





# For the health For the future



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# The Report at A Glance



### **Overview**

The report, covering the period from January 1, 2021 to December 31, 2021, is the fifth corporate social responsibility (CSR) report issued by Joincare Pharmaceutical Group Industry Co., Ltd. ("Joincare", the Company or the Group) (Stock Code: 600380).



### **Preparation Basis**

This report is prepared mainly in accordance with the No.1 Guidelines for self-discipline regulation of Listed Companies on the Shanghai Stock Exchange-- Operating in a well-regulated manner and with reference to the Environmental, Social and Governance (ESG) Reporting Guide published by the Hong Kong Stock Exchange (i.e. SEHK). In light of the requirements of the aforementioned standards, to ensure the completeness, materiality, authenticity and balance of the content, the preparation of this report has gone through steps including benchmark selections, questionnaire survey, interviews with relevant stakeholders, due diligence and research of social responsibility, information collection, information review, report compilation and the management review.



### **Scope of the Report**

The policy documents, statements, and data in this report cover Joincare and its wholly-owned subsidiaries and holding subsidiaries.



### **Definitions**

For the sake of compendious expression, "Joincare", "Group" and "we" mentioned in this report all refer to Joincare Pharmaceutical Group Industry Co., Ltd. This report involves several subsidiaries of Joincare. Moreover, the full names and abbreviations of the subsidiaries used in the report are listed below:

Name of Subsidiary	Abbreviation
Shenzhen Haibin Pharmaceutical Co., Ltd.	Haibin Pharma
Xinxiang Haibin Pharmaceutical Co., Ltd.	Xinxiang Haibin
Shenzhen Taitai Pharmaceutical Co., Ltd.	Taitai Pharmaceutical
Jiaozuo Joincare Bio Technological Co., Ltd.	Jiaozuo Joincare
Joincare Haibin Pharmaceutical Co., Ltd.	Joincare Haibin
Shanghai Frontier Health Pharmaceutical Technology Co., Ltd.	Shanghai Frontier
Guangzhou Joincare Respiratory Drugs Engineering Technology Co., Ltd.	Guangzhou Joincare
Sichuan Guangda Pharmaceutical Manufacturing Co., Ltd.	Sichuan Guangda

Name of Subsidiary	Abbreviation
Shanghai Livzon Pharmaceutical Manufacturing Co., Ltd.	Shanghai Livzon
Livzon Group Livzon Pharmaceutical Factory	Livzon Pharmaceutical Factory
Livzon Group Limin Pharmaceutical Manufacturing Factory	Limin Factory
Zhuhai Livzon Diagnostics Inc.	Livzon Diagnostics
Zhuhai Livzon Biotechnology Co., Ltd.	LivzonBio
Zhuhai Livzon Microsphere Technology Co., Ltd.	Livzon Microsphere
Livzon Group Xinbeijiang Pharmaceutical Manufacturing Inc.	Xinbeijiang Pharmaceutical
Gutian Fuxing Pharmaceutical Co., Ltd.	Gutian Fuxing
Jiaozuo Livzon Hecheng Pharmaceutical Manufacturing Co., Ltd.	Jiaozuo Hecheng
Livzon Group (Ningxia) Pharmaceutical Manufacturing Co., Ltd.	Ningxia Pharmaceutical
Zhuhai FTZ Livzon Hecheng Pharmaceutical Manufacturing Co., Ltd.	Livzon Hecheng
Livzon Group Fuzhou Fuxing Pharmaceutical Co., Ltd.	Fuzhou Fuxing
Livzon MABPharm Inc.	Livzon MAB
Shanghai Livzon Biotechnology Co., Ltd., Jiaozuo Branch	Shanghai Livzon Bio



### **Data Sources and Reliability Statement**

Joincare guarantees that this report does not contain any false representation, misleading statement or material omission and assumes liability for the authenticity, accuracy and integrity of this report.



### **Access and Response to the Report**

This report can be accessed or downloaded from the official website of Shanghai Stock Exchange (www.sse.com.cn) and our official webpage (www.joincare.com). Should you need to make further inquiries, comments or suggestions regarding this report, please contact us via fax (0755-86252165) or email (joincare@joincare.com).



### **Confirmation and Approval of this Report**

The contents of this report have been confirmed by the management and been approved by our Board of Directors on March 29, 2022.

This report is originally written in Chinese; this English version is for stakeholders' reference only. Should ambiguities arise between the two versions, the Chinese version shall prevail.

# **Chairman's Statement**

#### Dear stakeholders and friends:

2021 was a year of special significance. It witnessed the realization of China's goal of building a moderately prosperous society in all respects. It marked the 100th anniversary of the founding of the Communist Party of China (CPC). It also embarked on the 14th Five-Year Plan period. Throughout the year, Joincare actively responded to the initiatives of the CPC and the state. While maintaining robust growth in business, we thoroughly implemented new concepts for high-quality development. All the efforts and endeavors enabled us to present satisfactory accomplishments to all stakeholders.

Adhering to the mission of " For the health, For the future " and the vision of " Attentively developing high-quality medicines and innovative medicines", we firmly follow the dual-drive strategy and actively prompt the R&D and global layout of innovative medicines and high-barrier complex drug preparations, in order to provide patients with more high-quality medicines. In terms of inhalation preparations, our well-balanced R&D pipeline made considerable progress in 2021. Two key varieties of inhalation preparations entered the production application stage, and multiple exclusive products received notice of approval for clinical trial. In terms of biomedicine, we completed the interim analysis of master data from phase III clinical trial of sequential boosting immunization of Recombinant SARS-CoV-2 Fusion Protein Vaccine (V-01), which was jointly developed by the Institute of Biophysics of the Chinese Academy of Sciences and Livzon Mabpharm, a subordinate company of us. The analysis revealed critical data. V-01 features excellent immunogenicity and safety due to its innovative molecular structure and can thereby benefit a larger population in a wider coverage and for a longer time, contributing to the prevention and control of the COVID-19 epidemic globally. In addition, the promotion of V-01 has important strategic significance to our business development. It will not only help us to quickly enter and explore the vaccine field, but also prepare us with rich resources and experience for delivering innovative medicines to the world in the future.

With patients in our mind, we are committed to improving the availability of medicines and standardizing the process of treatment. In 2021, three of our inhalation preparations were listed in the fifth round of the national centralized drug procurement program. They will benefit more patients suffering respiratory diseases with a lower price and help us to rapidly develop the market in China. For underdeveloped regions outside China, we take local per capita income into full consideration and employ differentiated pricing strategies in our product promotion, to make our drugs more affordable. We advocate rational use of

medicines. To this end, we have developed a unique digital marketing strategy based on features of chronic disease medications and pain points of patients. This strategy is designed to connect the silos of hospitals, doctors, patients, and pharmaceutical companies to form a closed loop to effectively solve irrational use of medicines.

In terms of sustainable development, we actively respond to the national "dual carbon" policy and continuously promote energy conservation and emission reduction in our production sites. In addition, We have established a strategic cooperation agreement with Tencent Quantum Lab and Chemical.AI. By taking this initiative, we will work towards technological breakthroughs in sustainable pharmaceuticals and new paths for low-carbon development, in order to reduce environmental pollution and resource consumption from the origin, thereby contributing to realization of the "dual carbon" goal.

We attach importance to social responsibility. To this end, we devote ourselves to public welfare by continuously investing in multiple sectors, such as community health, education, industry revitalization, anti-epidemic support, and disaster relief. In this way, we contribute to rural revitalization and common prosperity. By the end of 2021, our "Inclusive Public Welfare Program on Chronic Diseases" has reached 14 remote regions. This won us two honored titles: "Model Enterprise in Brand Influence and Social Responsibility in China of 2021" and "Model Enterprise in Rural Revitalization of 2021".

Grand ambition makes a grand contribution. High diligence gains high achievements. The new blueprint is inspiring, the new mission is encouraging, and the future journey may be painstaking. At the new starting point to the future, Joincare will carry on its original intention and forge forward with legacy and innovation. We will strive to grow into an influential pharmaceutical company under the dual drive of technological innovation and high-barrier technology.

Chairman:

March 29, 2022



# **About Joincare**

### 3.1 Group Overview

The business scope of Joincare covers multiple areas, such as chemical drug preparation products, traditional Chinese drug preparation products, chemical active pharmaceutical ingredients (APIs) and intermediates, diagnostic reagents and equipment, and healthcare products. The diversified portfolios and mix of products have enabled the Group to have greater market and growth opportunities.

The Group has diversified and multi-level R&D institutions with strong R&D capabilities and global R&D concepts in the fields of chemical drug preparation products, traditional Chinese drug preparation products, biological drugs, diagnostic reagents, healthcare products and food. Our R&D pipelines focusing on the fields of respiration, anti-infection, anti-tumor, gonadotropic hormones, gastroenterology and neurology, are well balanced. In recent years, we have been focusing on the innovation and improvement of inhalation administration therapy, antibody and microsphere release, lipid microemulsion and other technology platforms. Through the efforts mentioned above, we further improve our product portfolios and business and our core competitiveness.

Main products of the Group are as follows:

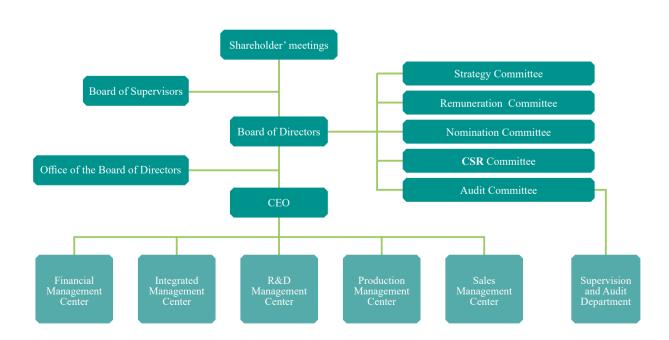
Product Type	Treatment Field	Main Products	
		TOTAL  AND TOTAL  AN	WATER AND THE CONTROL OF THE CONTR
	Respiration	Levosalbutamol Hydrochloride Nebuliser Solution (丽舒同)	Budesonide Suspension for Inhalation (雾舒)
Chemical drug preparation products	Respiration	WA用品化療物を含めている。  WA用品化療物を含めている。  WA用品化療物を含めている。  WATER CONTROLL OF THE CONTRO	<b>収入用息方用所</b> 化療物務 <b>収入用息方用所</b> 化療物務 <b>収入用息方用所</b> 人機物務 <b>収入用息方用所</b> 人機能激素
		Ipratropium Bromide Solution for Inhalation (丽雾安)	Compound Ipratropium Bromide Solution for Inhalation (舒坦琳)
	Gastroenterology	文色加度を	注射用艾普拉唑钠 (10mg) ILAPRAZOLE SODIUM FOR INJECTION
		llaprazole Enteric-Coated Tablets (畫丽安)	(Ilaprazole Sodium for Injection) (壹丽安)





<b>Product Type</b>	Treatment Field	Main Products	
Chemical  APIs and intermediates	/		Cilastatin Sodium, Phenylalanine, Daptomycin, Vancomycin Acarbose, Lincomycin, etc.
Diagnostic reagents and equipment	/	Autoimmunity multiple detection platform	Diagnostic Kit for IgM / IgG Antibody to Coronavirus (SARS-CoV-2) (Lateral Flow)
Healthcare products	/	Jingxin Menocare Essence	Eagle's American Ginseng Tea

# 3.2 Organizational Structure



## 3.3 Corporate Culture



For the Health, For the Future



Attentively Developing
High-quality Medicines and
Innovative Medicines



Putting People First, Valuing Workmanship and Quality, Pursuing Innovation and Truth, Promoting Cooperation and Sharing

For three decades, Joincare has forged ahead despite the twists and turns, ever staying true to its original aspiration in its ongoing inheritance and innovation. Gradually, we have formed a strong sense of duty – "For the health, For the future". Along this journey, we always act in the interests of patients and focus on the safeguarding of human life and health. We continuously increase our investments in R&D and innovation, work with top domestic R&D teams to conduct in-depth research and strategic planning, and carefully conceive a new vision for "Attentively developing high-quality medicines and innovative medicines". In addition, we actively and continuously contribute to the building of a community with a shared future for the public. Even while focusing on the business development, we are committed to empowering employees, providing them with opportunities for sustainable career development. With "Putting people first, Valuing workmanship and quality, Pursuing innovation and truth, Promoting cooperation and sharing" as core values, we consider the quality of products, the training of talents, and the strength of R&D of the utmost importance, thereby aligning the values of the enterprise with those of our employees.

## 3.4 Value Sharing

During the reporting period, Joincare achieved total revenues of RMB 15.904 billion, representing a year-on-year increase of 17.62%; achieved net profits attributable to shareholders of the listed company of RMB 1.328 billion, representing a year-on-year increase of about 18.57%; and achieved net profit attributable to shareholders of the listed company after extraordinary gain or loss of RMB1.225 billion, representing a year-on-year increase of about 26.72%.

At the same time, the Group was actively creating social value. It generated tax revenues for the government of RMB1.653 billion, paid RMB 1.951 billion in salary to employees, distributed dividends and paid interest worth RMB1.271 billion to banks and other creditors, donated funds and goods totaling RMB 29.10 million to the society, and achieved a social contribution per share of approximately RMB 2.57 for the society in 2021.



Total revenues

Net profits attributable to shareholders of the listed company

Tax revenues for the government

15.904 billion

**1.328** billion

**1.653** billion

Salary to employees

Donated funds and goods

Social contribution per share

**1.951** billion

**29.10** million

2.57 Yuan



### 3.5 Honors



## March

Awarded by: Shenzhen Women's Federation

Awards/Honors: Shenzhen March 8th Red Banner Collectives

# **July**

Awarded by: menet.com.cn

Awards/Honors: Top 9 in "2020 Annual Ranking of Top 100 Chinese

Chemical Drug Enterprises"

# **September**

Awarded by: China Enterprise Confederation / China Enterprise

Directors Association

Awards/Honors: Top 500 Enterprises of Chinese Manufacturing Industry

Awarded by: Shenzhen Association for Promoting the Development

of Strategic Emerging Industries, Shenzhen Press Group,

Shenzhen Economic Daily, etc.

Awards/Honors: 2021 Top 50 Leading Enterprises in Strategic Emerging

Industries in Guangdong-Hong Kong-Macao Greater

Bay Area

Awarded by: menet.com.cn

Awards/Honors: "Top 10 BigPharma Enterprises by Innovation Strength

in China" under the 2020 Annual Ranking of Top 100 Enterprises by Innovation Strength in Biomedical

Industry in China

# May

Awarded by: China Enterprise News, Consumption Daily, Discovery

brand, etc.

Awards/Honors: 2021 Model Enterprise of Social Responsibility with

Brand Influence in China, 2021 Model Enterprise for

Rural Revitalization

# **August**

Awarded by : Zhejiang University School of Management, Shenzhen

Press Group

Awards/Honors: 2020 China's Top 500 Listed Companies by Innovation

Index, 2020 China's Top 200 Listed Companies by

Innovation Strength

## November

Awarded by: Shenzhen Advanced Technology Enterprise

Development Association

 $Awards/Honors: \ \ Top\ 20\ Leading\ Green\ Enterprises\ among\ 2021\ Leading$ 

Enterprises for High-Quality Development

# December

Awarded by : Sina Finance, The Growing of the Great Brand under

CCTV-1

Awards/Honors: Top 24 among "2021 Top 500 Excellent ESG Enterprises

in China"

Awarded by: National Business Daily

Awards/Honors: "Listed Company of the Largest Growth Potential in the

Healthcare Industry" on the 2021 11st Reputation List of

China Listed Companies

2021

# 4 Governance

### 4.1 CSR Strategy

Joincare is striving to be an explorer in the healthcare industry and insisting on creating a healthy life driven by technology. The Group pays great attention to its sustainable development, and actively focuses on the internal regulatory environment and external policy guidance. Considering China's 14th Five-Year Plan and the local government's development plan, the Group has formulated a CSR strategy and goals adapting to its current business situation.

Focusing on "health", the Group's CSR strategy aims to provide the whole society with high-quality, safe, accessible and affordable medical products and services through the development of its principal businesses, while improving the overall strength of the health industry. Meanwhile, the strategy is committed to empowering employees and communities, emphasizing environmental protection and promoting the overall health development in society.

### 4.2 CSR Governance

Joincare has long valued the governance of its social responsibilities. In July 2020, the Group formally established the Social Responsibility Committee of the Board of Directors. The main duties of this organization are studying and formulating the Group's social responsibility strategy and policies; reviewing and determining the plans and measures for social responsibility fulfillment; supervising the implementation of such plans by the Group's social responsibility working group; supervising, inspecting and evaluating the Group's fulfillment of social responsibilities and giving advice. The Social Responsibility Committee has the right to question the major matters occurring in the production and operation process with an influence on the Group's fulfillment of social responsibilities, and is responsible for inspecting and urging the handling of such matters.

The Social Responsibility Committee is composed of three directors, including one independent director. The term of the Committee shall be the same as that of the Board of Directors. In August 2021, the general election of the Committee was completed. In the Social Responsibility Committee, there is a Social Responsibility Working Group of 30 members, with the Group's President serving as the group leader, and the heads of important functional departments including the Office of the Board of Directors, the Quality Management Department, the Environment, Health and Safety (EHS) Department and the Human Resources Department as members. The group is responsible for daily work liaison, reporting and meeting organization.

The 22nd meeting of the 7th session of the Board of Directors of the Group has reviewed and adopted the Social Responsibility Management Policy of Joincare, which clarifies the duties and work scope of the Social Responsibility Working Group and standardizes the division of labor among functional departments. This marks that the institutionalized and systematic management of the Group's social responsibility work has been realized.

### **2021 CSR Report Kick-off Meeting**

Case

In November 2021, Joincare organized and convened the 2021 CSR report kick-off meeting, in which all members of Social Responsibility Working Group, the heads of important functional departments and the senior management of the Group and its subsidiaries all participated. We invited external professional ESG teams to help the Group review and summarize its social responsibility work in 2020 and analyze and share the excellent practices from domestic and international counterparts. With sustainable development as the goal, the Group planned management priorities for the next year's social responsibility work of Joincare.





# 4.3 Communication on Responsibilities

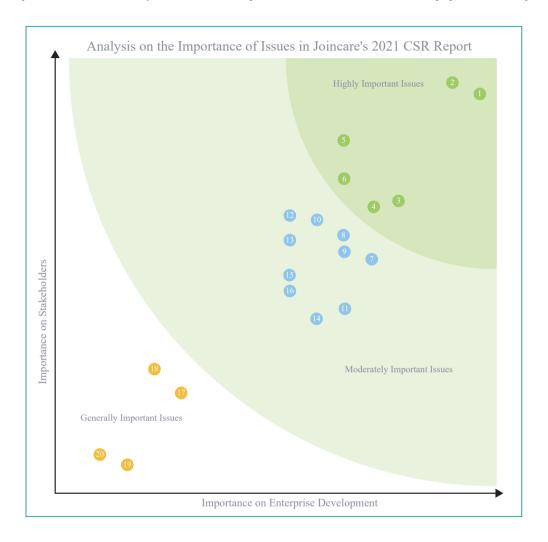
### 4.3.1 Communication with Stakeholders

By establishing a normal mechanism to communicate with stakeholders, Joincare actively responds to their requirements, achieves effective interaction with stakeholders, creates more value for them, and promotes the implementation of sustainable development work.

Stakeholders	Communication Requirements	Communication Methods
Employees	Protecting employees' rights and interests  Caring for employees and communicating to know their requirements  Providing salaries and welfare benefits, as well as training for development	Workers' congresses and labor union  Employees' satisfaction survey  Occupational health and safety training  Feedback platforms  Daily communication and visits
Investors	Conducting standardized governance and strict risk control Ensuring sound operation and value creation Providing open and transparent information disclosure	Shareholders' meeting  Regular releases of business information and data  By telephone, fax, email, and online voting at the general meeting  Through the investor's survey, interactive communication platforms, and external roadshows  WeChat official account
Consumers	Guaranteeing product safety and consumers' rights and interests  Protecting privacy and observing business ethics	Providing product labeling and information disclosure Regular visits Consumers' satisfaction survey Handling of consumers' complaints and opinions
Distributors, suppliers and partners	Guaranteeing honest business operation and pharmaceutical compliance  Facilitating timely communication and win-win development	Regular communications  Working meetings and exchanges via telephone and correspondence  Company's website
Government and regulators	Working in compliance with laws and ensuring drug safety  Cooperating with the government's regulation and operating in light of regulations  Paying taxes in accordance with laws and creating jobs	Government-enterprise symposiums  Supervision and inspection  Work reports and surveys
Media	Promoting effective interaction and information disclosure	Interactive communication platforms  Special reports  External roadshows
Pharmaceutical industry associations/organizations	Promoting fair competition and experience sharing	Industry organization meetings  Experience sharing sessions  Site visits and exchanges
Community/ The public	Charity  Boosting community development and creating social value	Volunteering activities  Money and medicine donation  Medicine knowledge publicity

### 4.3.2 Decision of Critical Issues

The Group engaged external professional consultants to review and evaluate the Group's annual sustainability issues. In combination with the feedback from internal and external stakeholders on existing issues and the business characteristics of Joincare, by aligning with the major CSR issue lists of peer companies, and based on the previous year's analysis results of major CSR issues, the important sustainable development issues to Joincare this year were determined, updated and summarized as the basis for the preparation of this report.



