

V7ZON

(A joint stock company incorporated in the People's Republic of China with limited liability) (在中華人民共和國註冊成立的股份有限公司) Stock Code 股份代號:1513

2020 Environmental, Social and Governance Report 環境、社會及管治報告

* For identification purpose only 僅供識別

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1 ABOUT THIS REPORT

1 ABOUT THIS REPORT

OVERVIEW

This report is the fifth Environmental, Social and Governance ("ESG") Report (the "Report") issued by the Company that serves as an annual ESG report, which covers the period from 1 January 2020 to 31 December 2020 (the "Reporting Period" or the "Year") to disclose the sustainability performance of the Company for 2020.

REFERENCE FOR THIS REPORT

The Report has complied with all "comply or explain" provisions in the "Environmental, Social and Governance Reporting Guide" (the "Guide") set out in Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Hong Kong Listing Rules") issued by The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange"), and reported on all recommended disclosures outlined in the Guide. The content index for the Guide is set out in Appendix 2 to the Report.

The content of the Report is prepared through a systematic process, including identifying and prioritizing important stakeholders, identifying and prioritizing material ESG issues, determining the scope of the Report, collecting the relevant materials and data, preparing the Report based on materials and reviewing the Report.

SCOPE AND BOUNDARY OF THE REPORT

The Report discloses the ESG risks and management measures of the Company in accordance with the "materiality principle" in the Guide. The Report covers the Company and its wholly-owned subsidiaries and controlling subsidiaries. The scope of the Report is in line with the scope of consolidated financial statements set out in the 2020 Annual Report of the Company.

EXPLANATION FOR ABBREVIATIONS

In order to facilitate presentation and reading, unless otherwise specified and for the purpose of the Report, the "Company" refers to Livzon Pharmaceutical Group Inc.* (麗珠醫藥集團股份有限公司) and each of the "Group", "we" and "Livzon" refers to the Company and its subsidiaries.

1 ABOUT THIS REPORT

Full company name	Abbreviated company name
Sichuan Guangda Pharmaceutical Manufacturing Co., Ltd.* (四川光大製藥有限公司)	Sichuan Guangda
Shanghai Livzon Pharmaceutical Manufacturing Co., Ltd.* (上海麗珠製藥有限公司)	Shanghai Livzon
Shanghai Livzon Biotechnology Co., Ltd., Jiaozuo Branch* (上海麗珠生物科技有限公司焦作分公司)	Shanghai Livzon Biotech
Livzon Group Livzon Pharmaceutical Factory* (麗珠集團麗珠製藥廠)	Pharmaceutical Factory
Livzon Group Limin Pharmaceutical Manufacturing Factory* (麗珠集團利民製藥廠)	Limin Factory
Zhuhai Livzon Diagnostics Inc.* (珠海麗珠試劑股份有限公司)	Livzon Diagnostics
Livzon MABPharm Inc.* (珠海市麗珠單抗生物技術有限公司)	Livzon MAB
LivzonBio, Inc.* (珠海市麗珠生物醫藥科技有限公司)	LivzonBio
Livzon Group Xinbeijiang Pharmaceutical Manufacturing Inc.* (麗珠集團新北江製藥股份有限公司)	Xinbeijiang Pharmaceutical
Gutian Fuxing Pharmaceutical Co., Ltd.* (古田福興醫藥有限公司)	Gutian Fuxing
Jiaozuo Livzon Hecheng Pharmaceutical Manufacturing Co., Ltd.* (焦作麗珠合成製藥有限公司)	Jiaozuo Hecheng
Livzon Group (Ningxia) Pharmaceutical Manufacturing Co., Ltd.* (麗珠集團(寧夏)製藥有限公司)	Ningxia Pharmaceutical
Zhuhai FTZ Livzon Hecheng Pharmaceutical Manufacturing Co., Ltd.* (珠海保税區麗珠合成製藥有限公司)	Livzon Hecheng
Livzon Group Fuzhou Fuxing Pharmaceutical Co., Ltd.* (麗珠集團福州福興醫藥有限公司)	Fuzhou Fuxing
Zhuhai Livzon Microsphere Technology Co. Ltd.* (珠海市麗珠微球科技有限公司)	Livzon Microsphere

ABBREVIATIONS OF SUBSIDIARIES OF LIVZON

1 ABOUT THIS REPORT

DATA SOURCE AND RELIABILITY STATEMENT

The data and case studies in the Report are mainly derived from the formal documents, statistical reports and relevant public documents of the Group. The Company undertakes that the Report contains no false representations or misleading statements and is responsible for the truthfulness, accuracy and completeness of its contents.

CONFIRMATION AND APPROVAL

The board of directors (the "Board") and the senior management of the Company have reviewed the Report and guarantee that there are no false representations, misleading statements or material omissions in the Report. The Board also regularly monitored the ESG matters of the Company and reviewed the progress made against relevant goals during the Reporting Period.

AVAILABILITY OF THIS REPORT AND FEEDBACK

The Report is available and can be downloaded from the website of Hong Kong Exchanges and Clearing Limited ("HKEX") (www.hkexnews.hk), the website of the Company (www.livzon.com.cn) and CNINFO (www.cninfo.com.cn).

For further enquiries or any comments or suggestions regarding the Report, please contact the Company by phone at (86) 756-8135888, (86) 756-8135990 or (86) 756-8135992, fax at (86) 756-8891070 or email at LIVZON_GROUP@livzon.com.cn.

The Report is prepared in both Chinese and English. In case of any discrepancies, the Chinese version shall prevail.

* For identification purpose only

2 CHAIRMAN'S MESSAGE



Dear stakeholders,

2020 marked a challenging yet purposeful year for the pharmaceutical industry and for Livzon as the outbreak of novel coronavirus disease (the "COVID-19 pandemic") spread over the world. Livzon found "opportunities" from the new "crises", overcame difficulties and moved forward steadily. This year, the Group reshaped its corporate culture and value, upheld the mission of "prioritizing the quality of life of the patients" with the goal of "becoming a leading pharmaceutical enterprise within the industry", insisted on "back to square one and start all over again" as the core of development and focused on its principal businesses in innovative medicines, in order to continuously strengthen its advantages in innovative medicines and complex drug preparation platforms with high barriers, break through higher growth barriers and strive to achieve high-quality enterprise development.

After the outbreak of the COVID-19 pandemic, Livzon shouldered responsibilities together with its global pharmaceutical peers, cooperated with frontline medical workers, responded and took actions immediately, and successively donated cash and medicines worth more than RMB16 million to Red Cross Society of Zhuhai, Wuhan and other places. In March 2020, the Diagnostic Kit for IgM/IgG Antibody to Coronavirus (2019-nCoV) (Colloidal Gold) (新型冠狀病毒(2019-nCoV) IgM/IgG 抗體檢測試劑盒(膠體金法)) of Livzon Diagnostics, a subsidiary of the Company, was approved for launch in domestic market, and received registration approvals consecutively from 15 countries and regions. By the end of 2020, two types of COVID-19 diagnostic products also received the European Union CE certification. In early 2021, the Recombinant SARS-CoV-2 Fusion Protein Vaccine (重組新型冠狀病毒融合蛋白疫苗) researched and developed by Livzon MAB was granted a drug clinical trial approval by the National Medical Products Administration.

We insist on innovation and development and continue to promote product innovation and upgrade, pay attention to unfulfilled clinical needs, focus on innovative drugs and high-barrier complex drug preparations, and continue to enhance innovation, research and development ("R&D") and business layout of our products in the segments of psychiatry, oncology and immunity based on our traditional segments of assisted reproduction and gastroenterology on which we have advantages. Our biologics R&D pipeline involves drugs based on new antibodies, multi-specific antibodies and recombinant protein in the areas of tumors, reproduction and immune diseases; meanwhile, we are also constantly advancing the platform construction including ADC technology platform and new CAR-T technology platform. With regard to the complex drug preparation

2 CHAIRMAN'S MESSAGE

platforms with high barriers, we will continue to expand our leading edges in the field of domestic microsphere innovation and R&D by developing a series of rich varieties under research, including many key varieties with high sales potential.

We guarantee product quality. All subsidiaries of the Company have complied with each of the requirements of the laws and the industry quality management system, which has enabled us to ensure safe and controllable quality of drug during its whole life cycle and to pass the inspections by external regulators for the Year.

We value talent development and provide opportunities for sustainable development for every employee. Through diversified training systems and complete promotion mechanism, the Group has provided its employees with a broad stage to show themselves, has constantly improved the working environment of its employees, and provided its employees with highly competitive salaries and benefits in the industry and a diversified development platform.

We practice environmental friendliness. All major manufacturing enterprises of the Company have passed the ISO14001 Environmental Management System Certification and conduct environmental management audits regularly to ensure effective implementation of the management system. We have formulated environmental management goals for the next five years (2021-2025), continued to improve data monitoring of pollutant emissions and energy consumption, and carried out renovation in pollutant discharge and energy saving.

We strengthen operations and governance. During the Reporting Period, we established the ESG committee of the Board to coordinate and manage matters regarding sustainable development of the Group. We maintain high transparency in information disclosure, proactively improve risk management and internal control system and demonstrate our confidence in the healthy and sustainable development of the Group through the Shareholders' Return Plan for the Three Years (2019-2021) of the Company.

We make bold commitment to social responsibility. During the fight against the COVID-19 pandemic, the Group has not stopped its paces of industry-based poverty alleviation and health-based poverty alleviation. As at the end of the Reporting Period, we have launched chronic disease poverty alleviation projects in "eleven counties and one township" in six provinces including Gansu, Sichuan, Shanxi, Jilin, Tibet and Henan, which has helped many poor families out of troubles of diseases and illuminated the light of hope for sick families in financial difficulties with the spirit of Healthy China Action.

In the new round of market competition in the future, Livzon will actively embrace changes, uphold the mission of "prioritizing the quality of life of the patients" with the goal of "becoming a leader in the pharmaceutical industry", continue to provide high quality products and services to health-care personnel and patients, attach importance to environmental protection, continue to invest funds to improve processes and upgrade equipment to achieve the goal of environmental management of the Group; meanwhile, Livzon will focus more on the development of talents, balance employees' work and life, stimulate the creativity of talents, and actively perform its social responsibility, extensively participate in charity campaigns, maintain our efforts in health-based poverty alleviation and industry-based poverty alleviation, in order to give back to the society with practical actions.

Chairman of the Board **Mr. Zhu Baoguo**



3.1 THE COMPANY'S BUSINESS

Founded in January 1985 and headquartered in Zhuhai City, Guangdong Province, the People's Republic of China (the "PRC" or "China"), the Company is a comprehensive group company that is principally engaged in pharmaceutical research and development, production and sales. We are among the top 100 enterprises in China pharmaceutical industry (中國醫藥工業百強企業) and top 100 valuable companies on main board (主板價值100強). The A shares of the Company are listed on the main board of the Shenzhen Stock Exchange (stock code: 000513) and the H shares of the Company are listed on the main board of the Hong Kong Stock Exchange (stock code: 01513).

During the Reporting Period, Livzon was primarily engaged in the research and development, production and sale of pharmaceutical products, which covered drug preparation products, active pharmaceutical ingredients ("APIs") and intermediates as well as diagnostic reagents and equipment. Major products include drug preparation products such as Ilaprazole (Ilaprazole Enteric-Coated Tablet and laprazole Sodium for Injection) (壹麗安(艾普拉唑腸溶片及注射 用艾普拉唑納)), a series of Bismuth Potassium Citrate (麗珠得樂(枸櫞酸鉍鉀)) products, Rabeprazole Sodium Enteric-Coated Capsules (麗倍樂(雷貝拉唑鈉腸溶膠囊)), Weisanlian (Bismuth Potassium Citrate Tablets/Tinidazole Tablets/Clarithromycin Tablets (維三聯(枸櫞酸鉍鉀片/替硝唑 片/克拉霉素片)), Leuprorelin Acetate Microspheres for Injection (貝依(注射用醋酸亮丙瑞林微球)), Urofollitropin for Injection (麗申寶(注射用尿促卵泡素)), Menotropins for Injection (樂寶得(注射用尿促性 素)), Voriconazole for Injection (麗福康(注射用伏立康唑)), Fluvoxamine Maleate Tablets (瑞必樂(馬來酸氟伏沙明 片)), Perospirone Hydrochloride Tablets (康爾汀(鹽酸哌羅匹隆片)), Shenqi Fuzheng Injection (參芪扶正注射液), and Anti-viral Granules (抗病毒顆粒); APIs and intermediates such as Mevastatin (美伐他汀), Acarbose (阿卡波糖), Colistin Sulfate (硫酸粘菌素), Phenylalanine (苯丙氨酸), Vancomycin Hydrochloride (鹽酸萬古霉素), Daptomycin (達托霉素), Milbemycin Oxime (米爾貝肟) and Ceftriaxone Sodium (頭孢曲松鈉); and diagnostic reagents such as Diagnostic Kit for IgM/IgG Antibody to Coronavirus (2019-nCoV) (Colloidal Gold) (新型冠狀病毒(2019-nCoV) IgM/IgG抗體檢測試劑盒(膠體金法)), Diagnostic Kit for IgM Antibody to Mycoplasma Pneumonia (Colloidal Gold) (肺炎支原體IgM抗體檢測試劑 盒(膠體金法)) and Diagnostic Kit for Antibody to Human Immunodeficiency Virus (ELISA) (人類免疫缺陷病毒抗體檢測 試劑盒(酶聯免疫法)).

3.2 CORPORATE GOVERNANCE

The Company has set up a corporate governance structure, which is composed of the general meetings, the Board and its special committees, the supervisory committee and the senior management. The Company carries out its operation in strict compliance with the Company Law of the PRC, the Securities Law of the PRC, the Stock Listing Rules of the Shenzhen Stock Exchange, the Hong Kong Listing Rules, relevant laws and regulations of China Securities Regulatory Commission ("CSRC") and the articles of association of the Company (the "Articles of Association"). The general meetings, meetings of the Board and meetings of the supervisory committee of the Company are convened, and the management decision-making and operation supervision are performed, pursuant to the requirements of the Rules of Procedures for the General Meetings, the Rules of Procedures for the Board of Directors and the Rules of Procedures for the Supervisory Committee of the Company. During the Year, the decision-making and regulatory bodies of the Company, including the general meetings, the Board and the supervisory committee, have strictly followed the requirements of the regulatory operating rules and internal system in performing management decision-making and operation supervision. The operating standards were proven to be effective. The special committees of the Board all performed their respective duties.

As at the disclosure date of the Report, the Board comprises 11 members, including 2 executive directors, namely Mr. Tang Yanggang (president) and Mr. Xu Guoxiang (vice chairman and vice president); 4 non-executive directors, namely Mr. Zhu Baoguo (chairman), Mr. Tao Desheng (vice chairman), Mr. Qiu Qingfeng and Mr. Yu Xiong; and 5 independent non-executive directors, namely Mr. Bai Hua, Mr. Zheng Zhihua, Mr. Xie Yun, Mr. Tian Qiusheng and Mr. Wong Kam Wa.

3.2 CORPORATE GOVERNANCE (Continued)



Organizational structure of the Group as at the end of the Year



3.3 2020 DEVELOPMENT OVERVIEW

In 2020, the Group realized operating income of RMB10,520.41 million, representing a year-on-year increase of 12.10%; the net profit was RMB2,131.33 million, representing a year-on-year increase of 45.82%; the net profit attributable to shareholders of the Company was RMB1,714.91 million, representing a year-on-year increase of 31.63%; excluding gains and losses from extraordinary items, the net profit attributable to shareholders of the Company in 2020 was RMB1,431.55 million, representing a year-on-year increase of 20.14%.

At the same time, Livzon actively undertook social responsibility, paid tax in accordance with the law and supported community philanthropy. During the Reporting Period, Livzon contributed tax revenue of RMB1,170.17 million to the government, the total amount of wages, bonuses, allowances, compensation, welfare, housing funds and social insurance paid to the employees was RMB1,051.79 million, interest paid to creditors such as banks was RMB25.31 million, donation to society was RMB10.81 million, and social contribution per share in 2020 was approximately RMB2.39 per share.

ENVIRONMENT, HEALTH AND SAFETY ("EHS") MANAGEMENT

Management of energy conservation and consumption reduction: Total greenhouse gas emissions were 574,380.25 tonne of CO₂ equivalent within scope 1 and scope 2, representing a decrease of approximately 3% as compared with 2019.

EHS investment: In 2020, Livzon invested approximately RMB110.24 million in EHS management, representing an increase of 7.46% compared with 2019 (RMB102.59 million), of which approximately RMB16.36 million was invested in safe production, and approximately RMB93.88 million was invested in environmental protection (including approximately RMB63.60 million for maintenance of environmental protection facilities and approximately RMB30.28 million for renovation of environmental protection facilities).

ACCESS TO HEALTH CARE

Availability of drugs: The overseas principal businesses income of the Group showed a year-on-year growth trend, which amounted to RMB1,725.15 million in 2020, representing a year-on-year increase of 39.84% or 16.49% as a percentage of principal businesses income, with a compound growth rate of nearly 22% in the past five years.

Affordability of drugs: As at the end of the Reporting Period, the Group has adopted a differentiated pricing strategy, which aligns with the local income level, in the sales process of 7 products in Southeast Asia and Central Asia.

INNOVATION OF RESEARCH AND DEVELOPMENT ("R&D")

R&D team: In 2020, the Group had 911 R&D employees (2019: 729), accounting for 10.89% of total number of employees (2019: 8.08%), with increasing scale of our R&D team.

R&D investment: In 2020, the Group's total expenditure on research and development amounted to approximately RMB989.59 million (2019: RMB827.73 million), representing a year-on-year increase of 19.55%, among which capitalized R&D investment accounted for 10.66% (2019: 8.14%) of total R&D investment. R&D investment accounted for 9.41% (2019: 8.82%) of the Group's operating income for the Year.

PUBLIC WELFARE AND CHARITY

In 2020, the expenditure of charitable donation of the Group amounted to RMB10.81 million, including funds donation of RMB7.15 million and materials donation value of RMB3.66 million. As at the end of the Reporting Period, the Group has entered into a total of 12 poverty alleviation agreements, among which 11 were with poverty counties and 1 was with natural reserve at state level, and there were more than 5,000 registered people in need.

3.4. LIST OF HONORS





4.1 OPERATION COMPLIANCE

4.1.1 Deepening anti-corruption management

The Group adopts a zero-tolerance attitude towards non-compliance behavior in breach of business ethics, maintains strict compliance with the Criminal Law of the PRC, the Anti-unfair Competition Law of the PRC, the Company Law of the PRC, the Interim Provisions on Banning Commercial Bribery, the Notice on Serious Investigation and Punishment and Proactive Prevention of Duty Crime in Food and Drug Supervision and other national policies and regulations, has formulated the Anti-Corruption and Anti-Commercial Bribery Regulations, the Interim Provisions on Anti-Fraud and the Interim Measures for Whistle-blowing and Complaint Management to establish and improve the management and control and supervision mechanism against fraud, and has established and improved the internal risk management system through internal control, internal audit, and anti-corruption systems to effectively prevent and control the fraud risk of the Group.

Summary of the Anti-Corruption and Anti-Commercial Bribery Regulations

Customers, suppliers, service providers and contractors which have business dealings with the Group are required to enter into the Commitment for Anti-Corruption and Anti-Commercial Bribery with the Group in the signed contracts or submitted tenders, and undertake not to provide or promise to provide rebates, handling fees, commissions and referral fees to the employees of the Group to obtain any business opportunities, and are fully aware of the provisions of the Anti-Corruption and Anti-Commercial Bribery Regulations of the Company.

If the undertaking is violated, qualifications of suppliers, service providers, agents, distributors and bidding shall be cancelled, and any suspected criminal offence shall be transferred to judicial authorities.

The Company's leaders at all levels are the primary persons responsible for anti-fraud issues, and the management and employees in key positions have signed the Commitment for Anti-Commercial Bribery to reflect the Company's zero-tolerance attitude towards non-compliance behavior in breach of business ethics. The Company has carried out management personnel appointment and integrity inspection work from time to time, and conducted assessment on management personnel at all levels by indicators in terms of moral quality and professional capability, with an aim to build a clean and efficient cadre management team. Meanwhile, we use the integrity supervision platform to expand the internal and external channels of supervision and whistle-blowing, continuously maintain the deterrence of anti-corruption, and proactively build an all-round and multi-dimensional risk prevention and control system.

For the corruption and commercial bribery which are proved to be true, the Company shall, depending on the seriousness of the situations, impose a penalty in accordance with the Employment Management System of the Company. In event of serious situation, the labor relationship shall be terminated, and the loss caused to the Group shall be recovered in accordance with the law. Any suspected criminal offence shall be transferred to judicial authorities.

4.1 **OPERATION COMPLIANCE** (Continued)

4.1.1 Deepening anti-corruption management (Continued)

Whistleblower Protection

In order to fully protect the personal rights, property rights, work rights, democratic rights, reputation rights and other legitimate rights and interests of the whistleblowers and complainants, the Company has formulated the Interim Measures for Whistle-blowing and Complaint Management, specifying that the risk management head office of the Company shall be the specialized department to accept whistle-blowing and complaints, so as to ensure the independence and objectivity of the whistle-blowing acceptance and supervision. The risk management head office of the Company shall strictly keep the personal information and whistle-blowing content confidential in the process of acceptance, registration, custody and investigation.

Abstract of the Interim Measures for Whistle-blowing and Complaint Management

The Interim Measures for Whistle-blowing and Complaint Management specifies that the employees, external customers and suppliers of the Group and other relevant personnel shall all be entitled to report and complain any violation of discipline and law, fraud or improper behavior within the Group. The Interim Measures for Whistle-blowing and Complaint Management fully protects the rights and interests of whistleblowers and specifies that no entity or individual shall retaliate against whistleblowers and complainants in any form. Retaliating behaviors against the whistleblowers and complainants, once verified, shall be seriously dealt with by us in accordance with relevant provisions, and if such behaviors constitute crimes, the relevant persons shall be transferred to judicial authorities for investigating their criminal responsibilities according to the law.

Whistle-blowing and complaint can be made by letters, telephone, WeChat, intranet mailbox, e-mails, visits and other means. The Company guarantees and promotes real-name whistle-blowing. The Company has set up a supervision and whistle-blowing column on our official website (https://www.livzon.com.cn/news/191.html), which published the name of the contact person, fixed-line phone number, mobile phone number, internal and external mailboxes, and addresses for whistle-blowing and complaint.

4.1.2 Performing internal audit

The Board acknowledged that it is responsible for the risk management and internal control systems and reviewing their effectiveness. The management of the Company shall be responsible for monitoring the assessment of risk management and internal control and has reported to the audit committee and the Board on results and effects in relation to the risk management and internal control system during the Year. The Company has obtained confirmation from the management in respect of the effectiveness of risk management and internal control system during the Year.

The Company has established the audit and integrity department which is responsible for the audits of each department of the Company. The audit and integrity department carries out audit work in accordance with the audit plan established by the Company, performs audit on the risk management, internal control system and financial position of each subsidiary on an annual basis, confirms and assesses the completeness and effectiveness of risk management and internal control system of each subsidiary and continues to supervise and review regularly. In accordance with the audit needs, the Company established an audit team comprising the audit and integrity department (as the leader) and staff from departments of laws, human resources, finance, engineering center and production technology, in order to carry out a comprehensive and special audit work on subsidiaries of the Company, the off office audit and economic responsibility audit for the management staff and recommend remedies for existing problems, organize and complete internal audit of key businesses while fulfilling the Company's comprehensive audit plan, to achieve a full coverage of audit projects and audit matters. Audit and integrity department shall prepare the comprehensive and special audit reports in accordance with specific audit contents, supervise the remedies of audited departments simultaneously, and report to the management of the Company. The management and internal control system

4.1 **OPERATION COMPLIANCE** (Continued)

4.1.2 Performing internal audit (Continued)

According to the requirement of optimizing corporate governance structure and internal control system of the Company, the Company endeavors to strengthen and optimize its risk management and internal control system, and the internal audit work of the Company was gradually professionalized, formulated and standardized. The Company continued to strengthen the system establishment, build internal audit system which is aligned with the development of the Company, establish risk management procedure and guidance of various terms of reference, amend and optimize relevant audit system, code of conduct for audit personnel, audit standards, audit business guidelines, complaints reporting management system and audit files management system.

4.1.3 Enhancing anti-corruption education

The Company has abided by the standards of business ethics, organized all employees to conduct business ethics training on a regular basis, and specified the definitions and standards of compliance risks in each operation process of the Company. In the process of performing internal audits on the subsidiaries, the Company carried out special compliance education programs in key areas such as procurement and R&D based on audit conclusions and recommend remedies, so as to raise awareness of anti-corruption among employees and strengthen the study of laws and regulations on integrity.

Case: The Company Organized the R&D Departments to Carry Out Internal Control Standard Training

In 2020, in order to match the Company's strategic objectives, the Company has focused on the integrity construction work of R&D unit. According to the corrective recommendations from the internal special audit, the Company has established and improved various systems, standardized the management process, and implemented stringent assessment and supervision. The risk management head office of the Company has conducted standardized training on internal control for key positions and personnel in the R&D departments to cultivate the pragmatic and innovative spirit of R&D personnel and the concept of project cost and establish the awareness of integrity, self-discipline and risk prevention, and effectively strengthened the management of R&D conduct to promote the integrity among the R&D personnel.

The Group has continuously improved the integrity education system to offer employees with general business ethics standard education, and special skills training for internal control and risk management, for the purpose of promoting the formation of an integrity atmosphere of the Group. There were no corruption lawsuits which were filed against the Group or its employees in 2020.

4.1 **OPERATION COMPLIANCE** (Continued)

4.1.4 Party-building work

As at the end of the Reporting Period, Livzon had a total of 593 party members, including 361 party members in the Zhuhai headquarter area, 232 party members in the Company's branches outside Zhuhai City, 9 party branches directly under the Zhuhai Party Committee, and 7 party organizations of the Company's branches outside Zhuhai City.

