waste water pollution, implementing various measures against solid waste pollution and establishing a sound risk control system by following the principle of "resourceful, reduced and harmless" disposal.

3.1.2 Environmental Training

In 2018, the Group organized 7 environmental trainings. The specific completion of the trainings is shown in the table below.

Training time	Training contents	Trainee	Training hours	Assessment method
5 February	Environmental protection training	New hires	2 class hours	Closed-book exam
26 March	Solid waste and hazardous waste management training	Post operators	2 class hours	Closed-book exam
7 May	Environmental protection training	New hires	2 class hours	Closed-book exam
21 May	Latest environmental supervision policies and regulations	Supervisors and managers of above level	2 class hours	Closed-book exam
18 July	Environmental protection training	New hires	2 class hours	Closed-book exam
21 September	Basic knowledge of environmental protection	Equipment Department, Environmental Protection Department	2 class hours	Closed-book exam
23 November	Environmental protection training	New hires	2 class hours	Closed-book exam

3.2 Energy Conservation and Emission Reduction

Energy conservation and emission reduction is an inevitable choice to meet the challenges of resource scarcity and limited environmental carrying capacity. It is of great significance for optimizing the economic structure, improving production efficiency and production environment and promoting the sustainable development of enterprises. In the production process, the Group continuously improves energy-saving equipment, optimizes energy production technologies, eliminates high-energy-consuming equipment, improves sewage systems, and adopts advanced environmental protection equipment to achieve efficient use of resources and minimize pollution to the surrounding environment.

3.2.1 Energy management

In 2018, the total energy consumption of the Group amounted to 16,527,677 kWh. We continued to invest in energy-saving measures, including improvement of integrated double-cooling high efficient water chiller units which would reduce power consumption in transmission of recycled water in the cooling tower to a greater extent; the use of air pressure piping in series to reduce the number of booting units; timely turn-off of the power source of lighting according to light conditions. Only when outdoor temperature reaches 32℃ or above can the air conditioner be turned on in non-production areas, while the temperature setting cannot be lower than 26℃. In winter only when the room temperature is lower than 17℃, that the air conditioner be turned on. All electrical equipment must be shut down at the end of work. In 2018, through improvement of energy-saving equipment, the Group recorded a year-on-year decrease in energy consumption of 1,803,595 kWh.

3.2.2 Management of wastewater

The volume of industrial wastewater discharged by the Group amounted to 33,600.18 tonnes in 2018. The wastewater produced during the production process will be discharged after treatment and meeting the required standard, and the process of discharging wastewater is strictly complied with standards such as the *Discharge Standard of Water Pollutants for Chemosynthesis Pharmaceutical Industry*, the *Emission Standard for Pharmaceutical Industrial Water Pollutants from Mixing and Formulation Category* and the *Emission Standard for Pharmaceutical Industrial Water Pollutants from Biological Engineering Category*. For the purpose of minimizing the discharge of wastewater and managing wastewater in an effective way, the Group has formulated management documents such as the *Standard Operating Procedures for Wastewater Station*, *Management Regulations for Accident Wastewater and Initial Rainwater*, and adopts the following measures to reduce wastewater discharge: promoting the rational use of water resources to achieve "separation of clean and dirty water discharge", "rain and dirty water discharge", and "repetition use of water"; building a specific collection system for industrial wastewater according to the degree of pollution and characteristics of the pollutants, and handling wastewater with the combination of physical chemistry method or activated sludge method accordingly. Residential wastewater, after collection, will be pumped directly into and treated by the biochemical system; adopting new energy-efficient and low-cost treatment procedures to handle wastewater that is difficult to be treated to reduce the cost of treatment.

3.2.3 Management of exhaust gas

In 2018, the Group collected the industrial exhaust gas generated from production process in order to reduce the impact on the environment by fugitive emissions. The exhaust gas collected was treated by oxidation, absorption, neutralization, washing and combustion so that the emissions could be minimized. Such emissions would be discharged after meeting relevant standard such as the *Integrated Emission Standard of Air Pollutants*.

Case: Laser printing and dust removal equipment

After the packaging line on the first floor of the Group's oral solid dosage workshop was updated to an automated process, the laser coder, boxing machine, and strapping machine generated dust and fumes during the production process, which caused certain risks to the operator's health and the workshop environment and required dust and fume treatment for relevant processes. In August 2018, the Company invested approximately RMB300,000 in entrusting a third party equipment company to install two dust removal systems. After the dust removal systems were officially put into operation, the harmful gases and dust in the production process were effectively purified, which not only effectively improved the production environment of the workshop but also provided better protection for the health of employees.

3.2.4 Management of solid wastes

The Group is committed to the harmless, reduced and resourceful management of waste disposal. The Group strictly controls the use of chemicals in the pharmaceutical process, ensures the quality and safety of chemicals by supervising the supply chain, collects waste drugs in a centralized way and delivers the same to hazardous waste management enterprises for proper disposal. In 2018, the volume of hazardous wastes generated by the Group amounted to 78.33 tonnes, including 23.68 tonnes of pharmaceutical wastes and 54.65 tonnes of other hazardous wastes. The harmless wastes generated mainly including general industrial wastes and domestic wastes amounting to 553.99 tonnes in aggregate. To minimize the impact on the environment caused by the solid wastes, the Group adopts the following measures including:

- recycling reusable materials such as paper, plastics, metals and glass from solid wastes;
- setting up permeation-proof and rainproof storage areas for domestic garbage and commissioning the environmental hygiene department to collect and dispose of the garbage in landfills;
- incinerating the solid garbage that meets the standards for incineration with the Company's incinerators.

The Group also transforms the idle production facilities in the chemical industry zone into hazardous waste warehouse by setting up cofferdam on the ground and in front of the door, undergoing anti-seep and anti-corrosion treatments on the ground, adding cofferdam for storage of small amount of hazardous wastes, equipping with equipment and supplies such as illumination, ventilation, weighting, categorization, fire services, emergency shelter and labour protection, and installing panels, information cards and doorplates, in order to standardize the management.