Highly Important Issues	Moderately Important Issues	Generally Important Issues
Product Quality and Safety	7 Supply Chain Management 13 Responsible Marketing	17 Energy Management
2 Product R&D and Innovation	Employee Training and Development Equal Employment	18 Biodiversity Conservation
3 Emission Management	9 Information and Data Security Investor Relations Management	Climate Change Risks and Countermeasures
4 Talent Attraction and Retention	10 Business Ethics 16 Inclusive Healthcare	20 Charity
Protection of Intellectual Property Rights	Water Resources Management	
6 Occupational Health and Safety	Corporate Governance	



### 4.4 Compliance Governance

In strict accordance with the requirements of the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Code of Corporate Governance for Listed Companies, the Rules Governing the Listing of Stocks on Shanghai Stock Exchange and other relevant laws and regulations, Joincare continuously improved its corporate governance structure, strengthened information disclosure management, investor relations management and made efforts to improve the Group's internal controls to standardize its operations.

### 4.4.1 Protection of Shareholders' Rights and Interests

We convene and hold general meetings in strict accordance with the Articles of Association, the Rules of Procedure for General Meetings and other relevant regulations to ensure that resolutions are made in a fair and open manner so that the rights and interests of shareholders are protected. At the same time, we make full use of modern information technologies, like online voting technology, to ensure that all shareholders, especially our minority shareholders, are able to participate in general meetings in the most efficient and effective way and to exercise their right to know and to participate in decision making.

Joincare has independent business and an autonomous operation capacity. The Group and its controlling shareholder implement independent management and independent accounting in business, personnel, assets, institution and finance. The controlling shareholder of the Group exercise their rights and assume their obligations in strict accordance with laws and regulations, and they do not directly or indirectly interfere with the decision-making and business activities of the Group by bypassing the general meetings. We have formulated the Policy for Preventing the Controlling Shareholder or the De Facto Controller and Other Related Parties from Occupying Company Funds and established a long-term mechanism for preventing the controlling shareholder or the de facto controller and other related parties from occupying funds of the listed company and infringing upon the interests of the listed company.

During the reporting period, there were no disputes arising from the appropriation of the Group's assets by the Group's controlling shareholder, or the de facto controller and other related parties and the detriment of the interests of the Group and the minority shareholders.

### 4.4.2 Performance of Duties of Directors and Supervisors

In August 2021, the general election of the Board of Directors of Joincare was completed. Consequently, the number of members of the Board of Directors was increased from 7 to 9 (4 independent directors in total); there are 3 female directors, accounting for over 30% of the total. To further raise the effectiveness of governance of the Board of Directors and constantly improve the corporate management structure, in addition to increasing female members of the Board of Directors, we also take the members' professional background into account. Based on existing professionals in the fields of corporate management, finance, law and production, we further optimized the structure of the Board of Directors, and appointed an expert in the pharmaceutical industry and an accounting professional, with a view to providing more forward-looking, scientific and feasible opinions for the Group's standardized governance and major policy decision-making. At the same time, the Board of Directors has established the Audit Committee, the Remuneration and Assessment Committee, the Strategy Committee, the Nomination Committee and the Social Responsibility Committee to assist in performing decision-making and monitoring functions of the Board. It has given full play to the professional advantages of each committee to ensure the legality, scientificity and accuracy of its decision-making.

There are three supervisors on the Supervisory Committee of Joincare, including one employee representative. The Supervisory Committee performed its duties in accordance with the law, supervised the performance of duties of the Group's directors and senior management, regularly inspected the Group's financial affairs, paid attention to the Group's major investment projects, and fully safeguarded the interests of the company and all shareholders.

### Joincare Was Awarded the "Best Board of Directors of Listed Companies"

Case

In December 2021, due to our outstanding performance in improved corporate governance structure, operating in a well-regulated manner as a public company, good market image, and effective protection of the lawful rights of investors, Joincare was awarded the "Best Board of Directors of Listed Companies" on the 11st Reputation List of China Listed Companies for the year 2021.



### 4.4.3 Disclosure Transparency

We fully recognize the importance and necessity of open and transparent information disclosure, and formulate the Management System for Information Disclosure Affairs to actively perform our information disclosure obligation as a listed company. Since Joincare went on public, we have strictly observed the principles of "truthful, accurate, complete, timely, concise, clear, and easily understandable" information disclosure, ensured that all investors have full access to significant information on the Company, including information on our business operations, and improved our corporate transparency to stakeholders.

Throughout 2021, we filed and disclosed 255 disclosure documents; and our published contents have approximately 2.50 million words in Chinese characters, which make us top 95.92 percentile among the domestic public companies in the industry in terms of quantity of information disclosure. Meanwhile, started with the 2021 Interim Report, we released periodic reports in both Chinese and English versions, aiming to comprehensively show our business situation and financial information to domestic and overseas investors. In August 2021, we were awarded the highest rating of "A" (Excellent) in the evaluation of information disclosure work of listed companies organized by Shanghai Stock Exchange in 2020 and 2021, indicating that Joincare's information disclosure work was fully affirmed by the regulatory authorities and the capital market. Moreover, MSCI upgraded our ESG rating twice for two consecutive years. The latest upgrading was from BB to BBB. This milestone illustrates Joincare's capabilities in sustainable development have been recognized and acknowledged by the capital markets.

#### 4.4.4 Investor Relations

We highly recognize the importance of communication with investors; and formulate the Regulations on Investor Relations Management and other relevant regulations. The Board of Directors designated a special department and relevant staff to take charge of information disclosure and investor relations management, to strengthen communication and contact with minority shareholders and to timely respond to relevant issues raised by shareholders on the productions and operations of the Company. We listen earnestly to the suggestions and opinions of shareholders on the comprehensive strategy and development of the Group, and actively provide investors with information disclosed by the Group.

We establish various communication channels and platforms for our investors, protect the legitimate rights and interests of domestic and overseas investors, especially those of the minority shareholders; and we ensure that all shareholders have equal access to information. During the reporting period, we actively held results release conferences and participated in the 2021 Reception Day Event for Listed Companies in Shenzhen. In addition, we actively communicated with investors, responded to inquiries from investors and maintained investor relations by multiple measures, such as timely answering of the investor service hotline, regular response to the questions raised by investors via sns.sseinfo.com ( $\pm$   $\mathbb{H}$  e  $\mathbb{H}$   $\mathbb{H}$ ), and creation of the WeChat official account "Joincare's Investor Relations". Throughout 2021, our Board office communicated with and responded timely to our investors via the official telephone and via sns.sseinfo.com 400 and 141 times respectively. Moreover, we published 8 articles on our WeChat official account, covering topics of concern for investors, such as corporate performance, business updates, IR events, and ESG governance.

### Launch of WeChat Official Account "Joincare's Investor Relations"

Case

In September 2021, We formally launched the WeChat official account platform of "Joincare's Investor Relations", which further extended our information release channels, improved information transparency, and enhanced the relations between Joincare and investors, enabling us to comprehensively show the Group's image and provide thorough and professional services for our investors.



QR code of WeChat official account "Joincare's Investor Relations"



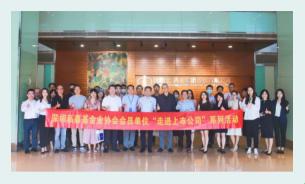
Articles on WeChat official account "Joincare's Investor Relations"



### **Exchange Meetings between Private Equity Firms and Listed Companies**

Case

In September 2021, Joincare held a series of exchanges between private equity firms and listed companies in collaboration with Shenzhen Private Equity Funds Association, and conducted in-depth communication and exchanges with 29 investor representatives and private equity manager representatives in Shenzhen, in a bid to solve the difficulty of conducting high-quality research by member agencies and establish a platform for communication and exchange with outstanding listed companies.



### 4.5 Carrying Forward the Party-Masses Spirit

The year 2021 marks the 100th anniversary of the founding of the Communist Party of China (CPC). It is also a significant year for China's modernization drive. This year kicks off the 14th Five-Year Plan and the new journey toward fully building a modern socialist country. Joincare has thoroughly implemented the spirit of the fifth plenary session of the 19th CPC Central Committee, and vigorously promoted Party building.

The general Party branch of Joincare regularly held the meetings of Party branch committees and the general meetings of all Party members, and organized multi-form and multi-dimensional special activities in an effort to build a loyal, clean, responsible and high-quality cadres team. In 2021, we continued to practice the system of holding Party branch general meetings, meetings of Party branch committees, Party group meetings, and Party lectures. Focusing on learning and practicing the Scientific Outlook on Development, we adopted various forms such as centralized study, listening to reports, and special seminars, to continuously improve the level of political thinking and the quality of policies and regulations.

To deepen the implementation of the Opinions on Further Improving the Quality of Listed Companies issued by the State Council, and give full play to the leading role of Party building in the high-quality development of companies, the general Party branch of Joincare actively responded to the campaign for collection of party-building cases of private listed companies organized by China Association for Public Companies in October 2021. The party-building case titled "Finding the Similarity between the Party and Enterprises – 'Three Dimensional Integration' to Promote High-Quality Corporate Development" of Joincare was selected into the Excellent Party-Building Cases of Private Listed Companies.

### Joincare Held Events to Celebrate the 100th Anniversary of the Founding of the CPC

Case

On the occasion of the 100th anniversary of the founding of the CPC, the general Party branch of Joincare held a series of events for celebration, of which "One Hundred Rank-and-File Party Members Say to CPC" and "Expressing Gratitude with Paintbrush" were greatly supported by rank-and-file Party members, and 100 heart stickers and 23 pictorials in various forms published by departments were received. After one week of exhibition arrangement, the events for the celebration of the 100th anniversary of the founding of the CPC were promoted across nearly thousand colleagues of the Group. In addition, at the Party's Birthday on July 1, 2021, the general Party branch of Joincare organized Party members to watch the live broadcast of the grand gathering and earnestly studied the spirit of General Secretary Xi Jinping's important speech.





### **Shanghai Frontier Conducted Thematic Party Day Activities**

Case

To celebrate the 100th anniversary of the founding of the CPC, Shanghai Frontier, the holding subsidiary of Joincare, organized all its Party members to carry out thematic Party Day activities of "Telling A Story and Singing A Song Together" and "Walking A Distance Together" on June 11 and June 19, 2021. During the activity of "Telling A Story and Singing A Song Together", each of 18 Party members told a piece of Party history and a heroic story, and all of them sang a red song in groups. During the activity of "Walking A Distance Together", 15 Party members visited the Archives of Shanghai Pudong New Area to review the history of the founding of the Party.





### 4.6 Integrity and Business Ethics

We are committed to establishing a good corporate image of integrity by complying with the Criminal Law of the People's Republic of China, the Law of the People's Republic of China Against Unfair Competition, the Interim Provisions on Prohibition of Commercial Bribery and other relevant laws and regulations, following domestic and international codes of business ethics, and advocating a business philosophy of integrity and self-discipline. The Audit Committee of the Group's Board of Directors coordinate the comprehensive work plans to supervise the issues related to business ethics; and the Supervision and Audit Department is responsible for the implementation, including improving integrity systems, carrying out audit and supervision, publicizing and advocating a culture of integrity and good governance, and protecting the rights and interests of the Group and its stakeholders. During the reporting period, we were not involved with any litigation cases of bribery, fraud, extortion, embezzlement or money laundry.

#### 4.6.1 Enhancing Anti-corruption Mechanism

In order to effectively prevent violations including embezzlement, bribery and fraud, we formulate and implement management policies such as the Anti-Corruption and Anti-Commercial Bribery System and the Anti-Fraud Regulations and set additional requirements for particular business segments, including the Financial Management System, the Accounting Organization and Accounting Personnel Management System, the Outbound Investment Management System, as well as the Cost Control. The policies mentioned above are applicable to all the employees of Joincare and its subsidiaries to effectively regulate the use of funds and eliminate embezzlement, bribery, fraud, money laundry and other violations.

In order to implement the anti-corruption management responsibility, we require our management, employees and partners to comply with business ethics. The management shall sign the Oath of Integrity for Senior Executives of the Company to clarify that they shall abide by national laws and regulations, comply with the Group's rules and regulations, and adhere to the principle of integrity and self-discipline during the working period. All employees shall learn the Code of Conduct for Employees in the induction stage to understand the compliance requirements, and sign the Commitment Letter of Anti-commercial Bribery, promising to eliminate integrity violations during their employment. At the same time, the Group also regulates the process to mitigate ethical risks in business cooperation. According to the systems related to procurement management, a bidding team and a bid evaluation team, composed of members from multiple departments of the Group and its subsidiaries, rates potential suppliers in terms of technology and business and identifies the supplier of the highest score to avoid subjective judgment, corruption and fraud. When signing a contract with the Group, all suppliers shall sign the Anti-Commercial Bribery Agreement with the Group as an appendix to the contract, promising to implement the service contents and work in compliance with the commercial ethics standards and regulations in the cooperation process in strict accordance with the contract.



### 4.6.2 Internal Audit and Supervision

Joincare abides by the applicable regulations, such as the Provisions of the National Audit Office on Internal Audit and the Guiding Opinions of the General Office of the State Council on Reforming and Perfecting the Comprehensive Supervision System for the Medical and Health Industry, and complies with the Rules for Implementation of the Audit Committee, the Internal Control System, the Internal Audit Work System, the Internal Audit Project Type and Working Procedures, and the Collection of Internal Audit Work Norms. The Audit Committee formulates the annual work scheme and carries out audit work for the Group and its subsidiaries.

According to the approved annual audit work scheme, the Audit and Supervision Department carries out special audits on the business process of the wholly-owned subsidiaries, holding subsidiaries, business divisions and functional departments of the Group every 18-24 months. During the reporting period, Joincare used a new internal audit template, and no major defects were found in the special audits of the whole business process of the Group's subsidiaries, the general defects detected have been rectified in time and the rectification results have been checked.

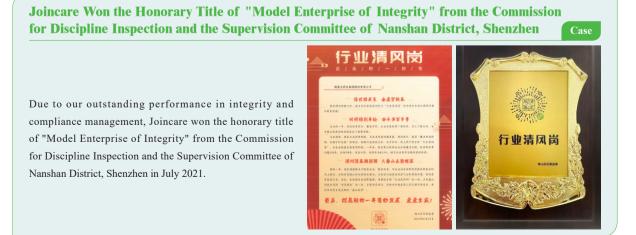
#### 4.6.3 Whistleblower Protection

Joincare formulates the Measures for the Management of Complaining and Reporting, which stipulates that all the employees and partners of the Group have the right to report and complain about misconducts including corruption, commercial bribery, and fraud. Please refer to www.joincare.com/intro/30.html for details of the Group's complaining and reporting channels such as email addresses and telephones. The Group's Supervision and Audit Department is responsible for the complaint management, including the acceptance of reports and complaints, the recording, reporting, investigation, follow-up review and handling of the reported and complained violations of laws and disciplines as well as frauds, which shall be recorded and filed by specially-assigned personnel, so as to ensure that an investigation must be conducted for every complaint or report, a conclusion must be reached for every investigation and a response muse be made to every conclusion.

Joincare strictly keeps confidentiality of the information on whistleblowers and complainants as well as the content of reports and complaints, and incorporates the materials and records of reports into confidential document management. Confidentiality goes the same for verifying the situation. Those who violate confidentiality provisions, leak information on whistleblowers and complainants or retaliate against whistleblowers and complainants will be prosecuted for criminal responsibility once verified.

### 4.6.4 Cultivating a Culture of Integrity

Joincare attaches great importance to the fulfillment of corporate social responsibility, and strives to cultivate a corporate culture of fairness, openness, integrity and transparency. Meanwhile, Joincare integrates the management of business risks into the construction of corporate culture, and forms the corporate philosophy of "integrity, law compliance and honest operation", aiming to carry out business activities with higher ethical standards. The Group's Supervision and Audit Department, through corporate culture publicity and training, guides employees to abide by disciplines and laws, and develop senses of integrity in their respective posts. Employees have been inspired and influenced by the concept of business ethics delivered in the training, which provides strong support for the enterprise to strengthen management and improve efficiency. In 2021, the Group added internal rules and regulations on trade secrets protection and business ethics to the Employee Manual to regulate the conduct of all its employees. We also organized info sessions and trainings on confidentiality management regulations in the induction training of employees recruited from campus, to comprehensively raise the awareness of new employees on law compliance, integrity and self-discipline.



# **Product Quality Control Mechanism**

### 5.1 Quality Management System

Adhering to the basic principles of "risk management, whole-process control, and social co-governance" for quality management, Joincare has established a quality management system for marketing authorization holders (MAH), which covers the full lifecycle management of medicines, including R&D, production, sale and use. Joincare has made continuous efforts to improve product quality so as to ensure safe and effective medicines.

Joincare undertakes and performs MAH responsibilities, and constantly improves the safety, efficacy and quality control of medicines during the entire life cycle. During the reporting period, Joincare sorted out and optimized the MAH quality management system according to relevant laws and regulations, and formulated and amended several internal management documents, including the Regulations on Post-marketing Drug Risk Management, Regulations on Post-marketing Drug Research Management, Regulations on Drug Traceability Management, Regulations on Material Management, and the Management System for Emergency Handling of Drug Safety Incidents.

Pursuant to the laws and regulations such as the Drug Administration Law of the People's Republic of China, the Good Manufacturing Practice (GMP), the Good Supply Practice (GSP), the Good Pharmacovigilance Practice (GVP), and the Measures for the Administration of Post-Marketing Drug Changes (for Trial Implementation), Joincare formulated many management policies, including the Regulations on Project Management in R&D Management Center, the Intellectual Property Management System, the Regulations on Product Quality Review Management, Regulations on Quality Risk Management, the Drug Traceability Management System, and the Lifecycle Pharmacovigilance Management System. Meanwhile, Joincare established a quality management system covering full lifecycle drug R&D, production, operation and pharmacovigilance.

### 5.1.1 R&D System

In 2021, in order to strengthen the drug lifecycle quality management, Joincare consolidated the R&D quality management system while continuously optimizing the GMP system, GSP system and PV system.

The Group set up the R&D Management Center, formulated the Regulations on Project Management in R&D Management Center, and established the CNAS quality management system in accordance with the laboratory certification requirements of China National Accreditation Service for Conformity Assessment (CNAS). The Group implemented strict quality management in the drug R&D process. Multiple departments such as the Business Development Department and Research Management Department performed collaborative management of the product project initiation, project process, intellectual property and registration matters, to ensure orderly project development and compliance with laws and regulations. In addition, the Group established a new R&D quality management system according to the ISO9001 and GMP requirements to implement whole-process management of product R&D, so as to ensure efficiency and compliance.

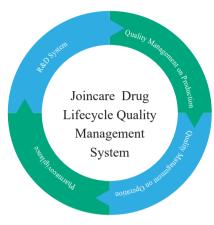


Figure: Drug Lifecycle Quality Management
System of Joincare



Figure: CNAS Laboratory Accreditation Certificate of Guangzhou Joincare Testing Center



Figure: CNAS Laboratory Accreditation Certificate of Shanghai Frontier Drug Analysis and Testing Center



### 5.1.2 Quality Management on Production

Joincare strictly complies with the national laws, regulations and standards related to quality. Meanwhile, in order to continuously improve quality management, participate in the international pharmaceutical market competition and expansion, the Group encourages all marketing authorization holders to apply for international standards certification and establish a production quality system meeting domestic and international requirements.

During the reporting period, the production lines and related products of the Group and its subsidiaries complied with the GMP regulations, and the Group and many of its production subsidiaries have passed the certification of quality management system.