In 2020, the Company's party committee conducted a series of theme days for the Party and learning and education activities for party members. In response to the COVID-19 pandemic, the party committee called on all party members to contribute to the fight against the pandemic, including donations to areas severely affected by the COVID-19 pandemic, collection of anti-pandemic materials such as masks and disinfectants from various parties, and organizing employees of the Company to have nucleic acid testing, so as to ensure the health of employees who resumed work and production, demonstrating the unity of the party members of Livzon.



On 30 June 2020, the Company conducted the Party day themed with "Party Classes Hosted by Party Secretaries" to celebrate the 99th anniversary of the founding of the Party and commended the anti-pandemic Party members to enhance the cohesion of the Party organization and encourage Party members to work hard for the Company's development.



On 20 December 2020, the Company organized the members and branch secretaries of the party committee to study Xi Jinping the Governance of China III and the Healthy China Construction documents in the 14th Five-Year Plan, and combined the 14th Five-Year Plan with the Company's development to make contribution to the Company's development.

4.2 SHAREHOLDERS' RIGHTS AND INTERESTS

4.2.1 Communication with investors

Based on the Securities Law of the PRC, the Opinions on Further Strengthening the Protection of Legal Rights and Interests of Medium and Small-sized Investors in the Capital Market issued by the General Office of the State Council and the Work Guidelines for Relations between Listed Companies and Investors issued by CSRC, the Company formulated and improved its Articles of Association and Handling Work System of Investor Complaint. The Company timely answers questions raised by shareholders through information disclosure on the Company's website, general meetings, telephone and email communication, timely reception and visits to investors, and an interactive platform for investor relations, to effectively communicate with investors and do a good job in information disclosure, establish an investor complaint handling account, and ensure that investors' opinions are effectively responded.

Information disclosure on the Company's website

The Company shall use the most comprehensive and timely manner for disclosure of all significant information related to the Group to all of those who are interested in receiving the Company's information. The Company's website (www.livzon.com.cn) may provide important information related to the Group's activities and corporate issues (such as annual reports and interim reports to shareholders, announcements, business development and operation, corporate governance practice and other information, etc.) available for reading and inspection by investors and other stakeholders. In addition, announcements issued through the Hong Kong Stock Exchange are also available on the Company's website.

Telephone number and email address for consultation

The Company provides telephone number ((86) 756-8135888, (86) 756-8135990, (86) 756-8135992) and email address (LIVZON_GROUP@livzon.com.cn) to investors for communicating with the Company.

Convening of general meetings

General meetings serve as a useful platform for the Board's direct communication with shareholders. The Company shall submit separate resolutions at the general meeting on substantially different topics for discussion, reserve sufficient time for direct communication and exchange between senior management of the Company and shareholders who attend the meeting, and answer various inquiries made by investors.

irm.cninfo.com.cn under Shenzhen Stock Exchange

The Company collects valuable suggestions from investors to the Company through irm.cninfo.com.cn under Shenzhen Stock Exchange, and answers in detail the questions raised by the investors to the Company on irm.cninfo.com.cn.

Investor relations activities

The Company has established a good communication mechanism with investors. Investors can understand the Company's operations and maintain close communication with the operation management and core technicians of the Company by means of specific object research, results presentation, on-site visits, roadshows and media interviews. For all contents of the aforesaid investor relations activities, the Company has formed written research summaries and made public disclosure through the information disclosure websites designated by the CSRC and stock exchanges.

4.2 SHAREHOLDERS' RIGHTS AND INTERESTS (Continued)

4.2.2 Shareholders' return plan

Pursuant to the relevant laws and regulations such as the Notice Regarding Further Implementation of Cash Dividends Distribution of Listed Companies and the Regulatory Guidelines of Listed Companies No. 3 – Cash Dividends of Listed Companies issued by CSRC and the relevant requirements of profit distribution policy under the Articles of Association of the Company, the Company convened a Board meeting on 23 December 2019 to review and approve the Shareholders' Return Plan for the Three Years (2019-2021) of the Company (approved by the general meeting on 11 February 2020) to establish a sustainable, stable and scientific return plan and mechanism for investors.

The Company promised that during the term of the plan, in the case where the conditions for distribution of cash dividends and the capital requirements for its normal production and operation are met, the Company shall actively distribute profits in the form of cash, and the profits to be distributed in cash each year shall not be less than 80% of the distributable profit achieved in the current year. The accumulated cash dividends of the Company in the past 6 years (2014 to 2019) amounted to nearly RMB3,485.60 million.

Based on the operating results and overall financial position of the Group for 2020, the Board proposed a profit distribution plan of the Company for 2020 as follows: to distribute cash dividend of RMB12.50 (tax inclusive) for every 10 shares to all shareholders of the Company, based on the Company's total share capital (excluding the shares of the Company which were repurchased but not yet cancelled) as at the registration date of shareholding as determined by implementation of the 2020 annual profit distribution plan. There will be no bonus shares, nor will the capital reserves be capitalized. The profit distribution plan for 2020 has been considered and approved at the 2020 annual general meeting of the Company.

4.3 ESG GOVERNANCE

The Group attaches importance to the ESG risk management and control and continuously improves the ESG governance structure and management mechanism. After reviewing our current ESG management and business development needs, the Company established an ESG committee under the Board on 30 June 2020, and announced the terms of reference of the ESG committee on the Company's website and the website of HKEX on the same day.

The ESG committee of the Company shall include at least 5 members, and the majority of them shall be independent nonexecutive directors of the Company. Members shall be nominated by the chairman, more than one-half of independent nonexecutive directors, or more than one-third of all directors, and appointed and removed by more than half of all members of the Board. The ESG committee shall be accountable to the Board, and its proposals and reports shall be submitted to the Board for consideration, decision and approval.

4.3 ESG GOVERNANCE (Continued)

The members of the ESG committee under the tenth session of the Board of the Company are: Mr. Zhu Baoguo (the chairman), Mr. Tang Yanggang, Mr. Bai Hua, Mr. Zheng Zhihua and Mr. Wong Kam Wa. During the Year, the ESG committee has held a meeting to approve the establishment of a working team under the ESG committee (the "ESG Working Team") and grant the secretary to the committee (i.e., the company secretary of the Company) the right of access to information. The ESG Working Team shall be the executive body of the ESG committee, is responsible for the preliminary preparations for the ESG committee's decision-making, and shall provide relevant written information of the Group for reporting to the ESG committee.

ESG management level	Key members	Specific duties
ESG governance	ESG committee	 Formulating and reviewing the vision, targets, strategies and management policies of ESG Reviewing and monitoring the management structure, policies and operation management of ESG, and reporting and offering recommendations to the Board
ESG leadership	Team leader and deputy leader of the ESG Working Team: Team leader: president of the Company Deputy leader: senior management including vice president of the Company	 In charge of daily management of specific ESG tasks Regularly reviewing the key ESG data of the Company Leading annual information summary and report preparation of ESG
ESG implementation	Members of the ESG Working Team: Heads of each functional department of the Company, and heads of each subsidiary and business unit of the Group	 Collecting and reporting ESG information Implementing specific ESG tasks Reporting to the ESG leadership

4.4 STAKEHOLDERS

Based on stakeholders' concern, the Company established a normalized communication mechanism for stakeholders. We aimed to maintain good interaction with each stakeholder and actively respond to their expectations through targeted and diverse communication channels, thereby promoting our sustainable development.

Stakeholders	Purpose of communication	Communications channels	
Government departments	 Comply with relevant laws and regulations Ensure quality and safety of drugs Cooperate with the regulatory work of the government in supporting healthy industrial development Ensure tax compliance and promote local economic development 	 Meetings between the government and the corporate sector Supervision and inspection Work reports and research General meetings 	
Shareholders	 Understand the operating results, governance standards and stringent risk control measures of the Company Ensure steady operation to maximize investment return Facilitate open, fair and equal information disclosure 	 General meetings Investor communication conferences and on-site visits Timely disclosure of material operating information and regular updates on financial information Face-to-face interviews, teleconferences and online interactive platform 	
Employees	 Safeguard the basic rights of employees Care for employees' physical and mental well-being and safety Understand employees' needs and their suggestions to the Company Provide employee training and career development platform 	 Staff representative meeting and labour union Staff satisfaction survey Occupational health and safety training Opinion feedback platform Daily communication 	
Consumers	 Protect consumer rights Uphold business ethics Ensure drug quality and safety, timely recall of defective products 	 Product labeling and information disclosure Client visits Consumer satisfaction survey Address complaints and opinions of consumers 	

4.4	STAK	(EHOL	DERS	(Continued)
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Stakeholders	Purpose of communication	Communications channels
Partners and suppliers	 Maintain good and stable cooperation relationship Operate with integrity and ensure pharmaceutical compliance Timely communication and coordination with upstream and downstream players to achieve mutual benefits 	 Regular communication Working meetings, phone calls and correspondences Company website
Media	 Maintain open and transparent information disclosure Keep good interaction with media 	 Phone interview and correspondences Featured articles
Industry peers	 Fair competition among peers to promote healthy industrial development Sharing of technology and experience among enterprises 	 Meetings of industry organizations Experience sharing sessions On-site visits and exchanges
Local community	 Emphasize the impact of manufacturing and operation activities on the local community Drive local economic development and provide assistance to the disadvantaged groups Promote health education and help patients Enhance recycling of product packaging and waste, etc. to reduce environmental pollution 	 Participate in community welfare events Provide regular assistance to the local community Organize volunteer service

4.5 MATERIAL ISSUES

The Company has engaged external professional consultants to review and assess its ESG issues for the Year. From the perspective of stakeholders, the consultants summarized and concluded material ESG issues of the Company as the basis of preparation of the Report.



4.5 MATERIAL ISSUES (Continued)

Materiality assessment process

- Review and update the pool of ESG issues: reviewed the results of materiality assessment for 2019, and comprehensively considered and selected the pool of ESG issues for 2020 by taking into account of the overall business development of the Group in 2020 and with reference to the ESG management practices of peer companies.
- Formulate and implement the stakeholder engagement program: communicating and investigating with important stakeholders to obtain relevant raw data by taking into account of the Company's own situation for the Reporting Period and with reference to the development of pharmaceutical industry and overall economic and social development.
- Quantify and evaluate from two dimensions: evaluate each issue from two dimensions of "materiality to corporate development" and "materiality to stakeholders" to obtain a matrix of material issues.
- Submit the report to, and obtain approval from, the management: submit the assessment report on stakeholder engagement and material issues to, and obtain approval from, the management.



2020 ESG Material Issues Matrix of Livzon

4.5 MATERIAL ISSUES (Continued)

List of ESG Issues for 2020 of Livzon

	No.	Content
Issues of high materiality	1	Product quality & safety
, , , , , , , , , , , , , , , , , , ,	2	Occupational health and safety of employees
	3	Pollutants management
	4	Intellectual property protection
	5	Corporate governance
	6	Data security and privacy protection
	7	Environmental governance and environmental risk management
	8	Accountability for violations
	9	Talent attraction and retention
Issues of medium materiality	10	Employee training and development
	11	Anti-commercial bribery
	12	Management of use of water resources
	13	Management of use of raw-materials
	14	Internal control and risk management
	15	Internal governance and planning of social responsibility
	16	Supply chain management
	17	Prevention of child and forced labour
	18	Management of investor relations
	19	Composition of the Board and its operation
	20	Management of use of energy
	21	Controlling shareholder and general meeting
	22	Addressing negative opinion from stakeholders
	23	Access to Health Care
	24	Supervisory Committee's performance
	25	Use of renewable energy
	26	Greenhouse gas emissions
Issues of low materiality	27	Protection of biological diversity
	28	Contingency management for environmental incidents
	29	Risk associated with climate change and countermeasures
	30	Participation in charity activities and poverty alleviation



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Adhering to the quality values of "scientific compliance, continuous improvement, in pursuit of excellent quality, patient-orientation, committing to providing patients with quality products" and continuously improving the quality control, Livzon's quality management over production and operation was in good working condition and our quality management system was operating healthily, which effectively guaranteed the safety and stability of the Group's products in various fields, thus further enhancing the market competitiveness of our products.

A well-established quality management system is the basic guarantee for the quality of pharmaceutical R&D, production and operation. According to the Drug Administration Law of the PRC, the Good Laboratory Practices for Pharmaceutical Products (GLP), the Good Clinical Practices for Pharmaceutical Products (GCP), the Good Manufacturing Practices for Pharmaceutical Products (GMP), the Good Supply Practices for Pharmaceutical Products (GSP), the Pharmacopoeia of the PRC, the Administrative Measures for Drug Registration, Administrative Measures for the Supervision on Pharmaceutical Production and other relevant regulations, technical guidelines and quality standards, as well as the Company's internal Quality Management System and Standard Operation Procedures, the Company established a full life-cycle quality management system covering product R&D, production and sales.

During the Reporting Period, there has been no product quality incidents within the Group where our products shall be recalled due to safety and health reasons.

5.1 QUALITY MANAGEMENT SYSTEM

With the successive implementation of the newly amended Drug Administration Law of the PRC and the Administrative Measures for Drug Registration, Livzon has actively implemented the system for Marketing Authorization Holder (MAH), and has formulated the Management System for Marketing Authorization Holder of Livzon Group. The relevant subsidiaries under the Group have become the Marketing Authorization Holders, besides, the Company has applied to become a Production License Holder (B certificate) and established the MAH quality department, which is responsible for the construction and operation of the quality management systems of the varieties held by the Group and the management of future release of held varieties. The Group actively implements the main responsibility as a manufacturing enterprise to ensure that the quality and safety of the drug throughout the life cycle is controllable, and meets the requirements of laws and regulations and quality management systems (GLP, GCP, GMP, GSP and traceability) in the industry.

5.1.1 Quality management on production and operation

Livzon has 4 preparation enterprises, 5 APIs enterprises, 1 in vitro diagnostic reagent enterprise, 7 R&D centers (preparation and APIs) and 3 pharmaceutical vendors. In 2020, Livzon accepted an aggregate of 52 inspections from external regulatory agencies and there were no major or serious defects.

Type of enterprise	Summary of inspections by external regulatory agencies accepted by the Group in 2020
R&D centers	There are 7 R&D centers, and 7 varieties have passed the on-site registration verification, of which 1 chemical drug product passed the clinical verification, 1 biopharmaceutical product passed the R&D and production on-site two-in-one inspection, and 1 chemical API and 1 preparation product passed the on-site inspection of registered production, and 3 chemical injection products were exempted from the on-site inspections based on the previous inspections and the principle of ballot.
Drug manufacturers	The API and preparation manufacturers accepted 10 license inspections, including newly commissioned production, changes in key production conditions, changes in production scope of license, and adding or replacing production licenses of companies within the Group, etc.; a total of 16 routine inspections, including daily supervision inspections on Marketing Authorization Holders, GMP of drug manufacturers and relevant standards by drug administrative authorities, as well as other 4 inspections were accepted. All passed inspections smoothly.
In vitro diagnostic reagent enterprises	A total of 14 relevant inspections by supervision administrative authorities were accepted, 3 of which were on-site registration inspections, covering 11 products including diagnostic reagents for antibody to COVID-19 (colloidal gold); the remaining 11 inspections were daily supervision inspections, including 7 special inspections for diagnostic reagents for antibody to COVID-19 (colloidal gold), so as to ensure the quality of medical equipment for prevention and control of the pandemic.
Pharmaceutical vendors	2 pharmaceutical vendors received GSP follow-up inspections by supervision administrative authorities respectively and there were no major or serious defects, and the risk of drug operation quality management was controllable.

5.1 QUALITY MANAGEMENT SYSTEM (Continued)

5.1.1 Quality management on production and operation (Continued)

As at 31 December 2020, Livzon had completed 138 registration projects for a total of 62 APIs and preparation varieties in process in 61 countries (regions). Please refer to the table below which summarizes the registration and certification of APIs, preparations and diagnostic reagents of the Group:

Projects for certification		Summary of registration and certification work for 2020
GMP certification		 A total of 30 production lines of 4 preparation enterprises have passed GMP certification A total of 2 production lines of 1 diagnostic reagent enterprise have passed GMP certificate A total of 31 varieties and 5 varieties of 5 APIs enterprises have passed GMP certification and veterinary drug GMP certification, respectively
International	APIs	 16 varieties have passed the international certification on-site inspection 48 internationally recognized certificates within the validity period were obtained (of which 4 varieties passed FDA on-site inspection and 12 varieties obtained CEP certificates) 2 system qualification certificates were obtained (ISO system certification (Xinbeijiang Pharmaceutical, Fuzhou Fuxing))
quality certification	Preparation	 1 variety passed international certification 2 internationally recognized certificates were obtained 2 qualification certificates were obtained (ISO system certification (Limin Factory, Pharmaceutical Factory))
	In vitro diagnostic reagents	 A total of 8 varieties have passed international certification 1 internationally recognized certificate was obtained 8 varieties passed TUV on-site inspection 1 qualification certificate was obtained (ISO system certification)

Livzon also requires suppliers to meet relevant qualifications, and preferentially selects enterprises that meet the relevant certification system standards for cooperation, so as to continue to increase the proportion of procurement from suppliers that have obtained ISO system certificates.

Type of suppliers	System management certification and qualification requirements
Manufacturer of pharmaceutical raw and auxiliary materials	ISO9001/ISO14000/ISO45001 series certificates (quality management system/environmental management system/occupational health and safety management system), approval number of corresponding material, CDE registration number, quality standards, Drug Production License, business license, etc.
Supplier of pharmaceutical packaging materials in direct contact with drugs	ISO9001/ISO14000/ISO45001 series certificates, production license of pharmaceutical packaging materials, Registration Certificate of Pharmaceutical Packaging Materials, CDE registration number, quality standards, inspection report, printing business license, business license, etc.
Supplier of pharmaceutical printing and packaging materials	ISO9001/ISO14000/ISO45001 series certificates, Special Printing License or Packaging and Decoration Printing License, commodity barcode printing license, quality standards, business license, etc.

5.1 QUALITY MANAGEMENT SYSTEM (Continued)

5.1.2 Clinical quality management

With the implementation of the newly amended Good Clinical Practices for Pharmaceutical Products (GCP), and in order to perform accountability of the applicant, the Group has coordinated the establishment of a clinical trial quality management system covering the entire clinical trial process to conduct risk-based quality management of the Group's clinical trials, and has established an independent audit process to monitor and give feedback by adopting risk-based long-term audit strategies and the audit results.

The Group applies the ICH Q10 (quality system in the field of pharmaceutical production) guidelines to clinical research, and combines clinical quality management practices to form a cQMS (Clinical Quality Management System) that conforms to the Company's management process, which provides clinical R&D with a comprehensive quality management system. The cQMS of the clinical departments should be consistent with the strategic goals of the Company.

Based on the cQMS system, the Group fully implements quality audit policies, objectives and responsibilities primarily through quality management, quality assurance, audits, and quality control. The quality management department supervises each R&D project to formulate quality risk management plans, including inspection plans, joint inspection plans, quality control plans, audit plans, third-party audit plans, and medical inspection plans, and determines the frequency of audit execution according to the characteristics of the projects, and requires to complete the rectification of the risks found in the audit within 60 days, so as to ensure that the clinical research fully meets the legal requirements and industry standards.

5.2 QUALITY AUDIT ON DRUGS

The quality management head office of the Company carried out an all-around quality audit based on the six major systems of GMP (quality system, production system, material system, laboratory system, equipment and facilities system and packaging system), and assisted each manufacturer in conducting comprehensive risk inspections on each production line combined with key varieties, to prevent blind spots in quality management, avoid regional and systemic risks, and further promote the healthy operation of the corporate quality management system.

For R&D of new products and consistency evaluation products, the quality management head office of the Company simulates the R&D and production on-site simulation inspections and clinical audits at the key nodes of the project to assist the holders to fully identify the risks before the product launch, proceeds with the problem-oriented approach for the construction and effective operation of the R&D quality system and adopts risk control measures to ensure the smooth application of the project as scheduled.

For drug clinical trials, the quality management head office of the Company formulates audit plans and procedures based on the type and complexity of clinical trials, and the risk levels that affect subjects. According to the progress of the clinical trial projects, it organizes clinical audits at different stages, supervises the trial quality throughout the entire process, and evaluates the implementation of clinical trials and compliance with laws and regulations, so as to proactively identify potential project problems and prevent recurrence of problems, protect the rights and safety of subjects, and ensure the truthfulness and reliability of clinical trial results.

For problems or defects found in the audit, the quality management head office of the Company requires the holders to identify product or system risks in conjunction with the defects of the inspection, and to conduct rectification and prevention following the "Plan-Do-Check-Act" (PDCA) mode. The PDCA mode emphasizes the brainstorming and the application of a variety of quality risk management tools, which can help companies learn from one another. It is mandatory to adopt the PDCA mode to urge all holders to further investigate the risks of products and systems comprehensively and systematically, to output the risk list and risk control measures list covering the six major factors of human, machine, material, law, environment, and testing, and to implement carefully against the checklist to continuously improve, so as to truly realize the Group's basic requirements of "daily settlement and precise GMP (日結日清、精準GMP)" for production quality work.

5.2 QUALITY AUDIT ON DRUGS (Continued)

5.2.1 Annual quality audit

Livzon's annual quality audit plan covers all secondary companies and R&D companies of the Group, and conducts quality audits at least once a year for each R&D, production and operation company.

In 2020, the quality management head office of the Company performed a total of 65 audits, including 11 interactive inspections, 6 special/flight inspections, 5 special inspections of pandemic prevention products, and 5 follow-up inspections for preparation enterprises and in vitro diagnostic reagent enterprise; and 8 R&D project simulation inspections, 6 special inspections, 5 follow-up inspections and 19 clinical audits for R&D enterprises.



The 2020 Audit Chart of Livzon



5.2 QUALITY AUDIT ON DRUGS (Continued)

5.2.1 Annual quality audit (Continued)



Case: Audit on Drug Clinical Trial

Between 12 October 2020 and 14 October 2020, the quality management head office of the Company conducted audit of drug clinical trial on a people's hospital in Shenzhen City.



5.2 QUALITY AUDIT ON DRUGS (Continued)

5.2.2 Suppliers' quality audit

Livzon conducts annual audits on suppliers based on the risk assessment level of materials and the importance to the products. Material risk assessment is evaluated following the potential failure mode effect analysis (FMEA), which is divided into extremely high risk, high risk, medium risk, and low risk, and different audit methods are adopted for material suppliers based on the risk level. Audit methods are divided into on-site audits and written surveys. Apart from audits with improvement plans and quality collaborative on-site audits, on-site audits are carried out at least once every 2 years for level I suppliers or key suppliers, and at least once every 3 years for level II suppliers, and the rest shall be audited once a year through written surveys, in order to understand the status quo of its quality control.

Meanwhile, the Group has gradually improved the management requirements on suppliers for environment and safety management and labor rights. EHS management has become one of the dimensions of the Group's supplier audit. For key suppliers, the subsidiaries of the Company formulate audit standards based on the characteristics of the suppliers and determine that audit plans shall cover EHS management content and acquirement of ISO system certification. By providing technical guidance and management training, the Group supports suppliers to actively adopt ISO14001:2015/ISO45001:2018/ ISO26000:2010 and other system certifications. As at the end of the Reporting Period, the percentage of the Group's suppliers varied greatly due to the different sources of product raw materials. Traditional Chinese medicine enterprises had relatively low percentage, and the supply amount of the suppliers with environmental, safety, health and quality management system certifications for chemical APIs and preparation enterprises accounted for 50% to 83% of the purchase amount of the subsidiaries.



Audit Dimensions for Suppliers of Livzon

During the Reporting Period, as a result of the impact of the COVID-19 pandemic, some audit plans were delayed. The Group completed a total of 176 on-site audits with an audit completion rate of 95.8%.

No.	Ningxia Pharmaceutical	Fuzhou Fuxing	Xinbeijiang Pharmaceutical	Livzon Hecheng	Pharmaceutical Factory	Limin Factory	Sichuan Guangda	Shanghai Livzon	Livzon Diagnostics
Completion rate of annual									
audit plan	100%	100%	92%	82%	100%	100%	97%	100%	92%

5.3 QUALITY RISK MANAGEMENT

Livzon attaches great importance to the safety of patients' medication. Adhering to the quality concept of "scientific risk assessment and control are the basis of quality management", Livzon formulated the Administrative Procedures for Quality Risks according to the quality management standards (GMP, ICH Q9, ICH 10, PIC/S PI038-01, ISO-31000, etc.) to conduct quality risk management (QRM) throughout the drug life cycle such as drug R&D, technology transfer, commercial production, product circulation and termination.


5.3 QUALITY RISK MANAGEMENT (Continued)

Quality risk management of the Group is divided into risk assessment, risk control, risk communication and risk review and other processes. Among them, risk communication runs through the entire risk management process. Please see the process chart as below:



Quality Risk Management Process of Livzon

The sources of quality risk identification include deviation reports, change in control, quality complaints, adverse reaction information, trend analysis for product quality review, inspections on continuous product stability, etc. Quality risk identification and assessment tools include potential failure mode effect analysis (FMEA), preliminary hazard analysis (PHA), risk ranking and filtering (RRF), fault tree analysis (FAT), fishbone diagram, flow chart, histogram, checklist, process capability coefficient and other methods.

We analyze and estimate the risks and their problems that have been identified, and then confirm the possible consequences of the problems and the possibility of the occurrence, and issue a quality risk assessment report based on the system risk assessment form; then determine the control measures to reduce the quality risk according to the risk level, take corrective approaches and preventive approaches (CAPA) when necessary, and after implementing the risk mitigation measures and reassessing, the quality risk management team makes a decision on whether to accept the residual risk.