3.3 Making the Best Use of Everything

The Group always adheres to our development target of "being a resource-saving enterprise" since our development. With effective use, reasonable allocation and efficient protection of resources, we aim to achieve the sustainable development of economy, society and resources. Meanwhile, the Group actively promotes the development of energy-saving technologies, establishes industrial technology innovation system which can facilitate sustainability of resources and environmental protection, achieves breakthroughs in technology of resource conservation and accelerates technology transfer. We will use the appropriate advanced technology for production, and enhance the technological level of comprehensive energy conservation, in order to maximize production capacity with less energy consumption.

3.3.1 Water management

In 2018, the total water consumption of the Group amounted to 346,151.70 tonnes. As water is one of the major resources that are vital to the pharmaceutical industry, we reduce water consumption and improve the efficiency of all factories through implementing a number of measures, including:

- improving the utilization efficiency of industrial production water system, changing the way of using water in production (such as changing current use of fresh water to recycled water), increasing the recycled utilization rate and reuse rate of water;
- through implementing clean production strategies to change the production process, or use water-saving and even no water production process, and reasonably carrying out industrial or production layout to reduce the demand for water by industrial production, and improve the utilization rate of water;
- carrying out water balance test to calculate the amount of water required by each production unit and then setting up inspection measures to control water consumption;
- shortening hot water pipes and migrating cold water pipes away from steam pipes and other places that release heat to minimize water pressure;
- regularly inspecting hidden water pipes to prevent leakage, checking internal water supply system, repairing default water tanks, faucets and other water supply facilities;
- maximizing the use of recycled water, promoting water-saving technologies including reuse of condensed steam, recycled use of indirect condensed water and reuse of treated sewage;
- vigorously promoting water-saving sanitary ware and water reuse technologies to improve water reuse rate in public buildings.

Case: Transformation of steam generator

There are two steam generators in the factory. Currently, the clean steam condensate and excessive raw water (purified water) in the equipment are directly discharged to sewage treatment. The consumption of purified water is large and the volume of wastewater discharged is also large. There is a large consumption of industrial steam when 18℃ of purified water is used as raw water for production of clean steam. After improvement, a water storage tank (using the existing equipment) is installed in the factory for collecting the hot discharged water (purified water) from steam generator. The water storage tank is equipped with fluid level auto control system. Water is pumped to the deionized water storage tank on the second floor as the raw water for cleaning the steam generator, achieving conservation of purified water. The consumption of industrial steam was also reduced due to the corresponding increase in temperature of raw water.

The recycling tank of hot discharged water has a volume of 500L and height of 130cm and can collect 60cm of hot water in every 16 minutes on average, which equals to 865L of hot water in an hour as indicated by calculation. Two steam generators both are operated for 24 hours; hence 20.76 tonnes of purified water can be saved in the recycling system every day, while 20.76 tonnes of wastewater is reduced from discharge. The aperture of the regulatory control valve of industrial steam is approximately 50% less than the previous one, indicating that the savings of industrial steam are approximately 50% of the savings. The original yield of purified water from the workshop was severely deficient and brought adverse effect to its production. The 20 tonnes of water reduced represents 16% of total current yield of purified water, which has substantially mitigated the impact on production of the workshop due to lack of purified water and mitigated the pressure faced by the sewage treatment stations.

The Group strictly managed the use of water resources and there was no material issue in relation to access to water resources in 2018.

3.3.2 Packaging material management

The Group continues to optimize product packaging design, advocates the use of green materials, and reduces the use of packaging materials to meet market and production needs. In 2018, the total amount of packaging materials used for finished products by the Group amounted to 4,110.73 tonnes. The packaging materials used by the Group include paper, polyethylene and aluminum foil. Our requirements for raw material suppliers are those among top three in the industry. For the procurement of product packaging materials, the Group has developed a group-level procurement management plan. Meanwhile, the Group has also developed a supplier evaluation and control plan which are applied for regulating and controlling the implementation of supplier evaluation processes and procurement operations. The Group's paper packaging materials are all purchased from FSC certified manufacturers.

CHAPTER IV SAFE PRODUCTION

4.1 INSISTENCE ON SAFETY CULTURE

Safe production and safeguarding employee occupational safety are the basic requirements for an enterprise, and also the principal standards of behaviour which an enterprise must observe. To enhance the labour protection during production process, improve employment conditions, protect labour's safety and health during production and foster development of businesses, the Group has formulated the *Safe Production System* and prepared the *Annual Occupational Health and Safety Review Report* pursuant to the relevant laws and regulations such as the *Safe Production Law of the People's Republic of China*, the *Labour Law of the People's Republic of China* and the *Law on the Prevention and Treatment of Occupational Diseases of the People's Republic of China* and in line with the Company's situation.

To safeguard the health and safety of staff, the Group has organized several company-level safe production training session in 2018 to enable new staff to understand mainly on the Company's safe production and basic knowledge on safe production, rules and regulations on safe production and labour discipline, rights and obligations for safe production, and relevant incident cases, to ensure that they have passed the training before taking up the position.

Meanwhile, the Company arranges occupational health check for our staff every year, emphasizes on prevention and control of occupational hazards, continues to improve precautionary equipment and facilities of occupational diseases, installs appropriate equipment, requests our employees wearing protective clothing, regularly arranges on-site inspection and supervision in order to improve working conditions, and control occupational disease hazards below the standard range to ensure that there is no occupational disease.

In 2018, the Group did not experience any death, extraordinary, material or ordinary incidents. The staff training was completed as scheduled, with a passing rate of 100%.