Table: Certification of Quality Management System of Joincare

Name	Certification
Joincare	GB/T19001-2016/ISO 9001:2015
Taitai Pharmaceutical	GB/T19001-2016/ISO 9001:2015
Jiaozuo Joincare	GB/T19001-2016/ISO 9001:2015
Fuzhou Fuxing	GB/T19001-2016/ISO 9001:2015
Ningxia Pharmaceutical ISO22000:2018	GB/T19001-2016/ISO 9001:2015 ISO13485:2016
Livzon Diagnostics	ISO13485:2016

Table: GMP Compliance of Production Lines of Joincare

Project		Joincare's GMP Certifications as at the end of 2021				
GMP Certification	Active Pharmaceutical Ingredients	55 production lines of 7 active pharmaceutical ingredient companies complied with GMP regulations				
	Preparations	53 production lines of 8 preparation companies complied with GMP regulations				
	In Vitro Diagnostic Reagents	2 production lines of 1 in vitro diagnostic reagent company complied with GMP regulations				

Throughout 2021, Joincare had more than 100 varieties in production registered for 172 projects in approximately 60 countries (or regions) across the globe. Overall registration and certification of Joincare's APIs, preparations, and diagnostic reagents are shown as follows:

Table: Global Registration and Certification of Joincare

	Project	Joincare's International Quality Authentication as at the end of 2021				
		13 varieties passed on-site inspection of international certification				
	Active Pharmaceutical	3 products obtained EU GMP certificates				
	Ingredients 86 licensed international certificates with validity period (among					
		inspected by FDA and 13 varieties are with CEP certificates)				
International Quality		1 variety passed international certification				
Authentication	Preparations	2 licensed international certificates				
		1 product obtained EU GMP certificate				
		8 varieties passed international certification				
	In Vitro Diagnostic Reagents	8 varieties passed on-site TUV inspection				
		1 licensed international certificate				

### 5.1.3 Quality Management on Operation

Joincare has established the drug management system in accordance with external laws and regulations such as GSP, and has taken effective quality control measures in the drug procurement, storage, sale and transportation process to ensure drug quality. In addition, Joincare has established the drug traceability system in accordance with the national requirements to ensure that drugs are traceable.

#### **Drug Traceability**

To better fulfill the responsibilities for full lifecycle drug management, Joincare has established and constantly optimized the drug traceability management system. During the reporting period, in order to improve drug traceability management, the Group formulated the Regulations on Drug Traceability Management based on the Drug Traceability Management System, strengthened the management of drug production and distribution, and stipulated that drug traceability data shall be recorded and stored timely and accurately to form an interconnected drug traceability data chain. By doing all this, Joincare aimed to build a whole-process traceability system that covers drug production, distribution and use and makes it possible that the drug source can be queried, whereabouts can be traced, and responsibilities can be investigated, and to ensure that drugs with quality and safety risks can be recalled and responsibilities can be investigated.

Joincare actively supported the 2021 key drug varieties information traceability in Guangdong province. The Group and its subsidiaries vigorously built the information traceability system and urged distributors to build the information traceability system according to the relevant requirements of the National Medical Products Administration. As of the end of the reporting period, the production process of key drug varieties were 100% traceable, and the occupancy rate of first-tier channel operators and the code scanning for storage both met the assessment criteria of drug authorities.

### "On-code" Drug Traceability System Operator Training

Case

According to the requirements of the National Medical Products Administration, a comprehensive drug traceability system shall be established for key varieties to ensure that the whole-process drug traceability information is complete and drug quality and safety are controllable.

On November 30, 2021, Joincare provided training on key points for operation of the "On-code" drug traceability system to the system operators. The training encompassed the operation details of traceability code scanning for drug storage and delivery, the requirements of uploading purchasing and sales flow documents, and the key points for confirmation of the completeness of the whole-process drug traceability information. The training stressed the importance of following up on the verification rate of drug outbound documents and the scanning of inbound purchase documents of downstream enterprises in real time, to ensure that the drug traceability information chain is complete and the whole drug flow is clear and controllable.

#### Management on Drug Instructions and Labels

To earnestly fulfill the MAH's responsibilities, Joincare attaches importance to adverse drug reaction monitoring and actively conducts post-marketing research. Meanwhile, Joincare timely amends and maintains package inserts and product labels as necessary according to the national laws and regulations, to provide objective, accurate, and scientific product information to patients.

Joincare implements the management requirements of package inserts in compliance with laws and regulations, and labels and inserts of Joincare's products all are examined by the National Medical Products Administration. Joincare strictly controls the design, use and change management of package inserts and labels of its products in accordance with internal management documents, such as the Provisions for Medicine Insert Sheets and Labels and the Change Management Regulations. For approved package inserts and labels, the content and design shall not be changed without permission. If change is necessary, additional application, filing and disclosure shall be made according to relevant regulatory requirements.

In the process of promotion, the prescription medicine department of Joincare has carefully reviewed product specifications of the prescription medicines already on the market and publicity materials made by the marketing department as well, to make sure that key information is consistent with the specifications and therefore product information can be properly and effectively transferred to healthcare providers and patients.

Joincare actively conducts post-marketing drug research. During the reporting period, the Group, with reference to the latest specifications of the reference listed drug, extended the expiration date and amended the specifications and labels of Budesonide Suspension for Inhalation, providing more reliable basis for clinical medication.



### 5.1.4 Pharmacovigilance

In 2021, the Group and its subsidiaries optimized the pharmacovigilance system pursuant to the Good Pharmacovigilance Practice in effect. The pharmacovigilance department of the Group performed comprehensive management of pharmacovigilance activities, including the reporting of adverse drug reactions, handling of adverse events, preparation of Periodic Safety Update Reports (PSUR)/Development Safety Update Reports (DSUR), and drug safety risk evaluation.

Key work in 2021:

### In terms of organizational structure and personnel allocation

Joincare established a new drug safety committee and arranged sufficient and qualified professionals for the pharmacovigilance system.

### In terms of management system construction

Joincare formulated the master document of the pharmacovigilance system, set pharmacovigilance quality objectives, and built a drug safety management system, to ensure full lifecycle pharmacovigilance monitoring of the Group's products from R&D through sales, to strike a balance between drug risks and benefits and to promote public health.

### 5.2 Quality Risk Control

According to the laws and regulations, a marketing authorization holder is responsible for its medical products' non-clinical studies, clinical trials, production and marketing, post-marketing management, adverse reaction monitoring and response. In 2021, based on the Drug Administration Law of the People's Republic of China and other legal requirements, the Group streamlined the whole-process quality risk management, formulated the Regulations on Post-marketing Drug Risk Management, and managed risks caused by drug registration, GMP, GSP, GVP and regulatory and industry changes.

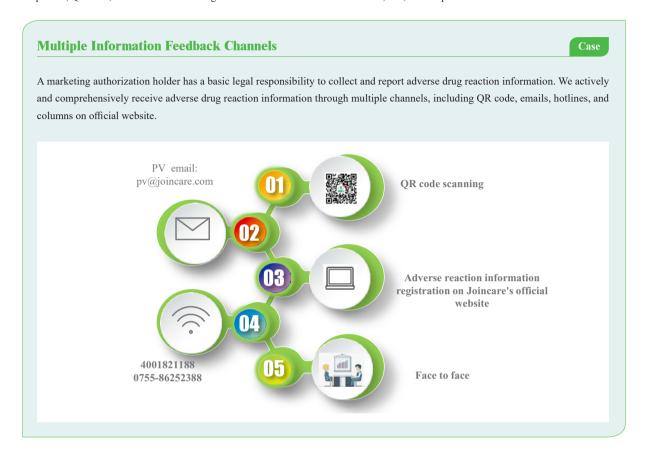
### 5.2.1 Quality Risk Management

In the R&D phase, on the premise of complying with the Good Laboratory Practice for Pharmaceutical Products (GLP) and the Good Clinical Practice for Pharmaceutical Products (GCP), Joincare ensures its development quality by following ICH guidelines such as the pharmaceutical quality system ICH Q10, adopting the Quality Target Product Profile (QTPP), the Failure Mode and Effects Analysis (FMEA), the Hazard Analysis and Critical Control Points (HACCP), and other risk management tools to determine products' critical quality attributes (CQAs) and critical process parameters (CPPs).

In the production procedure, Joincare abides by the Good Manufacturing Practice for Pharmaceutical Products (GMP) and has established systems such as Risk Management and Data Integrity Assessment, etc. We use beforehand and backtracking manners to assess our analysis tools and spot risks lying in man's work, machines, materials, rules, links, and tests with FMEA, HACCP, brain storming, checklists, cause-and-effect diagrams, 5 Whys, and the like. Further, we take corresponding measures to mitigate or eliminate the risks. Other risks are further assessed, analyzed, and discussion and review are conducted, to ensure safety, effectiveness, and control quality of our products.

For post-marketing management, Joincare properly receives, surveys, confirms and reports quality complaints and adverse reaction information according to the Customer Complaint Handling Procedure, the Adverse Medicine Reaction Handling Procedure, and the Medicine Safety Accident Handling Procedure. During the reporting period, Joincare formulated the Regulations on Post-marketing Drug Research Management, organized and conducted post-marketing drug research, collected full lifecycle drug data and information, assessed potential risks, timely controlled risks, and constantly assessed drug risks and benefits.

Joincare continues to step up efforts in actively collecting adverse reaction information, and has established multi-channels such as emails, telephones, QR code, adverse information registration column on the official website, etc., and keeps the channels available.



Product recall simulation is exercised every year at Joincare, to ensure that our recall system is effective. We also implement a product risk management scheme to ensure that the risk management of post-marketing products is in line with the GMP, the GSP, and related pharmacovigilance laws, and to ensure that the products' quality always serves their intended purposes and satisfies the registration requirements. In January 2021, Joincare conducted a product recall simulation at production enterprises Joincare Haibin and Taitai Pharmaceutical. The simulation result showed that the current recall system functioned properly.

### 5.2.2 Quality Audit

In order to continuously improve the quality management system, the quality management department of Joincare has made periodic quality audit plans covering all the producers, operators, and R&D institutions based on internal management documents. In addition, special audit is conducted from time to time based on management demands and external regulatory changes. With reference to the GMP regulations and the Entrusted Production Management Audit Procedures, Joincare performs quality audit work in production enterprises for at least once a year.

In 2021, on the basis of regular quality audit, Joincare conducted an internal quality audit on the three quality systems of production quality management system, drug supply management system and pharmacovigilance management system. Internal cross audit was conducted by each department relating to the systems, with focus on documents management, personnel training and management process. The internal audit result showed that the three quality management systems functioned effectively and met management requirements.

In addition, the Group and its subsidiaries cooperated with various external quality audits and improved quality management in combination with the advice of external experts. During the reporting period, Joincare passed all the official inspections and external audits.



### 5.3 Quality Culture Cultivation

Joincare always pays attention to laws and regulations related to quality, and has established quality training management procedures for employees based on the GMP, GSP and CNAS regulations. We launch quality training for employees at all posts, ensure that employees relating to drug R&D, production and operation timely follow up the changes in external regulations and quality standards, and enable them to have necessary professional skills and quality, to fully guarantee the effective operation of the quality system and management system.

During the reporting period, based on the changes in external laws and regulations and the optimization of internal quality systems, Joincare formulated and amended several quality management system documents, carried out publicity and training activities regarding major changes of various management systems and corresponding standard operating procedures, and examined the training effect through exams. In 2021, quality-related training courses covered all relevant personnel of quality systems.

### To improve drug R&D process management

the Group's institute held about 100 training sessions in 2021. Departments participating in the training included the analysis department, preparation department, synthesis department and quality management department of the institute. The training covered R&D concepts, R&D process, R&D tools, domestic and international pharmacopoeia guiding principles and ICH guiding principles. After training, professional competence of employees was enhanced, laying a foundation for the research on products with high safety, efficacy and quality controllability and the medication of patients.

### To improve drug production quality management

all production enterprises under the Group, based on their business characteristics, launched the "Quality Month" events, including publicity, skill assessment, training, and knowledge contest. As a result, the quality awareness of all employees was raised, and the concept that all employees shall take full participation in quality management was promoted.

### To improve drug operation quality management

the quality management department of the Group held 21 GSP training sessions in 2021. Departments participating in the training included the storage and transportation department, IT department, finance department, healthcare product department, prescription medicine department, and human resources department. The training covered GSP laws and regulations, guiding principles for on-site inspection, management regulations, and ERP system operations. After training, quality control was enhanced and product safety in the process of storage and distribution was ensured.

### **ISO** "Tripod Systems" Training at Joincare

Case

In December 2021, Joincare invited external institutions to provide ISO "Tripod systems" (ISO9001 quality management system, ISO14001 environmental management system, and ISO45001 occupational health and safety management system) training for its 14 departments, including the quality management department, technology transfer department, registration department, healthcare product department, prescription medicine department, human resources department, and administration department. The training content mainly included the management methods, history, concept, and construction of "Tripod systems". After training, employees of these departments had a deeper understanding of the construction of ISO systems.

### Fun Quiz at the Institute of Joincare

Case

To further examine the effect of R&D system training, increase team cohesion, and motivate employees, the institute of the Group organized employees to launch a fun quiz on December 16, 2021. The quiz was team-based, and the game winner had the right to answer questions. All contestants cooperated with their team members. Based on the principles of "fairness, justice, and openness", two excellent teams were selected and awarded.

This contest was conducted in the form of a game, making the quiz more fun and improving the participation of colleagues. As a result, all participating employees gained a deeper understanding of the training content.





Group photo in the Fun Quiz

Outstanding trainers awards ceremony

### Xinxiang Haibin Held "Quality Month" Events in 2021

Case

From September to October 2021, Xinxiang Haibin, a subsidiary of Joincare, held a quality culture building activity in which all staff participated. A series of interesting activities including quality knowledge contest, practical operation competition and on-site competition were conducted, fostering a corporate culture of quality and improving the quality awareness and quality management skills of employees.



Kick-off ceremony of "Quality Month" events



Practical operation competition



### Joincare Haibin Held "Quality Month" Events in 2021

Case

From May to September 2021, Joincare Haibin held the second quality culture building activity with the theme of "Execution is the first productive force". The activity comprised of 3 segments and 7 events, including lessons clock-in, experiment skills competition, production skills competition, GMP operation video assessment, and quality knowledge contest. Employees from different departments took an active part in the activity, and the total number of participants increased by 120% as compared with the previous year, hitting a new high.



Summary meeting of quality culture building activity

### **GSP Cold Chain Knowledge Training**

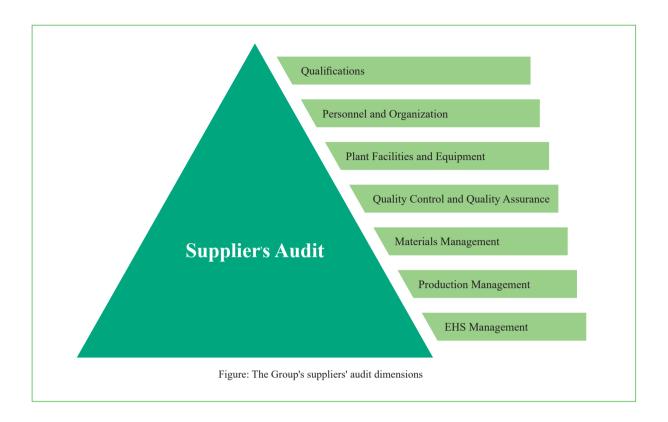
Case

To ensure that the storage conditions of products to be marketed meet the requirements, the Group provided training related to GSP cold chain knowledge for employees of the storage and transportation department and the quality management department on September 7, 2021. The training content included the Drug Administration Law, the Good Supply Practice for Pharmaceutical Products, Appendix I "Storage and Transportation Management of Cold Chain Drugs" to the GSP Guiding Principles for On-site Inspection, and other laws and regulations. The training was effective, and all participants passed the on-site assessment. Overall, this training laid a solid foundation for subsequent compliant management of cold chain drugs.

## 5.4 Supply Chain Quality Management

In order to further improve supply chain management and guarantee the quality and safety of materials, Joincare carries out standardized management on supplier on-boarding, maintenance and evaluation according to the Supplier Management System. In the on-boarding stage, considering the enterprise qualification, industry reputation, market share of products and material quality, and based on the principle of fair bidding, dual sourcing procurement and quality first, the quality assurance department conducts a comprehensive evaluation on the suppliers of materials to be purchased. Their comprehensive performance in supply stability, quality control, environmental and risk management will be evaluated through on-site quality audits, regular written quality audits and questionnaire feedback. Partners included in the list of qualified suppliers shall sign the Procurement Contract and the Quality Assurance Agreement, which define their responsibilities of quality assurance in the process of material supply, so as to ensure that they can supply high-quality production materials in a stable manner. Joincare and all its production subsidiaries implement hierarchical management on suppliers. According to the safety of raw materials and excipients supplied, the degree of impact of packaging materials on the medication safety of patients, the risk on product quality and other factors, suppliers are rated at three levels, namely H/M/L (or A/B/C).

In order to further guarantee the stability and quality of supply, the Group conducts scientific reviews on suppliers' qualifications, production sites, technologies, quality assurance systems, etc. according to such systems as the Supplier Quality Review Management and the External Review Management. Throughout 2021, the quality assurance department strengthened the annual supplier audit management, carried out at least one on-site audit on level H (or A) suppliers every two years, and stipulated that the supplier audit scope shall be extended from APIs of contract manufacturing products to raw materials, excipients and packaging materials in direct contact with medicines. Meanwhile, the quality assurance department conducted joint audits and written document investigation on the Group's holder and all entrusted manufacturers, enhanced risk management of and responsibility communication with major suppliers and suppliers of excipients or packaging materials, so as to ensure that the Group has a timely understanding of suppliers' management and the overall supply chain quality is improved steadily.



During the reporting period, the quality management department of Joincare carried out questionnaire audits and on-site audits on 3 APIs suppliers and 23 suppliers of excipients and packaging materials according to the annual supplier audit plan. The audit covered multiple areas such as ISO system certification, production site management, process technologies, environmental protection, natural disasters and safety incidents response. 14 corrective measures for supplier management were proposed based on the problems found in audits, requiring suppliers to complete the rectification and submit a rectification report within one month. Meanwhile, the quality management department helped suppliers improve the quality management system to ensure that suppliers can provide qualified products and services in a continuous and stable manner.

To respond to the risk of material shortage in the supply chain, Joincare has multiple potential suppliers of major materials to prevent supply risks. In 2021, in response to the short supply of raw materials, packaging materials and paper product raw materials due to strong market demand, Joincare and its subsidiaries cooperated with potential suppliers quickly, performed sample tests on product safety and conducted quality audits in accordance with laws and regulations, expanded the production capacity of 4 products and completed procurement registration, met the supply requirements of centralized procurement, and guaranteed orderly and effective product manufacturing.

In addition, Joincare assisted existing suppliers in improving management measures. To reduce the impact of transportation on the storage quality of pharmaceutical products, Joincare and its partnered carriers jointly clarified the regulations on long-distance transportation and abnormal-temperature transportation, stipulating that products transported to low-temperature, remote areas shall be kept at an appropriate temperature, and that night shipment shall be adopted to reduce damage to products from sunlight and high temperature in summer and to guarantee product quality and safety.

While guaranteeing the quality and safety of suppliers' products, Joincare also pays continuous attention to the management of suppliers in environment, health and safety (EHS), and is committed to establishing an upstream and downstream partnership based on collaboration and for win-win development, and to promoting the sustainable development of the industry. During the on-site audits, we also shared the EHS regulations and the industry trends with suppliers, distributed the EHS questionnaires to them, encouraged them to actively obtain ISO14001:2015/ISO45001:2018 and other management system certifications, assisted them in improving EHS management, strengthened long-term stable cooperation with them, ensured the quality and safety of products in the entire cycle and reduced the EHS risks. As of the end of the reporting period, more than 60% of the suppliers have passed the EHS certification as required by the Group.



## 5.5 Intellectual Property Rights Protection

Joincare attaches great importance to the protection of intellectual property rights, strictly abides by external laws and regulations such as the Patent Law of the People's Republic of China, the Guidelines for Patent Examination, and the Measures for the Implementation of Early Resolution Mechanisms for Drug Patent Disputes (Trial), and continues to facilitate the establishment and management of its intellectual property system.

During the reporting period, to better serve the healthcare strategy, Joincare formulated the Policy on Emergency Plan for Intellectual Property, which clarified the emergency work and the ways for protecting the Group's legitimate rights and interests in case of patent infringement or accusation of patent infringement. In addition, to raise the awareness of intellectual property and improve the management and operation of intellectual property, Joincare formulated the Policy on Intellectual Property Education and Training, which specified the responsible department, training method, content and assessment of intellectual property education and training.

In order to avoid infringement of external intellectual property rights, Joincare establishes a database of patents of pharmaceutical peers, continuously updates all the production varieties, pipeline varieties and pre-research varieties of peers, and grasps the latest technology trends, to minimize the risk of infringement of intellectual property rights, timely and clearly understand the Group's innovative research results, and to protect its intellectual property rights properly and timely.