5.3 QUALITY RISK MANAGEMENT (Continued)

5.3.1 Emergency management on drug safety

In order to enhance the ability to respond to drug safety emergencies, improve related work management practices, and ensure the safety of drug use by the public, the Company has formulated the Operating Procedures for Drug Recalls, the Contingency Plans for Material Drug Safety Incident, the Adverse Drug Reaction Reporting and Monitoring Management System and other management systems, and regularly conducts simulated drug recalls and emergency drills for drug safety emergencies.

Case: Emergency Drill Training for Drug Safety Emergencies

In July 2020, Limin Factory carried out emergency drill training for drug safety emergencies. The quality management head office of the Company, Pharmaceutical Factory, Sichuan Guangda and Livzon Diagnostics and other secondary enterprises and departments also participated in the emergency drill training for drug safety emergencies.



5.3.2 Quality risk management for supply chain

The Group adds a step of risk assessment on change of suppliers before supplier material verification, and develops alternative suppliers in different regions for a single supply after the production process of the new product is stable, to prevent supply stability risks. For important raw materials for production, the Group adopts multiple inventory measures including implementing double inventory in workshops and warehouses, and expands material storage in order to ensure safe inventory.

For Category I materials which are extremely important for the Group's production and operation, the quality management head office of the Company has formulated corresponding risk response strategies and selected alternate suppliers to ensure the stability and safety of the supply chain. At present, some production units of the Group have achieved 100% non-exclusive supply of key raw and auxiliary materials. The Group's early deployment of supplier development for the key product ilaprazole has promoted the rapid improvement of the quality of alternative suppliers, and achieved technical ownership of key materials. During the Reporting Period, the Group has overcome the impact of the pandemic and effectively stocked goods to resolve supply risks.

In addition, by establishing key medicinal material bases, adopting the model of the company + supplier + farmer planting, and setting production on demand, the traditional Chinese medicine business department of the Company has provided raw materials with stable resources and uniform quality to the continuous green production for the Group's superior traditional Chinese medicine products.

5.3 QUALITY RISK MANAGEMENT (Continued)

5.3.3 Quality management training

Livzon organizes the production and operation functional departments to carry out trainings on quality regulations and skills in accordance with quality management regulations and standards and combined with the regulatory dynamics of the drug regulatory agencies, to ensure the implementation of quality regulatory requirements.

Case: Learning of "One Law and Two Regulations" for Quality Management

In April 2020, the quality management head office of the Company organized corporate management (including corporate legal person, responsible person, person in charge of quality, person in charge of production, and person in charge of quality management) and quality management team to carry out training and learning of "One Law and Two Regulations".



Case: Special Training on "Drug Administration Law of the PRC"

On 2 January 2020, in order to implement the newly revised Drug Administration Law of the PRC ("Drug Administration Law"), Pharmaceutical Factory organized a training on Drug Administration Law for all employees to study. The training combined the current supervision work of drug safety and applied typical cases to deeply interpret the scientific connotation, core principles and specific considerations of the newly revised Drug Administration Law, and conducted detailed analysis on the drug supervision concepts and system innovation among them. In this training, a total of 380 people participated in the on-site lectures, and the rest of the employees were trained in batches to publicize and implement the new Drug Administration Law. Through this training, the awareness of drug management quality compliance of all employees of the company has been strengthened, which is conducive to further implementation of drug quality management in an effective manner.



5.3 QUALITY RISK MANAGEMENT (Continued)

5.3.3 Quality management training (Continued)

Case: Compliance Training for Pharmaceutical Business

In 2020, Pharmaceutical Factory selected 34 regulations related to the company based on the release of drug operations, organized the business backbones of the corresponding departments to carry out regulation discussion and study, gap analysis and feedback, and formulated 127 implementation plans, 112 of which have been completed, and completed revision of 66 documents. In order to continuously improve the management level of drug production quality and operation compliance, Pharmaceutical Factory formulates an annual training plan each year and refines it into a monthly training plan. The training plans in 2020 consisted of a total of 114 items (including GSP, GMP, training on newly issued regulations, etc.).

On 24 March 2020, Limin Factory provided training on finished product management knowledge learning for employees related to the finished product warehouse. This training adopted a combination of GSP, GMP and the new version of the drug management law to standardize daily work while also improving employees' professional skill level.

On 24 April 2020, Livzon Diagnostics carried out drug operation compliance trainings for employees, such as "training on product professional knowledge and skills, related laws and regulations on medical equipment" for sales support and sales management personnel, and "GSP training for medical equipment product warehouse" for related personnel in the materials department, which clarified the relevant requirements of medical equipment regulations, so as to avoid risks and operate in compliance with the laws.









5.4 PHARMACOVIGILANCE AND DRUG TRACING

The newly amended Drug Administration Law of the PRC clearly requires "the establishment of a pharmacovigilance system to monitor, identify, evaluate and control adverse drug reactions and other adverse drug-related reactions." Pharmacovigilance ("PV") is an important system design that connects us with international drug regulatory standards. Livzon actively responds to and supports the requirements for the establishment of a comprehensive pharmacovigilance system to ensure the balance of drug risks and benefits, and to ensure the safe and effective use of drugs by the public.

The Company has established a group-level pharmacovigilance department, formulated relevant PV management systems, and coordinated the overall PV system and system implementation work, and played a role in policy release, business guidance and management supervision in pharmacovigilance work. Each relevant subsidiary has formulated a Pharmacovigilance Management System, established an independent pharmacovigilance department, a pharmacovigilance management committee, and a system that covers the current PV-related regulatory requirements and can be revised and perfected according to the latest regulatory requirements in a timely and reasonably manner, purchased a pharmacovigilance system and a MedDRA dictionary for auxiliary data alignment, and implemented functions such as reporting of various reports within a time limit, automatic document retrieval, and automatic risk warning through the system, which not only improved work efficiency, but also made work faster, compliant and scientific.



Pharmacovigilance Management Structure of Livzon

5.4 PHARMACOVIGILANCE AND DRUG TRACING (Continued)

Based on the pharmacovigilance system and its related activities, the Group collects drug safety information (including adverse drug reactions/events) through multiple channels throughout the drug life cycle for sorting out and analysis, and adopts drug safety monitoring, risk signal management, regular safety reports update, post-market safety research and other management measures, while establishing a drug information traceability system, to strengthen the sharing of traceability information, achieve traceability in full variety and full process, promote comprehensive management of the quality and safety of drugs, and enhance the level of safety assurance of drug quality. The Drug Trace Back Management System was formulated to achieve "One Code for One Item, One Code Same Tracking" through the "Ma Shang Fang Xin (碼上放心)" traceability platform, to realize the traceability of the smallest drug packaging unit, which gives unique traceability logo to the smallest drug packaging unit, in order to achieve information traceability.

Case: Pharmacovigilance Risk Management

In June 2020, based on the monitoring data of the post-marketing adverse reaction, with reference to the results of literature search and risk assessment, Limin Factory proactively revised the [Adverse Reactions], [Contradictions], and [Precautions] and other items in the drug insert sheets of current product categories including andrographolide capsules, ligustrazine phosphate tablets, and compound sodium ferulate aspirin capsules, which have been approved by the Guangdong Drug Administration.

Case: Limin Factory Launched Training on Pharmacovigilance and Adverse Drug Reaction

In October 2020, Limin Factory invited Dr. Deng Jianxiong (鄧劍雄博士), a Deputy Secretary-General of Guangdong Pharmacological Society, to carry out a special training on Pharmacovigilance and Adverse Drug Reactions. The training content covered regulatory requirements, the definition and causes of adverse reactions, and the treatment of adverse reactions, which effectively strengthened employees' awareness of pharmacovigilance management and understanding of the treatment of adverse reactions.

5.5 PRODUCT RECALL PROCEDURES

Livzon has formulated and implemented the Operating Procedures for Drug Recalls, Unqualified Drug Management System, Adverse Drug Reaction Reporting and Monitoring Management System, Drug Recall Management System and Drug Trace Back Management System. We have a three-tier drug recall mechanism in place based on the severity of potential drug safety hazards, conduct statistics and acceptance of the products to be recalled and return them to drug manufacturers based on the return procedures, and establish and maintain complete purchase and sales records, to ensure the traceability of the drugs sold. We actively cooperate with drug manufacturers or drug regulatory authorities to carry out relevant investigations.

During the Year, Livzon had no recalls due to drug safety issues.

5.6 SUPPLY CHAIN MANAGEMENT

In compliance with the Company Law of the PRC, the Tendering and Bidding Law of the PRC and other relevant regulations, and in accordance with the national GMP requirements, Livzon has formulated related supplier management systems to conduct compliance management for suppliers. In the supplier management, Livzon conducts standardized management of suppliers' qualification confirmation, evaluation and maintenance, additions and changes, quality audit, quality evaluation and review, etc., and comprehensively evaluates the supplier's system operation, quality qualification rate, supply capacity, timely delivery rate, management on change in control, personnel training and after-sales service satisfaction, etc., which shall be used as the basis for supplier annual evaluation and share allocation, and synchronize to the supplier relationship management (SRM) system to standardize the management of the entire life cycle of suppliers' selection, admission, evaluation, maintenance, use, and elimination.



5.6.1 Supplier maintenance management

The Company classifies raw materials, auxiliary materials and packaging materials into Category I, Category II and Category III materials through judging the supply chain risks according to the extent of the impact on the quality of the drug production, the quantity of the drug required and the different quality risk of the drug production. The review process for the newly selected supplier includes sample testing, process inspection, on-site audit and comprehensive data review. If the review is passed, the Company determines the risk level of the material supplier according to risk assessment methods such as following the potential failure mode effect analysis (FMEA).

The Company conducts annual evaluation and maintenance management of material suppliers according to different risk levels, and divides suppliers into four types, i.e., excellent, good, qualified, and unqualified, through product quality inspection, acceptance evaluation, quality during production process, delivery date and after-sales service scores. For excellent suppliers, the Company may increase their purchase volume. For suppliers whose quality does not meet the requirements, the Company first suspends their purchases, supervises the suppliers to make necessary quality improvements within a time limit, follows up and evaluates the improvement effects of such suppliers, and reconfirms their qualifications upon rectification. If the improvement effect is not satisfied, such suppliers shall be rejected and our cooperation shall be terminated.

5.6 SUPPLY CHAIN MANAGEMENT (Continued)

5.6.2 Establishment of clean supply chain

In 2020, the Group further strengthened the procurement management of various assets, coordinated the development, allocation and utilization of the Group's productive resources, standardized the processes of various procurement business, strictly implemented corresponding systems, while promoting the construction of a digital procurement platform to realize the openness, transparency and traceability of the procurement business. The Company requires its subsidiaries to procure bulk materials and engineering equipment through public bidding, with the joint participation of the Company's legal compliance head office, production technology head office, and risk management head office.

The Company has formulated the Anti-Corruption and Anti-Commercial Bribery Regulations to strictly regulate the Group's production and operation activities. These activities include, but are not limited to, economic activities such as contacting government departments, negotiating orders with customer representatives, purchasing raw materials, engineering construction, product sales, equipment procurement and maintenance. The Company's senior executives, management at the deputy manager level or above in each second-level unit and staff in important positions (procurement, engineering, EHS, etc.) have signed the Commitment for Anti-Commercial Bribery.

We strengthened the supervision and management of suppliers, and the bidding and procurement management has been transformed from post-supervision into pre-participation, mid-event control, and post-event supervision. We require customers, suppliers, service providers, and contractors to enter into the Commitment for Anti-Corruption and Anti-Commercial Bribery with the Group when signing contracts or submitting bids to ensure that they will not provide or promise to provide rebates, handling fees, commissions, referral fees, etc. to employees of the Group to obtain any business opportunities therefrom, and that they fully understand the provisions under the Anti-Corruption and Anti-Commercial Bribery Regulations of the Company. The Group will cancel the qualifications and bidding of such suppliers, service providers, agents and distributors if they violate their commitments, and transfer those suspected of constituting a crime to judicial authorities.

We strengthened the supervision and management of major engineering projects, prepared well for pre-review, urged to conduct afterwards supervision, and strengthened the supervision of the whole process. After the project budget is approved, the project shall be publicized on the Company's official website to invite suppliers from the public. We conducted the qualification pre-examination of suppliers who are willing to participate in bidding, standardized the supplier access system and institutionalized the bidding process. We strictly controlled the entry and conducted qualification pre-examination and on-site inspection of bidders before bidding; carried out follow-up inspection of the construction process every quarter, including on-site construction progress and payment, procurement and use of materials, changes in engineering quantities, and supervisors' responsibilities, etc.; and carried out spot checks on bidding (procurement) files, contracts, financial payments and other materials every quarter, so that procurement supervision has been transformed from post-supervision into pre-participation and mid-event control.

5.6 SUPPLY CHAIN MANAGEMENT (Continued)

5.6.2 Establishment of clean supply chain (Continued)

We have also strengthened the supervision and management of the entire process of infrastructure construction projects, and through special audits, we have conducted full-cycle follow-up control of the Group's key projects to ensure the legal compliance of the construction process.

Case: Anti-Corruption Training for Service Providers

In January 2020, Shanghai Livzon established a code of conduct for cooperative service providers and provided training to relevant personnel, so as to regulate the work behaviors of cooperative service providers, eliminate the existed or potential commercial bribery and unfair competition behaviors with government agencies, industry organizations and medical institutions in business interactions.



5.6.3 Enhancement of supplier quality

The marketing authorization holder and manufacturer shall undertake the primary responsibility for the whole life cycle of drugs. The quality level of suppliers determines whether they can provide high-quality products and high-quality services. Livzon pays attention to the quality of suppliers and continuously carries out training and technical guidance for suppliers to improve quality together. In the process of supplier management, the main measures for providing suppliers with relevant improvements include:

- to put forward quality requirements to suppliers during the on-site audit;
- to provide guidance on aspects such as process improvement, inspection, etc. when the daily supplied materials are abnormal and quality complaints are submitted to the supplier, and require the supplier to investigate and make quality rectification in a timely manner;
- to convey the Company's quality concept through inviting supplier to training and meeting, and reach a consistent quality requirement or target agreement with the supplier;
- to proactively understand the interpretation and implementation of the provisions of the regulations by suppliers, and conduct training if necessary, before the promulgation and implementation of new industry regulations and standards.

5.6 SUPPLY CHAIN MANAGEMENT (Continued)

5.6.3 Enhancement of supplier quality (Continued)

Case: Improvement of Supplier Quality Management Capabilities

During the Reporting Period, Limin Factory dispatched quality management personnel to diagnose and analyze the entire production process of the supplier in response to the quality issue of supplier's packaging materials. Through trainings on the use of quality system improvement tools, the use of tools to identify all factors of human, machines, materials, laws and environment, improvement of mold cleaning standards and adding cleaning procedures for annealing furnace head, etc., the rate of high-quality products has increased to more than 99%.

Case: Quality Management Training for Supplier

After the promulgation of the new Pharmacopoeia of the PRC (《中國蔡典》), Sichuan Guangda and the Traditional Chinese medicine business department of the Company held a training seminar for Chinese medicine suppliers in July 2020, which emphasized to suppliers the acceptance criteria of commonly used traditional Chinese medicinal materials and the new basic requirements for use, and discussed how to meet the requirements of pesticide residues and heavy metals under the new Pharmacopoeia of the PRC, as well as the necessity of building a base for medicinal materials and a traceability system. In addition, Sichuan Guangda has also signed the latest quality agreements for traditional Chinese medicinal materials with suppliers, and guided suppliers to continuously improve their quality performance through training on supplier rating schemes and awarding of outstanding suppliers.

5.7 FACILITATING INDUSTRY DEVELOPMENT

Livzon actively participates in the activities of industry associations, serving as the vice chairmen and members of multiple associations. Livzon promotes the improvement of product quality management capabilities in the industry by participating in the formulation of industry self-discipline regulations. In 2020, the Company put forward 30 amendments to laws and regulations through the association, sent experts to participate in the industry system certification review for more than 20 times. Through association activities, the Company actively participated in the consensus discussion of industry development needs and social responsibility, which effectively solved the system problems including quality standards improvement and qualification evaluation of front-end supplier, thus reducing the procurement risks.

Industry associations in which Livzon participates (partial)

- China Quality Association for Pharmaceuticals
- China Association of Pharmaceutical Commerce
- China Pharmaceutical Enterprises Association
- China Pharmaceutical Innovation and Research
 Development Association
- China Pharmaceutical Industry Association

- Guangdong Province Quality Association
- Guangdong Province Pharmaceutical Industry Association (廣東省醫藥行業協會)
- Guangdong Pharmaceutical Association
- Guangdong Bio-pharmaceutical Innovate Technology Association
- Guangdong Enterprise Technology Innovation Investment Promotion Association (廣東省企業技 術改造投資促進會)

5.8 PROTECTING THE RIGHTS AND INTERESTS OF CUSTOMERS

5.8.1 Enhancement of customer satisfaction

In order to fully protect the rights and interests of customers, Livzon conducts drug and service quality satisfaction surveys every year, and distributes questionnaires to customers in various regions. Livzon conducts multiple-dimensional surveys to fully understand the opinions and feedback of customers on the Group's products and services.



In 2020, Livzon received 213 feedbacks from customers. The results showed that customers were highly satisfied with the quality and efficacy of Livzon's products. The questionnaire has been fed back to our corresponding business departments. Relevant departments are advised to pay attention to the problems and suggestions raised by customers, solve existing problems in a timely manner, and provide customers with better products and better services.



5.8 PROTECTING THE RIGHTS AND INTERESTS OF CUSTOMERS (Continued)

5.8.1 Enhancement of customer satisfaction (Continued)

From time to time, the Group commissions commercial customers to survey doctors and patients via telephone on the safety, stability, clinical efficacy of, and satisfaction and feedback of doctors and patients on, our major products. The survey results are regularly summarized to make appropriate assessment on the safety and efficacy of the products. During the Reporting Period, the Group commissioned commercial companies to survey doctors and patients in more than 100 hospitals across the country for products such as Ilaprazole Sodium for Injection (注射用艾普拉唑鈉) and Shenqi Fuzheng Injection (參芪 扶正注射液) to fully understand the terminal medication feedback.

Case: Investigation and Survey against users of Ilaprazole Sodium for Injection (注射用艾普拉唑鈉)

Since February 2020, the Group has been commissioning some commercial companies to survey doctors and patients in dozens of hospitals across the country to fully understand the feedback from doctors and patients on the innovative drug, Ilaprazole Sodium for Injection. The survey results showed that Ilaprazole Sodium for Injection, which is exclusively produced and marketed by Pharmaceutical Factory, was well received by doctors and patients due to its outstanding efficacy and economic advantages.

5.8.2 Protection of customer privacy

As Livzon's principal business is pharmaceutical production and management, it has less direct contact with end customers and their private information. For limited risks of privacy and security management, Livzon also fully complies with the relevant legal provisions on personal information protection under the Constitution of the PRC and the Civil Code of the PRC to protect customer privacy, protect business secrets, and safeguard customer interests.

During the Year, Livzon had no incidents of infringement of customer privacy or loss of customer information.

5.8.3 Customer feedbacks and complaints

The Company formulated the Administrative Procedures for Quality Complaints of Livzon Group to clarify the Group's work process for handling quality complaints and coordinate the Group's complaint affairs on quality as a whole, which play the role of guidance, management and supervision in the Group's complaint affair on quality. The headquarter of the Company is responsible for promptly and properly handling the quality complaints on the products produced by the subsidiaries of the Company, and taking effective measures to ensure the quality of medicines. The Company's subsidiaries have established or improved their own quality complaint management system in accordance with relevant regulations and the headquarters' complaint management system, and organized employees to learn and strictly implement pursuant to the systems.

In 2020, Livzon received 145 product-related feedbacks, of which 8 were drug counseling, and the remaining 137 were product-related complaints which mainly involved in adverse drug reactions, dissolution issues, bottle caps falling off, packaging quality issues, etc. In accordance with relevant systems, the Company promptly followed up and dealt with drug counseling and complaints received from customers, with an addressing rate of 100%.

5.8 **PROTECTING THE RIGHTS AND INTERESTS OF CUSTOMERS** (Continued) 5.8.4 Feedback mechanism of adverse reaction

Livzon provides patients and hospitals with three ways including a report platform for adverse drug event ("ADE").



Note: To safeguard public drug safety, the Company established a report platform for adverse drug event (ADE) on the official website of the Company and provided feedback telephone numbers and email address in order to provide a feedback channel for patients or clinical trial subjects who are subject to adverse events after taking drugs, learn and assess the adverse events and the characteristic of the products timely, and safeguard public drug safety.

5.8 PROTECTING THE RIGHTS AND INTERESTS OF CUSTOMERS (Continued)

5.8.4 Feedback mechanism of adverse reaction (Continued)

When an adverse drug reaction is received, the relevant functional departments and subsidiaries of the Group will take response measures in accordance with the Administrative Procedures for Quality Complaints of Livzon Group. The relevant procedures are as follows:

- (1) After receiving the complaint from the customer, the business department fills in the Drug Quality Information Feedback Form, and reports to the quality management department on the day of receipt after review. After receiving the Drug Quality Information Feedback Form, the quality management department should first determine the type of product complaint and organize an investigation. If it can respond in a timely manner, it should respond within 24 hours. If further investigation and analysis are needed, it should communicate with customers within 48 hours and handle them properly, and further verify with the manufacturer within 24 hours as the case may be.
- (2) After the manufacturer receives the Drug Quality Information Feedback Form, the factory's quality complaint handling procedures shall be activated. For complaints involving adverse drug reactions, in addition to activating the quality complaint handling procedures of each manufacturer, they shall also be handled following the Adverse Drug Reaction Reporting and Monitoring Management System, and the adverse reaction information shall be unified by the manufacturer and reported to the ADR center according to the regulations.
- (3) After the quality complaint is handled, the quality management department summarizes the handling of product quality complaints, annually summarizes the complaints of various varieties, compares and analyzes with historical data, and reports to the vice president in charge.



5.9 PHARMACEUTICAL OPERATION COMPLIANCE

5.9.1 Management of drug insert sheets and labels

Drug labels and insert sheets are important means to guide the correct selection and use of drugs, and are related to the health and life safety of the public. Therefore, the correct understanding and implementation of the Provisions for Drug Insert. Sheets and Labels is of great significance to pharmaceutical manufacturers.

In strict compliance with the Drug Administration Law of the PRC and the Provisions for Drug Insert Sheets and Labels and other laws and regulation, Livzon has established a management system for the formulation, revision and maintenance of labels and insert sheets. We always pay attention to the regulatory documents of the National Medical Products Administration on labels and insert sheets, and revise and improve the management system of drug labels and insert sheets in a timely manner, including the Management Procedures for Design, Audit, Purchasing and Use of Drug Insert Sheets and Labels, the Standard Management Procedures for Drug Packaging, Labels and Insert Sheets, the Management Procedures for Product Outer Packaging Materials, the Operating Procedures for Design and Approval of Packaging Materials, and the Management Procedures for Packaging Design, Audit and Printing of Products, etc., to ensure that our product labels and drug insert sheets continuously comply with regulatory requirements, and that the marketing authorization holder information in the drug insert sheets and labels is updated.

In accordance with relevant regulations and quality management systems, based on the regulatory requirements and regulatory trends of drug supervision agencies, the quality management head office of the Company regularly conducts drug business compliance trainings, and conducts routine audits on the pharmaceutical vendors of the Group. The scope of audit includes the key links in the operation management including the drug traceability system, integrity management, and quality system implementation in the drug management process.

In 2020, the quality management head office of the Company conducted an annual audit on the drug quality of three pharmaceutical vendors of the Group in accordance with the GSP system. As a result, no major non-compliance was found, management suggestions have been given back to relevant companies, and rectifications were required to be implemented on time to improve the level of quality management.

Case: Review and Amendments to the Drug Insert Sheets

In 2020, in accordance with the Provisions for Drug Insert Sheets and Labels and Pharmacopoeia of the PRC (2020 edition), Limin Factory reviewed and screened the drug insert sheets of 150 drugs which it holds, proactively collected the information of safety and effectiveness throughout the life cycle of the drug after it was marketed, and completed the amendments to contents of [Adverse Reactions], [Contradictions] and [Precautions] in the drug insert sheets of 16 varieties to ensure safety and efficacy of drugs; the labels or drug insert sheets related to 11 varieties in process were printed with the information of drug marketing authorization holder. The [Executive Standard] was changed from the original Pharmacopoeia of the PRC (2015 edition) to Pharmacopoeia of the PRC (2020 edition), and the new edition has been in use since 1 December 2020.

5.9 PHARMACEUTICAL OPERATION COMPLIANCE (Continued)

5.9.1 Management of drug insert sheets and labels (Continued)

Case: Interpretation of the Provisions for Drug Insert Sheets and Labels (Revision) and Training in connection therewith

On 13 August 2020, Sichuan Guangda organized the employees involved in production, quality, technology to study and discuss the Provisions for Drug Insert Sheets and Labels (Revision). The major amendments are to strengthen that holders are accountable to drug insert sheets and labels and responsible for the formulation, revision and maintenance of drug insert sheets and labels.

On 27 May 2020, the quality department, registration and law affairs department, and technical support department of Pharmaceutical Factory jointly organized the business backbone of all departments of the factory to carry out the discussion, gap analysis and training of the Provisions for Drug Insert Sheets and Labels (Revision), which further strengthened the enterprise's management on drug insert sheets and labels, and conducted a comparative analysis of the additions and revisions on the new and old editions, to actively respond to revision opinions. A total of 6 revision opinions were fed back.



Case: Review of Drug Insert Sheets

In 2020, in accordance with the Drug Administration Law of the PRC and Pharmacopoeia of the PRC (2020 edition) and the internal management process on change in control, Pharmaceutical Factory revised more than 290 drug insert sheets and labels of the varieties in process, and conducted compliance review on their text and layout. After review, the drug labels were consistent with the approval document, the drug names and use of registered trademark met the requirements, each of the content writings and format specifications of the drug insert sheets was in compliance with the requirements, and the review results were in compliance with the Provisions for Drug Insert Sheets and Labels and other relevant regulatory requirements.