4.2 ESTABLISHMENT OF SAFETY AWARENESS

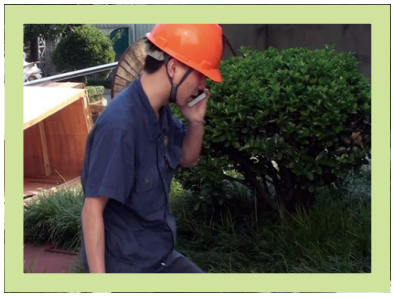
In order to better enhance employees' safety awareness and improve their ability to respond to emergencies such as fire, escape and self-rescue, the Group conducts various safety drills every year.

Case: Emergency Evacuation Drill of the Quality Assurance Department

In accordance with the requirements of the *Relevant Provisions on the Preparation of Emergency Response Plan, Training, Drills and Assessment* of the base, and the *2018 Annual Schedule of Emergency Rescue Drill of YiChang HEC ChangJiang Pharmaceutical Co., Ltd.*, the QC lab of the Quality Assurance Department launched a fire emergency evacuation drill on 9 March 2018.

Case: Special Electric Shock Drill of the Equipment Department of Pharm HEC

In order to test the emergency response mechanism of the Equipment Department of Pharm HEC, improve the employees' emergency response, rapid response and coordination capabilities and enhance safety awareness to ensure the safety of employees, the Equipment Department of Pharm HEC implemented a special electric shock drill on 16 May 2018 in accordance with the requirements of the *Relevant Provisions on the Preparation of Emergency Response Plan, Training, Drills and Assessment* and *2018 Annual Schedule of Emergency Rescue Drills for the Factory of Pharm HEC* of the base.


Case: Commencement of Safety Month Activities in 2018

In order to firmly establish the concept of safety development, enhance people's emergency awareness, improve the safety quality of the public and the ability of disaster prevention, mitigation and relief, and curb serious and serious accidents, in accordance with the spirit of the Notice of the Office of the Safety Production Committee of the State Council on Launching the Nationwide "Safety Production Month" and "Safety Production Promotion" Activities in 2018, the Group popularized safety knowledge to improve safety culture and formed a consensus on safe development through centralized publicity and education activities on safety production with the focus placed on the awareness of safety red lines, discharge of safety responsibility, promotion of governance according to law, deepening special governance, reform and innovation, etc. with a view to further promotion of the continued stability and improvement of safety production situation.

4.3 IMPROVEMENT OF RISK CONTROL

In order to improve risk control, the Group has developed corresponding monitoring measures and analyzed them one by one, thus effectively eliminating the occurrence of safety accidents and forming a good situation in which all staff in the factory concern about safety and pay attention to safety in everything.

In order to achieve the normal management of the risk classification and control and potential hazard inspection and treatment initiated in 2017, the Company specially hired a qualified third-party professional consultant to conduct acceptance and case training on the construction of the Company's "system for risk classification and control and potential hazard inspection and treatment". According to the review, the Company's system for risk classification and control and potential hazard inspection and treatment was well established.

The Company continuously improves the safety inspection standards, and processes the unsafe conditions and behaviors detected in a timely manner and incorporates the same in safety assessment. For the existing problems, the workshop was required to conduct rectification within a time limit. In 2018, a total of 195 safety hazards were detected, classified and rectified. The rectification rate reached 100%, which effectively guaranteed production safety.

Case: Installation of combustible gas alarm in ethanol warehouse

In order to prevent fire and explosion accidents and ensure safe production, the Company spent RMB20,000 to installation of point-type combustible gas detectors in the ethanol warehouse in August 2018 and installed the control terminal in the duty room of the refrigeration station to ensure that the leakage of ethanol will be noticed and treated as soon as possible.

CHAPTER V PEOPLE-ORIENTED

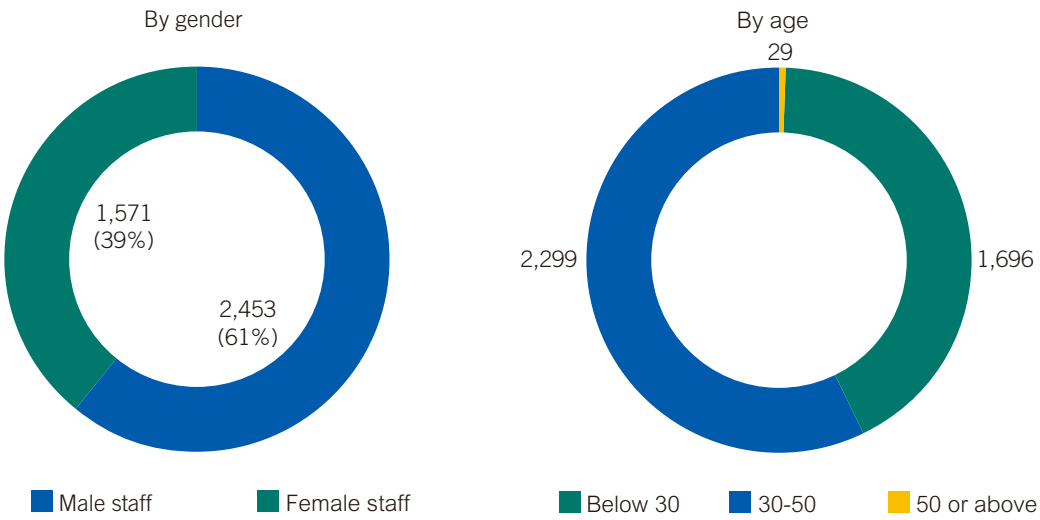
5.1 EMPLOYMENT AND INTERESTS

5.1.1 Equal Employment

After years of development, the Group has established a comprehensive and diversified employment system. By formulating the specific *Human Resources System*, the Group conducted recruitment via the internal and external channels. For internal recruitment, we selected the appropriate employees from our own human resources pool to fill any vacancies or new positions through promotions and the re-hire of former employees; while for external recruitment, we hired outstanding candidates from the society through a comprehensive evaluation system in an open, fair and equal manner through recruitment advertisements, employment agencies, internet recruitment and campus recruitment. During the process of recruiting candidates, the Group strictly adheres to the principle of openness, equality and impartiality. The assessment is rated according to unified standards and candidates with higher rating will have the priority. Anyone who wishes to be selected as key personnel must comply with the Company's requirements. We put quality before quantity.