With the acceleration of the R&D and production of key pipeline products and the continuous transformation of R&D achievements into patent, in order to comprehensively protect the Group's intellectual property rights, the intellectual property right department of the Group focuses on protecting the intellectual property rights of respiratory medicine products by means of patents, trademarks, copyrights, and technical secrets. For well-known respiratory medicine products such as Budesonide Suspension for Inhalation (雾 舒), Levosalbutamol Hydrochloride Nebuliser Solution (丽 舒 同), Compound Ipratropium Bromide Solution for Inhalation (舒 坦 琳), and Ipratropium Bromide Solution for Inhalation (丽雾安), the Group has applied for 74 patents for inhalation medicine products, including 49 invention patents. Meanwhile, 18 invention patents, 18 utility model patents and 6 appearance design patents were granted, and 26 computer software copyrights/works copyrights related to inhalation medicine products were granted.

For intellectual property rights within the Group, as of the end of the reporting period, 1,027 valid patents were applied for by Joincare and its subsidiaries, including 622 domestic invention patents. 711 valid patents were granted, including 374 domestic invention patents. 84 international patents were applied for, among which 50 were granted.

Total number of valid patents applied for

**1,027** items

In which: Domestic invention patents

**622** items

Total number of valid granted patents

**711** item

In which: Domestic invention patents

**374** items

International patents applied for

84 items

In which: Granted international patents

**5**0 items

Moreover, Joincare values innovation and tends to reach foreign markets. In the future, we will promote our pharmaceutical products, especially pharmaceutical reagents, in overseas markets, and play a part as far as possible in the Doha Declaration on the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement and Public Health. If some third-party invites us to provide our products for the least developed and low-income countries, Joincare will license our product patents on a proper and conditional basis.

### Series of Patent Training Sessions at R&D Management Center of Joincare

Case

Joincare establishes and improves multi-level intellectual property publicity, education, and talent training mechanisms. The intellectual property right department of the Group makes an annual training plan, carries out intellectual property publicity and professional skills training for personnel at different posts by levels and stages, and regularly examines the training effect. For example, given that new R&D employees of the R&D Management Center may have different knowledge of patents, the Group carries out a series of patent training sessions covering basic patent knowledge, patent search and analysis, patent writing, and invalid patent cases analysis, to gradually improve the ability of R&D employees in protecting intellectual property rights.

### Participation in High-level Talents Seminar on Intellectual Property in Nanshan District

Case

In October 2021, the head of intellectual property of the Group passed the selection and participated in the high-level talents seminar on intellectual property in Nanshan District (phase I). Seven renowned experts were invited to lead the seminar. A series of excellent courses were offered in the three-day closed training with focus on intellectual property creation, operation, protection, strategy and other frontier topics. All-range training on intellectual property was conducted in multiple forms, such as lectures, team development, and on-site teaching. After this training session, Joincare had a better understanding of cutting-edge industry information, and would comprehensively improve its awareness of and capability in intellectual property creation and protection.



#### Two Patents Won the Excellence Award of China Patent Award

Case

On December 24, 2021, the invention patent titled "A Meropenem active pharmaceutical ingredient (API), preparation method thereof and pharmaceutical composition comprising the same" (patent No.: ZL201210269067.6) with the Group's wholly-owned subsidiaries Shenzhen Haibin Pharmaceutical Co., Ltd. and Xinxiang Haibin Pharmaceutical Co., Ltd. as co-patentees, won the Excellence Award of China Patent Award. This patent represents a first major breakthrough in the preparation of carbapenem antibiotics in the biomedical industry. The nanofiltration membrane technology is innovatively introduced to the process of preparing Meropenem API, which fundamentally solves the key common technical problems of low yield, poor quality, high production cost and non-environmentally-friendly production process caused by the difficulty of production and purification of Meropenem API, and makes the prepared Meropenem API have high purity, well-defined impurity levels, low residual solvent content, and good stability for long-term storage, ensuring that the drug is effective and safe. Meanwhile, the whole process is simple, compact and controllable. The product yield is increased, production cost is reduced by 20%, and environmental performance is significantly improved. This patent is a milestone for China's independent research and development of Meropenem with respect to its preparation methods.

In addition, the patent titled "A method for preparing sustained release Leuprorelin Acetate Microspheres" (patent No.: ZL201610349226.1) of the Group's subsidiary Livzon Pharmaceutical also won the Excellence Award of China Patent Award.







## **Access to Healthcare**

### 6.1 Focusing on R&D and Innovation

In pursuing innovation-driven growth, we continue to focus on the healthcare industry in China, highlight investments in innovative technologies and construction of R&D platforms, and focus our efforts on developing high-barrier complex drug preparations, innovative medicines and special medicines. We are dedicated to improving the accessibility and affordability of high-quality pharmaceutical products. The Group has developed multiple innovative R&D technology platforms for high-barrier complex drug preparations, including inhalation administration, antibody, sustained-release microspheres and lipid microemulsion.

At the meantime, the Group continues to increase R&D investments, and conducts research on other high-end preparations (including complex injection preparations and transdermal preparations) with market potential and new drug delivery devices to further improve our product structure and business layout. The key treatment fields include respiratory diseases, cancer, analgesia and psychiatric disorders. In addition, the Group actively explores the integration of new technologies and interdisciplines, such as quantum computing and artificial intelligence (AI), and conducts research in drug development and microbial synthetic biology.

The Group has three national R&D technology centers and several provincial and municipal innovation carriers, and has established a long-term cooperative relationship with many well-known scientific research institutions at home and abroad, such as Guangzhou Institute of Respiratory Health and Shenzhen Institute of Respiratory Diseases, forming a sound enterprise technology innovation network with coordinated efforts of enterprises, universities and research institutions.

# Henan Province Joincare Biopharmaceutical Research Institute and Tencent Quantum Lab Jointly Promoted Pharmaceutical R&D with Quantum Computing + AI

Case

To meet the needs of technical and industrial chain, Henan Province Joincare Biopharmaceutical Research Institute (hereinafter referred to as the "Institute") has successively established 6 R&D platforms of industrial strain improvement, synthetic biology, biocatalysis, fermentation scale-up, product extraction and biochemical APIs. Up to now, the Institute has successfully introduced 8 doctors who have extensive R&D experience in synthetic biology and AI in pharma.

Joincare actively explores how to empower the traditional pharmaceutical manufacturing industry with new technologies. On February 1, 2021, Joincare Institute signed a Strategic Cooperation Agreement with Tencent Quantum Lab (腾讯量子实验室) to drive the application of quantum computing + AI in research fields of microbial synthetic biology and relevant drugs and to facilitate the development and advancement of pharmaceutical R&D technologies.

Currently, both parties use AI technologies such as deep learning to develop the algorithm for prediction of secondary metabolite biosynthetic gene clusters in microbial genomes, and are jointly building a research platform for synthetic biology and systems metabolic engineering of natural products with IBT technology.

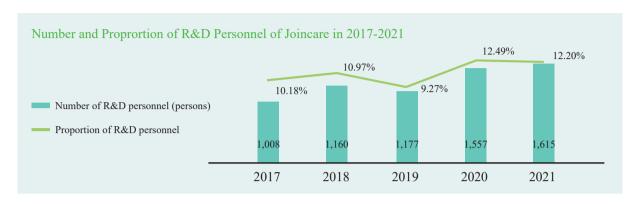
### Shanghai Frontier Was Approved to Set up a Post-doctoral Scientific Research Station

Case

Joincare continues to have cooperation with universities. During the reporting period, Joincare's subsidiary Shanghai Frontier was approved to set up a post-doctoral scientific research station in Shanghai Pudong New Area and successfully established the station in July, aiming to produce a virtuous circle in which scientific research and talent training are equally important and talent training promotes research development. So far, Shanghai Frontier has reached post-doctoral joint training agreements with universities such as Shanghai Jiao Tong University and East China University of Science and Technology.



The Group's R&D team has been growing continuously. As of the end of 2021, we have 1,615 R&D personnel; 464 of our R&D staff hold a master's degree or above. The Group has continuously increased investment in R&D. During the reporting period, the total R&D expenditures amounted to RMB 1,849.82 million, up 46.75% from the same period of the previous year, accounting for 11.63% of the total audited total revenues of the company in the reporting period.





Date	Major R&D/Registration Progress
March 2021	Clinical Trial Approval Notice obtained for Recombinant SARS-CoV-2 Fusion Protein Vaccine
April 2021	Clinical Trial Approval Notice obtained for Triptorelin Pamoate Microspheres for Injection
April 2021	Clinical Trial Approval Notice obtained for Formoterol Fumarate Inhalation Aerosol and Mometasone Furoate and Formoterol Fumarate Dihydrate Inhalation Aerosol
April 2021	Registration Certificate obtained for Recombinant Human Choriogonadotropin alfa for Injection
April 2021	Clinical Trial Approval Notice obtained for Mometasone Furoate and Formoterol Fumarate Dihydrate Inhalation Aerosol
May 2021	Registration Certificate obtained for Alogliptin Benzoate Tablets (25 mg)
June 2021	Clinical Trial Approval Notice obtained for Aclidinium Bromide Powder for Inhalation
June 2021	Quality Consistency Evaluation passed for Omeprazole Sodium for Injection (40 mg)
June 2021	Quality Consistency Evaluation passed for Fluvoxamine Maleate Tablets
September 2021	Production application made and accepted for Tobramycin Solution for Inhalation
September 2021	Clinical Trial Approval Notice obtained for Recombinant Human Follicle Stimulating Hormone for Injection
September 2021	Registration application accepted for Triptorelin Acetate Microspheres for Injection
September 2021	Clinical trail application accepted for Semaglutide Injection
December 2021	Clinical Trial Approval Notice obtained for Alarelin Acetate Microspheres for Injection



### 6.1.1 Committed to Respiratory Health

In China, about 100 million people are suffering from chronic obstructive pulmonary diseases (COPD). Such diseases are affecting 13.7% of people aged 40 and over and 8.6% of people aged 20 and over. The Outline of the Healthy China 2030 Plan issued by the Chinese government also defines specific objectives for COPD prevention and control. Inhalation medicine products are the best and most effective therapy methods for respiratory diseases, such as asthma and COPD, and the R&D investments in this market niche are highly recommended by the Chinese government. However, the market has been dominated by import manufacturers for a long time due to the high barriers to the R&D and production of inhalation medicine products. In recent years, domestic manufactures are rising rapidly and seeing broad prospects in this field.

In response to the national appeal, Joincare has made strategies quickly to enter the respiratory disease medicine market. In 2013, the Group established Shanghai Frontier Health Pharmaceutical Technology Co., Ltd. in cooperation with Dr. Jin Fang, the leader and pioneer in the R&D of inhalation medicine products in China, and her R&D team. In 2015, Joincare and Guangzhou Institute of Respiratory Health, led by Academician Zhong Nanshan, jointly established Guangzhou Joincare Respiratory Drug Engineering Technology Co., Ltd. to strengthen the R&D of inhalation medicine products and consolidate clinical resources.

Adhering to the original aspiration of "joining us in respiratory care", and R&D vision of "becoming a leader of the inhalation medicine sector in China", the Group has established R&D platforms for inhalation medicine products, and formed a clear and comprehensive R&D pipeline. Through years of development, Joincare's existing and pipeline varieties have covered all types of inhalation medicines for asthma and COPD. In the future, the Group is expected to provide better diagnosis and treatment services and more effective and safe medicine options for patients with asthma and COPD.

Joincare has steadily advanced the R&D of inhalation medicine products. In 2019-2020, inhalation medicine products such as "Compound Ipratropium Bromide Solution for Inhalation" (舒 坦 琳), "Levosalbutamol Hydrochloride Nebuliser Solution" (丽 舒 同), "Ipratropium Bromide Solution for Inhalation" (丽雾安), and "Budesonide Suspension for Inhalation" (雾舒) were successively approved for marketing, some of which are first generic drugs approved in China. Now, Joincare has become one of leaders in the R&D of high-end inhalation medicine products in China.

In terms of pipelines, Joincare has adopted a differentiated competition strategy, with balanced pipeline layout and complete coverage of dosage forms. During the reporting period, the Group made great headway in several Class II/III modified innovative medicine products in the pipeline. For Tobramycin Solution for Inhalation (Class 2.4), we completed phase III clinical study, and submitted product registration application, which was accepted. For Formoterol Fumarate Solution for Inhalation, we completed clinical study, and submitted product registration application, which was accepted.

# Joincare Passed Acceptance of National Science and Technology Major Project of "Key New Drug Creation and Manufacturing Program"

Case

The National Science and Technology Major Project of "Key New Drug Creation and Manufacturing Program" has been the largest-scale drug creation plan implemented by China since its founding, which is aimed at making China gradually shift focus from developing generic drugs to creating new drugs, representing a historic transformation from a country with big healthcare market to a country who has advanced medical science and technology.

Joincare focused efforts on the R&D of respiratory medicines. In 2017, the subproject "Research on Common Key Technologies for Scale Development of New Inhalation Medicine Products" of the National Science and Technology Major Project of "Key New Drug Creation and Manufacturing Program" under the 13th Five-Year Plan was approved. The Group's Chief Scientist Dr. Jin Fang, as the project manager, led the R&D team to work together. The task was increased from originally 9 products to 10 products, and the team tackled several key technologies for the industrial production of inhalation medicine products, and exceeded the target. In December 2021, the subproject passed the expert review and acceptance organized by the National Health Commission. During the subproject period, we received 7 production approvals and 7 clinical trial notifications, applied for 17 new patents, and obtained 11 patent certificates, further strengthening the leading position of the Group in the inhalation medicine sector.

#### Smart Medicine Administration-- Improving the Efficiency of Respiratory Therapy

Case

While focusing on the R&D of inhalation medicine products, the Group pays attention to the development of household intelligent nebulizers, which is of great significance to further change the current situation of low accessibility of nebulization and treatment in traditional hospitals. The device is easy to carry and operate, and can intelligently administer respiratory medicines according to patients' breath. It meets the medical device standard. The interior design can reduce noise and the plate is replaceable. With the advantages of high efficiency and patient compliance, the device can be widely used.



Throughout 2021, our R&D progress in inhalation medicine products is shown as follows:

			Research Stage					
Medicine Form	Product Name	Medicine Category	Pharmaceutical Study	Application for Clinical Study	Clinical Study	Application for Production		
	Tobramycin Solution for Inhalation	Category 2.4 chemical medicine				>>>>>>		
Inhalation solution	Formoterol Fumarate Solution for Inhalation	Category 3 chemical medicine (national encouraged generic varieties)				»»»»		
	Aclidinium Bromide Powder for Inhalation	Category 2.2 chemical medicine			»»»»			
Powder for inhalation	Indacaterol Maleate Powder for Inhalation	Category 4 chemical medicine			>>>>>>>			
	Salmeterol Xinafoate and Fluticasone Propionate Powder for Inhalation	Category 4 chemical medicine		>>>>>>>				
Inhalation aerosol	Formoterol Fumarate Inhalation Aerosol	Category 2.2 chemical medicine			>>>>>>			
	Mometasone Furoate and Formoterol Fumarate Dihydrate Inhalation Aerosol	Category 3 chemical medicine			>>>>>>			

### 6.1.2 R&D Efforts in Bio-Pharma

LivzonBio, a subsidiary of Joincare, keeps exploring biomedicine. It has built mature technology platforms for antibody medicines, fusion protein medicines, cell therapy medicines, etc., dedicating to the development and industrial production of tumor, reproduction and autoimmunity-related products. LivzonBio is carrying out a number of R&D projects for monoclonal antibodies, recombinant proteins, ADC and CAR-T.

In addition, Joincare will speed up the approval of new products through independent R&D, external introduction, strategic cooperation and other channels. In order to further improve promedicine technology and enhance commercial production, Joincare is intended to diversify the innovative portfolio of individualized tumor immunotherapy and combined therapy, and expand bispecific/polyspecific antibody, ADC and other technology platforms.

Progress of LivzonBio's Major Products under R&D								
Field	Drug Code (Full Name)	Preclinical	Application for Clinical Trial	Phase I	Phase II	Phase III	Marketing Approval	
Vaccine	V-01 (Recombinant SARS-CoV-2 Fusion Protein Vaccine)					>>>>>>		
Tumor	A-01 (Recombinant Tumor Enzyme Specific Interferon $\alpha$ -2b Fc Fusion for Injection)			>>>>>>				
	LZM009 (Recombinant Humanized Anti-PD-1 Monoclonal Antibody for Injection)				>>>>>>>			
Reproduction	B-01 (Recombinant Human Follicle Stimulating Hormone for Injection)			>>>>>>>				
Immune	LZM008 (Recombinant Humanized Anti-human IL-6R Monoclonal Antibody Solution for Injection)						»»»»	
diseases	LZM012 (Recombinant Anti-human IL-17A/F Humanized Monoclonal Antibody Injection)				»»»»			



# Sequential Immunization with Recombinant SARS-CoV-2 Fusion Protein Vaccine (V-01) Achieved Good Results

Case

Sequential immunization is considered an important research direction for fighting against Omicron. Sequential booster immunization means using different types of vaccines for original and booster inoculations after two doses of inactivated vaccine.

As of the date of the report, the interim analysis of key data from the Phase III clinical trial for the sequential immunization with Recombinant SARS-CoV-2 Fusion Protein Vaccine (V-01) jointly developed by Livzon MAB, a subsidiary of the Group, and the Institute of Biophysics, Chinese Academy of Sciences was completed, and the results showed that V-01 as a sequential booster can produce good protection against Omicron. At the same time, no safety issues of concern were found.

In addition, compared with other existing vaccines, V-01 has an innovative molecular structure design, and interferon is a component of the vaccine, making the vaccine have low side effects and high total antibody level. The Phase II clinical trial data showed that V-01 had excellent immunogenicity and safety; and the overall incidence of adverse events was lower in the elder group than that of the younger adult group in comparison.

Currently, since pandemic control is still facing enormous challenges in China, V-01 is of great significance for booster immunization. We have applied for marketing and sale of V-01 in China, hoping to provide a more flexible and scientific option for continuous booster immunization and to contribute to the pandemic control efforts.

### 6.1.3 Development of Sustained-Release Microspheres

Livzon Microsphere, a subsidiary of Joincare, focuses on the R&D of anti-tumor, endocrine-regulating and antipsychotic microsphere formulations which are advantaged for their long-acting and sustained-release mechanism. By the end of the reporting period, 7 projects were in pipeline on the sustained-release microsphere R&D platform, of which 1 medicine got the production application acceptance notice after phase III clinical trial, 1 medicine was at phase I clinical trial, 2 medicines were at BE (pilot) trial, and 2 medicines got clinical approval.

Progress of Joincare's Major Sustained-release Microsphere Products under R&D									
	Indication	Preclinical	Application for Clinical Trial	Clinical Trial or BE Trial				NIDA	
Project Name				Phase I	Phase II	Phase III	BE Trial	ANDA	
Triptorelin Acetate  Microspheres for Injection	Prostate cancer; precocious puberty; endometriosis (stages I to IV); female infertility; preconditioning of uterine fibroids before surgery							>>>>>>>	
Aripiprazole Microspheres for Injection	Schizophrenia, bipolar disorder			>>>>>>					
Octreotide Acetate Microspheres for Injection	Acromegaly; gastroenteropancreatic neuroendocrine tumors						>>>>>>		
Triptorelin Pamoate  Microspheres for Injection	Treatment of locally advanced or metastatic prostate cancer			>>>>>>					
Goserelin Acetate Sustained- Release Depot	Prostate cancer; breast cancer; endom etriosis	>>>>>>							

## **6.2** Paying Attention to Rare Diseases Treatment

High treatment costs in rare diseases result from their extremely low incidence rate and low market demand as well as lack of experience in clinical medication. Meanwhile, unknown causes pose a great challenge for research so that there is no medicine for a large number of rare diseases.

Under the guidance of relevant policies such as the "Healthy China 2030" Planning Outline and the Guidelines for Diagnosis and Treatment of Rare Diseases, we, based on our own scientific research system and capabilities, continuously invest in research on rare diseases, work with peer enterprises to improve the current situation of diagnosis and treatment of rare diseases in China, and thus make contributions to enhancing the health of all the people and building a Healthy China.

Malignant hyperthermia, a rare fatal syndrome caused by anesthetics, has an extremely high mortality. Dantrolene Sodium for Injection is the only specific medicine for the treatment of the disease. Due to the high cost and short shelf life, the medicine is not available for the majority of medical institutions in China, leading to the death of patients because of ineffective rescue measures. Livzon Pharmaceutical Group, a subsidiary of Joincare, began to plan the R&D of the medicine in the early days. After over a decade of arduous exploration, it obtained the medicine registration certificate of Dantrolene Sodium for Injection issued by the National Medical Products Administration in October 2020. The first domestically produced Dantrolene Sodium for Injection has brought good news to the vast number of anesthetists in China and also marks major progress in the diagnosis and treatment of malignant hyperthermia in the country.