5.9.2 Academic promotion compliance

The Group attaches great importance to the overall planning and monitoring of academic promotion, and has established clear standards for the theme, activity type and expenses of nation-wide promotion activities to ensure the legality and compliance of the promotion activities.

Through the self-developed "Service Provider Management Work Platform", the Group supervises the implementation work of various service providers in the process of academic promotions, requires service providers to implement work based on the annual plan, upload relevant evidence information to the platform, and complete the summary and record of service activities. We evaluate the compliance of the work process by reviewing the platform data, and score the business performance of service providers, and promptly eliminate service providers with compliance risks. In addition, the platform is also equipped with compliance training on academic promotion, so that service providers can fully understand the regulatory requirements and professional norms in the operation of drug business.



Livzon continues to focus on cutting-edge technologies and unfulfilled clinical needs, promote product innovation and upgrade, focus on innovative drugs and high-barrier complex drug preparations, and continues to enhance innovation and R&D and business layout of our products in the segments of psychiatry, oncology and immunity based on our traditional segments of assisted reproduction and gastroenterology on which we have advantages. During the Reporting Period, the R&D progress of our key products under research accelerated greatly and our pipelines under research achieved a number of significant progress.

In 2020, Livzon had 911 R&D employees (2019: 729), representing a year-on-year increase of 24.97%, accounting for 10.89% of the total number of employees (2019: 8.08%), and the scale of our R&D team continued to grow.



Number and Percentage of Livzon's R&D Employees from 2017 to 2020

In 2020, Livzon's total expenditure in R&D amounted to approximately RMB989.59 million (2019: RMB827.73 million), representing a year-on-year increase of 19.55%, among which capitalized R&D investment accounted for approximately 10.66% (2019: 8.14%) of total R&D investment, and R&D investment accounted for approximately 9.41% (2019: 8.82%) of the Group's total operating income for the Year.



Livzon's R&D Investment and Percentage to Total Operating Income from 2017 to 2020

6.1 BIOPHARMACEUTICAL RESEARCH

LivzonBio has solid footprints in the biopharmaceutical research area, has built up platforms of R&D technology and production technology for antibody drugs, fusion protein drugs and cell therapy drugs, and focuses on the development and industrialization of products in the fields of oncology, reproduction, and autoimmunity.

proteins, ADCs and CAR-T which were in different stages of production application, clinical trial and preclinical development, respectively. Meanwhile, amid the global outbreak 學院生物物理研究所) to develop the Recombinant SARS-CoV-2 Fusion Protein Vaccine and constructed a vaccine R&D platform, laying a foundation for the future expansion Currently, LivzonBio's R&D projects, with the focus on oncology, reproduction and autoimmunity, have developed a number of projects for monoclonal antibodies, recombinant of the COVID-19 pandemic in 2020, Livzon MAB, a wholly-owned subsidiary of LivzonBio, joined hands with the Institute of Biophysics, Chinese Academy of Sciences (中國科 of LivzonBio's R&D project pipeline. Furthermore, LivzonBio will continue its efforts in accelerating new product development through independent R&D, introduction from third parties and strategic alliances, expand innovative product mix of differentiated immunotherapy and combination therapy for tumor treatment, and expand bispecific/ multispecific antibodies and ADC technology platform, for the purpose of refining its prodrug technology and enhancing its products' marketability.

								QNI			Clinical trials				
					Monotherapy/ combination							Phase III/	Production application and	Region where clinical trials take Commercialization	Commercialization
Category	Drug name	Target	Molecular category	Product category	therapy	Indication	Preclinical	Filed	Approved	Phase I	Phase II	Key phase II	market launch	place	rights
Váccine	Recombinant SARS-CoV-2 Fusion Pro Iain Vaccine	SARS-COV-2	New molecular	Fusion protein	Monotherapy	COVID-19 vaccine								P.R.C. loverseas	Global
Tumor	Recombinant Tumor Eneyme Specific Interferon a-2b Pro-FIN Fc Fision for Injection	Pro-IEN	New molecular	fusion protein	Monotherapy	Solid tumor								PRC	Global
	Recombinant Humanized Anti-PD-1 Monodonal Antibody for Injection	PD-1	New molecular	Recombinant humanized monodonal antibody	Monotherapy	Thymic cancer and other solid tumor		T		T				PRCULS.	Global
	Recombinant Humarized Monodonal Antibody Conjugate Toxin Drug		New molecular	ADC/Antbody conjugate toxin drug	Monotherapy	Stomach cancer and pancreatic cancer, etc.								PRC	Gobal
Reproduction	Recombinant Human Choriogonadotropin alfa for Injection	P-HCG	Biosimilar drug (Oxidrel)	Recombinant protein	Monotherapy	Interdity								PRC	Global
	Reombinent Human folloropin Alià for hijection	r-FSH	Bosimilar drug (GONAL-F)	Recombinant protein	Monotherapy	Intertity								PRC	Global
Immune disease	Recombinant Humanized Anti-IL-6R Monoclonal Antibody for Injection	1-68	Biosimilar drug (Actenira)	Recombinant humanized monodonal antibody	Monotherapy	Rheumatoid arthrifis		T		Т	Т			PRC	Global
	Recombinant Antri-human IL - 17A F. Humarized Monoclonal Antbody Injection	IL-17AF	New molecular	Recombinant humanized monodonal antibody	Monotherapy	Psoriasis and ankylosing spondylitis		T						PRC	Global

Partial Key Pipelines under Research of LivzonBio in 2020

6.2 DEPLOYMENT OF SUSTAINED-RELEASE MICROSPHERES

Given the superior characteristics of prolonged-action and sustained-release of microsphere preparation, our efforts in product R&D mainly focused on three major areas: anti-tumor, regulation of endocrine system and antipsychotic. Meanwhile, in order to increasingly enhance innovation capability and explore drugs with market potential, we make full use of the resources available at home and abroad and pursuit more cooperation opportunities with external parties. In the future, we will be devoted to developing prolonged-action ophthalmic drugs and other anti-tumor drugs, and building other prolonged-action preparation platforms.

As at the end of the Reporting Period, the Group had 6 microsphere projects under research, of which 1 project was in phase III clinical trial, 2 projects were in phase I clinical trial, 1 project launched BE trial (human bioequivalence study) and 1 project applied for clinical trial.

Project name	Indication	Preclinical	Application for clinical trial	Phase I	Phase II	Phase III	BE trial	NDA (New Drug Application)/ ANDA (Abbreviated New Drug Application)
Triptorelin Acetate Microspheres for Injection (1-month sustained release)	Prostate cancer; precocious puberty; endometriosis (Phase I to IV); female infertility; treatment of uterine fibroids prior to surgery							
Aripiprazole Microspheres for Injection (1-month sustained release)	Schizophrenia, bipolar disorder							
Leuprorelin Acetate Microspheres for Injection (3-month sustained release)	Prostate cancer, premenopausal breast cancer							
Octreotide Acetate Microspheres for Injection (1-month sustained release)	Acromegaly; gastro-entero-pancreatic endocrine tumor							
Triptorelin Pamoate Microspheres for Injection (3-month sustained release)	Treatment for locally advanced or metastatic prostate cancer							
Goserelin Acetate Sustained-release Implant (1-month sustained release)	Prostate cancer; breast cancer; endometriosis		•					

R&D Progress of Major Products under Research of Livzon Microsphere

6.3 DEVELOPMENT OF DIAGNOSTIC REAGENTS

Livzon Diagnostics has long been working on infectious diseases, respiratory diseases and diseases associated with blood safety, maternal and child and reproductive health, and has gained a leading market share and good fame among our customers in some diagnostic segments. In recent years, given the changes in disease spectrum in modern society and increasing demand for health of human and the development trend of precision medicine, Livzon Diagnostics has expanded its disease coverage encompassing autoimmune diseases, tuberculosis, allergy and allergic reactions and central nervous system diseases, and invested a lot in a number of innovative technology platforms in order to develop more efficient, stable and accessible integrated solutions for disease diagnosis. The technology portfolio of Livzon Diagnostics covers the whole industry chain, including raw materials, reagents and automated equipment, which gives full support to its sustainable innovation and promotes the development of the industry. To further strengthen the profitability and comprehensive competitiveness of Livzon Diagnostics and deepen the Group's strategic layout in the industrial chain of diagnostic reagents, the general meeting of the Company considered and approved the spin-off and listing of Livzon Diagnostics on the ChiNext Board of the Shenzhen Stock Exchange in November 2020.

Livzon Diagnostics develops with focuses on different diagnostic application scenarios of eight major disease areas, supported by diverse and unique technology platforms, to provide a wide range of diagnostic offerings to meet the needs of clinical care. Livzon Diagnostics has established 7 core technology platforms based on its strengths and strategic disease categories, including industry-leading special platform technologies such as multi-liquid chip (多重液芯), single-person chemiluminescence (單人份化學發光) and diagnostic for molecular nucleic acid (分子核酸檢測). In 2020, the products of the above platforms achieved successful market introduction and received good customer feedback. During the Reporting Period, a total of 28 domestic new product registration certificates were received for the multi-liquid chip platform, chemiluminescence platform and molecular nucleic acid diagnostic platform, including 7 for Class III medical devices, and filing for 8 products of Class I medical devices was completed.

As at the end of the Reporting Period, Livzon Diagnostics had a total of 28 projects under research and 4 projects under clinical trial stage. Among which, Diagnostic Kit for IgM/IgG Antibody to Coronavirus (2019-nCoV) (Colloidal Gold) (新型冠狀病毒(2019-nCoV) IgM/IgG 抗體檢測試劑盒(膠體金法)) for use as approved emergency product renewed its license successfully at the end of 2020. Diagnostic Kit for Autoimmune Hepatitis related Autoantibody (magnetic barcode immunofluorescence method) (自身免疫性肝病相關自身抗體檢測試劑盒(磁條碼免疫螢光發光法)) completed clinical trial and submitted evaluation materials, and the rapid diagnostic product for influenza antigen for differential diagnosis of respiratory tract infection had entered the stage of clinical trial.



6.3 DEVELOPMENT OF DIAGNOSTIC REAGENTS (Continued)

Diagnostic Kit for IgM/IgG Antibody to Coronavirus (2019-nCoV) (Colloidal Gold)

The product was jointly developed by Livzon Diagnostics and Wuhan Institute of Virology, Chinese Academy of Sciences, and is applicable to auxiliary diagnosis of early infection and epidemiological investigations of the novel coronavirus. This product can produce the test result within 15 minutes, and caters to the primary medical institutions' requirements for testing systems which are small-size, portable and can produce results rapidly for the purpose of the prevention and control of the pandemic. In mid-March 2020, this product was approved to launch in China and later obtained CE certification from European Union ("EU") with EU market access conditions, and was permitted for registration by 15 countries and regions successively. This product was among the first batch of the certified diagnostic kits for antibody to coronavirus in China.

Meanwhile, Livzon Diagnostics proactively advances the overseas marketing of its premium products and has established an overseas sales division which lays a foundation for the expansion of its diagnostic products into overseas markets in the future. As at 31 December 2020, a total of 16 products of Livzon Diagnostics obtained CE certification from European Union, 8 technology platforms have passed TUV on-site inspections and 1 qualification certificate was obtained. Among which, the diagnostics kit for IgM/IgG antibody to coronavirus (2019-nCoV) was swiftly permitted for market launch in a number of countries, such as Brazil, Thailand, Nigeria, Indonesia, Philippines, Ecuador, Peru, Russia, Georgia, Turkey, Chile, etc.

Livzon's Diagnostic Kit for Coronavirus (2019-nCoV) Helps Prevention and Control of Global Pandemic

During the Reporting Period, Livzon Diagnostics sold its Diagnostic Kit for IgM/IgG Antibody to Coronavirus (2019-nCoV) to 38 countries and regions including Asia, Europe, Africa and Americas. The products which were sold through the distributor channels to local medical institutions and third-party laboratories gave strong support for prevention and control of the global pandemic. Livzon Diagnostics has been well recognized by many medical centers and evaluation institutions in such countries for the quality of its diagnostic products for COVID-19, including Harvard Medical School, Pasteur Laboratories in France, Hospital of University of Copenhagen in Denmark, Karolinska Institute in Sweden, Medical Center of Moscow State University in Russia, and National Institute of Quality Control in Health in Brazil.

At the end of 2020, two types of COVID-19 diagnostic products of Livzon Diagnostics received CE certification and were included in the export license white list of the China Chamber of Commerce for Import & Export of Medicines & Health Products, i.e. Diagnostic Kit for Antigens of SARS-CoV-2 (Latex method) (新冠抗原檢測試劑盒(乳膠法)) and Diagnostic Kit for Antigens of SARS-CoV-2 (Immunofluorescence method) (新冠抗原檢測試劑盒(免疫螢光法)), which have increased the types and expanded the supply of diagnostic reagents for coronavirus (2019-nCoV) and further satisfy the global needs of preventive control over the spread of the pandemic.

To help countries fight against the COVID-19 pandemic, Livzon Diagnostics has donated its diagnostic kits for antibody to coronavirus (2019-nCoV) to the Royal Garden Hospital in Japan, the capital of Denmark, MAA Trust in Kenya, Virunga National Park in Congo, etc.

6.4 INVESTMENT IN TREATING FOR RARE DISEASES

At present, the supply of orphan drugs for rare diseases in China is still insufficient. Under the guidance of relevant policies such as "Healthy China 2030 Planning Outline" and "Guidelines for Diagnosis and Treatment of Rare Diseases", Livzon has leveraged on its scientific research system and capabilities to increase the investment in research on orphan drugs for rare diseases and cooperated with the state to establish a two-way mechanism for R&D of orphan drugs for rare diseases, in an effort to improve the clinical status of rare diseases in China, and bring benefits to the patients suffering from rare diseases.

In October 2020, Livzon received the Drug Registration Certificate for Dantrolene Sodium for Injection (注射用丹曲林鈉), which is developed independently by Livzon and used for the prevention and treatment of malignant hyperthermia. Malignant hyperthermia, a rare disease, is an inheritable muscle disease. This orphan drug is the first generic drug of the brand drug Dantrium®, which was developed by Par Sterile Products LLC in the United States. As at October 2020, Pharmaceutical Factory, a subsidiary of the Company, was the only one that obtained the registration approval for Dantrolene Sodium for Injection in mainland China, without filings made by other manufacturers to our best knowledge. In view of the lack of knowledge on the clinical symptoms of malignant hyperthermia and relevant rescue plans among anesthesiologists in China, after communication with the China Anesthesia Quality Control Center, Livzon has promoted the establishment of a simulation exercise mechanism for malignant hyperthermia and called for the inclusion of Dantrolene Sodium for Injection as a mandatory drug for clinical resuscitation as it may contribute significant social value in terms of effectively controlling malignant hyperthermia, saving the lives of patients with malignant hyperthermia and reducing medical disputes.

In September 2020, Livzon received the notice of approval for clinical trial on Octreotide Acetate Microspheres for Injection (注射用醋酸奧曲肽微球) (1-month sustained release) which was in the stage of R&D, and the product was approved for clinical bioequivalence study. This orphan drug is intended for the treatment of acromegaly and gastroenteropancreatic neuroendocrine tumors. This orphan drug is the world's first generic drug of Sandostatin® developed by Novartis. Although Sandostatin® is covered by the national medical insurance catalogue of China, the price is still relatively high, exerting a great financial pressure and burden to patients and the national medical insurance system. Therefore, given the actual clinical demand and social responsibility, we started to develop the generic version of Sandostatin®, hoping to provide a quality-assured generic product as soon as possible to mitigate the current situation of medication for patients. Based on the preclinical data available, the pharmacokinetic characteristics and safety profile of Octreotide Acetate Microspheres for Injection are largely consistent with that of Sandostatin®. As a result, this product has been approved for clinical bioequivalence study. The clinical bioequivalence study was approved by the Ethics Committee and the Genetics Office and entered the start-up and preparation phase, which will provide patients with a clinical treatment option that is not inferior to the original product of Sandostatin®.



6.5 INTELLECTUAL PROPERTY PROTECTION

Livzon strictly abides by the Patent Law of the PRC, the Trademark Law of the PRC and other related laws and regulations. Meanwhile, in order to make the acquisition, maintenance and application of patent more scientific, more standardized and procedural, the Company has formulated the Patent Workflow Guidelines, which regulates the work in the areas of patent risk assessment before product establishment, patent conversion of R&D deliveries, patent risk response for listed products, and review of articles before publication, and provides in detail the workflow of new patent application, maintenance, transfer, purchase, technology financing, technology patent search, infringement litigation, invalidity response, etc.

The Company actively carried out patent application and maintenance. In 2020, the Company completed the daily maintenance of 422 valid patents and 193 patents which were at the application stage. Application for 101 patents were filed in 2020, including 71 invention patent applications, and a total of 51 patents were granted in 2020. Among which, the patent "A Method for Manufacturing Sustained Release Leuprorelin Acetate Microspheres" was awarded the Six Session of Guangdong Province Patent Silver Award, and the project "Ilaprazole Sodium for Injection" won the Excellence Award in the competition for Cultivation of High-value Patents in Guangdong-Hong Kong-Macao Greater Bay Area.

To prevent the risk of patent infringement, the Company actively followed up the development of the projects under research and cooperated with the business development ("BD") department for its project research to provide reference for assessment of patent infringement risk. A total of 122 patent search and analysis reports were completed in 2020. In order to build a patent network for Livzon's key products, the legal compliance head office of the Company keeps close communication with our research team and appoints experienced patent attorneys to explore the innovative technology of various key products and plans to build a patent network.

The Company highly values independent innovation and actively explores overseas markets, and will seriously consider the conditional implementation of the Doha Declaration on the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement and Public Health when marketing our pharmaceutical products to overseas markets in the future. If appropriate third parties request that we make available the drugs we develop to least developed countries and low-income countries, we will consider licensing our product patents on appropriate terms and conditions.

7 GROWTH WITH GREEN SUSTAINABILITY

7.1 ENVIRONMENTAL MANAGEMENT SYSTEM

Livzon strictly complies with national laws and regulations including the Environmental Protection Law of the PRC, the Environmental Impact Assessment Law of the PRC and the Energy Conservation Law of the PRC, and continuously strengthens environmental risk management to ensure that production and operation of the Group meet relevant standards as well as laws and regulations.

Meanwhile, taking into account the actual operation and the characteristics in the pharmaceutical industry, we have established a comprehensive environmental management system, under which we developed internal management systems including General Requirements of EHS Management System, Administrative Measures for Contingency Plans for Emergency, Administrative Measures for EHS Accidents, Administrative Measures for EHS Information and Communication and Administrative Procedures for Internal EHS Audit. In addition, while massively promoting clean production, we review the implementation of environmental management systems of each of our manufacturing subsidiaries on a regular basis and analyze various environmental management indicators to ensure the continuous improvement of management performance.

We have set up the EHS management department (i.e. production technology head office) at the headquarter for overall management which has dedicated staff in charge of environmental management and supervision and guidance of environmental protection work; the subsidiaries of the Company also have a dedicated EHS department responsible for energy conservation and emission reduction, discharge of solid waste, waste water and exhaust gas ("three-waste"), environmental protection investment and the specific implementation of environmental protection technology to ensure the effective operation of our environmental management system and the continuous improvement of environmental management performance.

The EHS performance of the Group is linked to the remuneration of the EHS management of the headquarter and subsidiaries of the Company, and is included in the operating performance assessment and energy conservation and emission reduction assessment of our subsidiaries. The Company (i) sets management indicators such as major EHS incidents, EHS audit and follow-up in the remuneration performance of the head of the EHS management department at the headquarter; (ii) sets management indicators such as EHS accidents, EHS facility operation, EHS audit and rectification, EHS goals and working plans in the remuneration performance of the EHS management of our subsidiaries. In the regular assessment, if the EHS management indicators of the EHS management of our headquarter and subsidiaries are not met, their annual salary will be affected; (iii) sets management indicators such as EHS incidents, EHS incidents, EHS system management, annual EHS targets and plans in the operating performance assessment of our subsidiaries, and calculates the amount of bonuses that can be obtained by the subsidiaries in the current year through the total scores of the EHS assessment; and (iv) in view of the fact that API companies are the largest energy consumption and three-waste discharge companies of the Group, sets up special bonuses for the annual target assessment of energy conservation and emission reduction in each of our API subsidiaries, and the bonuses will be distributed to the companies which meet the targets.

7.1 ENVIRONMENTAL MANAGEMENT SYSTEM (Continued)

Each of the Company's manufacturing subsidiaries operates and maintains the effectiveness of the system under the "Plan-Do-Check-Act (PDCA)" operating model in accordance with the requirements of the ISO14001 Environmental Management System. All manufacturing operations with ISO14001 certifications under the Group undertake regular external independent audits.

Certification of Environmental Management System and Review on Clean Production of the Group

Name of Subsidiary	Certification of Environmental Management System(ISO14001) Acquired	Review on Clean Production
Sichuan Guangda	Yes	Yes
Shanghai Livzon	Yes	Yes
Pharmaceutical Factory	Yes	Yes
Limin Factory	Yes	Yes
Livzon Diagnostics	No	No
Shanghai Livzon Biotech	No	Yes
LivzonBio	Yes	No
Xinbeijiang Pharmaceutical	Yes	Yes
Gutian Fuxing	Yes	Yes
Jiaozuo Hecheng	Yes	Yes
Ningxia Pharmaceutical	Yes	Yes
Livzon Hecheng	Yes	Yes
Fuzhou Fuxing	Yes	Yes
Total (13)	11	11



7.1 ENVIRONMENTAL MANAGEMENT SYSTEM (Continued)

The Company's subsidiaries have formulated a variety of management systems such as the Environmental Protection Responsibility System, Sewage Treatment Station Management System, Hazardous Waste Management System, Exhaust Gas Management System, Soil Hidden Hazards Examination System, Environmental Performance Assessment and Reward and Punishment System and Noise Pollution Prevention and Control Procedures, signed environmental protection target indicators and responsibility statements, formulated annual targets and plans for environmental protection, reviewed the achievement of each target and indicator on a regular base, and enhanced maintenance of environmental protection equipment and facilities, so as to ensure the proper operation of environmental protection equipment and the discharge of solid waste, waste water and exhaust gas satisfying the standards.

Regular Audits on Environmental Management

The subsidiaries of the Company conduct regular audits on environmental management, which cover EHS compliance, three-simultaneous system, equipment and facilities used in management and discharge and disposal of three-waste (solid waste, waste water and exhaust gas), storage and use of hazardous chemicals, personnel training and implementation of accountability system, emergency plans and drills, etc.

- The production technology head office of the Company conducts EHS audits at least twice a year for the API manufacturers of the Company, and at least once a year for the drug preparation manufacturers of the Company, and follows up on the improvement of each enterprise.
- The API business department of the Company conducts 3 to 4 EHS cross-checks per year for the API manufacturers of the Company and follows up on the improvement of each enterprise.
- Each of the Company's relevant subsidiaries conducts a monthly EHS meeting and inspection at the corporate level to rectify defects in a timely manner.
- The third-party certification bodies conduct EHS system review once a year for the entities of the Group that have passed the EHS management system certification, and conduct reviews of certificate renewal once every three years.
- The entities of the Group that have passed the EHS management system certification shall conduct an annual EHS internal review.

7.2 ENVIRONMENTAL MANAGEMENT GOALS

With reference to the ESG guidelines issued by the Hong Kong Stock Exchange and management practices of domestic and overseas pharmaceutical peers, the Company has formulated environmental management objectives and corresponding plans for the years from 2021 to 2025, and will review the achievement of each target indicator on a quarterly basis and supervise each of the Company's manufacturing subsidiaries to carry out refined management in respect of resources and energy consumption. Please see the table below for details.