The Group has strictly complied with the relevant laws and regulations, such as the *Labour Law of the People's Republic of China* and the *Labour Contract Law of the People's Republic of China*. There was no breach of relevant laws and regulations in relation to dismissal, recruitment and promotion, working hours and anti-discrimination.

The Group strictly abides by the *Law of the People's Republic of China on the Protection of Minors* and the *Provisions on Prohibition of the Use of Child Labour* and other laws and regulations, and undertakes not to use child labour and forced labour. We carefully review job seekers' information during the recruitment process to avoid employment of underage applicants due to the use of false certificates. In case of use of child labour or forced labour, we will strictly follow the relevant procedures and deal with the personnel in charge seriously. During the reporting period, the Group did not have any violations in respect of use of child labour or forced labour.



5.1.2 Remuneration and Benefits

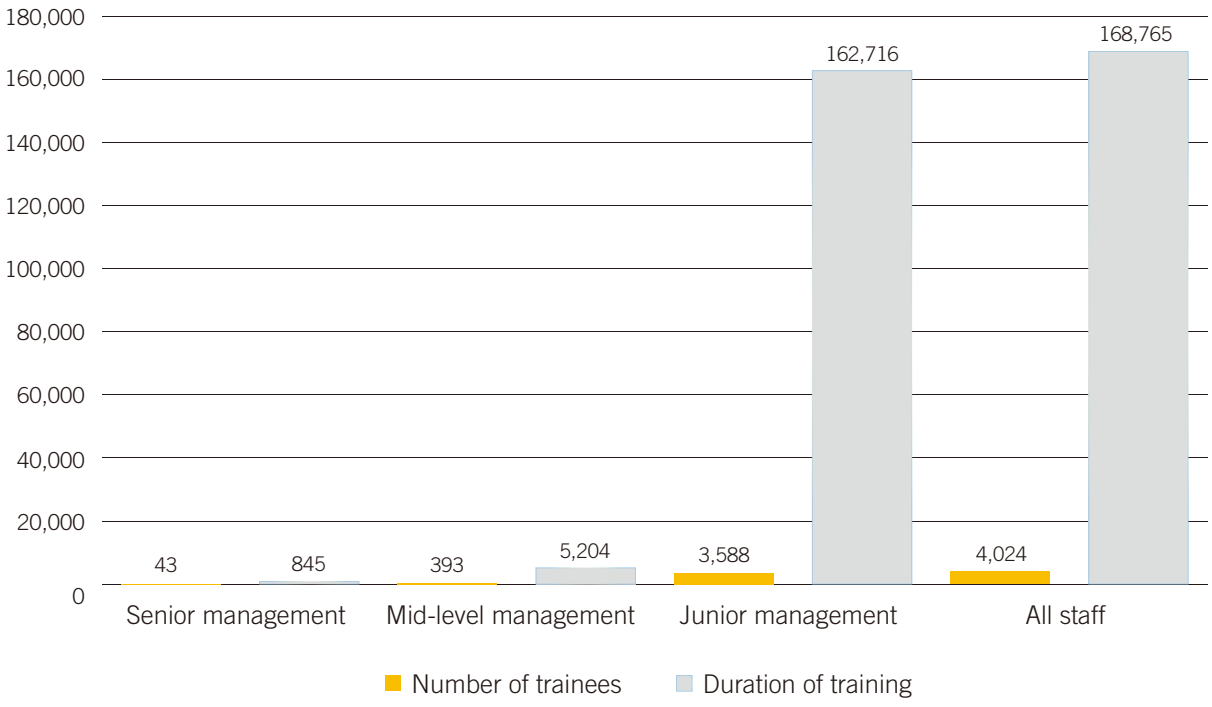
Based on the regulations of association and internal control system, by making reference to the overall remuneration level within the industry and the actual living cost of working place, the Group has formulated remuneration policies aiming at retaining talents and giving incentives to the staff on performance basis. The Board and the board of supervisors of the Group review the remuneration policies of the Group on a regular basis in order to safeguard employees' legal rights and interests. The Group set wage standards 5%-10% higher than those offered by our peers. Besides the basic salary and five statutory social insurances and one statutory fund, the remuneration of staff also includes the competitive year-end bonus based on their different ranking and performance. Meanwhile, for the purpose of inspiring potential and building up a development platform so that the outstanding administrative and technical staff can join and maintain a long-term employment relationship with us, the Group has also formulated a share option reform scheme, in which a certain amount of shares will be granted to competent and most contributive employees as incentives in order to enhance their motivation. The Group strictly complies with the *Labour Law of the People's Republic of China*, the *Labour Contract Law of the People's Republic of China* and the *Social Insurance Law of the People's Republic of China* by making contributions to various social insurance and housing provident funds for our employees. Meanwhile, the Group arranges staff in key positions to have an annual occupational health check and organizes intensive learning sessions of safe production knowledge for new staff to attend, to safeguard health and safety of the employees.

In addition to the statutory security requirements of the PRC, in order to provide better welfare and benefits for the employees, the Group has established corresponding systems such as *Pension System*, *Housing Benefits* and *Children's Benefits*, and set up public welfare facilities such as kindergarten and medical room. The Group will further optimize the employee welfare and protection system in accordance with our development progress so that we can provide better protection to employees' rights and interests through and provide them with more benefits and protection.

