ALPHAMAB ONCOLOGY 康寧傑瑞生物製藥

(Incorporated in the Cayman Islands with limited liability) Stock code : 9966





Contents

		Page		Page
Α	bout the Report	2	Green development	20
			Energy saving and emission reduction	20
Α	bout Alphamab Oncology	2	Water resource management	21
	Company overview	2	Emission management	21
	Events of 2020	3	Emergency response	24
Μ	lanagement approach	4	Talent-oriented philosophy	25
	ESG management	4	Training & development	25
	Communication with stakeholders	4	Employee rights and benefits	26
	Analysis of substantive issues	7	Employee care	28
	Quality management	8	Safety and health	29
	Supply chain management	11	Community benefit activities	32
	Compliance management	12	-	
			Appendixes	33
R	&D and innovation	14	Appendix I – ESG Key Performance	
	R&D capability	14	Indicators	33
	Strategic cooperation	19	Appendix II – Index of the	
	Efficient production	19	Environmental, Social	
	Intellectual property	20	and Governance	
	inteneotidal property	20	Reporting Guide of	
			HKEX	37

10

About the Report

• Reporting period and scope

The reporting period of the *Environmental, Social and Governance Report* (hereinafter referred to as "the Report) is from January 1, 2020 to December 31, 2020 (hereinafter referred to as "FY2020"). The disclosure scope of the Report is consistent with that of the 2020 Annual Report of Alphamab Oncology. For the convenience of expressing and reading, "Alphamab Oncology" is also referred to as "Alphamab", "we", "our", "us", or "the Company" in the Report.

Reference

The Report is prepared with reference to Appendix 27 of the *Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited* ("HKEX"), namely the *Environmental, Social and Governance Reporting Guide* (hereinafter referred to as "the Guide"), and its major amendments. The scope and contents of the Report are also in line with the disclosure liability under the "comply or explain" provisions set out in the Guide. Please go to the last section of the Report — Appendix II – Index of HKEX's *Environmental, Social and Governance Reporting Guide* for quick reference.

• Source of information

The qualitative and quantitative information of the Report is from the public information, internal documents and relevant statistics of Alphamab Oncology.

About Alphamab Oncology

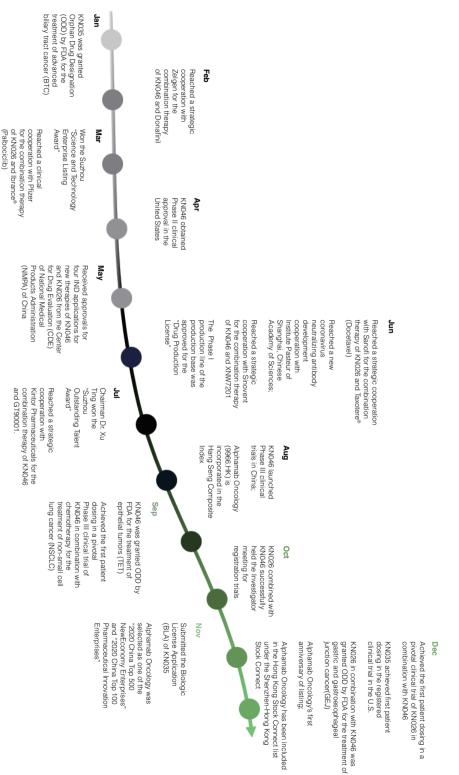
Company overview

Alphamab Oncology (Stock code: 9966.HK) is a biopharmaceutical company dedicated to R&D, manufacturing and commercialization of innovative macromolecular drugs. On December 12, 2019, Alphamab was listed on the Main Board of HKEX.

Alphamab has integrated discovery, R&D and manufacturing platforms for bispecific antibody and protein engineering. The Company's product pipeline includes 15 highly differentiated anti-tumor drug candidates with independent intellectual property rights, mainly double antibodies, and a Covid-19 multifunctional antibody, four of which are in clinical phase I-III across China, the United States, Japan, and Australia. The new drug application of Envolimab Injection (KN035) has been formally accepted by the National Medical Products Administration (NMPA) and included in the priority review.

The Company has multiple technology platforms with independent intellectual property rights such as heterodimer and mixed antibody platforms, as well as mass production capacity in line with the *Good Manufacturing Practices for Drugs* (China), *the Current Good Manufacturing Practice* (the United States) and the Good Manufacturing Practice guidelines of the European Union. The Company also has a complete quality system which passed multiple audits including EU QP. The company is committed to building an internationally leading, multi-dimensional drug development and industrialization platform, focusing on multifunctional biomacromolecule new drugs, benefiting patients in China and around the world.