Item	Indicator	Targets for 2021	Targets for 2022 to 2024	Targets for 2025
Water	Water consumption per RMB10,000 of output value	3% lower than 2020	3% lower than previous year	14% lower than 2020
Electricity	Electricity consumption per RMB10,000 of output value	3% lower than 2020	3% lower than previous year	14% lower than 2020
Chemical oxygen demand	Amount of emission per RMB10,000 of output value	2.2% lower than 2020	2.2% lower than previous year	10% lower than 2020
Sulfur dioxide	Amount of emission per RMB10,000 of output value	2.2% lower than 2020	2.2% lower than previous year	10% lower than 2020
Amount of disposal of hazardous waste	Amount of disposal per RMB10,000 of output value	0.5% lower than 2020	0.5% lower than previous year	2% lower than 2020

Table 1: Livzon's Environmental Management Targets from 2021 to 2025

7.3 ADDRESSING CLIMATE CHANGE

Livzon has been practicing the concept of sustainable low-carbon green development and proactively taking measures to cope with climate change. The Company has formulated the annual energy management targets of the Group, regularly reviewed the achievement of the objectives, comprehensively improved the efficiency of energy use through management improvement and technological innovation, and took energy conservation performance as the main basis of annual work assessment.

lssue	Target	Review on progress	Enhancement plan
Energy management	Electricity consumption per RMB10,000 of operating income in 2020 decreases by 5% over 2019	Completed	 To implement energy audits for high power-consuming enterprises, and perform measurement and assessment of electricity consumption
			2. To conduct a comprehensive examination in accordance with the national Catalogue for the Elimination of High Energy- consuming and Outdated Mechanical and Electrical Equipment to eliminate outdated equipment and use energy- saving equipment.
			 To select high value-added, low power-consuming products, and use energy-saving equipment and promote clean production



7.3 ADDRESSING CLIMATE CHANGE (Continued)

Table 2: Livzon's Partial Key Energy Conservation Projects in 2020

Company name	Project name	Accumulated input (RMB'0,000)	Project profile	Effect of the project
Fuzhou Fuxing	Renovation of blower system for water treatment	118	Replacing 4x110kw Roots blowers with 2x84kw air suspension blowers and 2x90kw screw blower	Saving electricity consumption by approximately 30%, saving 50,000 kWh per month
Livzon Hecheng	Central air- conditioning cloud monitoring system	20	Refined management of central air-conditioning system, real-time evaluation of energy-saving status, and advising on improvement of daily operation and maintenance	approximately 30%, saving 50,000 kWh per month Saving electricity consumption by approximately 5%
	Replacement of compressor of refrigeration unit	3.35	Replacing old and high energy-consuming equipment with energy-saving compressor	Saving electricity consumption by approximately 3%
	Replacement of energy saver for 5T boiler	5	Replacing with energy saver capable of heating boiler water in advance	Saving natural gas consumption by approximately 3%
Pharmaceutical Factory	Additional industrial steam pipelines installed in the park	120	Additional industrial steam pipelines installed in the park were designed for supply of industrial steam by connecting with the grid of external power companies; the natural gas boiler existing in the park shall be used for backup purpose	Safer and more environmentally friendly and cost saving
	Solar photovoltaic power generation project	1,400	Establishment of solar photovoltaic power generation project for power supply for the production equipment and lighting of Pharmaceutical Factory	Generation of approximately 230,000 kwh of photovoltaic power to the plant in 2020



7.3 ADDRESSING CLIMATE CHANGE (Continued)

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Table 3: Livzon's Energy Consumption in 2020¹

Indicator	Unit	API segment	Drug preparation segment	Total
Gasoline	liter	141,737.56	136,485.57	278,223.13
Diesel	liter	259,532.63	96,660.00	356,192.63
Coal	tonne	4,336.50	0	4,336.50
Natural gas	10,000 cubic meters	645.23	272.64	917.87
Steam purchased	tonne	594,067.30	72,129.55	666,196.85
Electricity purchased	kWh	322,337,597.00	78,112,505.90	400,450,102.90
Intensity of electricity consumption#	kWh/RMB10,000 of output value	1,015.92	92.84	345.62
Alcohol based liquid fuel	tonne	0	20.20	20.20

Table 4: Livzon's Greenhouse Gas Emissions in 2020²

Indicator	Unit	API segment	Drug preparation segment	Total
Total greenhouse gas emissions	tonne of CO_2 equivalent	480,962.85	93,417.40	574,380.25
Greenhouse gas emissions (Scope 1)	tonne of CO ₂ equivalent	23,933.90	6,493.89	30,427.79
Greenhouse gas emissions (Scope 2)	tonne of CO ₂ equivalent	457,028.95	86,923.51	543,952.46
Intensity of greenhouse gas emissions [#]	tonne of CO ₂ equivalent/ RMB10,000 of output value	1.52	0.11	0.50

The disclosure scope of energy consumption covers the total consumption of industrial process of Livzon's manufacturing enterprises.

The disclosure scope of greenhouse gas emission covers the total emission of industrial process of Livzon's manufacturing enterprises.

The data of intensity is calculated based on the output value of the API segment, the output value of the drug preparation segment and the total output value of the Group, respectively.

7.3 ADDRESSING CLIMATE CHANGE (Continued)

The Company actively identifies the possible major impacts of climate change on the Company, including the potential risks to the production and operation of the Company caused by the increase in the frequency and intensity of extreme weather. In order to ensure the rapid trigger and performance of emergency measures in the event of sudden extreme weather events and to improve the emergency response capability to climate change crisis events, the Company has set up emergency measures for extreme weather such as typhoons and rainstorms in accordance with the Contingency Plans for Production Safety Accidents, formulated the Contingency Command Plans for Typhoon Prevention, a special plan for typhoon with greater potential impact, established an emergency command system, clarified the personnel and responsibilities of the emergency organization structure, and strengthened interaction and rapid response, to minimize the casualties and property losses caused by extreme weather.

Extreme weather	Response policy	Measure
Typhoon	Contingency Plans for Production Safety Accidents, Contingency Command Plans for Typhoon Prevention	Livzon has classified typhoon warning emergency response into four levels: Level I (red), Level II (orange), Level III (yellow), and Level IV (blue and white). Each entity shall properly perform precautious measures for rains, floods and lightning strikes developed specifically for their respective responsibility, and develope their respective rainstorm response plan depending on their own circumstances to cope with various safety hazards caused by rainstorms.
Rainstorm	Contingency Plans for Production Safety Accidents	Dredge sewers, repair roofs, strengthen fences, install water-retaining thresholds, strengthen ventilation, strengthen circuit leakage protection, and improve firefighting capabilities, etc.

7.4 RESOURCE CONSERVATION

Livzon is in strict compliance with the Energy Conservation Law of the PRC and the Recycling Economy Promotion Law of the PRC, and has formulated the Procedures for Energy Management and the Procedures for Resources Management and established an energy management system. We have implemented regulated and systematic supervision and management initiatives for energy conservation to support the promotion of energy conservation and improvement of energy utilization efficiency. Meanwhile, we have set up annual energy conservation objectives for the Group, and regularly review the achievement of the objectives. In addition, through management enhancement and technological innovation, the Group made tremendous efforts to promote clean production, and comprehensively improved the use efficiency of energy and resource, and took energy conservation and environmental performance as the main indicator for annual EHS assessment.

Water Resources Management

In order to fully implement the national water conservation campaign, the Group has adopted advanced process and strict management to measure and assess water consumption properly, reduced water consumption and adopted various measures to reduce the use of groundwater and water supplied by the municipal government. The Group increased its investment in various reclaimed water recycling projects, enhanced the maintenance of equipment and facilities, and implemented measures including reclaimed water recycling, cooling water recycling, reduction of raw water consumption, regulation of water used in process so as to improve the reuse rate of water resources.

7.4 **RESOURCE CONSERVATION** (Continued)

Water Resources Management (Continued)

During the Reporting Period, Livzon did not encounter any issues in sourcing water that is fit for purpose.

lssue	Target	Review on progress	Enhan	cement plan
Water resource management	Water consumption per RMB10,000 of operating income in 2020 decreases by 5% over 2019	Completed		To implement clean production on an on-going basis, strictly manage water measurement and assessment, and reduce water consumption.
				To reduce raw water consumption through reuse of reclaimed water and cooling water, etc.
				To strengthen the maintenance of equipment and facilities, and prevent leakages.

Table 5: Livzon's Partial Key Water Conservation Projects in 2020

	Company name	Project name	Accumulated input (RMB'0,000)	Project profile	Effect of the project
	Fuzhou Fuxing	Reuse of concentrated water produced in refining raw materials	20	The concentrated water produced in refining raw materials in the plant, which is previously discharged into the sewage treatment system directly, is now recycled and used for fire-fighting water replenishment, exhaust gas spraying water replenishment, toilet flushing, and flower watering	Saving water consumption by approximately 100 tonnes per day
	Livzon Hecheng	Building up a water- saving enterprise	0	Livzon Hecheng has established a water conservation management team, set up a water conservation department and formulated water conservation targets, and issued water conservation management system, water conservation promotion and education system, reward and punishment system, inspection and maintenance system, and a ten-year water conservation plan	Saving water consumption by approximately 5%
-	Ningxia Pharmaceutical	Water conservation project to add a new cool water tower	252	Building a 1,500m ³ /h cool water tower and two 500m ³ /h high-temperature water cooling towers to cool the circulating water and chilled water, thus reducing the discharge of circulating water and chilled water, reducing water replenishment and the use of raw water and reducing the consumption of chilled water and the power-on time of chillers, therefore achieving the purpose of water and electricity conservation	After renovation, saving water by approximately 400,000m ³ /year, saving steam cost of ice water by approximately RMB1,100,000 and electricity cost of recycling water by approximately RMB480,000

7.4 **RESOURCE CONSERVATION** (Continued)

Water Resources Management (Continued)

		Accumulated input		
Company name	Project name	(RMB'0,000)	Project profile	Effect of the project
Sichuan Guangda	Renovation of water system in extraction workshop	7.3	Renovating the cooling water system for single-effect evaporation for alcohol extraction, increasing the pumps and specialty piping, renovating the circulating water of one-off condensed vacuum pump, replacing the manual valves of water pipes with automatic ones, and reusing condensate water for cleaning centers and canteens, etc.	Saving water resource, alleviating the pressure of wastewater treatment and improving production efficiency
Shanghai Livzon Biotech	Recycling of condensate water	0.8	Recycling condensate water produced in the ethanol recovery tower, addressing the heating issue in winter by using the spare storage tank and the new variable-frequency and constant-pressure water supply system	Replacing the air conditioners for heating in winter and saving procurement cost and operating cost of air conditioners Saving water
	Vacuum drying system, circulation system and automatic start-stop transformation	0.2	Instead of direct discharge, recycling the cooling water produced in the vacuum pump of the vacuum drying system, converting the vacuum pump from 24-hour straight running to automatic start-stop	Saving water consumption by approximately 1,500m ³ / year, saving treatment cost of tap water and wastewater by approximately RMB13,500/year, and saving electricity cost of facilities by approximately RMB3,500/year
	Adding a high-pressure cleaning device to the raw urine section	0.2	Changing to use high-pressure water gun to clean the raw urine section, effectively reducing the water consumption in washing the raw urine section	Saving water cost by approximately RMB7,000/year
	Adding partition between urine storage tank and filtering process section	3	Adding partition between urine storage tank and filtering process section, effectively reducing the disorderly emission of gas	Saving approximately RMB20,000/year for manual cleaning and other related costs
Xinbeijiang Pharmaceutical	Renovation of water recovery of the second plant under the third refinery division	10	The acid and alkaline water used for washing resin was recycled for cleaning purpose after adjusting PH	Saving water consumption by approximately 9,000 tonnes per month

Table 6: Livzon's Resources Consumption in 2020³

Indicator	Unit	API segment	Drug preparation segment	Total
Total water consumption	tonne	5,007,301.50	1,257,051.60	6,264,353.10
Intensity of water consumption [#]	tonne/RMB10,000 of output value	15.78	1.49	5.41

The disclosure scope of resource consumption covers the total consumption of industrial process of Livzon's manufacturing enterprises. The data of intensity is calculated based on the output value of the API segment, the output value of the drug preparation segment and the total output value of the Group, respectively.

7.4 **RESOURCE CONSERVATION** (Continued)

Management of packaging materials

By reducing the use of disposable packaging materials and recycling the available packaging materials, the Group has improved the recycling of packaging materials so as to reduce waste of resources and protect the environment effectively.

Company name	Project name	Accumulated input (RMB'0,000)	Project profile	Effect of the project
Pharmaceutical Factory	Increasing the 56-tablet packaging size for Weisanlian	2	The original 8-tablet package size is for 1 day's dose, while the treatment course of the product is 7 days. The new 56-tablet package is launched for the convenience of patients to purchase and saving packaging materials	Saving packaging procurement cost by approximately RMB363,000/year
	Cancelling flocking for the bottle holder of Mouse Nerve Growth Factor for Injection1During the production process, lint shedding may easily cause allergies to production staff and this measure also reduced material procurement cost		Saving packaging procurement cost by approximately RMB130,000/year	
	Packaging refinement of rabeprazole sodium enteric- coated tablets	3	Without prejudice to the protection effect during transportation, the protection materials of the 10-tablet package size of this drug are optimized	The new package will be put into use in 2021, expecting to save procurement cost by RMB777,000/year
Ningxia Pharmaceutical	Self-made metal tray project	45	The trays purchased from third parties are poor in quality and expensive. The self-made tray can improve the quality, extend the useful life and reduce procurement cost	Saving tray procurement cost by approximately RMB80,000/ year
	Tray maintenance project	0	The maintenance of trays will be handled by the in-house staff rather than third parties	Saving tray maintenance cost by approximately 70%

Table 7: Livzon's Partial Key Packaging Materials Conservation Projects in 2020

Table 8: Livzon's Packaging Materials Consumption in 2020⁴

Indicator	Unit	API segment	Drug preparation segment	Total
Outer paper packaging materials	tonne	627.09	3,000.98	3,628.08
Intensity of outer paper packaging materials used [#]	kg/RMB10,000 of output value	1.98	3.57	3.13

The disclosure scope of package materials consumption covers the total consumption of industrial process of Livzon's manufacturing enterprises.
 The data of intensity is calculated based on the output value of the API segment, the output value of the drug preparation segment and the total output value of the Group, respectively.
7.5 POLLUTANTS EMISSION CONTROL

Livzon has strictly complied with requirements for environment protection of construction projects to ensure that all pollutants are treated in compliance and discharged up to standards, and prevents pollutants from polluting the atmosphere, water and soil. For new construction, renovation and expansion projects, Livzon implements the "three-simultaneous" system (environmental protection facilities shall be designed, constructed and put into operation simultaneously with the main body of the project) pursuant to the Environmental Impact Assessment Law of the PRC and the Administrative Rules of Environmental Protection for Construction Projects, to achieve effective control over the emission of pollutants. In accordance with the Self-monitoring Technical Guideline for Pollutant Discharging Units, the Company requires its manufacturers to carry out self-monitoring of pollutants on a regular basis to achieve effective monitoring of pollution sources and regularly disclose environmental monitoring information and be subject to review by regulatory authorities and public supervision.

Exhaust gas treatment

The Group has formulated the Procedures for Air Emission Management according to the Prevention and Control of Atmospheric Pollution Law of the PRC to continuously carry out work to reduce total emission of pollutants. Through measures such as upgrade of flue gas ultra-low emission for coal fired boilers, renovation of natural gas boilers, substitution of biomass boilers with natural gas boilers, purchase of steam to reduce boiler usage, comprehensive treatment for VOCs (volatile organic compounds) and centralized treatment of diffuse exhaust gases, we reduced the emission of air pollutants including sulfur dioxide, nitrogen oxides, smoke and dust.

lssue	Target	Review on progress	Enhancement plan
Exhaust gas	Emission of sulfur dioxide per RMB10,000 of operating income in 2020 decreases by 5% over 2019	Completed	 To renovate facilities used for exhaust gas management to achieve emission reduction by multiple channels To maintain and ensure the reliable operation of the existing boilers and desulphurization devices to reduce emission of flue gas sulphur dioxide, and upgrade to gas boilers as appropriate To use purchased steam as much as possible

Company	Project name	Accumulated input (RMB ['] 0,000)	Project profile	Effect of the project
Livzon Hecheng	VOCs treatment project	257	Adding condensation pre-treatment, and replacing the cover of wastewater tanks	Improving the efficiency of collection and treatment of exhaust gas VOCs
	Leak Detection and Repair	12	Regular leak detection and repair of pumps, valves, flanges, mixers and other components	Reducing emission from VOCs leakage by approximately 0.55 tonne/year
	Online monitoring equipment for exhaust gas VOCs	20	Adding online monitoring to the outfalls	Ensuring stable emissions to meet standards
Fuzhou Fuxing	Three exhaust gas treatment systems	145	Reconstruction of three exhaust gas treatment systems for fermentation, tank receiving station and environmental protection	Improving the atmospheric environment of the plant

Table 9: Livzon's Partial Key Exhaust Gas Treatment Projects in 2020

7.5 POLLUTANTS EMISSION CONTROL (Continued)

Exhaust gas treatment (Continued)

Company	Project name	Accumulated input (RMB ['] 0,000)	Project profile	Effect of the project
Gutian Fuxing	VOCs treatment facilities	130	Collection and treatment of diffuse emission of VOCs	Reducing the emission of VOCs
Ningxia Pharmaceutical	Upgrade, transformation and replacement of exhaust gas treatment facilities in 103-1 and 102 fermentation plants	560	103-1 fermentation plant has added a set of treatment facility featuring "sodium hypochlorite spray absorption + water spray absorption + two-phase super oxygen water + micro-nano bubble" in addition to the original treatment process; 102 fermentation plant has dismantled all the original equipment, and installed a new set of treatment facility featuring "sodium hypochlorite spray absorption + water spray absorption + two-phase super oxygen water + micro-nano bubble"	Further improving the treatment effect of fermented exhaust gas and thus significantly improving the peculiar smell around the plant
	Upgrade and transformation of exhaust gas treatment facilities in 101 fermentation plant	40	Adding two new spray towers for exhaust gas treatment to expand capacity of exhaust gas treatment	
	Centralized collection and treatment of exhaust gas from the sewage pool in the 201-2 workshop	6	Installation of pipelines and suction ventilators for exhaust gas collection in the sewage pool, centralized collection of exhaust gas produced in the sewage workshop for treatment in the designated facilities	Collection and treatment of diffuse exhaust gas, thus improving the surrounding environment
	A backup exhaust gas collection fan has been installed in the pre-aeration tank of the sewage workshop	6	A new backup exhaust gas collection fan has been installed in the pre-aeration tank of the sewage workshop as there was an exhaust gas collection fan but no back-up fan	Ensuring the pollution treatment facilities are equipped with back-up devices
	Centralized collection and treatment of exhaust gas from material storage tanks in the 203-1 workshop	3	A new exhaust gas collection duct to lead the exhaust gas from the material storage tank to the existing exhaust gas treatment facility for centralized treatment	Collection and treatment of diffuse exhaust gas, thus improving the surrounding environment
	Replacing the gas inlet pipes used for leading the exhaust gas to the boiler for incineration in the 202 workshop	60	Because the buried pipeline is rusty and inconvenient for inspection and operation, an overhead laying 240-meter DN600 fiberglass pipeline has been installed to replace the original buried pipeline	Eliminating the hidden hazards of equipment, improving convenient operation for the staff



7.5 POLLUTANTS EMISSION CONTROL (Continued)

Exhaust gas treatment (Continued)

		Accumulated input		
Company	Project name	(RMB'0,000)	Project profile	Effect of the project
Xinbeijiang Pharmaceutical	New ozone generators are installed for treatment of fermented exhaust gas	20	New ozone generators are installed in two fermentation workshops for advanced treatment of fermented exhaust gas	Effectively reducing the emission of peculiar smell of fermented exhaust gas
	SBR pool cover installation project	160	Adding cover for managing exhaust gas from SBR pool and centralized treatment of exhaust gas	Effectively reducing the impact of peculiar smell of sewage plant on the surrounding communities Implementing VOCs leak detection as required by relevant regulations
	VOCs leak detection and repair (LDAR)	2.38	VOCs leak detection and repair for each equipment in the organic solvent workshop	Implementing VOCs leak detection as required by relevant regulations
	Replacement of exhaust gas spray tower of the first refinery division and the third refinery division	93	Replacement of exhaust gas spray tower of the first refinery division and the third refinery division	Enhancing treatment capability of exhaust gas and reducing the impact of exhaust gas generated from production on the environment
	Replacement of exhaust gas treatment facility of the second plant under the first refinery division	30	Replacement of exhaust gas treatment facility of the second plant under the first refinery division	Improving the efficiency of exhaust gas treatment to ensure the emission of exhaust gas meets the standards

Table 10: Livzon's Air Pollutants Emission in 2020⁵

Indicator	Unit	API segment	Drug preparation segment	Total
NO _x	tonne	74.28	11.93	86.21
SO ₂	tonne	47.08	0.72	47.79

The disclosure scope of air pollutants emission covers the total emission of industrial process of Livzon's manufacturing enterprises.

7.5 POLLUTANTS EMISSION CONTROL (Continued)

Wastewater management

The Group has complied with the Water Pollution Prevention and Control Law of the PRC and formulated the Procedures for Wastewater Management to continuously improve the proportion of reuse of wastewater, and reduce new water consumption. In addition, our key sewage discharge subsidiaries have installed on-line monitoring instruments at the discharge outlets, connecting the on-line systems with local environment authorities to realize real-time monitoring on the pollutant indicators such as COD (Chemical Oxygen Demand), ammonia nitrogen, pH, flow and others, so as to ensure the discharge up to the standard.

lssue	Target	Review on progress	Enhancement plan
Wastewater	Emission of COD per RMB10,000 of operating income in 2020 decreases by 3% over 2019	Completed	1. To eliminate leakage in the production process, reduce organic matter emissions of raw and auxiliary materials, semi-finished products, finished products, etc., and increase the proportion of reuse of wastewater
			2. To ensure the normal and steady operation of wastewater treatment facilities
			3. To improve COD treatment rate through upgrade and renovation of sewage plants

7.5 POLLUTANTS EMISSION CONTROL (Continued)

Wastewater management (Continued)

Table 11: Livzon's Partial Key Wastewater Treatment Projects in 2020

Company name	Project name	Accumulated input (RMB'0,000)	Project profile	Effect of the project
Fuzhou Fuxing	Construction of rainwater and sewage pipe network	140	Replacing worn rainwater and sewage pipe network	Separating the drainage of rainwater and sewage to reduce the environmental risks
Livzon Hecheng	Wastewater treatment	749.1 Wastewater treatment and inspection on operation of RTO-related equipment		Ensuring the compliant discharge of wastewater
	Replacing the cover plates of wastewater	18	Replacing the worn cover plates of the integrated balancing tanks	Reducing the leakage of peculiar smell
	Technical renovation of ozone system for wastewater	1	Technical renovation of ozone advanced treatment system to address the peculiar smell of ozone and limit of processing volume	Notably reducing the chromaticity of wastewater and reducing the COD emission
	Installation of horizontal spiral desilter	17	Improving the efficiency of sludge dehydration and enhancing the stability of the wastewater treatment system	Ensuring that the residual sludge is dehydrated and transported in time
Xinbeijiang Pharmaceutical	Renovation of pretreatment for high-concentration wastewater	110	Renovation of pretreatment for high- concentration wastewater to enhance the wastewater treatment capability	Increasing the wastewater treatment capability by approximately 200 tonnes/day
Shanghai Livzon	Inspection of rainwater pipe	8.96	Avoiding the mixed drainage of rainwater and sewage due to pipe damage	Ensuring the separation between rainwater and sewage
Pharmaceutical Factory	Rectification of laboratory in the sewage plant	20	Renovating the laboratory in the sewage plant, and replacing the equipment such as the worn ventilating kitchen and the ground	Ensuring a promising working environment for personnel of the sewage plant



7.5 POLLUTANTS EMISSION CONTROL (Continued)

Wastewater management (Continued)

Indicator	Unit	API segment	Drug preparation segment	Total
Industrial wastewater	tonne	3,631,648.38	653,866.59	4,285,514.97
Chemical Oxygen Demand (COD _{cr})	tonne	307.22	31.29	338.51
Ammonia nitrogen	tonne	12.27	0.77	13.04

Table 12: Livzon's Discharge of Wastewater Pollutants in 2020⁶

Waste management

In strict compliance with requirements under relevant laws and regulations, including the Law on the Prevention and Control of Environmental Pollution by Solid Waste of the PRC, the Technical Specifications of Collection, Storage and Transport for Hazardous Waste and the Administrative Measures on Hazardous Waste Transfer Receipt, the Group has developed the Procedures for Solid Waste Management to manage the solid waste in a proper way, reduce and prevent the pollution on the surrounding environment, improve integrated use and achieve reduction, recycling and harmlessness of solid waste.

Issue	Target	Review on progress	Enhancement plan
Hazardous waste	Amount of treatment of hazardous waste per RMB10,000 of operating income in 2020 decreases by 3% over 2019	Amount of treatment of hazardous waste per RMB10,000 of operating income in 2020 increased by 2.78% over 2019	 To reduce the generation of hazardous waste by clean production, process improvement and product restructuring etc. Enterprises engaged in drug preparation production shall limit the generation of waste drugs and expired waste organic matters

Table 13: Livzon's Partial Key Waste Management Projects in 2020

Company name Project name		Accumulated input (RMB'0,000)	Project profile	Effect of the project	
•	Floor improvement of hazardous waste warehouse	1.2	Improving the leakage prevention and cofferdam conditions of the floor of hazardous waste warehouse	Ensuring compliance with national laws and regulations	
	Improvement of diffuse gas emission of hazardous waste warehouse	6.5	Inletting the diffuse gas emission from the hazardous waste warehouse to the exhaust gas outlet in an orderly manner for centralized monitoring and management	Ensuring compliance with national laws and regulations	

The disclosure scope of discharge of wastewater pollutants covers the total discharge of industrial process of Livzon's manufacturing enterprises.

7.5 POLLUTANTS EMISSION CONTROL (Continued)

Waste management (Continued)

Indicator	Unit	API segment	Drug preparation segment	Total
Medical waste (HW02) and waste medicine (HW03)	tonne	1,743.97	82.91	1,826.87
Other hazardous waste	tonne	1,095.03	58.49	1,153.52
Total hazardous waste	tonne	2,839.00	141.40	2,980.40
Intensity of hazardous waste produced#	kg/RMB10,000 of output value	8.95	0.17	2.57
Total general industrial waste	tonne	42,085.66	13,904.54	55,990.20
Intensity of general industrial waste produced [#]	kg/RMB10,000 of output value	132.64	16.53	48.32

Table 14: Livzon's Generation of Solid Waste in 20207

Reducing impact on the environment

Livzon strictly manages and controls the air and water pollutants produced in its main business activities to ensure that all discharged pollutants meet the standards and reduce the impact on the environment and natural resources. In 2020, in response to heavy pollution weather warnings (yellow, orange, red), the Company's subsidiaries initiated corresponding reduction in and restriction on production. In this way, the running time of the boilers decreased, therefore reducing the discharge of pollutants and the impact of production activities on the environment.

Extreme weather	Response policy	Measure	Achievement
Heavy pollution weather	Reduction in and restriction on production in workshops	In yellow warning, the running time of boilers shall be cut by 30% In orange warning, the running time of boilers shall be cut by 50% In red warning, the running time of boilers shall be cut by 70%	Reducing the emission of pollutants such as VOCs, nitrogen oxides, particulate matter, and sulfur dioxide

7.6 MANAGEMENT AND CONTROL OF ENVIRONMENTAL RISK

In order to further strengthen the management and control of environmental risk, the Company has formulated the Identification and Assessment Requirements of Environmental Factors, the Administrative Measures for EHS Accidents and the Guidelines for Management of EHS Changes. By identifying and regularly reviewing the risk level of environmental factors, we strengthen the daily monitoring on environmental pollution, increase investment in environmental protection to upgrade facilities and equipment used for environmental protection, strengthen emergency response capabilities for environmental incidents, and continuously improve environmental performance. The Group's relevant manufacturing subsidiaries carry out self-monitoring of pollutants on a regular basis based on their actual conditions to achieve effective monitoring of pollution sources; we also regularly disclose environmental monitoring information and are subject to the supervision of administrative authorities such as the government and of the public.