5.2 TRAINING AND DEVELOPMENT

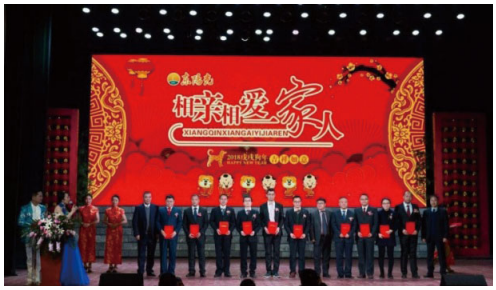
Employee training is an important part of human resources management of an enterprise, an effective way to strengthen its competitiveness and an important measure to encourage staff to work in a positive manner. The Group always emphasizes on employee training and nurturing skills, and has established and implemented an effective training and management system based on the work nature and demands of each employee every year (with ad-hoc training as and when necessary). This helps to give full play to the positive effect of training for the Company, and promotes the personal development of the employees to achieve advancement and growth. Our training programs consist of factory training, onboard training, continuous education and training (comprising planned training and ad-hoc training), and outsourced training. Our training methods include intensive classes, discussions, audio-visual and practical training. Evaluation of the effectiveness of our training comprises of written examinations (open-book and closed book), practical tests and instant tests. In 2018, the number of employees of the Group which accepted trainings reached 4,024 and the average training hours of employees were 41.94 hours.

The Training Profile of the Employees in 2018



5.3 CARE FOR EMPLOYEES

Employees are an important driving force for the development of enterprises, and have irreplaceable importance to the improvement of comprehensive strength of enterprises. We respect and protect the basic rights and interests of every employee, enrich the life of employees, gather the strength of employees, and improve the quality of employees by organizing diverse cultural and sports activities, thereby promoting the healthy, proactive and effective development of the Company.



CHAPTER VI WIN-WIN COOPERATION

6.1 BUILDING A RESPONSIBLE SUPPLY CHAIN

Currently, the Group has established cooperation relationship with 1,175 suppliers. Our success always relies on the support from various products and services provided for the Group by the massive supply chain network. While we have maintained long-term and mutually beneficial relationship with our suppliers, we also strive to cooperate with them and take our own social responsibilities. We have promoted the sustainable development of the Group and of our suppliers with our actual actions with an aim of building a better social and business environment.

The Group has established a comprehensive and effective procurement system based on our internal control system and provided further details for duties of all corresponding departments. The Group has adopted two approaches, including filing for each supplier and entering into quality guarantee agreement with key suppliers, to supervise suppliers' performance in all aspects, including not only the quality of products and services, but also business ethics and social evaluation. Meanwhile, by means of dynamic information management, periodic evaluation and annual review, the Group monitors suppliers' performance to safeguard the interests of both the Group and customers.

6.1.1 Selection and Management of Suppliers

(1) Initial investigation of suppliers: the Group conducts field visits and online credit surveys to understand the basic information of suppliers and the distribution in the market, and whether the varieties, specifications and quality of suppliers' products meet the needs, price level, suppliers' strength, scale, production capacity, production process, inspections, management level, qualifications, credit standing, ranking and share in the market, and whether the product is a competitive or monopolistic product, relative traffic conditions, industry reputation, etc.;

(2) Price calculation and comparison: By understanding the cost components of products, the Group conducts more accurate price analysis and price comparison, in order to accurately determine the quality of the supplier's products;

(3) Selection and determination of suppliers: the Group tries to choose over three suppliers as candidates, and proactively implements the replacement of suppliers. The suppliers with poor reliability and high price shall be replaced in time. Meanwhile, the Group proactively introduces new suppliers, which, on the one hand, reduces the risk of exclusive and long-term supply, and, on the other hand, reduces procurement costs through benign competition; and selects the most suitable supplier at the most suitable price.

6.1.2 Supplier quality management

For major quality problems, the policies and complaint handling process adopted by the Group are basically consistent. However, the qualifications of qualified suppliers will be cancelled, and if necessary, the suppliers will be required to make compensation. Subsequently, if the supplier qualifications are restored if necessary, it is required to re-conduct on-site audit on the suppliers, mainly focusing on the last quality problem, to re-evaluate its qualifications, capabilities and other relevant information; in order to avoid impact on production caused by suppliers' major quality accidents, for important materials, the Group will try to select 3 qualified and capable suppliers as candidates, to increase the Company's resilience and minimize such risk.

6.2 PROMOTION OF INDUSTRY DEVELOPMENT

On 15 October 2018, the communication meeting for business strategic partners in the west region of Pharm HEC was held as scheduled. During the meeting, Mr. Chen Yangui, an executive director of Pharm HEC, first expressed his deep gratitude to the partners attending the meeting for their support of the sales of Pharm HEC for many years. At the same time, he introduced in detail the future corporate planning and international layout of the Group. He mainly shared the business model and sales service system of Pharm HEC and expressed that Pharm HEC would always adhere to "innovation + internationalization" and be the promoter of the professional scientific concept of diagnosis and treatment, and continuously optimize the sales service under the premise of ensuring product quality to provide partners with better services and achieve mutual benefits and a win-win situation.

This strategic visit has become a good start of the strategic cooperation project of Pharm HEC and laid a solid foundation for the deeper commercial strategic cooperation in 2019!

CHAPTER VII CONTRIBUTING TO THE SOCIETY

7.1 PROACTIVELY TACKLING INFLUENZA

The core product of our Group, oseltamivir phosphate, is a very important product in preventing and healing the urgent and mass diseases caused by influenza viruses, and is valued by various governmental departments of the PRC after multiple outbreak of influenza. In respect of the R&D of new dosage form, considering the excellent efficacy of oseltamivir phosphate against the anti-viral influenza, and the difficulty faced by some people in using the existing capsule dosage form, our Company was the first in the whole nation of the PRC, as well as the whole world to develop oseltamivir phosphate in granule dosage form which includes 2 specifications (i.e.15mg and 25mg), obtaining registration of production approval in November 2008 and June 2009 respectively. Driven by the consistency evaluation, our Company is proactively launching in-depth research despite that the pill dosage form still belongs to our exclusive dosage form, and we are making efforts to apply for becoming the Reference Listed Drug for such dosage form in the PRC. On 15 June 2018, the supplementary application for consistency evaluation of oseltamivir phosphate capsule, a blockbuster variety, was accepted by CDE. At present, no other enterprise has made supplementary application for consistency evaluation of this variety. The Group is expected to become a first enterprise passing the consistency evaluation of this variety.