Events of 2020



Environmental, Social and Governance Report

Management approach

ESG management

Alphamab's ESG management structure is composed of the Board of Directors (the "Board") of the Company, the management, and the specific functional departments. As the decision-making level, the Board is responsible for the review of ESG policies, the formulation of ESG annual plans and the verification of the achievement of ESG objectives, the monitoring of ESG work, the review of ESG risks, and takes full responsibility for the formulation of ESG strategies and the reporting of ESG results. The management of the Company is responsible for coordinating all departments to implement ESG strategic planning, assisting the departments to identify ESG risks, and setting ESG assessment objectives. As the executive level, the specific functional departments need to identify the ESG related defects during their operations, evaluate the impact on business and stakeholders, and implement the ESG objectives in combination with the company's operation.

Communication with stakeholders

According to business characteristics, the Company identifies the major stakeholders to be shareholders and investors, employees, potential customers, suppliers, competitors, government and regulators, and the community. The Company values communication with stakeholders, gets to know the interests of stakeholders through various targeted communication channels, and accordingly makes efficient responses.

Environmental, Social and Governance Report

Stakeholders	Expectations and requirements	Means of communication
Shareholder and investor	 Protection of Shareholders' rights and interests Information disclosure and transparency Corporate governance perfection Compliance in operation 	General meeting of shareholdersAnnouncement and press releaseCommunication mechanism for investor
Employee	Employee rights and welfareEmployee training and developmentOccupational health and safety	Employee activityEmployee trainingCommunication channels for employees
Potential customer	 Product quality guarantee R&D and innovation Intellectual property protection Customer privacy and rights protection 	Industry forumCustomer service and complaint handling procedures
Supplier	Standardized procurement management	Supplier access and evaluationSupplier audit
Competitor	Fair competitionCooperative development	Industry communicationStrategic cooperation projects
Government and regulator	Compliance in operationIndustry development promotionEnvironmental protection	Institution investigationPolicy implementationInformation disclosure
Community	Environmental protectionCommunity benefit activities	Community activity

Communication with investors amid COVID-19

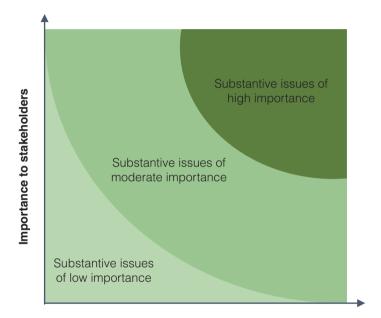
2020 is an extremely special year. People's regular work and life were greatly impacted by the global spread of COVID-19. To avoid contact transmission of the virus, offline meetings and activities were reduced, thus, communication channels between listed companies and their investors were restricted.

To guarantee communication with investors and avoid potential health risks of investors, the Company mainly conducted online communication in 2020. The Company prepared presentations, clinical data posters, progress reports, and management interviews for investors. In addition, the Company took the initiative to disclose relevant information and improve information transparency during the epidemic by flexible use of email group, WeChat groups, the company website, and the WeChat official account, to help investors comprehensively, timely, and efficiently understand the Company's strategies, operations and business performance.

In 2020, the Company organized more than 200 one-to-one communications, small and large-scale investor exchange meetings to update the investors on the Company's product pipeline, clinical data, and operations, and actively expand new investor groups.

Analysis of substantive issues

Through exchanges and communication with stakeholders and insights into the hot spots of the industry and current environment, the Company identified the substantive issues in 2020 in accordance with the requirements of *Environmental, Social and Governance Reporting Guide*, which is listed on the Appendix 27 of the *Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited*. We prioritized the substantive issues based on their importance to the sustainable development of the Company and to stakeholders. The Report includes disclosure and explanation on the substantive issues.



Significance to the sustainable development of the Company

Substantive issues of high importance

Quality management Product R&D Intellectual property protection Strategic cooperation Compliance in operation Employee rights and benefits Employee health and safety

Substantive issues of moderate importance

Efficient production Supplier management Emission management Resource management Employee training and promotion

Substantive issues of low importance

Community dedication Response to extreme weather

Quality management

As a pharmaceutical company, Alphamab values quality management as the foundation of sustainable development while focusing on R&D efficiency and cost. Alphamab believes that long-term development of the Company can only be achieved by improving quality awareness and strengthening quality control. Therefore, the Company takes quality as one of its core values, constantly improves its quality control and supervision mechanism, and implements high-level quality requirements, to provide the society with products of excellent quality, safety and reliability.