- The disclosure scope of generation of solid waste covers the total generation of industrial process of Livzon's manufacturing enterprises.
- The data of intensity is calculated based on the output value of the API segment, the output value of the preparation segment and the total output value of the Group.

7.6 MANAGEMENT AND CONTROL OF ENVIRONMENTAL RISK (Continued)

• Identification of major environmental factors: by analyzing the environmental factors in production and operation activities, products and services, evaluating the risk levels through qualitative and quantitative methods, the Company formed a list of major environmental factors, and developed sound management plan and control measures to prevent environmental risk incidents.



Environmental Factors Identification Flow Chart

In 2020, the Company's subsidiaries added the Soil Pollution Potential Hazards Inspection System in accordance with the requirements in relation to the prevention and control of soil and groundwater pollution under the Soil Pollution Prevention and Control Law of the PRC, and organized regular monitoring to identify the potential risks of leaks, dispersion and seepage, made timely rectification to eliminate soil pollution hazards, and prevented environmental pollution incidents.

- Strengthening environment pollution monitoring: According to the requirements of the Self-monitoring Technical Guidelines for Pollutant Discharging Units on Chemical Synthesis Pharmaceutical Industry, our relevant manufacturing subsidiaries carry out self-monitoring of pollutants based on their actual conditions to achieve effective monitoring of pollutants sources. Meanwhile, we regularly disclose environmental monitoring information and are subject to the supervision of administrative authorities such as the government and of the public.
 - **Continuous increase of investment in environmental protection:** In order to further improve capability and quality of environmental protection, on the basis of ensuring the normal and effective operation of the environmental protection facilities, our manufacturing subsidiaries continuously increase investment in upgrading and innovating environmental protection facilities and equipment used for wastewater discharge, air pollutant emission and solid waste storage. In 2020, the Group's total investment in the renovation of the environmental protection equipment was approximately RMB30.28 million.

Strengthening emergency response capabilities: Each manufacturing subsidiary of the Company has set up an emergency response leading team and working team, formulated the Contingency Plan for Environmental Emergency based on its actual environmental risks, and regularly conducts professional training and emergency response drills in order to ensure that the emergency measures can be quickly initiated and executed in the event of environmental incidents and to improve the emergency response capabilities for crisis events.



8.1 DIVERSIFIED EMPLOYMENT

High-quality talent teams are the cornerstone of the Company's competitiveness. Adhering to the principle of "people are the Company's most valuable resources and high-quality talents are the Company's material assets", we actively encourage a diverse and inclusive workplace atmosphere. We also formulate a long-term incentive scheme to attract and retain outstanding talents and keep ensuring the lawful rights and interests as well as health and safety of the staff, striving for a common growth together with our employees.

In 2020, the Company developed experts in various field through internal training and external introduction. The Company implemented rotation of key positions to strengthen the flow of talents and insisted on the selection criteria of morality and ability, the employing principle of cultivating talents in accordance with the survival of the fittest, the cultivation principle of developing employees with specialization and multiple capabilities, the retention mechanism of eliminating those with poor performance and actively promoting business partners. The Company put more efforts in developing and cultivating youth talents, especially R&D and technical talents, to facilitate their growth with the Company.

During the Reporting Period, we carried out talent review and organizational optimization, formulated talent introduction standards and timely grasped the talent reserve, so as to accumulate strength for subsequent development. The Company has improved its talent introduction channels and recruitment processes, formulated competitive remuneration incentive policies, with a focus on the introduction of outstanding high-end talents, and provided talent support for the Group's R&D, medical, clinical and sales teams and rapid development of the business.

In addition, the Company has been organizing medical, clinical and Business Development (BD) teams since 2020 to sort out and integrate resources and rebuild structure, so as to further improve our R&D strength and efficiency.

Livzon continuously optimizes its staff structure, with a focus on absorbing young and outstanding domestic and foreign employees, and conforms to the development of the Group's reform and innovation. As at the end of the Reporting Period, the Company and its wholly-owned subsidiaries and controlling subsidiaries had a total of 8,367 existing employees (31 December 2019: 9,019). In 2020, the employee turnover rate of the Group was 14.80% (2019: 16.81%), with an average monthly turnover rate of 1.23%, showing a steady downward trend, and the number of employees tended to stabilize.





8.1 DIVERSIFIED EMPLOYMENT (Continued)





Total Number of Employees and Turnover

8.1 DIVERSIFIED EMPLOYMENT (Continued)

8.1.1. Compliant employment

In order to ensure compliance with laws and regulations in respect of employment process and avoid child labour or forced labour, Livzon has complied with the relevant regulations and applicable provisions in its human resources system and required job applicants to present their original identification documents for verification, so as to ensure that they have met the minimum working age requirements for employment.

The human resources management systems of the Company fully safeguard employees' legal rights and interests, prohibit child labour or any form of forced labour, prohibit forced labour by means of violence, threat or illegal restriction on personal freedom, or endangering the personal safety of employees by instructing and ordering them to carry out dangerous operation in breach of regulations.

The Group truthfully informs the job applicants of the job duties, condition, location, occupational hazards, details of production safety, remuneration and other information at request during recruitment.

During the Reporting Period, there was no child labour or force labour within Livzon.

8.1.2 Diversity and inclusiveness

Livzon insists on implementing the talent strategy and focuses on recruitment of innovative talents globally, has diverse teams with members from different regions and nationalities, and emphasizes on the diversity and inclusion of our staff force.

Livzon fully respects the diversity of employees. To promote a diverse and inclusive workplace atmosphere, we treat each employee equally regardless of the employee's ethnicity, race, nationality, gender, religion, age, sexual orientation, political affiliation, marital status and other social identities, which shall not affect their employment, treatment, promotion channel, etc.

The Company considers that the diversity of Board is one of the key factors to maintain our competitive strength and promote our sustainable development. Since 2014, the Company has issued the Board Diversity Policy and has taken into consideration gender, age, cultural and education background, professional experiences, skills and knowledge in considering the composition of the Board. On top of the above basis, the Company shall make decisions in accordance with objective conditions such as comprehensive values that the candidates can bring to the business and development of the Company, contributions that the candidates can make to the Board whilst ensuring the diversity of the Board, thus actively promoting a diversified Board with members of different backgrounds.

As at the end of the Reporting Period, the percentage of Livzon's female employees continued to increase. Female employees accounted for 47.5% (31 December 2019: 46.8%) of total number of our employees and the gender ratio showed a positive and balanced trend.

8.1 DIVERSIFIED EMPLOYMENT (Continued)





In response to the national policy guidance, the Group complies with the national regulations on vacation management for female employees, fully cares for female employees to ensure various benefits for them. The employment system of the Company specifies that female employees enjoy paid marriage leave, maternity leave, breastfeeding leave, pregnancy check-up leave, and birth control leave, and provides paternity leave for male employees. The Company has set up mother-and-baby rooms to support female employees who give birth to return to work.

8.2 RESPECT FOR TALENTS

Livzon has been constantly improving its core competitiveness in R&D innovation and academic promotion and considers the excellent talent teams as "business partners" of the Company, has been continuously improving resources for training and scientific research cooperation, and formulated long-term incentive programs in order to become a domestic leading and international first-class international pharmaceutical company.

8.2.1 Construction of talent teams

In line with the Company's talent strategy for 2020, the human administration head office of the Company has continuously expanded talent introduction channels and improved the recruitment process to introduce experts in various fields and provide talent support for the rapid development of the business.

During the Reporting Period, Livzon carried out talent planning around R&D, medical and clinical business modules to improve the construction of talent teams. The Company first sorted out the R&D pipeline, set up a computational chemistry platform, improved the early-stage biopharmaceutical R&D platform and complex preparation platform, combed and integrated the medical and clinical teams, and carried out corresponding talent recruitment according to business needs, which improved systematically the Group's innovative R&D, medical and clinical capabilities. In addition, through the optimization of the talent structure, the Company adjusted the existing teams to complete the introduction of urgently needed talents for the Group's business, recruited international talents and established offices in the United States, the United Kingdom, Spain, the Philippines and other countries, and expanded the R&D, production and sales teams of pet preparations to match the new business layout.

Meanwhile, we have established contacts and cooperation with domestic first-class universities, including Shanghai Jiao Tong University, China Medical University, Wuhan University, and Chinese Academy of Sciences. Besides, we deepened our cooperation with Sun Yat-sen University, Jinan University, Sichuan University, Southern Medical University and other universities to establish social practice bases, received intern students from partner universities and colleges and conducted campus recruitment, so as to provide strategic guarantee for Livzon's future talent needs.

8.2 RESPECT FOR TALENTS (Continued)

8.2.2 Appraisals and incentives

Since the end of 2014, the Company has successively launched the 2015 Restricted A Shares Incentive Scheme and the 2018 Share Options Incentive Scheme to constantly improve the long-term incentive mechanism for employees. In 2020, the Company completed the option exercise work for the second exercise period under the first grant and the first exercise period under the reserved grant of the 2018 Share Option Incentive Scheme. In addition, in order to achieve leapfrog development and improve the benefit sharing mechanism between the employees and the shareholders of the Company, the Company launched the Medium to Long-term Business Partner Share Ownership Scheme (Draft) and its revised draft as well as the First Phase Ownership Scheme thereunder, which were approved at the general meetings in February 2020, December 2020 and May 2021, respectively. The core management team will increase their shareholding in the Company through this ownership scheme and lock these shares in the medium and long term, which is conducive to realizing long-term incentives and constraints for the core management team of the Company and establishing the business partnership mechanism of "enjoying the benefits and assuming the risk together". It is expected to effectively advance and promote the change from "managers" to "partners" and promote the long-term stable development of the Company and enhance the overall value of the Company.

The ownership scheme will be implemented in multiple phases. Within the ten years from 2020 to 2029, the multiple independently existing phases of the ownership scheme shall be implemented on a reasonable basis and, in principle, once a year, after determining whether the special fund for the previous year shall be extracted or not, be determined by the Board to decide whether to implement or not. The special fund shall be extracted with net profit attributable to the shareholders of the Company after deducting the extraordinary gains or loss in 2018 as the base. During the period of assessment, the Company will use the compound growth rate of net profit achieved in each year as the assessment indicator to calculate and set aside a progressive special fund for each period. The ratios are set out in details as below:

Compound growth rate of net profit achieved in each year of assessment (X)	Percentage of progressive special funds with a compound growth rate of over 15%
X≤15%	0
15% <x≤20%< th=""><th>25%</th></x≤20%<>	25%
20% < X	35%



8.2 RESPECT FOR TALENTS (Continued)

8.2.2 Appraisals and incentives (Continued)

During the Reporting Period, the Company formulated a result-oriented assessment plan for R&D personnel, and encouraged R&D personnel to speed up the progress of R&D through the remuneration incentive system, who would also obtain rapid improvement and salary raise in this process. In addition, the Company encouraged R&D personnel to actively participate in industry related academic seminars, carried out various trainings to continuously improve the professional skills and abilities of R&D personnel, and provided help to achieve good work results, which could also satisfy researchers' pursuit of self-worth.

In 2020, the Company implemented a result-oriented special assessment and incentive plan for the research institute, Livzon Microsphere, Livzon MAB and the consistency evaluation project team. The plan covered the main participants and main supporters of the projects, and was allocated according to the contribution of employees to the projects rather than based on the levels of the employees' positions. Taking the current research project as the entry point, the plan set up major achievement nodes (such as obtaining clinical approval, completing the first phase of the clinical trial, submitting application materials, and obtaining production approval, etc.). According to its importance to the Company, a project is divided into three levels i.e. A, B, and C. With reference to factors such as the future international and domestic market capacity, competition and revenue of the products under research, different levels of bonus bases are set; meanwhile, the actual bonus to be distributed will be increased by 10% every time a project is completed one month in advance at the time of current assessment, thus encouraging the members of the task force to actively accelerate the progress of R&D.

In addition, as a supplement to the result-oriented assessment plan, the Company formulated the Quarterly Assessment and Incentive Plan for R&D Units (Trial) during the Reporting Period. The plan sets a bonus base based on the level of employees and their contributions to R&D work, assesses the contribution to the current quarter, and calculates bonus coefficient in accordance with the assessment score, which greatly enhances the enthusiasm of R&D personnel. The plan strengthened the process management of project operation, promoted the achievement of project results, and mobilized the enthusiasm of R&D personnel to promote the common development of the Company and R&D personnel.

During the Reporting Period, each scientific research unit has applied for the corresponding reward based on the actual progress of the projects. 6 project teams have achieved phased results and therefore, applied for and received the project bonuses, covering all participants in the projects, and the R&D teams were stable.



8.2 RESPECT FOR TALENTS (Continued)

8.2.3 Remuneration and promotion

Livzon has established a remuneration structure consisting of fixed income and floating income with reference to the market salary level in accordance with relevant laws and regulations, formulated competitive remuneration incentive policy to enrich the benefits of employees, and has established and improved the Remuneration Management System, Administrative Measures for Remuneration Adjustment, Provisions on the Base Salary of Undergraduates, Administrative Measures for the Performance of Functional Headquarters and a series of supporting remuneration and welfare system including transportation subsidy, rental subsidy, communication subsidy, etc. The opinions of the Company's employees are considered in formulating and amending the employee remuneration system.

The remuneration level of the Company is oriented by performance and job value contribution and determined with reference to the value of job position and the performance and skill level of employees, which guarantees the maximization of employees' personal value. The Company appropriately adjusts the salary and welfare income level of employees according to the market rate and performance results every year, which not only reflects the external competitiveness, but also the internal fairness. Additionally, we fully mobilize the enthusiasm and initiative of employees through the establishment of short-term/long-term share incentive schemes to facilitate common development and benefit sharing between the Company and our employees.

In 2020, the total wages, bonuses, allowances, compensation, welfare, housing funds and social insurance premiums paid to the employees by the Group amounted to RMB1,051.79 million with an average of RMB0.126 million per person.

In order to meet the management needs of the Group's strategic development, the Company has formulated dual development channels for administrative personnel and technical personnel to support employees to grow in different career development paths. According to the Administrative Measures on Ranks of the Company, professional and technical employees may obtain rank adjustments via changes in the two major positions of administration and technology. At present, the channel for employee promotion mechanism is operating well, and our employees were promoted or transferred successfully through administrative or technical channel.

The human administration head office of the Company regularly manages the construction and reserve of talent teams, and organizes and publicizes internal job opportunities timely to encourage employees to achieve internal promotion through open competition. The Company values the talents of each employee, fully recognizes the value that each employee creates for the Company in different positions, provides a platform for employees to play freely, and creates fair and reasonable channels for promotion and transfer for employees.



8.2 RESPECT FOR TALENTS (Continued)

8.2.4 Training and development

Adequate training resources are a necessary guarantee to realize the development of employees. Livzon continuously improves the training system and supporting resources in accordance with the Training Management System, standardizes the training management, and achieves systemized and institutionalized employee training, so as to ensure the effective implementation of talent strategy of the Group.

The Company takes "Livzon Business School" as the core platform to develop a diverse and comprehensive employee training system and carries out online and offline trainings in various forms. The training system is divided into four modules, including basic skills, job skills, management skills and continuing education. By fully integrating internal and external



resources, the training system improved the motivation and initiative of employees and enhanced sense of belonging of employees, which facilitated the full and comprehensive development of our human resources and equipped our talent reserves with stronger competitiveness.

During the Reporting Period, according to the Company's strategic needs and talent classification, the Company adopted a diversified online and offline learning approach for training, had 8 business school branches established in its subsidiaries, encouraged employees to pursue post-graduate (Ph.D.) degrees and encouraged professional and technical personnel to continue education, cooperated with relevant universities to organize seminars, and organized various forms of trainings including intelligent office software application trainings for middle-level employees, trainings for new recruits, induction trainings for fresh graduates in 2020 and team buildings; the Company introduced external training platforms for potential management cadres to provide them with online courses so as to improve their management capabilities.

Meanwhile, in 2020, combined with the development strategy, Livzon continued to strengthen capacity improvement projects on product quality management and safety and environmental protection management, and developed internal and external training resources to provide targeted training courses for personnel involved in quality and safety and environmental business with over 5,000 participants, assisting the Group to improve its overall performance in quality control and safety and environmental protection management.

8.2 RESPECT FOR TALENTS (Continued)

8.2.4 Training and development (Continued)

As a result of the impact of the pandemic, we mainly focused on online training in 2020. Online learning primarily centered on the "fit-for-job training" policy issued by the Human Resources and Social Security Department of Guangdong Province. 9 subsidiaries responded positively and the number of trainees reached more than 2,000. The course content covers four major sections, i.e. leadership, professionalism, business strategy, and industry courses, with a wide range of applicable personnel and novel training methods. In order to ensure the effect of online learning, the learning platform was managed by specialized managers, and the learning data was exported from time to time and sent to each unit and department so that the training specialist of each unit and department could track the learning progress. Training feedback and effect tracking were mainly carried out by collecting data from online questionnaires and inviting trainees to interview offline. Training feedback was satisfying, and the annual training completion rate reached 98%.

In 2020, our academic competition was upgraded from the previous "Livzon Cup" academic speech competition to "Livzon Cup" academic debate competition. Starting from mid-2020, national selection was conducted, and 8 regional competitions and a national semi-final were held.

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Enhancement of leadership

Livzon is fully aware of the importance of management optimization for improving organizational effectiveness. We raise the level of corporate management by cultivating employee leadership to achieve high-quality development in the fierce market competition. There is a management skill training series in the regular training system, and the training scope covers basic-level cadres, middle-level cadres and senior leaders. In addition, the Company has formulated a series of management skills and leadership improvement projects, such as Livzon Business School management trainees, "Livzon Youth Class" training program, training programs for middle and senior management in sales teams, etc.

Case: Livzon Business School Management Trainees

The training term of Livzon Business School Management Trainee Program is two years, and the participants are mainly managers or key personnel. Based on the requirements of the Company's talent training plan, Livzon Business School specified a total of 30 hours of compulsory courses and 8 types of courses. Online learning started in October 2019. The learning lasted for 9 months, and all courses were ended on 30 June 2020. The learning completion rate is 96%.

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8.2 RESPECT FOR TALENTS (Continued)

8.2.4 Training and development (Continued)

Enhancement of leadership (Continued)

Case: "Livzon Youth Class" Training Program

In order to cultivate potential young talents, the Company selected 44 young high-potential employees from various units for intensive training, aiming to cultivate a group of outstanding cadres and talents in line with the Company's development. The training cycle was once a month starting from September 2020, with two days of off-duty training each time. The courses were carried out in a combination of sharing and teaching by the Company's internal senior executives and the introduction of excellent external lecturers, which has comprehensively improved the learning efficiency and effectiveness and learning enthusiasm. The training content is novel and covers a wide range of aspects, including financial management, production quality, safety and environmental management, scientific research, leadership, etc.



Case: Training Programs for Middle and Senior Management in Sales Teams

In 2020, in order to empower outstanding sales managers and provide them with better non-material incentives, we cooperated with China's top university business schools/management schools to carry out middle and senior management training programs. We have developed or negotiated cooperation with Sun Yat-sen University and Harbin Institute of Technology. During the Reporting Period, we have successfully opened a half-year management elite meeting of Sun Yat-sen University study class, and completed the third-quarter meeting of Sun Yat-sen University professors' professional course training, and obtained sound training feedback. We were ready to routinely incorporate this training into the system. It was expected that a plan for three-year training at elite schools would be formulated in the future.

8.2 RESPECT FOR TALENTS (Continued)

8.2.4 Training and development (Continued)

Educational qualifications and skills improvement

Taking into account of employees' professional background, qualifications and career development paths and matching with corresponding skills improvement projects and support, Livzon supports and encourages employees to pursue further learning on management or job related skills or obtain certification during their employment. Livzon provides its qualified in-service employees with further learning opportunities for postgraduate studies in management for master or doctoral degrees through systematic projects.

Rules of the Training of Doctoral Candidate

(or Master Degree Candidate in Management) for In-service Employees

In order to promote the learning and education of employees, improve the creative vitality and competitiveness of the talent teams and improve the overall quality of the workforce, Livzon has issued this regulation since 2015 to provide employees with sponsored postgraduate education opportunities, primarily in medical universities and institutions, including Peking University, Sun Yat-sen University, Shenyang Pharmaceutical University, etc. Employees may participate in the training under the prescribed conditions. The tuition fees of employees who graduate on schedule and obtain degrees on schedule under the relevant regulations of the schools will be borne by their employers; and they may enjoy standard salary, year-end bonus and corresponding project award during their study.

In addition, the Company encourages employees to use their spare time to obtain professional qualifications and upgrade their skills. The human administration head office of the Company may assist employees in obtaining relevant specific qualifications or national title's recognition and upgrades, including assisting employees in reporting, submitting materials, etc., and in applying for Zhuhai City and Jinwan District Technical Skill Title Subsidy. All units of the Company may also set up annual training budgets to support employees in obtaining professional certificates related to their positions, such as certified public accountants (CPA).

8.3 HEALTH AND SAFETY

The health and safety of employees are the foundation of Livzon's sustainable development. Livzon strictly abides by and implements various occupational health and safety laws and regulations including the Production Safety Law of the PRC, the Law of the PRC on the Prevention and Control of Occupational Diseases and the Fire Prevention Law of the PRC. Taking "zero accidents and zero injuries" as the EHS goal of the Group and the "life foremost, safety first, compliance with laws and regulations, and protection of the environment" as EHS values, we continuously improve systematic EHS risk management and control in compliance with the various provisions of the occupational health and safety management system, continuously improve safety management mechanisms, strengthen emergency response capabilities for safety risk, and create a safety culture atmosphere so as to ensure the health and safety of employees.

The Company has formulated management systems such as the General Requirements of EHS Management System, EHS Culture of Livzon Group, Regulations on Safe Production Penalties (including Ten Prohibitions for Safe Production, Plan on Resumption of Work and Production and Pandemic Prevention and Control of Livzon Group, and Contingency Command Plans for Typhoon Prevention. The Company reviews the safety production status of each unit of the Group on a regular basis, promptly rectifies problems when found, and strictly trains employees to implement various safety systems to ensure production safety.

8.3 HEALTH AND SAFETY (Continued)



8.3 HEALTH AND SAFETY (Continued)



8.3 HEALTH AND SAFETY (Continued)

The EHS department under the production technology head office of the Company is equipped with dedicated occupational health and safety management personnel, and responsible for supervision and management of occupational health and safety. Each of our relevant subsidiaries has the occupational health and safety management department in place, which is equipped with dedicated occupational health and safety management personnel as required, who are responsible for the management of safe production and occupational health. As at 31 December 2020, 11 enterprises of the Group had passed ISO45001 certification of Occupational Health and Safety Management System, and 6 enterprises had passed safety production standardization.

In 2020, the annual safety and environmental protection goals and plans of all manufacturing enterprises of the Group have been effectively implemented.

8.3.1 Safe production

Livzon complies with the relevant requirements of the Production Safety Law of the PRC and the Fire Prevention Law of the PRC, adheres to the safe production policy of "safety comes first, prevention as primary concern, integrated governance, total involvement, risk control and continuous improvement", and formulates the regulations and systems on safe production, such as the General Requirements of EHS Management System, Administrative Measures for EHS Accidents, Regular EHS Meeting and Flight Check Management System, Administrative Measures for EHS Information and Communication and Administrative Procedures for Internal EHS Audit, which cover the management structure of safety and rules of procedure, emergency plans, assessment method, measures of accountability, etc.

In 2020, Livzon formulated the Business Performance Evaluation Standards for Secondary Enterprises of Livzon Group for 2020, the Contingency Plans for Production Safety Accidents, Contingency Command Plans for Typhoon Prevention and EHS Culture of Livzon Group and other new systems. Each of our relevant subsidiaries has made amendments to the Dangerous Source Identification Evaluation and Risk Control Planning Procedures, the Occupational Health and Safety Protection Control Procedures and the EHS Assessment Management Regulations and other systems, respectively, to further strengthen safety management goals at all levels and implement safe production management requirements.

In accordance with the Ten Prohibitions for Safe Production, the Company requires each manufacturing unit to implement a safety responsibility system, strictly manage and control all production and operation links, and actively introduce advanced technology and equipment. During the Reporting Period, Livzon Hecheng, Fuzhou Fuxing, Ningxia Pharmaceutical, Xinbeijiang Pharmaceutical and other companies invested a total of more than RMB18 million to automate the production equipment and facilities such as Class A tank farms and Class A production equipment, increased DCS (Distributed Control System), safety interlocking and other automation devices to comprehensively upgrade the fire prevention system, and hired qualified companies to conduct process safety analysis on new products to ensure safe production.

8.3 HEALTH AND SAFETY (Continued)

8.3.1 Safe production (Continued)

- **Management and control of safety risk:** In accordance with the Hazard Sources Identification and Risks and Opportunities Evaluation Requirements, we identify and analyze hazard sources in production and operation activities, products and services, evaluate the level of risks, and formulate safety management and control measures based on the risk levels.
- **Safety emergency management:** According to the Administrative Measures for Contingency Plans for Emergency, based on actual conditions, we prepare plans covering comprehensive emergency, special emergency and on-site disposal, and provide training for relevant personnel and conduct regular emergency drills, so as to ensure that the contingency plan is target-oriented and effective.
- **Hazard inspection and treatment:** We conduct regular hazard inspections in respect of the factories' production procedure, production sites, warehouses for product storage, construction sites, etc. Once any hazard is found, rectification shall be implemented within the time specified, and the progress of rectification shall be reviewed and assessed on a regular basis.
- Safety training and education: Livzon attaches importance to publicity and trainings on employees' health and safety. We develop practical safety training materials based on the actual work content of each position, conduct targeted safety education, and implement compulsory pre-work training for personnel who are newly recruited, change positions and return to positions. The employees can only be arranged to work after passing the assessment; we also conduct qualification trainings for special operational personnel to ensure that they work with certificates. We enhance the overall awareness of health and safety of employees through safety education and promotion for different levels and types of employees. In accordance with the Ten Prohibitions for Safe Production, the Company requires safety training for all relevant personnel involved in construction by external parties, and no violation of regulations shall occur.
- **Safety culture promotion:** The 4th, 14th and 24th days of each month are the safety reflection days of the Group. The Group organizes safety reflection activities, including training and education, emergency drills, safety tips, hidden danger investigation, seminars, etc., with the purpose of continuously improving the safety awareness of all employees and avoiding safety accidents.