(I) Pharm HEC and Dingxiangyuan reached a strategic cooperation to help with influenza protection

In order to further promote science popularization education on influenza between doctors and the public, on 17 April 2018, Pharm HEC held the online press conference on strategic cooperation with Dingxiangyuan and the centenary influenza in Guangzhou. The press conference was themed on "gathering the efforts of doctors to resist the centenary influenza". Lu Hongzhou, the Party secretary of Shanghai Public Health Clinical Center, Zhou Xin, director of Respiratory Department, Shanghai First People's Hospital Affiliated with Shanghai Jiao Tong University, Zhan Qingyuan, director of Department of Respiratory and Critical Care Medicine IV and V, China-Japan Friendship Hospital, Bao Yixiao, executive dean of Shanghai Pubin Children's Hospital and deputy director of the General Medicine Department of Shanghai Children's Medical Center, and other experts in the industry attended the press conference. Zhong Nanshan, an academician of the Chinese Academy of Engineering and director of the Guangzhou Institute of Respiratory Diseases, also interacted with the audience at the conference through video.

(II) The 3rd Influenza Forum

In order to further improve the prevention and control of influenza and pandemic response, the third China Influenza Forum aiming at "public benefit, leadership, communication and propagation" as sponsored by Pharm HEC was held in Beijing on 13 October 2018. Wang Chen, an academician of the Chinese Academy of Engineering, and Prof. Siu Lun (John) Tam, the Asia-Pacific Alliance for the Control of Influenza, were invited to chair the conference. Parallel sessions on adults and pediatrics were specially set. Over 600 experts, scholars and clinicians in respiratory medicine, pediatrics, emergency treatment, infection, etc. shared and exchanged the latest academic progress and clinical practice experience in relation to influenza, and provided suggestions for better promotion of domestic influenza diagnosis and treatment.

7.2 PRACTICE OF CONTRIBUTING TO OUR COMMUNITIES

While focusing on business development, our Group has also seen supporting public welfare as part of our business development, and contributes to the community for the actual needs such as participating in voluntary blood donation. Our Company organizes non-remunerated activities every year, and on 16 April 2018, our Company organized and launched a non-remunerated blood donation activity of the year. The voluntary blood donation activity was actively responded and wildly supported by the staff of our Company.

OUTLOOK

In the future, the Company will further develop and enrich its product lines, expand the market and enhance the international standards and quality of its products, and continue to expand the coverage of marketing and sales to promote the further growth of the Company's business and profitability and create more economic benefits for investors. At the same time, we will implement the concept of sustainable development in all aspects of enterprise development, and be practically committed to developing sound policies and taking effective measures to promote sustainable development in the economic, environmental and social fields, to make the Group become a top pharmaceutical enterprise with high-end R&D and production capacities, a sense of social responsibility and the concept of sustainable development in the pharmaceutical industry.

APPENDIXES TO THE ESG REPORT

Appendix I Index of the ESG Report of Pharm HEC

Subject Areas, General Disclosures and Key Performance Index(KPI) of Environmental, Social and Governance			Corresponding Sections
Environmental			
A1: Emissions	General Disclosure		Chapter III Green Development
	A1.1	The types of emissions and respective emissions data	Appendix III KPI
	A1.2	Greenhouse gas emissions in total and intensity	Appendix III KPI
	A1.3	Total hazardous waste produced and intensity	Appendix III KPI
	A1.4	Total non-hazardous waste produced and intensity	Appendix III KPI
	A1.5	Description of measures to mitigate emissions and results achieved	Chapter III Green Development
	A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved	Chapter III Green Development
A2: Use of Resources	General Disclosure		Chapter III Green Development
	A2.1	Energy consumption in total and intensity.	Appendix III KPI
	A2.2	Water consumption in total and intensity	Appendix III KPI
	A2.3	Description of energy use efficiency initiatives and results achieved	Chapter III Green Development
	A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved	Chapter III Green Development
	A2.5	Total packaging material used for finished products and with reference to per unit produced	Appendix III KPI
A3: The Environment and Natural Resources	General Disclosure		Chapter III Green Development
	A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them	Chapter III Green Development

Subject Areas, General Disclosures and Key Performance Index(KPI) of Environmental, Social and Governance			Corresponding Sections
Environmental			
B1: Employment	General Disclosure		Chapter V People-oriented
	B1.1	Total workforce by gender, employment type, age group and geographical region	Chapter V People-oriented
	B1.2	Employee turnover rate by gender, age group and geographical region	Appendix III KPI
B2: Health and Safety	General Disclosure		Chapter IV Safe Production
	B2.1	Number and rate of work-related fatalities	Appendix III KPI
	B2.2	Lost days due to work injury	Appendix III KPI
	B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored	Chapter IV Safe Production
B3: Development and Training	General Disclosure		Chapter V People-oriented
	B3.1	The percentage of employees trained by gender and employee category	Appendix III KPI
	B3.2	The average training hours completed per employee by gender and employee category	Appendix III KPI
B4: Labour Standards	General Disclosure		Chapter V People-oriented
	B4.1	Description of measures to review employment practices to avoid child and forced labour	Chapter V People-oriented
	B4.2	Description of steps taken to eliminate such practices when discovered	Chapter V People-oriented
B5: Supply Chain Management	General Disclosure		Chapter VI Win-Win Cooperation
	B5.1	Number of suppliers by geographical region	Appendix III KPI
	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored	Chapter VI Win-Win Cooperation