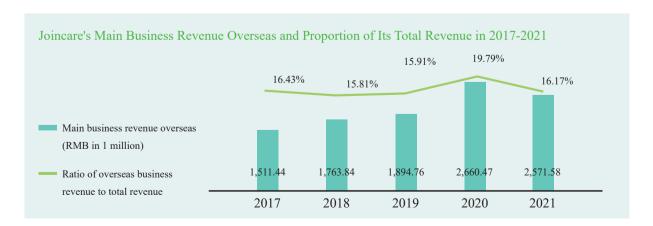
At the same time, Livzon Pharmaceutical Group is also continuously investing in the R&D of Octreotide Acetate Microspheres for Injection, a medicine for rare diseases such as acromegaly and gastroenteropancreatic neuroendocrine tumors (GEP-NET). It is conservatively estimated that there are 70,000 acromegaly patients in China. Due to the technical difficulty of mass production, the high R&D cost and long R&D cycle, the high dependence on import and the high price, there is urgent demand for a domestically produced medicine. Based on this situation, Livzon Pharmaceutical Group made active plans. In September 2020, the subsidiary obtained the approval for clinical trials of Octreotide Acetate Microspheres for Injection issued by the National Medical Products Administration, which allowed bioequivalence (BE) studies to be conducted on healthy people in contrast with the brand-name medicines; this has brought our product Octreotide Acetate Microspheres for Injection for domestic mass production. In 2021, the preparation of clinical samples meeting the quality standards, the review by the Human Genetic Resource Administration of China and the ethical review by the test unit were completed. A bioequivalence (BE) trial is being conducted on the medicine.

## 6.3 Improving the Availability of Medicines

Joincare has been endeavoring to improve availability and affordability of medicines, and advocate for rational use of drugs. We have prioritized inclusive healthcare into the top issues of corporate social responsibility (CSR) management. Since Joincare mainly operates within China, which is also a developing country, the economic development and healthcare level in China, and diversified features of foreign markets are taken into accounts when the inclusive medical strategy is formulated.

#### 6.3.1 Improving Products' Availability

Joincare entered foreign markets mainly via direct operation, along with distributors in a few regions. So far, products of the Group and our holding subsidiaries have been approved for registration in multiple countries and areas including Asia, Europe, North America, and Africa. To improve our products' availability, Joincare expands products' production and marketing overseas, gaining consecutive growth in main business revenues in foreign markets. During 2021, our revenues generated from overseas businesses reached RMB2,571.58 million, representing a 5-year compound growth rate of 11.21%.





#### 6.3.2 Improving Medical Affordability

Joincare actively responds to admission to the medical insurance list, making efforts to provide and high-quality medicines to patients at affordable prices. In the National Reimbursement Drugs List (NRDL) published by the National Healthcare Security Administration in 2021, Joincare has 200 products included, among which 95 are Class A and 105 are Class B. Besides working for admission to the medical insurance list, Joincare has been keeping track of and actively participating in the national centralized drug procurement, striving to provide fairly-priced and high-quality medicines to more patients with respiratory diseases.

#### Key Products in National Reimbursement Drugs List

Levosalbutamol Hydrochloride Nebuliser Solution: a Joincare's blockbuster, was incorporated into the medical insurance negotiation list in 2020. It has fewer side effects compared with salbutamol, a commonly-used first aid for asthma and COPD, and can greatly improve patients' pulmonary function, thereby lowering the risks of them having to be hospitalized and re-hospitalized, or shortening hospital stays. Therefore, this medicine is a new, safe, and useful choice for patients.

Ilaprazole Sodium for Injection: whose product name is" 壹 丽 安", a patented new drug of Livzon Pharmaceutical Group, was incorporated into the medical insurance negotiation list in 2019. It was still incorporated in the negotiation list after the NRDL adjustment in 2021. In this adjustment, payment limitation on it was canceled. In the "Remarks" column, "used only to patients with the diagnosed disease indicated in the instruction and with medical advice on fasting or swallowing difficulties" was changed to "used to patients with peptic ulcer bleeding" according to the instruction. In the future, we expect to bring benefits to more patients.





Three major inhaled medicine products won the bids in the fifth batch of centralized procurement, bringing benefits to more patients with respiratory diseases

On June 23, 2021, the fifth batch of state organized centralized drug procurement kicked off. Joincare's three inhaled medicine products - Budesonide Suspension for Inhalation (2ml: 1mg) ("雾 舒"), Compound Ipratropium Bromide Solution for Inhalation ("舒坦琳"), and Ipratropium Bromide Solution for Inhalation ("丽雾安"), won the bids. Domestic inhaled medicine products, with high affordability and quality, is stepping up the pace in replacing imported ones, benefiting more patients with respiratory diseases, improving the availability of medicine for respiratory diseases.



"寡育" (2ml:0.5mg) (2ml:0.5mg) is the first small specification of Budesonide that passed consistency evaluation in China, making Joincare the first enterprise to obtain approval for both small and large specifications in China. "雾 舒" can be used to treat bronchial asthma in replacement of or reducing the use of oral steroids. Inhalation therapy, with the advantage of quick effect, small dosage and little toxic and side effects, is the first choice for the prevention and treatment of respiratory diseases such as asthma, as inhalation drugs can directly reach the respiratory tract and lungs.

"舒 坦 琳" is the first inhalation preparation approved for market since China carried out the consistency evaluation of generic drugs, breaking the technical monopoly of original drugs in the country for many years. In addition, this product is also the first new category 4 registered and approved aerosol inhalation solution in China. It is used to treat or prevent bronchospasm caused by reversible airway obstruction, offering a more convenient and safe medication choice for patients with airway obstructive diseases such as COPD and asthma.

" $\overline{\mathbb{R}}$   $\mathcal{F}$ " is the first ipratropium bromide inhalation preparation in China that has passed the consistency evaluation, making Joincare the first manufacturer in China to be approved under the category 4 generic drugs under the new registration classification system. Ipratropium bromide is an anticholinergic drug, which can be combined with inhaled  $\beta$ -agonist to treat reversible airway obstruction caused by acute or chronic asthma.

When entering into overseas markets, Joincare comprehensively considers local economy, healthcare level, price benchmarking to offer a fair pricing and hence affordable medicines equitable pricing of promoting our products in developing areas overseas, it is after adequate assessment on local per capita income that differential pricing strategies were provided. Joincare also positively goes for bidding of local governments, so that affordable medicines would be offered locally. So far, Joincare and the subsidiaries have used differential pricing in selling of fourteen products in Southeastern Asia and Middle Asia, for matching the local income level.

#### 6.3.3 Advocating for the Rational Use of Medicines

#### Popularizing Knowledge on Chronic Disease and Promoting Rational Medicine Use

Respiratory diseases rank among top five causes of death in China and worldwide. Its primary diseases include asthma and chronic obstructive pulmonary disease (COPD). The number of patients with chronic respiratory diseases has been significantly underestimated. According to statistics, there are nearly 45.7 million adult asthma patients and 100 million COPD patients in China. However, the diagnosis rate and the awareness rate of asthma and COPD are now far behind the goal made in Healthy China Initiative 2019-2030, and the number of patients is seriously under-estimated.

With measures such as academic promotion and spread of knowledge about diseases, Joincare endeavors in many ways to educate the public about asthma and COPD and appeals for regular pulmonary function tests, pushing forward the Healthy China Initiative. In 2021, the Medicine Department of Joincare published five key papers on the efficacy and safety of drugs for respiratory diseases, clinical decision support systems for childhood asthma and patients' understanding of the disease, providing a reference for the standardization of respiratory disease diagnosis and treatment and the rational clinical use of drugs.

#### **Healthy Lung Challenge**

Case

Joincare has always called on the society to keep a healthy lung. It created an account "Voice of Respiratory Experts" in WeChat, Tik Tok, Weibo and other new media platforms to promote knowledge on chronic respiratory disease and give treatment support.

In supporting the 20th World COPD Day, Joincare launched the "COPD One Breath Challenge" Online public charitable interactive activity in Tik Tok on November 15, 2021, inviting participants to compete over vital capacity in "one breath", drawing public attention to COPD and lung health through online interaction. This activity reached over 100 million people on the first day. Through the activity, we expect to keep the public better informed of the prevention and treatment of COPD, to promote healthy lifestyle and call on early effective intervention for better treatment effect, as an effort to implement "Healthy China 2030" Initiative.





#### Held professional seminars on chronic respiratory diseases

Case

Joincare maintains close communication and cooperation with medical professionals to jointly promote the standard and science-based diagnosis and treatment. In March and May, 2021, the Company conducted live streaming of "Research and Transformation Seminar on Children's Respiratory Drugs" and "Expert Seminar on World Asthma Day" respectively. Through these two seminars, Joincare expected to enable in-depth communication between pediatricians all over the country to optimize the individualized diagnosis and treatment strategy of children asthma in China and clear up patients' misunderstanding of diagnosis and treatment of asthma.



Expert Seminar on World Asthma Day

#### Joincare promoted early diagnosis and treatment of COPD

Case

Early Diagnosis and intervention of COPD are of great significance to treatment of the disease. On June 22, 2021, the project of "Compound Ipratropium Bromide for Early COPD Treatment" was officially launched. At the kick-off meeting, Academician Zhong Nanshan of the National Clinical Research Center for Respiratory Diseases emphasized the importance of "early diagnosis and treatment of COPD" in his speech. He especially appreciated Joincare for its support and contribution to the project. In order to facilitate the use of drugs in the project, we specially developed a portable atomizer which is small and portable, improving the drug use efficiency for patients.



Kick-off Meeting of "Compound Ipratropium Bromide for Early COPD Treatment"

This project will push the diagnosis and treatment of COPD into a brand-new stage. Traditional passive diagnosis and treatment mode is expected to be replaced by the mode of early screening, early diagnosis and early treatment. In this move, we expect to decelerate decline in lung function, increase reversibility rate, reduce the number of acute exacerbations, improve life quality, alleviate symptoms, and finally to relieve the burden for patients' families, society and the country.

#### Eliminating the indiscrimination use of antibiotics

Joincare has a sophisticated anti-infection product portfolio, including Meropenem for Injection, Voriconazole for Injection, and Cefodizime Sodium for Injection. Since the Management Policy for Clinical Use of Antimicrobial Medicines was issued in 2012, Joincare has greatly emphasized clinical use of antibiotics. We have strengthened management of prescription medicines in sales and cooperated with medical institutions to classify antibiotics and limit physicians' prescription rights. The classification of antibiotics for clinical use has been strictly followed in Joincare, as we enforce non-limited use, limited use and special use, cooperate with hospitals to handle antibiotic abuse and help with the work on controlling medicine-resistance bacteria. Training lessons and lectures on optimizing medicine-resistance bacteria treatment scheme are given to improve clinical use of antibiotics and reduce misuse.

In 2021, Joincare participated in a number of national academic conferences on infection-related fields, including the National Academic Conference on Deep Fungal Infection, the Annual Meeting of Respiratory Physicians of Chinese Medical Doctor Association, and the Summit Forum on Chronic Airway Disease Management. Besides, we had in-depth exchanges with clinical experts in infection, respiration, blood, ICU, organ transplantation, skin, obstetrics and gynecology, and scholars engaged in basic research of microbiology. Through these efforts, we aim to promote development and innovation in the field of medicine, help professional medical workers better equipped in disease diagnosis and treatment, so as to ensure that all the people can live a healthy life.

#### Livzon Group's study on tackling antimicrobial drug resistance

Case

#### Study on Drug Resistance of Gram-Negative Bacteria (GNB)

At present, GNB is highly resistant to antibiotics. According to the study, all top five clinical strain infections in China are GNB infections. Polymyxin, one of the most important drugs in the treatment of multidrug-resistant (MDR) GNB infections, is effective against various GNB including Escherichia coli thanks to its low resistance rate and strong antibacterial activity. It is called the last line of defense for MDR GNB infections, against which antibiotics such as β-lactams, aminoglycosides and quinolones are ineffective.

The Livzon Group is developing polymyxin products. Our own chemical generic API, polymyxin E sodium methanesulfonate, has obtained the European CEP, passed the FDA review, and is under domestic application for registration at present.

#### Study on Drug Resistance of Fungi

In recent years, as more people are infected with immunodeficiency virus or undergo tumor chemotherapy, invasive fungal infections has gradually increased. At present, only three types of antifungal drugs are available on the market: polyene, azole and echinocandin. After years of clinical use, it shows high level of antifungal resistance, severely limiting treatment options.

Livzon is developing a new class 1 drug with a brand-new mechanism of action and targets - fungi-specific enzymes. It is expected that no adverse reactions will occur when it is bound to human cells. The new mechanism of action is expected to tackle antifungal resistance. At present, the project is in the molecular screening stage, from which a partial list of pre-clinical candidate compounds (PCC) was generated.



# 7

# **Employee Empowerment**

## 7.1 Protection of Rights and Interests of Employees

#### 7.1.1 Compliance with the Labor Law

Complying with the Labor Law of the PRC, the Labor Contract Law of the PRC, and other local and national regulations, Joincare has formulated and improved the Human Resources Management Regulations, the Training Management System, the Attendance Management System, and the Employee Handbook. We sign contracts with employees under the principle of free will to specify their rights and obligations.

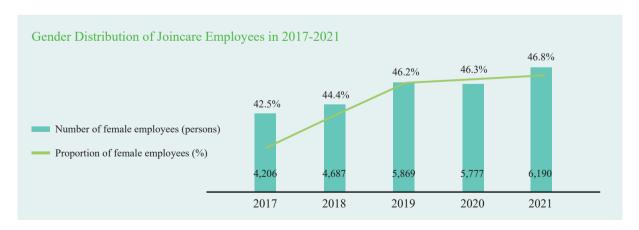
According to the Employment Relation Management System of the Group, we fully protect workers' right to know in the hiring process, truthfully informing the workers of the content, conditions, sites, hazards, work safety and payment of the jobs, and other information that they request to be informed. Furthermore, we respect and uphold the international human rights convention and labor standards to which China is a signatory, strictly abide by the Provisions on the Prohibition of Child Labor, and resolutely resist any form of forced labor.

#### 7.1.2 Workface Diversity and Inclusiveness

Joincare advocates a diverse and inclusive work environment, treat employees equally, offers rights and benefits in all aspects of human resources management, such as hiring, promotion and compensation, to all employees regardless of their gender, age, ethnicity and nationality, encouraging employees of diverse backgrounds to give full play to their talents in a fair and transparent talent management system. We have specified the management rules of "anti-discrimination" and "diversity" in the Compilation of Human Resources Management System. We ensure the full implementation of the rules through compliance audits on human resources management to promote diversity and inclusiveness.

Joincare safeguards the reproductive rights and interests of employees. We encourage female employees who give birth to a child to return to work, allow marriage leave, pregnancy medical check-up leave, maternity leave, breastfeeding leave and other national paid leaves, and visit female employees who give birth with generous gifts. We care for working mothers with practical actions, including providing babycare rooms and dedicated refrigerators and offering fitness classes, dance classes, yoga classes and other body-shaping courses for female employees free of charge.

As at the end of the reporting period, there were 6,190 female employees (46.8% of total employees,) in the Group, showing a clear trend of diversified development represented by the narrowing gender gap.



The Group assists foreign employees in their working and living in China. We help foreign employees obtain work permits and residence permits as required by the Chinese government free of charge, assign assistants to those weak in Chinese, provide foreign employees with the opportunities to learn Chinese, and help them adapt to the work environment through team building activities.

#### 7.1.3 Staff Communication

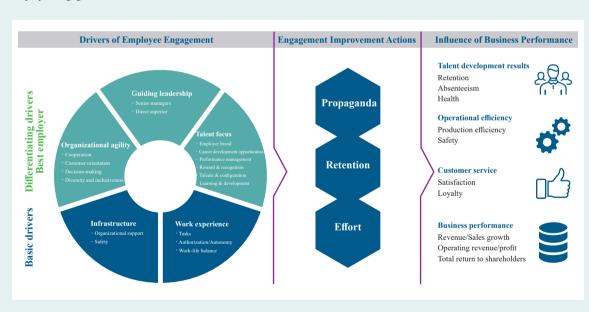
Joincare valued the views and suggestions of employees. We have established smooth communication channels, including weekly talks and talks during the probation period and before departure, to listen to their voice, prepare regular reports based on their feedback, in a bid to solve specific difficulties in their work and life.

Joincare regards labour union as a link between the management and employees to bring actual benefits to every employee and solve their difficulties in an effort to make employees feel warm. To improve mutual understanding between the Group and employees, and build a stronger sense of belonging, Joincare holds regular workers' congresses to keep close communication with them. We hold canteen talks and dormitory talks every month to listen to employees' reasonable suggestions and keep informed of their actual situation in meal, accommodation and other aspects, thus to improve rules and regulations. In this respect, we give full play the role of labour union as a special link. As of the end of the reporting period, we held over 20 talks with over 1,000 employees.

#### Livzon Pharmaceutical Group conducted employees' satisfaction survey

Case

In 2021, our holding subsidiary Livzon Pharmaceutical Group engaged an external third party to conduct an employees' satisfaction survey in aspects of life/work balance, safety, career development opportunity, rewards and recognition, and performance management based on **Gallup model** using Kincentric questionnaire. In this survey, 92% employees gave their answers with an employee engagement score of 70%.





## 7.2 Talent Recruiting and Retention

#### 7.2.1 Construction of Talent Teams

To align with the development strategy and business requirements, Joincare has been stepping up efforts in talent employment. While carrying out experienced hires and campus recruitment, we seek diversified recruitment channels such as online recruitment, internal recommendation and government cooperation to build up strong teams. In doing this, we expect to inject vitality into the Company's development as a part of talent reserve strategy. We select talents and evaluation method based on job characteristics to ensure that candidates are qualified for the position, as a part of our effort to improve talent management desirable for the Group's development.

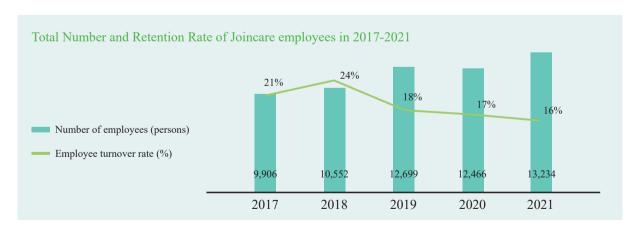
Case



Jinan University, Shenyang Pharmaceutical University, and Shenzhen University, enhancing the school-enterprise cooperation. In the future, we will push forward cooperation with universities in talent cultivation.

Joincare continuously optimizes its human resources management model by diversified talent identification and management strategies based on talent groups and strives to build professional, efficient and innovative teams to be one of the core competitiveness of the Group. As of the end of the reporting period, Joincare had 13,234 employees, seeing continuous benign growth in the staff members.

In this year, the Group prepared a questionnaire to ask for employees' reason for leave. Through one-to-one interviews with outgoing employees, we analyze their reasons for leave and figure out targeted measures to improve talent retention management. During the reporting period, the Group recorded a significant decrease in staff turnover rate of 16%, and a low turnover rate in female workers of childbearing age and those back from maternity leave, laying a solid foundation for the sound and stable development of the Group.



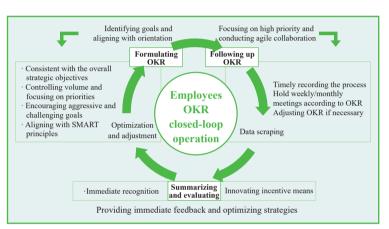
#### 7.2.2 Compensation, Promotion and Welfare

According to our internal policies such as the Salary Management System and the Performance Management System, Joincare provides employees with fair and competitive salaries and benefits, make sure our employees have their Statutory holidays and contributes to employees' pension insurance, medical insurance, unemployment insurance, work-related injury insurance and maternity insurance; Moreover, we also offer them with housing provident fund and supplementary medical insurance.

Upholding the management philosophy of "ensuring the consistency between responsibility and benefit, the consistency between ability and value, and the consistency between performance and earnings", we have established a compensation mechanism that divides salary into fixed and variable parts, and the latter is subject to both the Group's performance and the employees' personal performance. We believe this mechanism could make employees highly motivated.

Based on the performance of our business development and employees' characteristics, we formulate effective performance management and incentive policies and implement the aforementioned mechanism, improving the Company's overall competitiveness and promoting the Company's sustainable development.

The Group maintained a scientific and effective performance evaluation system and implemented the parallel management system of OKR (Objectives and Key Results) and KPI (Key Performance Indicator). The evaluation mechanism focuses on employees' value to the Group as the core criteria, and follows the principles of strategic guidance, value leading, promoting growth, objectivity and fairness. Employees' performance objectives and targets are set up clearly through this evaluation mechanism, creating incentives for performance improvements and workforce vitality.