8.3 HEALTH AND SAFETY (Continued)

8.3.1 Safe production (Continued)

The Group continues to take zero accidents and zero injuries as its ultimate goal, and reviews the completion of the goals on a regular basis. During the Reporting Period, each of our relevant subsidiaries formulated annual safety work goals and plans and such plans were implemented effectively, respectively. In 2020, the Group achieved the goal of a low rate of minor injury accidents. A total of 4 minor injury accidents occurred throughout the Year, and the number of lost working days was 155 days. Minor injury accidents include burns, slips and falls, etc. The Group has provided compensation and arranged treatment in accordance with the provisions of the Social Security Bureau, conducted a comprehensive investigation into the cause of the accidents, identified and rectified potential safety hazards in a timely manner, and emphasized to all employees in safety training the accident related hidden dangers and preventive measures, so as to avoid re-occurrence of similar accidents.

Case: Emergency Drills

In 2020, Ningxia Pharmaceutical carried out 97 comprehensive, special and on-site emergency drills. A total of 1,906 employees participated in the drills. The emergency drills mainly focused on the initial accident emergency response at the grassroots level of production to contain the signs of accidents and initial accidents in a budding state and strengthen effective control over accidents. Exposed problems were timely improved and corrected during the drills, and the handling measures and procedures were improved.



8.3 HEALTH AND SAFETY (Continued)

8.3.1 Safe production (Continued)

Case: Fire Drill

In 2020, Fuzhou Fuxing conducted a total of 44 fire safety drills, including 2 comprehensive drills, 21 quarterly evacuation drills and 21 on-site disposal drills (emergency disposal in confined space, disposal of hazardous chemicals leakage, emergency disposal of burns, and emergency disposal of fire fighting), with 716 trainees, 232 trainees and 324 trainees, respectively.





Case: Emergency Drills

On 31 March 2020, Livzon Hecheng organized an emergency rescue drill for the 402 tank area ethyl acetate leakage fire accident. The drill aimed to improve its ability to respond to sudden risks and chemical leakage fire accidents, and focused on the early warning, organization and command, and rescue and disaster relief of the emergency rescues in chemical leakage fire accidents. Through this drill, Livzon Hecheng tested its ability to rescue chemical leakage fire accidents, further discovered the problems in emergency rescues, improved the safety production emergency plan and emergency mechanism of its relevant departments, and popularized relevant knowledge on the emergency rescue of chemical leakage fire accidents, which has strengthened employees' awareness of responding to unexpected risks.





8.3 HEALTH AND SAFETY (Continued)

8.3.2 Occupational health

Strictly abiding by the Law of the PRC on the Prevention and Control of Occupational Diseases, Livzon formulated the Administrative Procedures for Occupational Health, and based on the principles of prevention-oriented, comprehensive planning, adapting to local conditions and comprehensive management, Livzon created a sound, healthy and safe working environment through the upgrading and transformation of production equipment and occupational disease protection facilities to ensure the health and safety of employees. In 2020, the Group achieved the goal of zero major occupational health accident.

- Occupational hazard test: The occupational hazards of the Group primarily include hydrochloric acid, liquid alkaline, noise, dust, high temperature, acetone, etc. In order to create a healthy and safe working environment for employees and ensure their physical health, each of our relevant subsidiaries commissions qualified unit to inspect and evaluate the occupational disease hazard factors in the production site on a regular basis.
- Occupational health notification: For job positions with occupational health hazards, we inform employees
 of the specific risks in writing and the adopted occupational disease protection measures before they work in the
 position.
- **Labour protection equipment:** We equip employees who are exposed to occupational hazards with appropriate and effective personal labour protection equipment and supervise the usage, and set up flushing facilities in places with corrosive substances such as acid and alkali or potential risk of chemical burns, and maintain, upgrade and improve the occupational disease protection facilities.
- **Occupational health examination:** We organize pre-job, in-job (annually) and off-job occupational health examinations for employees in positions exposed to occupational hazards, and establish occupational health files and manage the tracking thereof.
- Occupational health training: The Group organizes employees to participate in occupational health training every year, invites safety and health education experts to give employees mental health lectures and psychological rescue knowledge promotion, and organizes employees to participate in outdoor exploration, Lebu (樂步), sports meetings, birthday parties and other activities, so that employees may learn to master mental health protective knowledge to ensure their physical and mental health.

8.3 HEALTH AND SAFETY (Continued)

8.3.2 Occupational health (Continued)

Case: Occupational Health Training

In 2020, Jiaozuo Hecheng invited medical examiners to explain the hazards and protection knowledge of occupational diseases, so as to improve employees' awareness and skills of occupational disease protection.



Case: Protection of the Mental Health of Employees

In 2020, Limin Factory has organized front-line employees several times to hold seminars and watch videos to guide them to improve their mental health awareness and strengthen their mental health knowledge. In addition, Limin Factory carries out sports meeting activities annually so that employees can relax during sports and release their psychological pressure.



8.3 HEALTH AND SAFETY (Continued)

8.3.2 Occupational health (Continued)

In response to the COVID-19 pandemic, Livzon actively responded to the national anti-pandemic call and actively promoted the resumption of work and production. In February 2020, we started full scale resumption of work and launched the Plan on Resumption of Work and Production and Pandemic Prevention and Control of Livzon Group, which carefully deploys the procedures for resumption of work and production and pandemic prevention and control.

Livzon's Anti-pandemic Measures for Resuming Work and Production in 2020



8.4 CARING FOR STAFF

8.4.1 Employee welfare

Livzon provides employees with a complete welfare system. In addition to basic salary, social insurance and housing provident fund, the benefits provided to employees include performance bonuses, equity incentives and overseas allowances. In addition, the labour union of the Company gives birthday allowances every month and festive welfare. The Company provides standardized annual health examination for employees to make them understand their health status, provides employees with allowances of funeral of their family members, gives condolences allowances to employees or their families with severe illness, and gives allowances of Spring Festival to employees with special difficulties. The Company also provides assistance to employees with difficulties and disabilities through giving condolences allowances and organizing charitable fund-raising, and keeps in close contact and follows up on their status as well.

To commend the long-term service of the Livzon's employees, according to the Employee Retirement Reward Scheme, the Company provides the employees who have maintained a labour relationship with the Company for more than 10 years and have gone through retirement procedures at the Group with a certain reward according to their length of service. The scheme is applicable to all employees of the Company and the Company's wholly-owned or controlling subsidiaries established in Zhuhai.

8.4.2 Staff communication

By insisting on the "people-oriented" business concept, Livzon is committed to creating an equal, harmonious, smooth and transparent communication environment. The Company regularly organizes employee representative conferences, organizes face-to-face seminars with senior management, and establishes a good communication mechanism with employees through various channels and forms such as employee forums, forums, websites, WeChat communities and public accounts to fully understand employees' feedback and demands on the Company, makes timely adjustments to problems in the Company's processes based on employees' suggestions for improvement, and enhances employees' sense of belonging and motivation.

The Company has formulated and strictly implemented the Livzon Industrial Park Logistic Management System, Collective Dormitory Management System and Activity Center Management System, which specify the detailed requirements for dormitory management, activity center management, canteen management, security work management, greening management, cleaning management and vehicle management, etc., aiming at creating a healthy working and living environment for employees, strengthening employee communication, standardizing work behavior and improving work efficiency.

The Company promptly discloses the Company's operation and system construction to its employees, responds to and understands the needs of employees, improves and implements the corporate systems, and actively and extensively carries out activities to collect reasonable suggestions for support services. The implementation of reasonable suggestions has a significant effect on energy conservation and consumption reduction, cost reduction and improvement of employee satisfaction.

8.4 CARING FOR STAFF (Continued)

8.4.2 Staff communication (Continued)

In respect of online activities, the Company has established a platform for communication with employees through the WeChat public account of the support service center. The public account promotes positive energy through advocating good samaritans, publishes announcements and information of the support service center, and fully utilizes the platform to collect opinions, and adds functions such as food pre-order. The support service center of the Company investigates the dining preferences of employees in the park through this public account, and adjusts dishes based on big data to meet their dining needs and improve their dining satisfaction.

In respect of offline activities, the Company organized a series of festive activities in the cafe and canteen such as Dragon Boat Festival, Mid-Autumn Festival, etc. On every festival, the canteen of Company creates a festive atmosphere on site, launches festive recipes and dishes, and presents festive foods such as rice dumplings on Dragon Boat Festival, tangyuan and dumplings on winter solstice. In addition, the canteen introduced the Northwest Pasta Project, giving employees from all over the country more dining options in Livzon Industrial Park. In addition, employees may cultivate temperament and learn knowledge in Xiaoli Book Bar (小麗書吧), which reflects the Company's humanistic care, happy work and happy life.

In order to improve the employee accommodation services in the Livzon Industrial Park, located at the headquarter of the Company, the support service center of the Company has established two dormitory service WeChat groups, which is a platform to receive service needs, complaints and suggestions, thereby adding channels for communication with employees.

Case: Phase I Face-to-face Symposium for R&D Personnel and Executives

In May 2020, the Company convened young representatives in the R&D field at Livzon Industrial Park to hold a faceto-face symposium for "R&D personnel and executives". Mr. Tang Yanggang, the president of the Company, and the managers in charge of various R&D fields and youth representatives had close interactions, and exchanged ideas on themes such as the Company's current R&D status, urgent problems to be solved, and future R&D strategies.



8.4 CARING FOR STAFF (Continued)

8.4.3 Work-life balance

Livzon cares about employees' health, promotes the balance between work and life, and organizes a series of sports and team-building activities to enrich employees' amateur life, promote the healthy development of working atmosphere, and create a harmonious working atmosphere.

Case: Diversified Sports Activities

In 2020, the Group held a variety of sports and cultural activities, including the Lebu (樂步) welcome event, the 23rd Livzon basketball match, the 17th Livzon badminton match, the "Le Yu Cup (樂羽杯)" badminton match by Pharmaceutical Factory, autumn sports meeting by Ningxia Pharmaceutical, "Livzon Cup" football match, Dragon Boat Festival singing, etc. Among them, the grandest event is Lebu (樂步) welcome event, which is a traditional activity of Livzon. "Working Happily and living happily" is an important part of the core culture values of the Company. The annual Lebu welcome event is a way for employees to bid farewell to the old year and usher in a new begin.

In addition to the various traditional sports meeting every year, Livzon also added BBQ fun activities and the King of Glory e-sports competitions that are favored by the "descendants" so as to adapt to the development of the times.





Lebu (樂步) Welcome Event



Autumn Sports Meeting



Basketball Match



Basketball Match



8.4 CARING FOR STAFF (Continued)

8.4.3 Work-life balance (Continued)



King of Glory E-sports Competition

Dragon Boat Festival Singing



Summer Barbecue Activity





Badminton Match

8.4 CARING FOR STAFF (Continued)

8.4.3 Work-life balance (Continued)

Case: Various Hobby Associations

Working happily and living happily are important corporate cultural concepts promoted by Livzon. Since 2020, the leaders of the Company have paid close attention to employees' amateur cultural life and emphasized the need to stimulate their interests and hobbies in various ways. Livzon's employees have spontaneously organized various clubs, including dance (yoga) club, badminton club, e-sports club, basketball club, mountaineering club, music association, etc. Various clubs bring together Livzon's people with the same hobbies, enriching the work and life of our employees.



Basketball Club



Yoga Club



Badminton Club



Mountaineering Club



9 SERVE PEOPLE WITH SINCERITY



9 SERVE PEOPLE WITH SINCERITY

9.1 ACCESS TO HEALTH CARE

The Group regards Access to Health Care as an important topic within the scope of ESG management. As the principal businesses of the Group are primarily located in the PRC which is a developing region, the Group needs to take into consideration the economic development and level of healthcare in the PRC as well as market characteristics of different overseas regions in formulating our strategy of Access to Health Care. The Company's management formulates the global market entry strategies for our major products based on our R&D pipelines and product positioning on a timely basis and makes regular review and adjustments in light of market change trend. The Group is committed to improving the availability and affordability of our pharmaceutical products, promoting reasonable use of drugs and actively practicing the concept of Access to Health Care, and is devoted to providing better products and services to doctors and patients and improving universal healthcare coverage with global peers.

9.1.1 Improve availability of drugs

In order to improve availability of pharmaceutical products and benefit patients worldwide with more safe and effective products, the Group has accelerated the promotion of our global presence by active pursuit of overseas registration and sale of our products, and facilitated our extended development in overseas markets by licensing cooperation and equity investment, etc., and continued to market our high-quality products to the world. The Group's income from overseas principal businesses has shown a year-on-year growth trend, amounting to RMB1,725.15 million in 2020, representing a year-on-year increase of 39.84%, accounting for 16.49% of income from principal businesses, with a compound growth rate of nearly 22% in the past five years. We continuously provide high-quality pharmaceutical products and services to many countries and regions.



Amount and Percentage of Livzon's Income from Overseas Principal Businesses from 2017 to 2020

API business

Livzon has become one of the global major active pharmaceutical ingredients ("API") suppliers, ranking 9th in Outstanding Brands in Chinese Chemical Pharmaceutical Industry (Export of APIs) in 2020. The Group continuously develops and operates in standardized markets such as the United States and Europe, and also attaches importance to the development and maintenance of non-standardized markets. Key markets include India, the Middle East, South America and Southeast Asia. The Group adopts different product mix and pricing strategies for different markets.

As at 31 December 2020, the Group had completed 84 registration projects overseas for a total of 28 API products in 49 countries/regions, had passed 16 on-site inspections of international certification, obtained 48 certificates for international certification during the validity period (of which 4 varieties have passed FDA on-site inspections and 12 varieties have obtained CEP certificates) and 2 qualification certificates.
9.1 ACCESS TO HEALTH CARE (Continued)

9.1.1 Improve availability of drugs (Continued)

Drug Preparation business

Livzon continuously explored markets outside the PRC, comprehensively streamlined and developed a new international team, recruited talents in international registration regulations for drug preparation, and set up a Southeast Asia office. 11 business cooperation agreements were signed during the Reporting Period on varieties already marketed and under research.

In emerging markets (mainly including Southeast Asia, South Asia, Middle East and North Africa, Latin America, the Commonwealth of Independent States and other regions), we rely on our existing products that meet the requirements of local registration regulations to initiate local GMP inspections and obtain marketing permits. As at the end of the Reporting Period, our 7 core products have been officially marketed in 6 overseas markets, and more than 10 products have been registered in more than 10 countries. We continue to advance the market access and sales of gonadotropic hormones, gastroenterology, psychiatry, immune and anti-infective products in the countries and regions including Pakistan, Indonesia, Philippines, Nigeria, Central Asia, Central and South America. Meanwhile, we have evaluated and selected products in overseas market with higher potential and have increased efforts in registration to continuously expand new international markets.

In addition, we have built partnerships with local pharmaceutical manufactures and carried out technology transfer and local production of our major products. The business model of output of our technology transfer program and the analysis and testing program can help local pharmaceutical enterprises to enhance and improve the production process management and quality control to a certain extent, which can not only improve the local pharmaceutical industry level, but also increase the local accessibility of our products. Meanwhile, Livzon was working hard to develop large-molecule and small-molecule preparation technology transfer projects to developing countries. By exporting technology transfer programs and analytical testing programs, Livzon helped local pharmaceutical enterprises upgrade and improve production process management, quality control and other links to a certain degree.

In the standardized markets (mainly including Europe and America, Japan, South Korea and Australia, etc.), in light of the stringent requirements of these market regulations and the high cost of preliminary development, we mainly rely on the existing featured high-barrier complex drug preparations to achieve the internationalization of the Group through international multi-center clinical and declaration, and enter into the standardized markets should any opportunities arise. Passing the European and American high-end drug preparation certification will greatly facilitate the promotion and registration of the Group in developing countries and increase the local popularity and coverage of the Group's products.

Certifications of Livzon's Drug Preparations in Markets outside the PRC

As at the end of the Reporting Period, a total of 30 production lines of drug preparation products of Livzon have passed the China GMP certification, the small-volume injection workshop has passed the WHO PQ certification, and the powder injection workshop has passed the Philippine FDA certification and the Pakistan Ministry of Health certification. In 2021, the preparation workshops of the Group plan to receive the certification from PIC/S GMP member countries.

The expansion of overseas market of our drug preparation products experienced fast development. During the Reporting Period, 2 drug preparation products of the Group were approved for registration in overseas markets, 5 were newly submitted for registration, 1 was newly applied for overseas GMP official audit, and additional 11 overseas preparation registration sales agreements were signed. The overseas official audits of our drug preparation products are intended to be upgraded to the PIC/S-GMP level (PIC/S GMP is one of the most stringent GMP standards in the world so far). Therefore, the implementation of PIC/S GMP can further improve the quality of the Group's pharmaceuticals and ensure drug safety.

9.1 ACCESS TO HEALTH CARE (Continued)

9.1.2 Improve affordability of drugs

Livzon strives to provide high quality drugs with reasonable prices to patients. In late December 2020, the National Healthcare Security Administration and the Ministry of Human Resources and Social Security published the 2020 Catalogue of Drugs for National Basic Medical Insurance, Work Injury Insurance and Maternity Insurance (the "National Medical Insurance Catalogue (2020)"). As at the end of the Reporting Period, a total of 187 products of the Group are included in the National Medical Insurance Catalogue (2020), with 95 drugs in the class A list and 92 drugs in the class B list. Among the adjustments to the Catalogue for the year 2019, Ilaprazole Enteric-Coated Tablet (艾普拉唑腸溶片) was added into the coverage of national medical insurance reimbursement for Gastroesophageal Reflux Disease (反流性食管炎), Perospirone Hydrochloride Tablets (鹽酸哌羅匹隆片) entered the regular catalogue of national medical insurance, and Ilaprazole Sodium for Injection (注射用艾普拉唑鈉) entered the negotiation catalogue of national medical insurance.

Ilaprazole Sodium for Injection (注射用艾普拉唑鈉) (brand name: Yilian (壹麗安)), an original patented new drug of the Group, has been included in the Catalogue of Pharmaceutical Products Covered by National Medical Insurance for Price Negotiation since 2019, resulting in a decrease of its price from RMB256 per unit to RMB156 per unit or nearly 40%, the therapeutic expenses of which is nearly 50% lower than that of similar original Proton Pump Inhibitor (PPI), thereby significantly reducing the financial burden of patients, benefiting more patients, and saving a large amount of medical insurance expenditures for the country.

In exploring and establishing our presence in overseas markets, Livzon sets equitable prices which align local development status by reference to the product pricing of peers, and by taking into consideration local economic development and healthcare level and maintaining close contact with end preparation customers, for the purpose of providing local people with affordable drugs.

In the process of product promotion in overseas underdeveloped countries and regions, we evaluate local market conditions and per capita income levels, provide differentiated pricing strategies in different markets, and actively participate in local government tenders, so as to provide local people with affordable drugs. As at the end of the Reporting Period, the Group has adopted a differentiated pricing strategy that matches the local income level in the sales process of 7 products in Southeast Asia and Central Asia.



9.1 ACCESS TO HEALTH CARE (Continued)

9.1.3 Promote rational use of drugs

In compliance with the Administrative Measures for the Clinical Application of Anti-tumor Drugs (Trial) (《抗腫瘤藥物臨 床應用管理辦法(試行)》), Livzon has actively implemented the compliance management of the clinical application of anti-tumor drugs, followed the diagnosis and treatment standards, clinical diagnosis and treatment guideline, clinical pathways and drug insert sheets, strictly implemented drug classification management, and ensured that the drug use is evidence-based.

Livzon has a series of anti-infection products including Voriconazole for Injection (注射用伏立康唑) and Cefodizime Sodium for Injection (注射用頭孢地嗪鈉). Since the implementation of the Administrative Measures for the Clinical Application of Anti-bacterial Drugs in 2012, we have placed high emphasis on the reasonable clinical use of antibiotics by strengthening the management on prescription drugs in the process of drug business operation and cooperating with medical institutions in implementing management of hierarchical anti-bacterial drugs and doctor's prescription authority.

In addition to strict compliance with the classification management system for the clinical application of anti-bacterial drugs, implementation of the regulations of non-restricted application class, restricted application class and specialized application class, Livzon also actively cooperates with the hospital to control the indiscriminate use of antibiotics, assists the hospital in the control of drug-resistant bacteria, carries out training and lectures on optimization of the treatment plan of drug-resistant bacteria, and devotes to improving the level of clinical use of anti-bacterial drugs and reducing the incidence of indiscriminate use of antibiotics.

In 2020, we sponsored a number of national academic conferences in the sector of anti-infection, such as the 4th Symposium on Fungal Infection and Host Immunity held by the Mycology Professional Committee of the Chinese Society for Microbiology (中國微生物學會真菌學專業委員會) held in Jiaxing, Zhejiang Province, the PRC and the Annual Meeting of Respiratory Diseases of Chinese Medical Association (中華醫學會呼吸病學年會) – 2020 (The 21st National Respiratory Disease Symposium) held in Shenzhen, the PRC. Meanwhile, we participated in the 14th Congress of Chinese Society of Critical Care Medicine of the Chinese Medical Association online. We have in-depth communications and exchanges with clinical experts from infection, respiratory, blood, ICU, organ transplantation, skin, obstetrics and gynecology, and scholars engaged in microbiological basic research so as to jointly promote the development of medical technology.

9.2 PUBLIC WELFARE AND CHARITY

In accordance with external regulations and internal rules such as the Management System for Charity Donation, Livzon has standardized the usage and audit of funds, implemented management and coordination, continuously practices corporate social responsibility, keeps the public welfare mission in mind, and regards social responsibility as our irrevocable duty. In 2020, the Group has increased efforts in public welfare poverty alleviation, and proactively participated in earthquake relief, health-based poverty alleviation and industry-based poverty alleviation, contributing to the society with practical actions. In 2020, the expenditure of charitable donation of the Group amounted to RMB10.81 million, including funds donation of RMB7.15 million and materials donation value of RMB3.66 million.

9.2 PUBLIC WELFARE AND CHARITY (Continued)

Cases of Livzon's Charity Donation in 2020

Date	Activities participated	Donation target	Amount/items donated
January 2020	Fighting the COVID-19 pandemic	Red Cross Society of Zhuhai	The Company made donations in a total value of RMB12 million, including RMB5 million in cash and RMB7 million worth of antiviral drugs, diagnostic kits and equipment. The antiviral drugs, diagnostic kits and equipment worth of RMB7 million were used to prevent and control the pandemic in Hubei Province and other places; As for cash of RMB5 million, RMB2 million of which was used for R&D expenses of the team led by Mr. Zhong Nanshan (鍾南山), an academician, and RMB3 million of which was used in the construction of pandemic prevention and control bases in Hubei Province and other places
February 2020	Fighting the COVID-19 pandemic	Red Cross Society of Shaoguan	Anti-pandemic materials such as alcohol, masks and gloves in a total value of RMB8,100
February 2020	Fighting the COVID-19 pandemic	Red Cross Society of Zhuhai	Drugs in a total value of RMB1.2221 million
March and April 2020	Fighting the COVID-19 pandemic	Hospitals in Wuhan and hospitals across the country	Various drugs and diagnostic equipment in a total value of RMB4.7612 million
May 2020	Poverty Alleviation against Chronic Diseases Program	Patients with chronic diseases in financial difficulties in Pingwu County, Sichuan Province	Drugs for chronic diseases such as hypertension and hyperlipidemia in a total value of RMB1 million
June 2020	Guangdong targeted poverty alleviation (630 poverty alleviation)	Red Cross Society of Shaoguan	Cash of RMB30,000
June 2020	Guangdong targeted poverty alleviation (630 poverty alleviation) – drainage dredging in Xinyi, Maoming	Red Cross Society of Zhuhai	Cash of RMB100,000



9.2 PUBLIC WELFARE AND CHARITY (Continued)

Date	Activities participated	Donation target	Amount/items donated
June 2020	Guangdong targeted poverty alleviation (630 poverty alleviation) – rural road construction in Leizhou	Red Cross Society of Zhuhai	Cash of RMB200,000
June 2020	Guangdong targeted poverty alleviation (630 poverty alleviation) (Bureau of Science, Industry and Information Technology of Zhuhai City Jinwan District (珠海市金 灣區科工信局))	Red Cross Society of Jinwan District	Cash of RMB500,000
July 2020	Poverty Alleviation against Chronic Diseases Program	Patients with chronic diseases in financial difficulties in Xianghai National Nature Reserve, Jilin Province	Drugs for chronic diseases such as hypertension and hyperlipidemia in a total value of RMB1 million
September 2020	Poverty Alleviation against Chronic Diseases Program (drugs in a total value of RMB1 million would be donated over 3 years)	Patients with chronic diseases in financial difficulties in Chayu County in Tibet Autonomous Region	Drugs for chronic diseases such as hypertension and hyperlipidemia in a total value of RMB0.4 million
November 2020	Poverty Alleviation against Chronic Diseases Program (drugs in a total value of RMB1 million would be donated over 2 years)	Patients with chronic diseases in financial difficulties in Macun District of Jiaozuo City, Henan Province	Drugs for chronic diseases such as hypertension and hyperlipidemia in a total value of RMB0.5 million

9.2 PUBLIC WELFARE AND CHARITY (Continued)

9.2.1 Health-based poverty alleviation

Livzon and its controlling shareholder, Joincare Pharmaceutical Industry Group Co., Ltd. (健康元藥業集團股份有限公司) ("Joincare"), jointly launched a public welfare poverty alleviation program through healthcare against chronic diseases (the "Poverty Alleviation against Chronic Diseases Program") by virtue of their own strengths in pharmaceutical industry, which accurately targets hypertension, hyperlipidemia, and cardiovascular and cerebrovascular diseases, and regularly donates drugs to patients with chronic diseases in poverty-stricken areas to provide timely assistance to low-income people, relieves financial burden on healthcare of patients' families with financial difficulties, creates convenience for patients to take drugs nearby and makes contribution to enhancing the healthcare services of residents in poverty-stricken areas. Donations to poor counties proposed by the "Poverty Alleviation against Chronic Diseases Program" include Pravastatin Capsules (普伐他汀膠囊), Amlodipine Besylate Capsules (苯磺酸氨氯地平膠囊), Valsartan Capsules (纈沙坦膠囊), and Isosorbide Mononitrate Tablets (單硝酸異山梨酯片) and other drugs for treatment of chronic diseases.