Subject Areas, General Disclosures and Key Performance Index(KPI) of Environmental, Social and Governance			Corresponding Sections
Environmental			
B6: Product Responsibility	General Disclosure		Chapter II Lean Quality
	B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	Appendix III KPI
	B6.2	Number of products and service related complaints received and how they are dealt with	Appendix III KPI
	B6.3	Description of practices relating to observing and protecting intellectual property rights	Chapter II Lean Quality
	B6.4	Description of quality assurance process and recall procedures	Chapter II Lean Quality
	B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored	Chapter II Lean Quality
B7: Anti-corruption	General Disclosure		Chapter I Responsibility Governance
	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	Chapter I Responsibility Governance
	B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored	Chapter I Responsibility Governance
B8: Community Investment	General Disclosure		Chapter VII Contributing to the Society
	B8.1	Focus areas of contribution	Chapter VII Contributing to the Society
	B8.2	Resources contributed to the focus area	Appendix III KPI

Appendix II List of ESG Management Policies and Regulations of Pharm HEC

List of policies and indicators ESG areas	Laws and regulations complied with	Corporate internal policies
A1. Emissions **A2. Use of Resources** **A3. The Environment and Natural Resources**	Environmental Protection Law of the People's Republic of China Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste Water Pollution Prevention and Control Law of the People's Republic of China Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution Law of the People's Republic of China on Prevention and Control of Pollution From Environmental Noise Integrated Emission Standard of Air Pollutants Emission Standard of Air Pollutants from Boilers Integrated Emission Standard of Sewage Water Quality Standards on Sewage Discharged to Urban Sewers Emission Standard for Industrial Enterprise Noise at Boundary	Environmental Management System
B1. Employment	Labour Law of the People's Republic of China Labour Contract Law of the People's Republic of China Employment Promotion Law of the People's Republic of China Social Insurance Law of the People's Republic of China	Human Resources System
B2. Health and Safety	Law on the Prevention and Treatment of Occupational Diseases of the People's Republic of China Safe Production Law of the People's Republic of China Industrial Injury Insurance Regulations of the People's Republic of China Regulations on the Labour Protection of Female Staff and Workers of the People's Republic of China Production Safety Accident Report and Investigation	Safe Production System

List of policies and indicators ESG areas	Laws and regulations complied with	Corporate internal policies
B4. Labour Standards	Labour Law of the People's Republic of China Provision on Prohibition of Child Labour of the People's Republic of China Law of the People's Republic of China on Protection of Minors	Prevention and Handling of Labour Disputes
B5. Supply Chain Management	Company Law of the People's Republic of China Contract Law of the People's Republic of China	Material Supplier Management Incoming Material Procurement Management Material Procurement Quality Standard Qualified Supplier List
B6. Product Responsibility	Drug Administration Law of the People's Republic of China Regulations for the Implementation of the Drug Administration Law of the People's Republic of China Measures for the Reporting and Monitoring of Adverse Drug Reactions Measures for Administration of Drug Registration Provisions on the Administration of Pharmaceutical Directions and Labels Measures for Production Supervision and Management of Drugs Good Manufacture Practice of Medical Products (GMP) Good Supply Practice for Pharmaceutical Products (GSP) Measures for Administration of Pharmaceutical Distribution Certificates Measures for Administration of Drug Import Measures for Administration of Drug Recall Regulations on Protection of Traditional Chinese Medicines	Services for Customers Customers Complaints Handling Product Return Management Drug Recall

List of policies and indicators ESG areas	Laws and regulations complied with	Corporate internal policies
	Measures for Administration of Drug Information Service over the Internet Interim Measures for Administration of Internet Advertising Advertising Law of the People's Republic of China Law of the People's Republic of China on Protection of the Rights and Interests of Consumers Trademark Law of the People's Republic of China Copyright Law of the People's Republic of China Patent Law of the People's Republic of China Intellectual Property Law of the People's Republic of China Pharmacopoeia of the People's Republic of China	
B7. Anti-corruption	Criminal Law of the People's Republic of China Anti-Money Laundering Law of the People's Republic of China Drug Administration Law of the People's Republic of China Regulations for the Implementation of the Drug Administration Law of the People's Republic of China Anti-unfair Competition Law of the People's Republic of China Provisional Regulations on the Prohibition of Commercial Bribery	Integrity and Self-discipline Commitment Internal Control System Agreement of Anti-commercial Bribery Agreement on Anti-Commercial Bribery between the Suppliers and Purchasers Agreement on Anti-Commercial Bribery of Sales Cooperation Parties

Appendix III ESG KPI of Pharm HEC

Environmental performance

List of environmental data

Aspect A1: emission

Indicator required		Unit	2017	2018
A1.1	**Type of emissions and relevant data of discharge**			
	Industrial wastewater	tonnes	26,545	**33,600.18**
	Chemical oxygen demand COD_{Cr}	tonnes	–	**1.23**
	Ammonia nitrogen	tonnes	–	**0.08**
A1.2	**Total emissions and density of greenhouse gas**			
	Total emissions of greenhouse gas	tonnes CO2e	13,168.54	**19,427.07**
	Scope 1 Total emissions of greenhouse gas	tonnes	–	**1.64**
	Scope 2 Total emissions of greenhouse gas	tonnes	–	**19,425.42**
	Density of greenhouse gas	tonnes CO2e/ revenue (million dollars)	8.22	**7.74**
A1.3	**Total hazardous wastes generated**			
	Pharmaceutical wastes (HW02)	tonnes	10.05	**23.68**
	Other hazardous wastes	tonnes	26.20	**54.65**
	Density of hazardous wastes	tonnes/ revenue (million dollars)	0.02	**0.03**
A1.4	**Total non-hazardous wastes generated**			
	General industrial wastes and domestic wastes	tonnes	554.51	**553.99**
	Density of non-hazardous wastes	tonnes/ revenue (million dollars)	0.34	**0.22**