With the establishment of the Social Responsibility Committee of the Board of Directors, our Human Resources Management Department, by considering the Group's sustainable management strategy and policies, incorporated sustainable management indicators, including environment, safety and occupational health into the performance evaluation system of employees in their job positions.

In addition, Joincare offers employees with multiple tangible benefits.

To relive employees' housing stress, we offer dormitory and assist qualified employees in applying government-subsidized houses or housing subsidies for talents.

To encourage work-leisure balance, we set up a gym, offering such courses as dance, yoga and aerobics for relaxation during breaks.

To give more care for female workers, we carried out activities such as "Women's Day" celebration activities, improving their sense of happiness and belonging.

# In this year, Joincare helped 8 young employees apply and move into talent apartments (of desirable layout in desirable location with low rent) to address talents' accommodation concerns.



#### 7.2.3 Equity Incentives

To ensure development and governance in the future, based on the Group's long-term incentive policies such as the 2018 Share Options Incentive Scheme (Draft) and the Medium- and Long-term Business Partner Shareholding Plan (Draft), Joincare has innovated long-term incentive mechanisms of shareholding for senior management and the core technical team to achieve shared responsibility and value.

#### Equity Incentives of Joincare:

Two vesting periods of the initial options granted under Joincare's 2018 Share Options Incentive Scheme (Draft) expired, and the third vesting period commenced in December 2021. The second vesting period of the reserved options commenced in September 2021. According to the Scheme, 33,468,000 stock options are granted, accounting for 1.75% of Joincare's total share capital. With a large coverage, the Share Options Incentive Scheme effectively integrates the interests of shareholders, the Group and core team members, largely motivating employees and promoting common development of employees and the Company.

#### Employee share ownership plan:

To attract and retain excellent managers and key members, to promote long-term, sustainable and healthy development, the Group released the First Phase Ownership Scheme under Medium to Long-term Business Partner Share Ownership Scheme on June 2021. Under this Scheme, a total incentive fund of RMB 31,038,200 was granted to 41 key employees in R&D, production, sales and management, improving cohesion, work enthusiasm and motivation of employees, and the overall value of the Group.

#### 7.2.4 Training and Development

The excellent talent team is not only the cornerstone for Joincare's business development, but also the core driving force for Joincare's sustainable development. The Company continued to attach great importance to internal talent training. With diversified, regularized and systematic training systems and a combination of online and offline learning courses, the Company organized and carried out new employee orientation training, employee on-the-job training, and training team building. We establish, improve and implement a talent development mechanism benefiting employee development. Through trainings, cultivation and qualification management, we promote improvements in our employee capabilities and the matching between employees and their job positions, building our talent pools and enhancing our human capital development.

We actively develop more training resources and offer professional training courses for employees based on job characteristics and business needs. Training for the functional personnel at the headquarter focuses on improving their general knowledge and professional skills. We highly encourage the R&D team to gain competence in project management, testing and information retrieval, the personnel on production lines to receive knowledge training and hands-on practice on production safety, machine operation, and environmental protection, the sales team to attend courses about products, compliant marketing, and marketing skills. In developing more training resources, we encouraged internal lecturers to develop job-specific courses. In this year, we prepared the External Training Agreement template to encourage employees to attend external professional training to improve their skills.

To encourage employees to improve professionalism, we support employees to pursue higher education qualification level through projects such as career-based study for a master's or doctor's degree. In this regard, we grant full amount subsidies to employees who attend external trainings, and tuition fee subsidies to approved employees who engage in career-based study. Meanwhile, the Company provides abundant resources to motivate employees to obtain work-related professional qualifications after work, such as hiring external experts to provide training and counseling, and giving financial support and vacation.

In terms of training feedback and efficiency assurance, we adopt the "531" learning principle. We share 5 self-achievements, 3 work applications, and 1 action plan in each training session, and assign supervisors to ensure the results. During the reporting period, we provided 1,027,812 hours of training to employees, with 77.7hours of training per employee.

#### Joincare launched the 2021 "Dream & Future" training program for campus recruitment

Case

In July 2021, Joincare launched the five-day "Dream & Future" training program for campus recruitment. The intensive training was held together with Guangzhou Joincare, Haibin Pharma and Taitai Pharmaceutical under the overall management of the Group's HR Department. The program aims to facilitate campus recruitments' shift from campus to the workplace, help them get familiar with the corporate culture and core values, and increase their sense of belonging through activities including address from the President, team building, intensive course trainings, and outdoor exercises.



#### Management cases sharing and study

Case

To improve management ability of Group managers, Joincare organized case sharing sessions every month in this year. The Group's HR Department collected cases on difficulties encountered by business units in their daily work and solutions to them. These cases will then be sent to mangers of all departments of the Group and secondary subsidiaries to learn, analyze, and summarize. Managers are invited to share their inspirations at the regular meeting every month. A total of 25 classic cases were compiled. Inspirations drew from 9 cases shared by managers were summarized in the 2021 Management Case Analysis Collection for relevant managers to further study and review. In addition, we also carried out the selection of excellent management cases and best case analysis. 2 excellent management cases and top 5 best case analysis were selected.

#### 7.2.5 Promotion Plans

Joincare respects employees' personal career planning. To promote talent identification, selection and recruitment, Joincare conceives professional and administrative development channels for employees to achieve job level and job position change, offering them greater possibility for promotion and development. The Group adopts the combined approach of "progressive promotion" for excellent employees and "exceptional promotion" for employees with outstanding performance or special expertise. Employees can get promoted through the professional channel and administrative channel. The Group recognizes the diversity of talent backgrounds, and promotes employees of different cultural backgrounds and nationalities in different fields and dimensions.

In addition, the Group regularly analyzes its human resources, classifies professions according to strategic objectives, supports the path and process of human resources development, and provides opportunities, resources and support for employees' development.



#### 7.2.6 Work-Life Balance

Joincare advocates the philosophy of "Happy work, Healthy life". To relieve employees' working pressure and enhance their sense of happiness, Joincare organized such activities as regular badminton competition, daily fitness courses, TCM lectures, Women's Day celebration activity, and Mid-Autumn Festival garden party, in a bid to build a corporate atmosphere of balance between work and life, enhance employees' sense of belonging.

To promote corporate culture and enhance cohesion, the Group organized regular activities including holiday-themed activities and birthday parties to create a vibrant working atmosphere and bring more warmth and care to employees.







Birthday Party for Employees

Women's Day Celebration

Caring for Employees

In 2021, we organized sports activities such as hiking and badminton competition. We also set up a gym and engaged professional coaches to teach employees how to use the fitness equipment properly, aiming to promote employees' physical and mental health and help them achieve work and life balance.



"Walk with You All the Way" Hiking



Employee Badminton Competition

In March, 2021, the female employees of Joincare participated in the theme activity held by Nanshan District to commemorate the 111th anniversary of the International Women's Day (March 8) and the activity of Learning CPC History, Celebrating the Party's Grace and Following the leadership of the Party - One Hundred Women's Tribute to the 100th anniversary of the Founding of the Party. By sharing women's stories, they paid tribute to heroines and called on women to make new contributions in the new era. After review, public notification and evaluation, Joincare won the "Collective Title of National March 8th Red Flag of Shenzhen City" among many candidates.



This year, Joincare set up a book club. A monthly recommendation book list will be offered at the beginning of each month after soliciting book lists from club members. In doing so, we encourage employees to develop a reading habit and create a positive learning atmosphere within the Company. The book club will carry out offline reading sharing event at the end of the year to encourage book lovers to exchange ideas and share knowledge.



# 7.3 Occupational Health and Safety

Joincare attaches great importance to employees' occupational health protection and production safety. With "zero safety accidents" as the ultimate goal, it formulated a series of internal management measures such as the General Requirements of EHS Management System, in accordance with relevant regulations and the requirements of ISO45001 system. It also established and implemented an internal management system, and set up an EHS department with full-time management personnel to be responsible to supervise and promote the implementation of production safety and occupational health protection. As at December 31, 2021, 17 manufacturing enterprises of the Group obtained the GB/T45001-2020/ ISO45001:2018 certifications and 10 have been certified as Level 3 enterprises of production safety standardization.

To ensure occupational health and production safety, we implemented technological improvements and equipment upgrading to eliminate potential risks. Joincare's investment above 52 million in occupational health and safety in year 2021

#### 7.3.1 Occupational Health

Joincare strictly abides by rules and regulations regarding occupational health protection, including the Law of the PRC on the Prevention and Treatment of Occupational Diseases, the Regulations on the Management of Occupational Health in the Workplace, the "Three Simultaneous" Supervision and Management Measures for Occupational Disease Protection Facilities in Construction Projects, the Regulations on Labor Protection in Workplaces Using Toxic Substances, the Technical Specifications for Occupational Health Surveillance, and Regulations on the Management of Occupational Injuries. It implements and continuously improves internal management system such as Occupational Health Management System and Operating Procedures, and the Monitoring and Evaluation System for Occupational Hazard Factors in the Workplace. In 2021, Xinxiang Haibin revised the Management System for Issuance of Labor Protection Supplies to clarify each department's responsibilities and adjust the standard and time of issuance of labor protection supplies based on exposure to occupational hazards, so as to effectively protect the safety and health of employees.

In specific, we strictly follow national regulations and standards to implement the "three simultaneous" management system for new, reconstruction and expansion projects; identify, analyze and control the occupational hazards that may arise or exist in the work process; give priority to healthier and more harmless processes, equipment, materials, etc. to minimize the impact of hazards on employees; engage occupational health technical service institutions with appropriate qualifications to carry out regular occupational disease hazard factor testing and publicize the results; conduct occupational disease hazard evaluation in accordance with the Regulations on the Management of Occupational Health in the Workplace; arrange regular occupational health examinations and trainings for employees in positions exposed to occupational disease hazards; equip employees with labor protection articles and first aid supplies; sets up warning signs in places where occupational disease hazards may be involved, so as to create a healthy and safe working environment and effectively protect employees' occupational health rights.

In 2021, Joincare continued to invest in occupational health protection for employees and built special funds for labor protection articles procurement, occupational health monitoring and physical examination; regularly maintained and overhauled protective facilities, and make upgrades and technological improvements from time to time. During the reporting period, no new or suspected occupational contraindications or occupational cases occurred.



#### Carry out "pre-job, on-job and off-job" occupational disease physical examination

Case

In strict accordance with the physical examination regulations to ensure occupational health, Joincare arranged physical examinations for employees in posts exposed to occupational hazard factors before they take the post, during they work in the post, and after they leave the post. This year, 100% of related employees in Joincare's subsidiary manufacturers accepted the occupational diseases physical examination. Meanwhile, we continue to improve our general occupational health file and establish an individual health file for each employee.

Pre-job examination: Organize pre-job occupational health examination for employees who are about to engage in operations

exposed to occupational hazards and operations with special health requirements.

On-job examination: Organize regular on-job occupational health examination for employees who are exposed to occupational

hazards.

After-job examination: Employees are required to undergo health examination before they change posts or leave current posts

that are exposed to occupational hazards.

#### Xinxiang Haibin carried out occupational health evaluation

Case

To prevent, control and eliminate the occupational disease hazards that may arise from construction projects, and to strengthen and standardize the supervision and management of the construction of occupational disease protection facilities, in 2021, Xinxiang Haibin conducted a pre-evaluation on occupational disease hazards in the new project "sterile powder raw material production line" and the reconstruction project "automatic transformation of meropenem crude product production line". It also conducted an overall evaluation on occupational disease hazards of the Company at the time being, to ensure that the protection measures, personal protective equipment, emergency rescue facilities and management level of the Company meet the relevant occupational disease protection requirements and to effectively protect employees' right to be healthy.

#### 7.3.2 Safe Production

#### Production Safety Management

Joincare strictly abides by the national laws and regulations such as the Law of the PRC on Work Safety, the Fire Control Law of the PRC, as well as the Law of the PRC on Prevention and Control of Occupational Diseases, production safety guidelines directing "safety awareness, legal compliance and continuous improvement". To ensure production safety, Joincare formulates management policies such as the Work Safety Management by Objectives, the Safety Management System Operation Control Management and the EHS Accident Management Methods in accordance with the requirements of the occupational health and safety management system; define the safety responsibilities of employees at all levels to promote safety management; and develop and improve rules and regulations on production safety.

Joincare continuously improves the production safety management system. In 2021, the Group formulated such regulations as the Joincare Emergency Response Management System, the Safety Management Regulations for Contractors. To strengthen emergency response capability, enhance safety management for related parties and further improve the level of production safety, subject to the requirement of the Group, subsidiaries added or revised, based on their own operation, regulations such as Safety Management System for Related Parties, the Management System for Abnormal Information Response, the Abnormal Weather Disaster Warning Issuance and Emergency Disposal System, the Management System for Key Parts of Critical Installations, the Operation Assessment System for Dual Prevention System, and the Management System for Safety Production Files.

During the reporting period, no major safety accidents occurred in the Group. Annual production safety objective was achieved.

We adhere to the principle of advance prevention and integrate intrinsic safety management into the production safety system. By continuously updating production equipment and adding the production safety automation systems, starting from the production line, we identify risk points, control dangerous points, prevent production safety accidents caused by human-made mis-operation, and optimize intrinsic safety design.

#### Jiaozuo Joincare verified and eliminated major hazard source

Case

To reduce the safety risk level of solvent reservoir zone, Jiaozuo Joincare invested RMB 1.93 million in degradation this year. Without compromising production, the methanol tank farm was designed and planned to be scaled down through overall adjustment to the storage layout of dangerous chemicals. Storage tanks were placed in related area to replace the original barreled materials based on actual production. The reconstruction not only reduced the methanol storage, but also reduced the transportation risk of barreled materials. As a result, the project passed the expert review and acceptance, and Grade 4 major hazard sources were eliminated after verification.

#### Xinxiang Haibin upgraded the DCS/SIS system

Case

In 2021, Xinxiang Haibin completed the upgrading of the Distributed Control System (DCS) and the Safety Interlocking System (SIS) to ensure automatic control over hazardous chemical area, achieving full coverage. The DCS and the SIS featured by automatic operation, control and cut-off in case of emergency help reduce the production safety accidents caused by human-made mis-operation, and nip accidents in the bud.

#### Haibin Pharma continued to increase safety investment for higher level of production safety

Case

In 2021, Shenzhen Haibin Pharmaceutical Co., Ltd. further increased safety investment to improve its level of production safety. In specific:

- It invested RMB 8 million to rebuild the solvent reservoir zone to replace aboveground storage tanks with "a sunk tank farm at the original site and a barrel storage yard". After the reconstruction, the reservoir zone can fully meet the planned safety spacing with adjacent plots, and the buried storage tanks can effectively reduce the fire risk.
- It invested RMB 150,000 to upgrade the fire-fighting facilities in the 4th floor warehouse in Building No.2, in specific, with the installation of automatic fire alarm device and smoke exhaust system, so as to improve the warehouse' emergency response capability.

#### Safety Culture Cultivation

Joincare always regards the development of safety culture as the foundation of the enterprise. By organizing safety knowledge trainings and activities, such as work safety month, emergency drills, and special event, we expect to increase employees' safety awareness and sense of responsibility, embed the safety idea deeply in their mind, help them change from "I'm required to be safe" to "I want to be safe", thus creating a good safety culture atmosphere.



#### Health and Safety Training

According to the requirements of the Safety Education and Training Regulations, Joincare formulated the annual safety training plan, improved all employees' safety supervision and management ability through the combination of internal and external training, and ensured long-standing insistence on Production Safety. We promoted the overall improvement of health and safety awareness of all employees by carrying out targeted safety education publicity. During the reporting period, the per capita training time for EHS training was about 40.5 hours

Internal training: three-level (plant-level, workshop-level and team-level) trainings on safety knowledge and safety management system, and themed trainings for new employees. The training includes national laws and regulations on work safety, work safety management system and basic knowledge, work safety technology, fire safety, analysis of typical accident cases, accident reports and investigation and handling methods, as well as use and maintenance of safety equipment and facilities.

External training: qualification training for special operations (such as electric welders), qualification training for safety management personnel, and lessons given by external lecturers, etc. Employees in posts requiring certificates are allowed to work only after they obtain related certificates and pass the trainings.

#### Xinxiang Haibin organized safety training sessions

Case

On June 7, 2021, Xinxiang Haibin organized a special training on "Safety Leadership" to its management to improve their understanding of safety management. After the training, an exam was held to check what did they learn. In addition, employees were arranged to watch educational films on emergency response, in a bid to improve employees' safety awareness and emergency response ability as we seek to build a stronger emergency team.



Carry Out a Special Training on Safety Leadership

#### Joincare Haibin conducted joint trainings with the local government

Case

In 2021, Joincare Haibin Pharmaceutical Co., Ltd. and local government departments jointly organized three trainings:

- Customized and targeted training of "One Enterprise, One Lesson" in Pingshan District with Emergency Management Agency of Pingshan District on September 3, 2021.
- Emergency rescue knowledge training (on AED use, CPR, and Heimlich Maneuver) with Emergency Management Agency of Pingshan District on November 3, 2021.
- Fire-fighting knowledge promotion to "Five Designations" with Kengzi Sub-district Office on December 3, 2021.



"One Enterprise, One Lesson" Training



Fire-fighting Knowledge Promotion to "Five Designations"

#### **Emergency Drills**

Joincare formulated the comprehensive emergency plan and the special emergency plan for production safety, and sets up emergency rescue teams accordingly. Each subsidiary carried out regular drills according to the annual emergency drill plan, and improved the emergency plan and disposal plan after the drills.

#### **Carried out 2021 Emergency Drill**

Case

Jiaozuo Joincare: In June 2021, Emergency Agency of Macun District together with other six units, including Environmental Protection Agency and Fire Brigade, conducted a comprehensive emergency drill in Jiaozuo Joincare, with a total of 98 participants; In October of the same year, Jiaozuo Joincare Emergency Team, together with Fire Brigade of Macun District, Fire Brigade of Xiuwu County, and Fire Brigade of Shanyang District, conducted a comprehensive cooperative fire-fighting drill, in which more than 50 people participated and 4 fire engines were dispatched.

**Joincare Haibin:** In June 2021, EHS Department organized the "emergency rescue drill for fire-fighting and leakage of hazardous chemicals" to enhance employees' awareness of fire-fighting and safety and their emergency response ability. 78 participated in the drill. The drill covered evacuation and escape in case of emergency, on-site hands-on fire-fighting drills, on-site disposal of hazardous chemical leakage and basic knowledge of on-site rescue.

**Xinxiang Haibin:** In June 2021, it carried out "Comprehensive Emergency Drill for Fires in Solvent Drums and Warehouse". 97 participated in the drill. Through this drill, employees were better informed of the accident response and report process, and emergency teams can be better coordinated.

Haibin Pharma: In June 2021, Haibin Pharma carried out a company-level comprehensive emergency drill in the tank farm, with the theme on emergency response to cracks and leaks in the bottom flange of the tank farm. The drill not only tested the feasibility of the comprehensive emergency plan, but also improved the emergency response capacity of all employees for sudden chemical leakage.

**Taitai Pharmaceutical:** In November 2021, Taitai Pharmaceutical organized the 2021 fire evacuation emergency drill, covering emergency evacuation, fire-fighting practice, and hose operation. This drill not only tested the feasibility of the emergency plan, but also improved the safety awareness and fire-fighting skills of employees.



Jiaozuo Joincare Conducted Comprehensive Fire-Fighting Drill



Joincare Haibin Conducted On-site Rescue drill



Xinxiang Haibin Conducted Comprehensive Emergency Drill for Fires in Solvent Drums and Warehouse



Taitai Pharmaceutical Conducted Fire Drill



Haibin Pharma Conducted Emergency Response to Cracks and Leaks in the Bottom Flange of the Tank Farm



Jiaozuo Joincare and Other Six Companies Conducted Comprehensive Emergency Drill



#### Safety Themed Activities

To build safety culture and improve employees' work safety awareness, Joincare organized regular safety themed activities. In response to the Notice on 2021 "Work Safety Month", Joincare and its subsidiaries carried out series "Work Safety Month" activities in June.

#### Various "Work Safety Month" activities

Case

**Xinxiang Haibin** organized "Work Safety Knowledge Contest" with 27 participants. The safety knowledge contest was expected to improve employees' safety skills and risk identification ability, ensure that safety measures are put in place, and to enhance all employees' safety awareness.

**Jiaozuo Joincare** organized an online selection and exhibition of employees' creative comics themed on "Production Safety Journey". This activity attracted 20,959 views and 15,364 votes. In the "My Understanding of Safety Responsibility" speech contest, 17 contestants from 9 workshops and departments gave wonderful speeches on their understanding of safety responsibility.

**Joincare Haibin** organized a sports meeting themed on safety, from which employees learned how to use fire extinguishers, fire hydrants, and stretchers among others in an entertaining way, and gained experience and skills under emergencies.