During the Reporting Period, the Poverty Alleviation against Chronic Diseases Program was carried out by the Company subsequently in Jiange County and Pingwu County in Sichuan Province, Xianghai National Nature Reserve in Jilin Province, Chayu County in Tibet Autonomous Region and Macun District of Jiaozuo City in Henan Province.

From late 2018 onwards, the Poverty Alleviation against Chronic Diseases Program was carried out by Livzon and Joincare subsequently among poverty people in the areas including Chaotian District of Guangyuan City in Sichuan Province, 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 Province, Dongxiang County and Tianzhu County in Gansu Province, Xianghai National Nature Reserve in Jilin Province (poverty alleviation for the second year), Chayu County in Tibet Autonomous Region and Macun District of Jiaozuo City in Henan Province. As at the end of the Reporting Period, there were a total of 12 poverty alleviation agreements entered into by the Group, among which 11 were with poverty counties and one was with natural reserve at state level, and there were more than 5,000 registered people in need.





9.2 PUBLIC WELFARE AND CHARITY (Continued)

9.2.1 Health-based poverty alleviation (Continued)



The Company, Joincare and Pingwu County in Sichuan Province entered into a poverty alleviation agreement for chronic diseases



The Company, Joincare and Shenzhen Project Care Committee Office entered into a poverty alleviation agreement for chronic diseases in Chayu County in Tibet Autonomous Region



The Company, Joincare and the Health Committee of Macun District of Jiaozuo City in Henan Province entered into a cooperation agreement

9.2 PUBLIC WELFARE AND CHARITY (Continued)

9.2.2 Industry-based poverty alleviation

Livzon continuously promotes industry-based poverty alleviation, has established the concept of "targeted poverty alleviation + Astragalus root (黃芪) Industry", promoted the integration of poverty alleviation policy, industry development projects and occupational skills training, and implemented poverty alleviation model of "Company + Base + Poor households", encouraging the poor households 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, so as to achieve poverty elimination and construction of the "Chinese Medicine Ecological Base".

Case: Achievements of Poverty Alleviation through Industrial Development Program

During the Reporting Period, Datong Livzon Qiyuan Medicine Co., Ltd. (大同麗珠芪源藥材有限公司) ("Datong Livzon"), a subsidiary of the Company, has employed approximately 110 workers for the self-built base and jointly-constructed base, including 20 impoverished people (including workers at the base and processing staff at the workshop). In Shanxi (陝西) and Shanxi (山西), 50 people were trained on the standardized planting and processing techniques of astragalus root to improve the vocational skills of poor farmers, and the Group jointly established 33,000 mu of bases in three counties, namely Hunyuan, Tianzhen and Yingxian in Shanxi (山西) as well as Zizhou in Shanxi (陝西), to provide reliable sales channels for poor households. During the Reporting Period, the Group acquired more than 20,000 kg of astragalus root in Tianzhen, Shanxi (山西), and more than 15,000 kg of astragalus root in Zizhou, Shanxi (陝西). We have signed purchase orders of astragalus root with poor households and their products will be preferentially purchased by us subject to the fulfilment of enterprises' requirement under standardized production.





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LIST OF POLICIES

ESG areas	Laws and regulations the Company is subject to	Some policies of the Company
A1. Emissions	Environmental Protection Law of the PRC Law on the Prevention and Control of Environmental Pollution	Identification and Assessment Requirements of Environmental Factors
	by Solid Waste of the PRC (Revised)	Procedures for Air Emission Management
	Water Pollution Prevention and Control Law of the PRC	Procedures for Noise Emission Management
	Prevention and Control of Atmospheric Pollution Law of the PRC	Procedures for Solid Waste Management
	Environmental Protection Tax Law of the PRC	Procedures for Hazardous Chemicals Management
	Soil Pollution Prevention and Control Law of the PRC	Procedures for Wastewater Management
	Regulations on the Prevention and Control of Environmental Pollution by Solid Waste of Guangdong Province	Soil Pollution Potential Hazards Inspection System
	National Catalogue of Hazardous Wastes (Revised)	Guidelines for Management of EHS Changes
	Administrative Regulations for Urban Construction Waste	Notice on Issuing Energy Conservation and Emissio Reduction Objectives of Livzon Group in 2020
	Environmental Impact Assessment Law of the PRC	
	Administrative Rules of Environmental Protection for Construction Projects	
	Technical Specifications of Collection, Storage and Transport for Hazardous Waste	
	Administrative Measures on Hazardous Waste Transfer Receipt	
2. Use of Resources	Energy Conservation Law of the PRC	Procedures for Resources Management
	Recycling Economy Promotion Law of the PRC	Procedures for Energy Management
3. The Environment and Natural Resources	Environmental Protection Law of the PRC	General Requirements of EHS Management System
	Energy Conservation Law of the PRC	Environmental Hygiene Management Rules for Factory Area
		Soil Pollution Potential Hazards Inspection System
		Contingency Plan for Environmental Emergency

ESG areas	Laws and regulations the Company is subject to	Some policies of the Company
B1. Employment	Labour Law of the PRC	Employment Management System
	Labour Contract Law of the PRC	Recruitment Management System
	Labour Right Protection Law	Employee Retirement Reward Scheme
	Social Security Law of the PRC	Code of Conduct of Employees
	Provisions on the Prohibition of Using Child Labour	Board Diversity Policy
	Tax Law of the PRC	Remuneration Management System
		Administrative Measures for Remuneration Adjustment
		Employee Retirement Reward Scheme Code of Conduct of Employees Board Diversity Policy Remuneration Management System Administrative Measures for Remuneration Adjustment Provisions on the Base Salary of Undergraduates Administrative Measures on Ranks
B2. Health and Safety	Labour Law of the PRC	General Requirements of EHS Management System
	Labour Contract Law of the PRC	Administrative Measures for EHS Accidents
	Social Security Law of the PRC	Regular EHS Meeting and Flight Check Management System
	Production Safety Law of the PRC Law of the PRC on the Prevention and Control of Occupational Diseases	Administrative Measures for EHS Information and Communication
	Fire Prevention Law of the PRC	Administrative Procedures for Internal EHS Audit
		Hazard Sources Identification and Risks and Opportunities Evaluation Requirements
		Regulations on Safe Production Penalties
		Safe Production Training Management System
		Safe Production Responsibility Management System
		Administrative Measures for Contingency Plans for Emergency
		Administrative Procedures for Occupational Health
		Contingency Plans for Production Safety Accidents
		Contingency Command Plans for Typhoon Prevention
		EHS Culture of Livzon Group



ESG areas	Laws and regulations the Company is subject to	Some policies of the Company
B3. Development and Training	Labour Law of the PRC	Training Management System
5	Labour Contract Law of the PRC	Safe Production Training Management System
	Social Security Law of the PRC	Rules of the Training of Doctoral Candidate (or Master Degree Candidate in Management) for In-service Employees
		Administrative Measures for Administrative and Technical Channels
		Administrative Measures for the Performance of Functional Headquarters
		Quarterly Assessment and Incentive Plan for R&D Units (Trial)
B4. Labour Standards	Labour Law of the PRC	Employment Management System
	Labour Contract Law of the PRC	Recruitment Management System
	Social Security Law of the PRC	



SG areas	Laws and regulations the Company is subject to	Some policies of the Company
5. Supply Chain Management	Company Law of the PRC	Administrative Procedures for Supplier Standard
	E-commerce Law of the PRC	Administrative Procedures for Supplier Audit
	Tendering and Bidding Law of the PRC	Code of Practice for On-site Supplier Quality Audit
		Catalogue of Qualified Material Suppliers
		Catalogue of Shortlisted Material Suppliers
		Administrative Measures for Material Procurement
		Material Management System
		 Code of Practice for On-site Supplier Quality Audit Catalogue of Qualified Material Suppliers Catalogue of Shortlisted Material Suppliers Administrative Measures for Material Procurement Material Management System Administrative Measures for Centralized Procurement of Bulk and General-purpose Materials Implementation Rules for Bidding for Construction Projects
		Implementation Rules for Bidding for Construction Projects
		Implementation Rules for Bid Evaluation of Centralized Procurement of Construction Projects
		Operating Guidelines for Tender Announcement of Materials and Service Projects on the Official Website
		Operating Strategies for Tender Announcement of Materials
		Electronic Procurement Management System of Livzon Pharmaceutical Group Inc. (Draft for Comment)
		Operating Guidelines for Internal Mall Procurement
		Rules Applicable to External Sourcing of Non-Productive Materials and New Product Materials
		Rules on Integrity in Bid Evaluation
		Administrative Measures for Joint Audit of Suppliers of Livzon Group V1.0



SG areas	Laws and regulations the Company is subject to	Some policies of the Company
Product Responsibility	Patent Law of the PRC	Procedures for Establishment of Independent Research and Development Projects
	Trademark Law of the PRC	Quality Management System
	Copyright Law of the PRC	Pharmacovigilance Management System
	Drug Administration Law of the PRC	
	Good Manufacturing Practices for Pharmaceutical Products	Standard Operation Procedures
	(GMP)	Procedures for Drug Inspection and Acceptance
	Good Laboratory Practices for Pharmaceutical Products (GLP)	Administrative System of Quality Enquiries and Quality Complaints
	Good Clinical Practices for Pharmaceutical Products (GCP)	User Complaint Management Procedures
	Good Supply Practices for Pharmaceutical Products (GSP)	Patent Management Process
	Pharmacopoeia of the PRC	Unqualified Drug Management System
	Administrative Measures for Drug Registration	
	Administrative Measures for the Supervision on Pharmaceutical Production	Adverse Drug Reaction Reporting and Monitoring Management System
	Administrative Measures for Drug Recalls	Drug Recall Management System
	Regulations on Protection of Traditional Chinese Medicines	Drug Trace Back Management System
		Ten Prohibitions on QC Laboratory Management of
	Advertising Law of the PRC	Livzon Group
	Implementation Rules on the Drug Administration Law of the PRC	Administrative Measures for Quality Incidents of Livzon Group
	Provisions for Drug Insert Sheets and Labels	Contingency Handling Procedures for Sampling Inspection



ESG areas	Laws and regulations the Company is subject to	Some policies of the Company
		Measures for Cross-examinations among R&D Enterprises of Livzon Group
		 Measures for Cross-examinations among Drug Preparations Manufacturing Enterprises of Livzon Group Management System for Marketing Authorization Holder of Livzon Group Administrative Procedures for Quality Internal Audit of Livzon Group Administrative Procedures for Quality Complaints of Livzon Group Administrative Procedures for Quality Information of Livzon Group Administrative Procedures for Quality Information of Livzon Group Management Rules for Quality Authorizers of Livzon Group
		Management System for Marketing Authorization Holder of Livzon Group
		Administrative Procedures for Quality Internal Audit of Livzon Group
		Administrative Procedures for Quality Complaints of Livzon Group
		Administrative Procedures for Quality Information of Livzon Group
		Management Rules for Quality Authorizers of Livzon Group
		Administrative Procedures for TCM Pre-treatment and Extraction Workshop Shared among Enterprises within Livzon Group
		Administrative Measures for Clinical Audit and Procedure of Livzon Group (Trial)
		Administrative Procedures for Quality Risks
		Operating Procedures for Drug Recalls
		Contingency Plans for Material Drug Safety Incident



LIST OF DATA

	ESG Indicator	Unit	Data for 2018	Data for 2019	Data for 2020
Α.	Environmental				
A1.	Emissions				
A1.1	Types of emissions and emission data				
	Industrial wastewater	tonne	4,329,594.0	4,368,313.4	4,285,515.0
	Chemical Oxygen Demand (COD _{cr})	tonne	366.2	343.2	338.5
	Ammonia nitrogen	tonne	27.8	19.2	13.0
	NO _x	tonne	133.6	141.1	86.2
	SO ₂	tonne	91.2	76.3	47.8
A1.2	Greenhouse gas emissions and intensity Total greenhouse gas emissions ⁸	tonne of CO, equivalent	585,606.7	591,307.5	574,380.3
	Greenhouse gas emissions (Scope 1)	tonne of CO, equivalent	162,712.4	183,982.0	30,427.8
	Greenhouse gas emissions (Scope 2)	tonne of CO ₂ equivalent	422,894.3	407,325.5	543,952.5
	Intensity of greenhouse gas emissions9	tonne of CO ₂ equivalent/ RMB10,000	0.7	0.6	0.5
A1.3	Hazardous waste produced and intensity				
	Medical waste (HW02) and waste medicine (HW03) ¹⁰	tonne	1,782.5	1,564.5	1,826.9
	Other hazardous waste	tonne	489.3	1,018.5	1,153.5
	Total hazardous waste	tonne	2,271.8	2,583.0	2,980.4
	Intensity of hazardous waste produced ¹¹	kg/RMB10,000	2.0	2.8	2.6

³ In the calculation of greenhouse gas emissions, the weighted average of the electricity margin emission factor in the Baseline Emission Factors for China Regional Grid in 2017 Emission Reduction Program was adopted for the electric emission factor, and the data for 2018-2019 were retrospectively adjusted.

^{9. 11} The intensity in 2020 was calculated based on RMB10,000 of output value, and the intensity in 2018 and 2019 was calculated based on the RMB10,000 of operating income, respectively.

¹⁰ Part of medical waste and waste medicine were sent to boilers for incineration in accordance with the approval requirements of the environmental impact assessment report, which were not included in the statistics of medical waste and waste medicine, and therefore, the statistical scope and data of medical waste and waste medicine in 2018 and 2019 were retrospectively adjusted.

	ESG Indicator	Unit	Data for 2018	Data for 2019	Data for 2020
A1.4	Non-hazardous waste produced and intensity Total general industrial waste ¹² Intensity of general industrial waste produced ¹³	tonne kg/RMB10,000	97,771.9 110.3	99,881.5 106.4	55,990.2 48.3
A2.	Use of Resources				
A2.1	Total energy consumption and intensity Direct energy consumption				
	Gasoline	litre	286,800.3	365,628.3	278,223.1
	Diesel	litre	506,185.9	362,836.3	356,192.6
	Coal	tonne	63,140.0	72,714.2	4,336.5
	Natural gas	10,000 cubic meters	973.9	1,111.5	917.9
	Biomass fuel	tonne	7,625.7	6,466.0	0
	Alcohol based liquid fuel	tonne	17.2	18.5	20.2
	Indirect energy consumption				
	Steam purchased	tonne	237,117.8	284,016.2	666,196.9
	Electricity purchased	kWh	407,384,975.0	374,098,694.8	400,450,102.9
	Intensity of electricity consumption ¹⁴	kWh/RMB10,000	459.8	398.6	345.6
A2.2	Water consumption and intensity				
	Total water consumption Intensity of water consumption ¹⁵	tonne tonne/RMB10,000	6,416,763.6 7.2	6,385,615.3 6.8	6,264,353.1 5.4

Part of the general industrial wastes were sent to boilers for incineration in accordance with the approval requirements of the environmental impact assessment report, which were not included in the statistics of general industrial waste. The statistical scope and data of general industrial wastes in 2018 and 2019 were retrospectively adjusted.

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^{13, 14, 15} The intensity in 2020 was calculated based on RMB10,000 of output value, and the intensity in 2018 and 2019 was calculated based on the RMB10,000 of operating income, respectively.

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	ESG Indicator	Unit	Data for 2018	Data for 2019	Data for 2020
A2.5	Packaging materials used and				
	intensity Outer paper packaging materials	tonne	3,331.3	3,095.7	3,628.1
	Intensity of outer paper packaging	kg/RMB10,000	3.8	3.3	3.1
	materials used ¹⁶				
В.	Social				
B1.	Employment				
B1.1	Total workforce by gender, age group and geographical region				8,367
	Total number of employees	person	7,671	9,019	8,367
Gender	Male	person	4,177	4,796	4,392
	Female	person	3,494	4,223	3,975
Age	30 and below	person	3,344	3,780	3,303
	31-49	person	3,906	4,838	4,651
	50 and above	person	421	401	413
Geographical	Mainland China	person	7,654	9,012	8,353
region	Hong Kong, Macau and Taiwan	person	2	1	4
	Overseas	person	15	6	10
Employee	General manager level and above	person	Not disclosed	Not disclosed	73
category	Director level	person	Not disclosed	Not disclosed	201
	Manager level	person	Not disclosed	Not disclosed	900
	Other employees	person	Not disclosed	Not disclosed	7,193

¹⁶ The intensity in 2020 was calculated based on RMB10,000 of output value, and the intensity in 2018 and 2019 was calculated based on the RMB10,000 of operating income, respectively.

	ESG Indicator	Unit	Data for 2018	Data for 2019	Data for 2020
B1.2	Employee turnover rate Overall employee turnover rate ¹⁷	percentage	19.25	16.81	14.80
Gender	Male Female	percentage percentage	Not disclosed Not disclosed	Not disclosed Not disclosed	14.59 15.02
Age	30 and below 31-49 50 and above	percentage percentage percentage	Not disclosed Not disclosed Not disclosed	Not disclosed Not disclosed Not disclosed	19.22 12.60 4.12
Geographical region	Mainland China Hong Kong, Macau and Taiwan Overseas	percentage percentage percentage	Not disclosed Not disclosed Not disclosed	Not disclosed Not disclosed Not disclosed	14.79 25.00 20.00
B2.	Health and Safety				
B2.2	Lost days due to work injury	day	Not disclosed	547	155
B3.	Development and Training				
B3.1	Percentage of employees trained Percentage of employees trained ¹⁸	percentage	Not disclosed	Not disclosed	99.56
Gender ¹⁹	Percentage of male employees trained Percentage of female employees trained	percentage percentage	Not disclosed Not disclosed	Not disclosed Not disclosed	52.12 47.88
Employee category ¹⁹	Percentage of trained employees at general manager level and above	percentage	Not disclosed	Not disclosed	0.35
	Percentage of trained employees at director level	percentage	Not disclosed	Not disclosed	1.94
	Percentage of trained employees at manager level	percentage	Not disclosed	Not disclosed	7.03
	Percentage of other employees trained	percentage	Not disclosed	Not disclosed	90.67

Calculation of employee turnover rate: employees turnover/(total number of employees at the beginning of the period + new recruits)

¹⁸ Percentage of employees trained = total number of trainees/total number of employees

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¹⁹ Percentage of employees trained by category = number of employees of such category trained/total number of employees trained

	ESG Indicator	Unit	Data for 2018	Data for 2019	Data for 2020
B3.2	Average training hours per employee				
	Average training hours per employee	hour	33.5	65.0	42.3
Gender	Average training hours per male employee	hour	32.6	70.0	42.4
	Average training hours per female employee	hour	34.6	59.4	42.2 7.7 23.9 23.4
Employee category	Average training hours per employee at general manager level and above	hour	Not disclosed	Not disclosed	7.7
	Average training hours per employee at director level	hour	Not disclosed	Not disclosed	23.9
	Average training hours per employee at manager level	hour	Not disclosed	Not disclosed	23.4
	Average training hours per other employee	hour	Not disclosed	Not disclosed	45.5
B5.	Supply Chain Management				
B5.1	Number of suppliers				
Geographical	Southern China	percentage	28	31	36
region	Eastern China	percentage	43	41	38
	Northern China	percentage	10	9	9
	Central China	percentage	7	8	7
	Northeastern China	percentage	2	1	1
	Northwestern China	percentage	6	7	5
	Southwestern China	percentage	3	2	2
	Overseas	percentage	1	1	1

	ESG Indicator	Unit	Data for 2018	Data for 2019	Data for 2020
B6.	Product Responsibility				
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	percentage	0	0	0
B6.2	Number of product and service related complaints received	time			
	Consultation on medicines Product related complaints	time time	Not disclosed Not disclosed	8 121	8 137
B7.	Anti-corruption				
B7.1	Number of concluded legal cases regarding corrupt practices	case	0	0	0
B8.	Community Investment				
B8.2	Resources contributed to the focus areas Funds donation Materials donation value	RMB10,000 RMB10,000	335.5 57.1	154.2 220.4	714.6 366.4

Aspects, General Disclosures and		
Key Performance Indicators (KPIs)	Description	Corresponding section
Aspect A1: Emissions		
General Disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. 	7.1 Environmental management system Appendix I List of policies
KPI A1.1	The types of emissions and respective emission data.	7.5 Pollutants emission control Appendix I List of data
KPI A1.2	Direct (scope 1) and energy indirect (scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity.	7.3 Addressing climate change Appendix I List of data
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity.	7.5 Pollutants emission control Appendix I List of data
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity.	7.5 Pollutants emission control Appendix I List of data
KPI A1.5	Description of emission target(s) set and steps taken to achieve them.	7.2 Environmental management goals7.3 Addressing climate change
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	7.5 Pollutants emission control
Aspect A2: Use of Res	ources Policies on the efficient use of resources, including energy, water and other raw materials.	7.3 Addressing climatechange7.4 Resource conservationAppendix I List of policies



Aspects, General Disclosures and Key Performance Indicators (KPIs)	Description	Corresponding section
KPI A2.1	Direct and/or indirect energy consumption by type in total and intensity.	7.3 Addressing climate change Appendix I List of data
KPI A2.2	Water consumption in total and intensity.	7.4 Resource conservation Appendix I List of data
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	7.3 Addressing climate change 7.4 Resource conservation
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	7.4 Resource conservation
KPI A2.5	Total packaging material used for finished products and, if applicable, with reference to per unit produced.	7.4 Resource conservation Appendix I List of data
Aspect A3: The Enviro	nment and Natural Resources	1
General Disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	7.5 Pollutants emission control Appendix I List of policies
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	7.5 Pollutants emission control
Aspect A4: Climate Ch	ange	
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	7.3 Addressing climate change
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	7.3 Addressing climate change

Aspects, General Disclosures and Key Performance		Corresponding
Indicators (KPIs)	Description	section
Aspect B1: Employment	ņt	
General Disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare. 	8.1 Diversified employment Appendix I List of policies
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	8.1 Diversified employment Appendix I List of data
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	8.1 Diversified employment Appendix I List of data
Aspect B2: Health and General Disclosure	Safety Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	8.3 Health and safety Appendix I List of policies
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Not Disclosed
KPI B2.2	Lost days due to work injury.	8.3 Health and safety Appendix I List of data
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	8.3 Health and safety



Disclosures and Key Performance Indicators (KPIs)	Description	Corresponding section
Aspect B3: Developm	ent and Training	
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	8.2 Respect for talents
KPI B3.1	The percentage of employees trained by gender and employee category.	Appendix I List of data
KPI B3.2	The average training hours completed per employee by gender and employee category.	Appendix I List of data 8.2 Respect for talents Appendix I List of data 8.1 Diversified employment
Aspect B4: Labour Sta	andards	
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	8.1 Diversified employment Appendix I List of policies
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	8.1 Diversified employment
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	8.1 Diversified employment (The Group did not experience any employment of child or forced labour during the Reporting Period)
Aspect B5: Supply Ch	ain Management	
General Disclosure	Policies on managing environmental and social risks of the supply chain.	5.6 Supply chain management Appendix I List of policies
KPI B5.1	Number of suppliers by geographical region.	5.6 Supply chain management Appendix I List of data
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	5.6 Supply chain management

Aspects, General Disclosures and		
Key Performance Indicators (KPIs)	Description	Corresponding section
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, how they are implemented and monitored.	5.2 Quality audit on drugs
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, how they are implemented and monitored.	5.2 Quality audit on drugs
Aspect B6: Product Re	sponsibility	
General Disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress. 	5.1 Quality managementsystem5.9 Pharmaceuticaloperation complianceAppendix List of policies
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	5.1 Quality management system Appendix I List of data (The Group did not recall any products due to safety and health reasons during the Reporting Period)
KPI B6.2	Number of product and service related complaints received and how they are dealt with.	5.8 Protecting the rights and interests of customers Appendix I List of data
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	6.5 Intellectual property protection
KPI B6.4	Description of quality assurance process and product recall procedures.	5.2 Quality audit on drugs5.5 Product recallprocedures5.8 Protecting the rightsand interests of customers
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	5.8 Protecting the rights and interests of customers 5.9 Pharmaceutical operation compliance Appendix I List of policies

Aspects, General Disclosures and Key Performance Indicators (KPls)	Description	Corresponding section
Aspect B7: Anti-corru		
General Disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering. 	4.1 Operation compliance Appendix I List of policies
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	4.1 Operation compliance Appendix I List of data (The Group did not experience any legal cases regarding corrupt practices during the Year)
KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	4.1 Operation compliance
KPI B7.3	Description of anti-corruption training provided to directors and staff.	4.1 Operation compliance
Aspect B8: Community	y Investment	
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	9.1 Access to Health Care 9.2 Public welfare and charity Appendix I List of policies
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sports).	9.1 Access to Health Care 9.2 Public welfare and charity
KPI B8.2	Resources contributed (e.g. money or time) to the focus areas.	9.1 Access to Health Care 9.2 Public welfare and charity Appendix I List of data



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