List of environmental data

Aspect A2: Use of resources

Indicator required		Unit	2017	2018
A2.1	**Total energy consumption and density**			
	Externally purchased power: Central China Grid	kWh	18,331,272	**16,527,677**
	Externally purchased steam	tonnes	19,755.60	**14,522.80**
	Diesel	litres	600	**630**
	Integrated energy consumption	tonnes of standard coal	4,797.21	**8,506.33**
	Integrated energy consumption density	tonnes of standard coal/ revenue (million dollars)	2.99	**3.39**
A2.2	**Total water consumption**			
	Freshwater consumption	tonnes	276,414	**346,151.70**
A2.5	**Packaging material used for finished goods**			
	Packaging materials used	tonnes	1,325.75	**4,110.73**

List of environmental data

Guidelines on Environmental Information Disclosure by Companies Listed on Shanghai Stock Exchange

Indicator required		Unit	2017	2018
Other 1	**Main raw materials consumed**			
	Shikimic acid	tonnes	–	**33.75**
	Dichloromethane	tonnes	–	**312.35**
	Methanol	tonnes	–	**97**
	Ethanol	tonnes	–	**19**
Other 2	**Resource input for environmental governance**			
	Investment in environmental governance and protection	RMB	–	**5,247,622**
Other 3	**Administrative penalty against pollutants**			
	Number of administrative penalty	Times	–	**0**
	Amount of penalty	RMB	–	**0**
Other 4	**Environmental accidents**			
	Number of excessive or illegal discharge	Times	–	**0**
	Total amount of excessive or illegal discharge of sewage	tonnes	–	**0**

Social performance

List of social data

Aspect B1: employment

Indicator required		Unit	2017	2018
B1.1	**Total workforce by gender, age group, geographical region and education**			
	Total workforce	persons	1,997	**4,024**
	By gender			
	Number of male employees	persons	1,048	**2,453**
	Number of female employees	persons	949	**1,571**
	By age group			
	Below 30	persons	899	**1,696**
	30-50	persons	1,078	**2,299**
	50 or above	persons	20	**29**
	By geographical region			
	Hubei Province	persons	–	**1,319**
	Other regions in the PRC	persons	–	**2,696**
	Overseas	persons	–	**9**
	By education			
	Master or above	persons	–	**116**
	Bachelor	persons	–	**1,401**
	Associate	persons	–	**1,624**
	Vocational or below	persons	–	**883**

List of social data

Aspect B1: employment

Indicator required		Unit	2017	2018
B1.2	**Employee turnover rate by gender, age group and geographical region**			
	Total number of employee turnover	persons	179	**571**
	Employee turnover rate	%	8.96	**14.20**
	By gender			
	Number of male employees turnover	persons	114	**379**
	Number of female employees turnover	persons	65	**192**
	By age group			
	Turnover of employees below 30	persons	134	**259**
	Turnover of employees at 30-50	persons	45	**310**
	Turnover of employees 50 or above	persons	0	**2**
	By geographical region			
	Number of employee turnover in Central China	persons	171	**462**
	Number of employee turnover in other regions of the PRC	persons	8	**109**
	Overseas turnover	persons	0	**0**

List of social data

Aspect B2: Health and Safety

Indicator required		Unit	2017	2018
B2.1	**Number of work-related fatalities**			
	Number of work-related fatalities	persons	–	**0**
	Rate of work-related fatalities	%	–	**0**
B2.2	**Lost working days due to work injury**			
	Number of work injury	Times	–	**1**
	Total lost working days due to work injury	Days	–	**11**

Aspect B3: Development and Training

Indicator required		Unit	2017	2018
B3.1	**Employees trained by types**			
	Total number of employees trained	persons	1,997	**4,024**
	By Type of Employees			
	Senior management	persons	9	**43**
	Mid-level management	persons	167	**393**
	Base-level employees	persons	1,821	**3,588**

List of social data

B3.2	**Training hours of employees by type of employees**			
	Total training hours for all employees	hours	65,450	**168,765**
	Average training hours for all employees	hours	32.8	**41.94**
	By Type of Employees			
	Total training hours for senior management	hours	610	**845**
	Total training hours for mid-level management	hours	5,277	**5,204**
	Total training hours for base-level employees	hours	59,563	**162,716**

Aspect B5: supplier management

Indicator required		Unit	2017	2018
B5.1	**Number of Suppliers by Region**			
	Total number of suppliers	suppliers	2,573	**1,175**
	Geographical Distribution of Suppliers			
	Hubei Province	suppliers	576	**258**
	Other regions in the PRC	suppliers	1,931	**895**
	Overseas	suppliers	66	**22**

List of social data

Aspect B6: Product Responsibility

Indicator required		Unit	2017	2018
B6.1	**Percentage of total products sold or shipped subject to recalls for safety and health reasons**			
	Amount of product recalled due to health and safety reasons	cartons	0	**0**
	Percentage of product recalled due to health and safety reasons	%	0	**0**
B6.2	**Number of products and service related complaints received**			
	Complaints related to product quality	Times	–	**0**
	Other complaints	Times	–	**7**

Aspect B7: Anti-corruption

Indicator required		Unit	2017	2018
B7.1	**Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period**			
	Number of pending or concluded legal cases regarding corrupt practices	cases	0	**0**

Aspect B8: Community investment

Indicator required		Unit	2017	2018
B8.2	**Resources contributed to the focus area**			
	Number of employees participated in voluntary services	persons	26	**10**
	Number of hours of voluntary services	hours	797.5	**30**

FEEDBACK

Dear Readers,

Thank you for reading this Report! This is the Environmental, Social and Governance (ESG) report published by us for 2018. It would be very much appreciated if you could appraise the Report and give us your sincere comments to help us to continuously improve the Report.

If you have any opinions or suggestions on ESG of the Group, please scan the QR code below to provide your feedback, thanks!

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