2021年安全月活动趣味运动会

Work Safety Knowledge Contest

Safety Sports Meeting



Work Safety Journey Cartoon Show



"My Understanding of Safety Responsibility" Speech Contest

# 8

# **Operating with Green Sustainability**

# 8.1 Environmental Management System

Joincare follows relevant laws and regulations regarding environmental protection, including the Environmental Protection Law of the PRC, the Law of the PRC on Prevention and Control of Environmental Pollution by Solid Waste, the Atmospheric Pollution Prevention and Control Law of the PRC, the Regulation on the Administration of Permitting of Pollutant Discharges, Guidelines on Identifying Potential Soil Contamination of Key Units Under Supervision (Trial). In accordance with the ISO14001 standard, we developed a series of our own management measures and continued to improve them. We also carried out trainings and activities to improve employees' awareness as we practice environmental protection.

All production units of Joincare strictly follow the "three simultaneous" system to ensure the facilities for pollution prevention and control be designed, constructed and put into use simultaneously with the main work of the project. Also, they establish a solid waste management system across the whole process from waste generation to collection, storage and disposal; regularly maintain pollution control equipment to ensure compliant pollutant discharge; formulate a self-monitoring plan based on the requirements of environmental impact assessment and sewage discharge permits, and regularly hire qualified third-party testing agencies to monitor wastewater, waste gas and noise, and review the level of environment protection management based on the monitoring results; continuously invest in equipment and facilities upgrading or production process and technology improvements; and strive to improve their performance in environment protection management.

In 2021, no major environmental protection accidents occurred to all production units of Joincare. Investment in environmental protection is listed as follows:

Unit: RMB Ten thousand

Technological improvements	approximately3,022.3
Operation	approximately14,304.8

#### 8.1.1 Environmental Management Policies and Targets

Joincare adheres to the environmental management policy focused on pollution prevention, legal compliance and continuous improvement. It sets environmental targets based on business characteristics and the management practices of peers at home and abroad. Joincare sets two targets: the annual compliance operation target and the medium-and long-term target of energy conservation and emission reduction with 2020 as the starting year. All production units were informed of the Group's requirements, made and gradually implemented action plans accordingly. Goals and achievement are listed in table below:

Table: Joincare's Compliant Operation Goals and Achievements in 2021

Indicator	Annual Goal	Completion Status
Compliant Waste Water/Gas Discharge	100%	Achieved
Number of Major Environmental Pollution Accidents	0	Achieved
Number of Environmental Penalties in the Year	0	Achieved

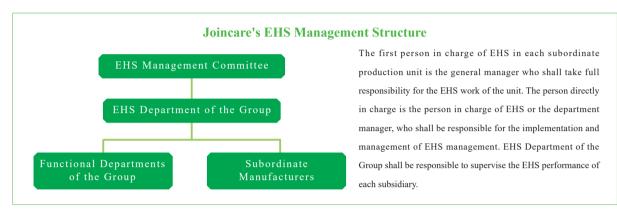
Table: Joincare's Medium- and Long- Term Goal for Energy Conservation and Emission Reduction (2020-2025) and its Implementation

Indicator	Unit (production value= ¥10,000)	Emission Reduction Goal	Review of the Achievement
Water	Water consumption per unit production	5% lower than 2020	The results of annual work regarding energy conservation
Electricity	Electricity consumption per unit production	5% lower than 2020	and emission reduction are in with our expectations;
Chemical oxygen demand	Emission per unit production	5% lower than 2020	We have been steadily promoting energy conservation
Sulfur dioxide	Emission per unit production	10% lower than 2020	and emission reduction to ensure our mid to long term
Hazardous wastes	Disposal volume per unit production	2% lower than 2020	environmental goals and targets could be achieved.



#### 8.1.2 EHS Management Structure

To achieve effective EHS management, Joincare established and gradually improved the EHS management structure to define responsibilities and ensure their performance according to the EHS Management Manual. The EHS management committee is responsible for coordinating the EHS management of the whole group. The EHS department of the Group is responsible for supervising and managing the implementation of EHS management of each production unit. Functional departments of the Group are responsible for the EHS management of their own departments. Subordinate production units are responsible for the EHS management of their own units and regularly report to the EHS Department of the Group.



#### 8.1.3 Certification of Environmental Management system and Review on Clean Production

We firmly believe that the establishment and implementation of an effective environmental management system is of great guiding significance for a higher environmental management level. Joincare has made great efforts to promote the establishment of environmental management system, actively carried out clean production and applied for green factory certification. The certification obtained by its 18 production-oriented units as at the day the report released is shown in the table below:

Company Name	GB/T24001 / ISO14001 Certification	Clean Production Review	Green Factory Certification
Taitai Pharmaceutical	Certified	Approved	/
Jiaozuo Joincare	Certified	Approved	National
Xinxiang Haibin	Certified	Approved	/
Haibin Pharma	Certified	Under review	National
Joincare Haibin	Certified	/	/
Livzon Syntpharm (Zhuhai FTZ)	Certified	Approved	/
Gutian Fuxing	Certified	Under review	/
Fuzhou Fuxing	Certified	Approved	Provincial
Xinbeijiang Pharmaceutical	Certified	Approved	National
Ningxia Pharmaceutical	Certified	Approved	/
Jiaozuo Hecheng	Certified	Approved	Provincial
Shanghai Livzon	Certified	Approved	/
Sichuan Guangda	Certified	Approved	/
Limin Factory	Certified	Approved	/
Shanghai LivzonBio (Jiaozuo)	Certified	Approved	/
Livzon Diagnostics	Certified	Approved	1
Livzon Pharmaceutical Factory	Certified	Approved	Provincial
Livzon MAB	Certified	/	/

#### Haibin Pharma received the Excellent Sponge City Project Award in Shenzhen

Case

In October 2021, Shenzhen Haibin Pharmaceutical Co., Ltd., a wholly-owned subsidiary of Joincare, was granted the Excellent Sponge City Project Award for the green project in its Pingshan pharmaceutical industrial base. This project also received the prize provided by the Shenzhen municipal government for new non-government-funded projects (including reconstruction projects) supporting the Sponge City program.

The Sponge City program is an important initiative to develop ecological civilization and promote green development in a city. This program enhances systematic construction of infrastructure and helps the city achieve the goals of restoring the water ecology, conserving water resources, improving the water environment, ensuring the water safety, and reviving the water culture. Ultimately, the city will be built into a community for harmonious coexistence between human and nature.





#### 8.1.4 EHS Audit

#### Internal Audit

In order to check whether the EHS management system is put into effective operation and whether the group management system and requirements have been implemented, Joincare established the EHS internal audit system based on the Group EHS Internal Audit Management Procedure. At the beginning of the year, the EHS Department of the Group organized an audit team to formulate an annual internal audit plan. The plan proposes EHS audits on subsidiaries at least twice a year and an internal audit report to record findings and to track corrections regularly according to the Management Regulations on Corrective and Preventive Measures. The EHS Department of the Group summarized the audit findings every six months and submitted them to the management for review. In 2021, the EHS Department of the Group conducted 11 EHS internal audits on subsidiaries while some audit plans were postponed or cancelled due to the epidemic. A total of 102 hidden risks were found in the annual EHS internal audit of the Group, all of which have been eliminated up to now.

All subsidiaries of the Group regularly carried out their own EHS examination on such matters as EHS compliance, operation and maintenance of pollutant control equipment and facilities, compliance disposal of solid wastes, personnel training, implementation of emergency drills, and eliminate risks in a timely manner. Companies that obtain the ISO certification were required to conduct comprehensive EHS internal audit at least once a year.

#### External Audit

Joincare's subsidiaries that have obtained ISO certification are required to employ third-party certification bodies to conduct ISO supervision and audit once a year and re-certification (renewal) audit once every three years.



# 8.2 Addressing Climate Change

In recent years, we are seeing more and severer extreme weather events like high temperature and heavy rainfall around the world due to climate change. Coping with climate change has become an important and urgent issue that the whole world must resolve at present. It is now generally accepted by experts and scholars that reducing greenhouse gas emissions is the key to tackling climate change. China has clearly put forward the "30·60 goal" to "strive to achieve carbon peak by 2030 and carbon neutrality by 2060".

In an effort to cope with climate change and implement the national "Double Carbon" policy, Joincare actively identifies the potential risks and opportunities brought by climate change to the Company's business, and puts forward countermeasures based on its own situation. In addition, it continuously promotes energy conservation and emission reduction through measures such as energy management, technological improvements and equipment upgrading, promoting the realization of the "Carbon Commitment". Meanwhile, to improve the carbon management ability, know the emission of each process, and fully tap the potential opportunities of energy conservation and emission reduction, several production subsidiaries of Joincare have independently carried out carbon accounting during the reporting period.

The Company's greenhouse gas emissions mainly come from fuel combustion, electricity consumption and purchased steam used in production and operation. This year, our energy use and greenhouse gas emissions were as follows:

Table: Energy Use of Joincare in 2021

Indicator	Unit	For Active Pharmaceutical Ingredients Businesses	For Preparations Businesses	Total
Gasoline	Liter	150,006.1	246,357.5	396,363.6
Diesel	Liter	289,510.7	97,393.1	386,903.8
Coal	Ton	86,291.0	0	86,291.0
Liquefied Petroleum Gas	Ton	4.25	3.6	7.85
Natural Gas	10,000 cubic meters	570.2	379.4	949.6
Purchased Steam	Ton	779,993.4	100,295.1	880,288.5
Purchased Industrial Electricity	10,000 kWh	80,849.9	11,806.1	92,656.0

Table: Greenhouse Gas Emissions of Joincare in 2021

Indicator	Unit	For Active Pharmaceutical Ingredients Businesses	For Preparations Businesses	Total
Category I Greenhouse Gas Emissions	Ton of CO <sub>2</sub> equivalents	192,189.5	9,045.3	201,234.8
Category II Greenhouse Gas Emissions	Ton of CO <sub>2</sub> equivalents	705,501.4	98,843.6	804,345.0
Greenhouse Gas Emissions in Total	Ton of CO <sub>2</sub> equivalents	897,690.9	107,888.9	1,005,579.8

#### **Energy Management**

In accordance with laws and regulations such as Energy Conservation Law of the PRC, the Law of the PRC on Promoting Clean Production, and based on ISO50001 standards, Joincare implemented a complete set of internal energy efficiency management system. During the reporting period, 5 subsidiaries passed the ISO50001:2018 or RB/T114-2014 certification. We formulate annual energy conservation plans and regularly reviews the progress to keep track of energy management performance. Take Livzon Pharmaceutical Group as an example. By vigorously promoting the energy management system, adopting high-efficiency energy-saving equipment, and introducing clean energy, Livzon exceeded its annual target of 3% decrease in electricity consumption per unit production (production value= ¥10,000) in 2021.

In response to climate change, to promote energy conservation and carbon emission reduction, Joincare continued to improve its energy efficiency. In this regard, it conducted a comprehensive survey against the Catalogue of Obsolete Mechanical and Electrical Equipments Eliminated due to High Energy Consumption and replaced obsolete devices with energy-saving ones. Major energy efficiency improvement projects during the reporting period are detailed in table below:

Table: Key Energy Conservation Projects of Joincare in 2021

Company Name	Project Name	Investment Amount	Result
W 31: N	Replacement of motors in the pump room  Haibin Pharma  Replacement of blowers for waste water treatment		Replaced motors in the pump room with energy-saving motors, saving the power by more than 20,000 kWh per year
Haibin Pharma			Replaced the original Roots blowers with air suspension blowers, saving the power by about 150,000 kWh per year
Xinxiang Haibin	Energy-saving technological improvements of circulating pumps	RMB 30,200	Reduced the power consumption of circulating pumps by technological improvements, saving the power by about 770,000 kWh per year
	Control parameter optimization of fermentation tank consumption	RMB 5,000	Optimized the control parameters of fermentation tank consumption to reduce the steam flow and steam consumption, saving the steam consumption by about 6,900 tons per year
Jiaozuo Joincare	Control method improvement of the stirring motor of fermentation tanks	RMB 4,000	Changed the control method of the stirring motor of fermentation tanks to frequency conversion control, and adjusted the electronic speed in real time, saving the power by about 5 million kWh per year
	Water supply temperature optimization of parsing tank	RMB 66,200	Installed a plate heat exchanger to stabilize the temperature of the water supply by means of physical cooling, which can reduce the startup time of the refrigerator and save the power by about 200,000 kWh per year

## 8.3 Emission Management

In addition to relevant national laws and regulations, all production subsidiaries of Joincare actively abide by relevant local regulations and policies, such as the Shenzhen Special Economic Zone Ecological Environmental Protection Regulations and 2020-2021 Air Pollution Comprehensive Governance Tackling Action Plan in Autumn and Winter of Beijing-Tianjin-Hebei and Surrounding Areas, and Fenwei Plain. On the basis of meeting management requirements of the Group, we have formulated the internal environmental management systems Environmental Protection Management Assessment System and the Safety and Environmental Management Manual in light of our own operation conditions, to ensure that waste gas and water and noise are discharged according to standards, solid waste is collected and disposed of in accordance with regulations, and we actively fulfill environmental protection operation compliance obligations. We also further increased investment in environmental protection, reduced pollutant emissions throughout the production cycle by upgrading equipment and facilities and technological improvements to become an enterprise of green development.

#### Waste Gas Management

According to internal management systems such as General Requirements for EHS Management System, Joincare supervises waste gas emissions from the Group level. Each production subsidiary strictly implements special environmental management systems such as the VOCs Collection and Treatment Management System, Boiler Waste Gas Emission Management System, and other special environmental management systems. While ensuring the effective operation of the waste gas collection and treatment system and the discharge of waste gas up to the standard, we also applied advanced and efficient treatment technologies to reduce the impact of waste gas emissions on the environment. In addition, we regularly entrust a qualified third party to conduct environment monitoring to check the result of our waste gas management.

Based on the excellent environmental management performance of Joincare, Xinxiang Haibin was rated as an A-level enterprise for heavy pollution weather management and control for its automatic emission reduction during heavy pollution weather. Jiaozuo Joincare was rated as a B-level enterprise, which is required to reduce emissions to a certain degree during the warning period of heavy pollution weather above the level Orange.



#### The following takes Jiaozuo Joincare as an example to detail relevant information:

Process organic waste gas: The gas is collected in a closed circuit, passed into a Regenerative Thermal Oxidizer (RTO), and heated to above 750°C for treatment. The organics in the waste gas are oxidized and decomposed into carbon dioxide and water vapor. The treatment efficiency can reach up to 90%, effectively reducing the waste gas emission concentration compared with the traditional adsorption process.

Fermentation waste gas: After a series of pretreatments of "water spray + acid spray + alkali spray + demister", the gas is introduced into a Regenerative Catalytic Oxidizer (RCO) for treatment. The waste gas is then converted by adsorption, concentration, oxidation, and decomposition into carbon dioxide and water vapor, which are then discharged.

Waste gas in sewage: To reduce unexpected escape, all links that may generate waste gas during sewage collection and treatment are covered and sealed. The waste gas is processed by "spray + oxidation", which can effectively reduce the odor and emission concentration of the waste gas.

In addition, the process waste gas and fermentation waste gas outlets are installed with the CEMS online monitoring system, which is networked with government regulatory authorities to share emission data in real time and realize dynamic supervision of compliant emission of waste gas.

To continuously reduce harmful waste gas emissions, many production subsidiaries of Joincare actively upgrade and transform their waste gas treatment facilities. The table lists major improvement projects within the reporting period.

Table: Major Waste Gas Management and Improvement Projects of Joincare in 2021

Company Name	Project Name	Investment Amount	Effects of the projects
Xinxiang Haibin	Recycle of waste gas membrane	RMB 2.1 million	Recycled solvents, reducing waste gas emissions and resource consumption
Jiaozuo Joincare	Waste gas collection and treatment efficiency improvement during sewage treatment	RMB 1.725 million	Covered and sealed the secondary settling tank, the third settling tank, and the open channel to increase the collection rate of waste gas. Added UV photo-oxygen catalytic equipment to effectively degrade odorous gases generated by waste water treatment.
Haibin Pharma	Aerobic pool odor collection and treatment	RMB 151,000	Covered and sealed the aerobic biochemical pool for waste water treatment to better collect and treat the odor generated by the process, thereby effectively reducing the unorganized emission of odor.

The main waste gas emissions of Joincare in 2021 are as follows:

Table: Emissions of Main Waste Gases of Joincare in 2021

Indicator	Unit	Active Pharmaceutical Ingredients	Preparations	Total
Volatile organic compounds	Ton	71.47	0.83	72.3
Nitrogen oxide	Ton	130.0	9.9	139.9
Sulfur dioxide	Ton	47.7	1.0	48.7
Particulates	Ton	25.6	1.6	27.2

#### Waste Water Management

Joincare complies with the Water Pollution Prevention and Control Law of the PRC, Comprehensive Waste Water Emission Standard, Pharmaceutical Industry Water Pollutant Emission Standard, and other relevant laws and regulations, and strictly implements the Sewage Discharge Management Regulations to ensure the stable operation of treatment facilities and waste water emission up to standards. Each production subsidiary arranges production reasonably, and gradually adjusts and technically transforms their process and equipment that produce waste water to reduce the waste water emission.

To continuously enhance the waste water processing quality, many production subsidiaries of Joincare actively upgrade and transform their waste water treatment facilities. The table lists major improvement projects within the reporting period.

Table: Major Waste Water Management and Improvement Projects of Joincare in 2021

Company Name	Project Name	Investment Amount	Effects of the projects
Jiaozuo Joincare	Upgrade of the 3# and 4# anaerobic reactors	RMB 2.95 million	Upgraded the anaerobic reactors, which can effectively improve the efficiency of sewage treatment, reduce the concentration of pollutant emission, and prevent the collapse, damage, leakage and other safety and environmental risks of old equipment.
	Upgrade and transformation of rainwater outlet	RMB 46,000	Effectively collected initial rainwater to ensure compliant emission
Xinxiang Haibin Up and the	Addition of hyper-gravity preprocessing link for the fifth workshop	RMB 300,000	Added a new hyper-gravity pretreatment link, which can effectively solve the problem of overloaded operation of the biochemical treatment system caused by the high content of total nitrogen and total phosphorus in the waste water of the fifth workshop. After the operation of the project, the total nitrogen in the regulation tank has been reduced from about 450 mg/L to about 150 mg/L, and the total phosphorus has been reduced from about 150 mg/L to about 50 mg/L. This measure enhanced the stability of the biochemical treatment system and improved the effluent index.
	Upgrade of the aeration system and sludge return system for the H/O system	RMB 175,000	After the system was upgraded, the problems of poor effect of the aeration device of the old biochemical system, low oxidation utilization rate, and easy sludge return were effectively solved, reducing the total nitrogen emission from about 45 mg/L to about 15 mg/L.
	Replacement of the sludge conveyor Item	RMB 90,000	Replaced the original sludge conveyor belt with a screw conveying device, which can effectively reduce the equipment failure rate, improve the safety performance of the equipment, and improve the on-site environment.
	Addition of a stirring reaction box to the Fenton process	RMB 50,000	Added a stirring device, which can improve the reaction efficiency and the mud-water separation effect, increase the clarity of the effluent of the third settling tank, and effectively reduce the effluent indicators.

The main waste water and pollutant emissions of Joincare in 2021 are as follows:

Table: Main Waste Water and Pollutant Emissions of Joincare in 2021

Indicator	Unit	Active Pharmaceutical Ingredients	Preparations	Total
Waste water emission	Ton	9,720,727.2	764,334.3	10,485,061.5
Chemical oxygen demand	Ton	962.1	22.3	984.4
Ammonia nitrogen	Ton	111.2	2.4	113.6

#### Noise Management

Joincare strictly abides by the Environmental Noise Pollution Prevention and Control Law of the PRC, Environmental Noise Emission Standards for Industrial Enterprises Boundary, and other relevant laws and regulations, and regularly tests the noise at the plant boundary according to the monitoring plan to ensure that the daytime/nighttime noise is lower than the emission limits. Besides, Joincare continuously reduces the impact of noise on the surrounding environment through the following means: design optimization, such as using low-noise equipment and processes, and arranging high-noise equipment in a unified manner; installing sound insulation/silencing materials/devices; and replacing old equipment.



#### Solid Waste Management

Joincare adheres to the principles of Reduction, Resource Utilization, and Harmless Processing. We strictly implement the Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste, Standards for Pollution Control of General Industrial Solid Waste Storage and Disposal Sites, Hazardous Waste Storage Pollution Control Standards, and other relevant laws and regulations, standardize solid waste management, and ensure compliant treatment.

Reduction: We continue to upgrade and improve production processes and strive to reduce waste generation.

Resource Utilization: We actively explore waste recycling methods and are committed to the resource utilization of solid waste.

Harmless Processing: We collect and store hazardous wastes according to their characteristics, and regularly hand them over to qualified organizations for harmless treatment/disposal.

To improve solid waste management, many production subsidiaries of Joincare actively improve their facilities. The main projects during the reporting period are detailed in the table below:

Table: Major Solid Waste Management and Improvement Projects of Joincare in 2021

Company Name	Project Name	Investment Amount	Effects of the projects
Jiaozuo Joincare	Recycling of waste ethanolamine liquid	RMB 1.333 million	Improved the process of the 4-AA project to recycle and reuse the waste ethanolamine liquid, which can reduce the production of hazardous waste by 216 tons per year as estimated, and reduce the resource consumption.
Taitai Pharmaceutical	Upgrade of the solid waste temporary storage warehouse	RMB 110,000	Upgraded general solid waste and hazardous waste temporary storage warehouses to improve the company's waste collection level. Among them, the hazardous waste warehouse renovation project was awarded the title of "Double Hundred" Demonstration Enterprise for Standardized Management of Hazardous Waste in Shenzhen.
	Upgrade of the hazardous waste storage site	RMB 12,500	Standardized the hazardous waste storage sites, such as adding ground anti-corrosion and anti-seepage measures, installing leakage collection facilities, and improving on-site marks, which can improve the company's hazardous waste management and control capabilities, and ensure that the hazardous waste management process meets the laws and regulations.
Haibin Pharma	Standardization of general industrial solid waste treatment	RMB 18,000	Upgraded and transformed general industrial solid waste storage sites, such as setting up rain-proof, anti-seepage, and other special storage sites that meet the standardization requirements of general industrial solid waste, and placing signs on the sites. Improved general industrial solid waste management documents. These measures can improve the management and control of general industrial solid waste and ensure that the treatment process comply with the laws and regulations.

Waste treatment of Joincare in 2021 is as follows:

Table: Waste Treatment of Joincare in 2021

Indicator	Unit	Active Pharmaceutical Ingredients	Preparations	Total
General industrial waste	Ton	131,828.8	13,800.0	145,628.8
Hazardous wastes	Ton	4,948.3	843.2	5,791.5
Among which, pharmaceutical waste and waste medicines	Ton	2,882.5	152.4	3,034.9
Other hazardous waste	Ton	2,065.7	690.9	2,756.6

# 8.4 Resource Utilization Management

#### Water Resource Management

Joincare constantly improves resource management, implements clean production, adopts advanced technology, and strictly controls the consumption of water resources. We actively promote water-saving technology, apply water-saving facilities, strengthen the maintenance of equipment and facilities, and strive to improve problems such as leakage. We vigorously promote waste water recycling and reuse projects, and strive to build a "zero-discharge of sewage" enterprise. Taking Joincare Haibin as an example, all production waste water and waste water from the water production station are treated up to the standard and used as circulating water. The annual recycling volume is expected to be more than 34,000 tons, which greatly reduces the water consumption.

Table: Major Water-Saving Projects of Joincare in 2021

Company Name	Project Name	Investment Amount	Result
Livzon Syntpharm (Zhuhai FTZ)	Transformation of the fire-fighting pipeline	RMB 650,000	Transformed the old underground fire-fighting pipeline into above-ground pipeline to effectively improve the waste of water resources caused by pipeline leakage.
Limin Factory	Reuse of waste water	RMB 260,000	Treated waste water and then used it for irrigating the green land, which can reduce the consumption of fresh water by about 32,400 tons per year.

Water resources use of Joincare in 2021 is as follows:

Table: Water Resources Use of Joincare in 2021

Indicator	Unit	Active Pharmaceutical Ingredients	Preparations	Total
Total Water Consumption	10,000 tons	1,164.3	197.0	1,361.3

#### Material Utilization Management

Joincare attaches great importance to the recycling of resources, promotes the recycling of industrial materials through technological transformation, and continuously improves the utilization rate of production resources. We continue to optimize the product packaging design, reduce the use of packaging materials under the conditions of meeting the market and production needs, and actively recycle green packaging boxes to reduce the consumption of resources.

Table: Major Material-Saving Projects of Joincare in 2021

Company Name	Project Name	Investment Amount	Result
Fuzhou Fuxing	Acetonitrile recycling	RMB 6 million	Added a set of acetonitrile recycling device to recycle and purify waste acetonitrile by membranes, which can recycle acetonitrile by about 6,000 tons per year
	Isopropyl alcohol recycling	RMB 2 million	Added a set of isopropyl alcohol recycling device to recycle and purify waste isopropyl alcohol by membranes, which can recycle isopropyl alcohol by about 1,000 tons per year
	n-butanol recycling	RMB 1 million	Added a set of n-butanol recycling device to recycle and purify waste n-butanol by membranes, which can recycle n-butanol by about 100 tons per year
Jiaozuo Joincare	Addition of a finned condenser to the 4-AA solvent recycling phase	RMB 57,000	Condensed the solvent for further recovery to improve solvent recycling



# 9

# **Public Welfare and Charity**

## 9.1 Promote Industry-based Welfare

Joincare strives to be a pioneer in the healthcare industry, and has been exploring the inhalation preparation sector in an all-round way, aiming to break the monopoly of foreign companies' original research on the huge Chinese market, and contribute to the development of the Chinese inhalation preparation industry. The Group focuses on cutting-edge technologies in the pharmaceutical industry, strengthens technical exchanges and cooperation with peers in the same industry, and promotes the common development of the industry.

#### Promoted the formulation of industry standards for inhalation preparations

Case

During the Reporting Period, Joincare participated in the drafting of the Guidelines for On-site Inspection of Inhalation Preparations (Draft for Comment), which was issued for public opinions by the Center for Food and Drug Inspection of the National Medical Products Administration in December 2021. This document focuses on the characteristics of on-site inspection of inhalation preparations from the aspects of materials, equipment, process, and quality control, and will provide guidance for inspectors to identify risk control points for inhalation preparations and improve the quality of on-site inspections.

# Assisted in preparing the Guidelines for Diagnosis and Treatment of Chronic Obstructive Pulmonary Disease (2021 Revision)

Case

Joincare Medical Department assisted the Chronic Obstructive Pulmonary Disease Group of Chinese Thoracic Society and the Chronic Obstructive Pulmonary Disease Working Committee of the Respiratory Physicians Branch of the Chinese Medical Doctor Association in preparing the Guidelines for Diagnosis and Treatment of Chronic Obstructive Pulmonary Disease (2021 Revision). This document was published in the Chinese Journal of Tuberculosis and Respiratory Diseases in March 2021, providing important guidance for Chinese doctors in clinical work and scientific research in the field of chronic obstructive pulmonary disease.

#### Participated in preparing the Blue Book on Chinese Generic Drugs (2021)

Case

Joincare has compiled the chapter 4 "Transformation and Exploration of Chinese Generic Drug Enterprises - High-end Generic Drugs" of Blue Book on Chinese Generic Drugs (2021). This blue book was published by Peking Union Medical College Press in July 2021. It reveals the current opportunities and challenges for the development of inhalation preparations in China, provides a reference for the strategic decision-making of the inhalation preparations industry in China, and promotes the development of the inhalation preparations industry.

#### Promoted the discipline development of the institute of respiratory diseases

Case

In May 2021, Joincare organized jointly with others a symposium on discipline development and planning of Shenzhen Institute of Respiratory Diseases, providing a platform for academic exchanges on chronic respiratory diseases. More than ten young and middle-aged members of the Respiratory Department of Chinese Medical Association were invited to make in-depth exchanges and discussions with respiratory medicine experts of Shenzhen Institute of Respiratory Diseases and major hospitals on the prospect and development direction of chronic respiratory diseases.

# Organized the 2021 Academic Annual Conference of Pharmaceutical Engineering Specialized Committee of Chinese Pharmaceutical Association

Case

In November 2021, Guangzhou Joincare organized, together with other organizations, the 2021 Academic Annual Conference of Pharmaceutical Engineering Specialized Committee of Chinese Pharmaceutical Association. This conference focuses on the frontier technology and industrialization research of pharmaceutical engineering, as well as on the difficulties and hot issues regarding the development of the pharmaceutical industry in China. Attending experts exchanged and discussed hot topics such as the research and development and industrialization breakthroughs of high-end preparations, how innovative drugs enter foreign and international markets, pharmaceutical industry 4.0 solutions, and the frontiers and applications of pharmaco-economics. The conference aims to actively promote the internationalization of the pharmaceutical industry in China and provide an active platform for academic exchanges and achievements display for the industry.







Speech by Dr. Jin Fang, Chief Scientist of the Group

## 9.2 Promoting Health-based Welfare and Charity

The year 2021 is the first year of the 14th Five-Year Plan, and a crucial year to consolidate and expand the achievements of poverty alleviation and rural revitalization. Joincare, as always, does its best to undertake social responsibilities to promote social health and education, offer industrial assistance, and contribute to epidemic fighting and disaster relief. This year, we have donated a total of RMB 20.456 million in cash and items worth RMB8.6453 million.

#### 9.2.1 Access to Public Welfare for Chronic Diseases Prevention

Joincare sincerely upholds the concept that "Health is the priority in rural revitalization". Health is the prerequisite for promoting people's all-round development, the base for economic and social development, an important symbol of national prosperity, and a common pursuit of the broad masses. Joincare, by leveraging its industrial advantages, joined hands with Livzon Pharmaceutical Group on the Inclusive Chronic Disease Prevention and Control Public Welfare Project. It actively take the social responsibility as a pharmaceutical company in response to the policy of healthy China and rural revitalization.



We donated five types of drugs for treating chronic diseases, including Pravastatin Capsules (普 伐 他 汀 钠 胶 囊), Isosorbide Bononitrate Tablets (单硝酸异山梨酯片), Amlodipine Besylate Capsules (苯磺酸氨氯地平胶囊), Valsartan Capsules (缬沙坦胶囊), and Bismuth Potassium Citrate Tablets (枸 橡 酸 铋 钾片), to homes in remote areas with chronic diseases, such as hypertension, hyperlipidemia, cardiocerebral diseases, stomach diseases. In doing so, we expected to reduce the medical burden of homes of people with diseases, support rural revitalization and promote the realization of the strategic goal of common prosperity. In 2021, three new agreements in relation to the Public Welfare Projects for Chronic Diseases were signed to cover Huangshan District of Huangshan City, Anhui Province, Suining County of Hunan Province and Fenyi County of Jiangxi Province. Under these agreements, RMB 1 million worth of chronic disease drugs were donated to each county and district. The Public Welfare Projects for Chronic Diseases won the awards of "2021 China Brand Influence - Model for Undertaking Social Responsibility" and "2021 Model for Rural Revitalization".





Joincare won the awards of "2021 China Brand Influence - Model for Undertaking Social Responsibility" and "2021 Model for Rural Revitalization".

Since late 2018 onwards, we carried out the "Access to Public Welfare for Chronic Diseases Prevention and Treatment Program" successively in areas including Chaotian District of Guangyuan City, Songpan County, Jiange County and Pingwu County of the Autonomous Prefecture of Aba Zangs and Qiangs in Sichuan Province, Hunyuan County, Guangling County and Lingqiu County of Datong City in Shanxi (山 西) Province, Dongxiang County and Tianzhu County in Gansu Province, Xianghai national nature reserve in Jilin Province, Chayu County in Tibet Autonomous Region, Macun District of Jiaozuo City in Henan Province, Huangshan District of Huangshan City in Anhui Province, Suining County of Hunan Province, and Fenyi County of Jiangxi Province, bringing benefits to many patients. As at the end of the reporting period, our Access to Public Welfare for Chronic Diseases Prevention and Treatment Program covers 8 provinces and 1 autonomous region, including 14 remote areas in need of help and one natural reserve at state level; there were 5,000 registered people in need. In the future, we will continue to respond to national policies, undertake the responsibility of pharmaceutical companies, promote the Inclusive Chronic Disease Prevention and Control Public Welfare Project, making more contributions to building a healthy China and boosting rural revitalization.





Donation Ceremony of Joincare, Livzon Pharmaceutical Group, Huangshan District and Suining County under the Inclusive Chronic Disease Prevention and

Control Public Welfare Project





Donation Ceremony of Joincare, Livzon Pharmaceutical Group, Fenyi County of Jiangxi Province under the Inclusive Chronic Disease Prevention and Control

Public Welfare Project

#### 9.2.2 Promoting Education Development

Joincare always cares about and supports the development of education in low-income areas, responds to the national call to sponsor students from low-income families, and actively undertakes the social responsibility to promote education development. From 2019 onwards, with the support of the National Medical Products Administration, the Group donated RMB 300,000 each year for three consecutive years to assist poor freshmen enrolled in pharmaceutical-related majors in colleges and universities, who are from Linquan County, Fuyang, Anhui. The grant standard is RMB 5,000 per undergraduate and RMB 3,000 per junior college student. The program aims to improve the learning and living conditions of those students and help them better complete their studies so as to train more talents for the national pharmaceutical undertaking. As of the reporting period, the planned donation of RMB 900,000 of scholarships has been fully paid, benefiting more than 180 students.

#### 9.2.3 Anti-epidemic and Disaster Relief Activities

With repeated epidemic outbreaks, in practicing its social responsibility, Joincare donated all kinds of epidemic prevention materials to safeguard frontline workers:

- Donate epidemic prevention materials to Xili Sub-district Office of Nanshan District, Shenzhen.
- Donate epidemic prevention materials to the local headquarters of Nanshan District of Shenzhen Bay Port Field Headquarters to support epidemic prevention targeting inbound passengers at Shenzhen Bay Port



Joincare donated epidemic prevention materials to the local headquarters of Nanshan District of Shenzhen Bay Port Field Headquarters

In July, 2021, a record-breaking extreme heavy and persistent rainfall occurred in Henan province, causing serious waterlogging in many parts of Henan, imposing great pressure on flood control. Joincare and Livzon Pharmaceuticals immediately joined with the government and other sectors of the society in the rescue effort by donating RMB 10 million in cash and RMB 10 million worth of medicines to Henan through the Chinese Red Cross Foundation. These donations were proposed to be used for daily supplies of the affected people and frontline rescuers, healthcare and epidemic prevention in disaster areas, and post-disaster recovery and reconstruction.





Handover Ceremony of Joincare's Donations to Henan



#### 9.2.4 Industry-based Assistance

As part of our effort to fully implement the spirit of the important instructions put forward by the General Secretary in keynote speeches, consolidate and expand poverty alleviation, promote rural revitalization, Livzon Pharmaceutical Group, a subsidiary of Joincare, establish the concept of "Astragalus Root (黄 芪) Industry" and adopt the model of "Company + Base" and "Company + Professional Cooperative". In doing so, we expect to encourage locals to cultivate and process astragalus root and develop the astragalus root industry with reference to the local conditions to make it a pillar industry for poverty relief in the long-term. The Company will explore the development of the featured astragalus root industry to achieve poverty elimination and promote the construction of the "Chinese Medicine Ecological Base".

#### **Achievements of Astragalus Root industry project**

Case

In 2021, Livzon spent RMB 4 million to purchase 132.6 tons of fresh Astragalus Root in Shanxi base, which promoted the development of local Astragalus Root industry. The company's self-built and co-built bases employ about 156 local workers, including 20 poverty-stricken workers, increasing per capita income of farmers by more than RMB 5,000. In addition, Livzon and the village committee of Mazhuang Village, Guaner Township, Hunyuan County reached a preliminary intention of cooperation to hire poor locals to work in the primary processing of fresh Astragalus Root. Through this cooperation, they expected to increase the income of villagers and the profit of the company, and to support poverty alleviation with Astragalus Root industry by offering various job opportunities to poor locals in their hometown.



Astragalus Root Industry Planting Base in Datong, Shanxi

#### 9.2.5 Commitment in Community Activities

To better fulfill our social responsibilities, Joincare actively participates in community activities while focuses on R&D innovation. In order to inherit and promote the TCM culture, we cooperated with Songping No.2 Primary School to carry out the Chinese herbs planting course. This year, we offered 52 hours of training courses to about 200 students on planting, identification, extraction and preparation of Chinese herbs, and provided nearly 1,000 herb seedlings of more than 30 types.







Exhibition of Achievements in Chinese Herb Planting

In the future, Joincare will continue to take social responsibility as its own responsibility, invest in public welfare projects, and make contributions to achieving rural revitalization and common prosperity.

# **Appendix**

# **Key Performance Table**

CSR Indicator	Unit	2019	2020	2021
1. Environmental Protection <sup>1</sup>				
1.1 Emissions				
Types of Emissions and Relevant Data				
Waste Water Emission	Ton	9,923,594.1	8,845,919.0	10,485,061.5
Chemical Oxygen Demand COD <sub>Cr</sub>	Ton	896.1	797.0	984.4
Ammonia Nitrogen	Ton	92.9	72.1	113.6
VOCs	Ton	/	/	72.3
$NO_X$	Ton	143.9	87.6	139.9
$SO_2$	Ton	76.8	47.8	48.7
Particulates	Ton	29.2	16.4	27.2
Non-hazardous Industrial Waste	Ton	124,217.2	75,891.9	145,628.8
Hazardous Wastes	Ton	3,428.9	4,273.7	5791.5
Pharmaceutical Wastes and Medicine Wastes	Ton	2,242.5	2,251.4	3,034.9
Other Hazardous Wastes	Ton	1,186.4	2,022.3	2,756.6
Greenhouse Gas Emission <sup>2</sup>				
Ton of CO <sub>2</sub> equivalents	Ton of CO <sub>2</sub> equivalents	1,177,203.3	1,080,215.3	1,005,579.8
Category I Greenhouse Gas Emissions	Ton of CO <sub>2</sub> equivalents	186,668.2	35,758.6	201,234.8
Category II Greenhouse Gas Emissions	Ton of CO <sub>2</sub> equivalents	990,535.1	1,044,456.8	804,345.0
1.2 Resource Utilization				
Total Energy Consumption				
Gasoline	Liter	492,135.4	378,879.1	396,363.6
Diesel	Liter	407,035.3	381,862.6	386,903.8
Coal	Ton	72,714.2	4,336.5	86,291.0
Natural Gas	10,000 cubic meters	1,217.1	1,150.7	949.6
Liquefied petroleum gas	Ton	/	/	7.85
Purchased Steam	Ton	772,026.2	1,095,289.9	880,288.5
Purchased Electricity	10,000 kWh	85,085.0	80,599.0	92,656.0
Water Consumption				
2. Social Responsibility	10,000 tons	1,282.0	1,165.1	1,361.3

Scope of environmental data disclosure: energy used by the production enterprises under Joincare

<sup>&</sup>lt;sup>2</sup>The electricity emission factor used to calculate greenhouse gas emissions is the grid emission factor of 0.5810 tCO<sub>2</sub>/MWh specified in the Guidelines on Enterprise Greenhouse Gas Emissions Accounting and Reporting - Power Generation Facilities (MEE Office Climate Letter [2021] No. 9).



CSR Indicator	Unit	2019	2020	2021
2. Social Responsibility				
2.1 Employment				
Number of Employees: By Gender, Type of Emp	oloyment, Age Group and Region	1		
Number of Employees	Person	12,699	12,466	13,234
Male	Person	6,830	6,689	7,044
Female	Person	5,869	5,777	6,190
29 Years Old and Younger	Person	4,864	4,494	4,393
30-49 Years Old	Person	7,194	7,300	8,042
Over 50 Years Old	Person	641	672	799
Mainland China	Person	12,687	12,448	13,218
Hong Kong, Macao and Taiwan, China	Person	4	6	4
Foreigners	Person	8	12	12
Employee Turnover Rate				
Overall Employee Turnover Rate <sup>3</sup>	Percentage	18	17	16
2.2 Health and Safety				
Number of Work-related Injuries				
Number of Deaths due to Work	Person	0	0	0
Frequency of Work-related Injuries	Case	12	4	3
Days Lost due to Work-related Injuries	Day	593	197	133
2.3 Training and Development				
Trained Employees				
Staff Training Hours	Hour	956,908	1,219,872	1,027,812
Training Hours for Male Staff	Hour	551,939	664,782	561,602
Training Hours for Female Staff	Hour	404,970	555,090	466,210
Training Hours per Employee				
Average Staff Training Hours	Hour	75.4	97.9	77.7
Average Training Hours for Male Staff	Hour	80.8	99.4	79.7
Average Training Hours for Female Staff	Hour	69.0	96.1	75.3
Public Welfare Projects				
Resource Utilization for Special Purpose				
Financial Donation	RMB Ten thousand	833.40	1,505.47	2,045.60
Value of Donated Goods	RMB Ten thousand	221.90	710.82	864.53

<sup>&</sup>lt;sup>3</sup>Method to calculate the employee turnover rate: number of resigned employees/(total number of employees at the end of the period)