Quality control system

We strictly abide by the *Drug Administration Law of the People's Republic of China*, the *Implementing Regulations of the Drug Administration Law of the People's Republic of China*, China's *Good Manufacturing Practices for Drugs*, EU's Good Manufacturing Practice guidelines, FDA's *Current Good Manufacturing Practice*, ICH Guidelines, and other domestic and foreign laws and regulations. Based on these laws and regulations, the Company established a sound quality control system according to its own characteristics to guide effective quality control activities. By the end of the reporting period, the Company formulated 88 quality assurance documents and 350 quality control and operation documents. Alphamab's quality control system includes six elements, covering the entire life cycle of the drugs:



The Company formulated the *Quality Manual*, which systematically plans and describes the quality control processes and methods from the perspectives of document management, resource management, product realization and continuous improvement, and established the *Quality Control System* to ensure implementation of the *Quality Control System* requirements within all relevant departments. In terms of product recall, we established the *Management Process of Product Recall* based on the *Administrative Measures for Drug Recalls* and the *Good Manufacturing Practices for Drugs* issued by National Medical Products Administration (NMPA), to ensure timely drug recall as per the relevant procedures when there is any quality problem or potential safety hazard, and thereby reduce the occurrence of health hazards. By the end of the reporting period, there were no product complaints or recalls.

In August 2020, Alphamab conducted quality system management review, aiming to continuously improve the management of quality system. The Company will continue to enhance the standardization, integration and systematization of GXP management through the quality system.

> Quality principle

In 2020, Alphamab updated its quality principle to be "Quality is the core value of Alphamab and the key to product safety and effectiveness". The Company promoted the new quality principle in the "2020 Quality Culture Promotion Action", organized quality culture publicity among all departments, and invited employees to the "Quality Principle Signature Wall" activity. In addition, based on the new quality principle, the Company updated the quality management systems:



Management Regulations for Release of Newlybuilt or Renovated Plant Facilities

To regulate the release and improve the daily management of plant facilities

Good Record Management Regulations

To expatiate the normalization of GxP records and improve the recording of GxP data

Quality Statement Management Regulations

•++•

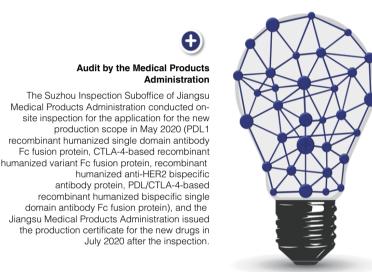
To clarify the standard management of quality statements, improving the relevant requirements for deviation, change and supplier management



> Quality audit

Alphamab continuously improves the quality control system through internal and external quality audits. We perform quality control self-inspection in key areas such as plant facilities and equipment, production management, quality control, laboratory management, clinical trials, materials and transportation management every year. As of the end of the reporting period, we conducted 10 internal quality audits and accepted 2 external quality audits.

In 2020, the Company organized two major audits:



Audit of partner

The Partner Tracon audited the quality system of the factory that produces and monitors the primary liquid, including the workshop, warehouse, quality management system, data integrity, and computer system verification. The auditor made positive remarks on the organization as well as the timeliness and comprehensiveness of on-site answers of this audit. There were no key problems, and only 3 major and 6 minor finding were identified during the audit. The Company timely responded to the issued identified in a timely manner and actively completed the remediation.

> Quality training

Alphamab firmly believes that product quality is closely related to each employee's daily work. Thus, we actively organize quality training to enhance the quality awareness of the staff. The Company's quality training includes employee orientation and annual training for all employees, with training content covering the key topics of the Company's quality management system as well as the new or updated laws and regulations for drugs. In 2020, the Company organized 11 annual GMP training, covering deviation, changes, personnel health, antibody production technology, and other aspects. In addition, the Company made individual GxP training plans for employees based on their departmental training matrix and job responsibilities; these training plans were effectively executed, including business training, cross-department process training, quality system training, as well as training on laws and regulations.

Case: Quality system forum

To create a good quality culture environment and underpin the continuous improvement of the Company's quality management, in November 2020, the quality department vigorously promoted quality culture construction. The Company held quality forums to discuss quality system construction strategies and share quality cases so as to improve the staff's quality consciousness and promote quality culture.

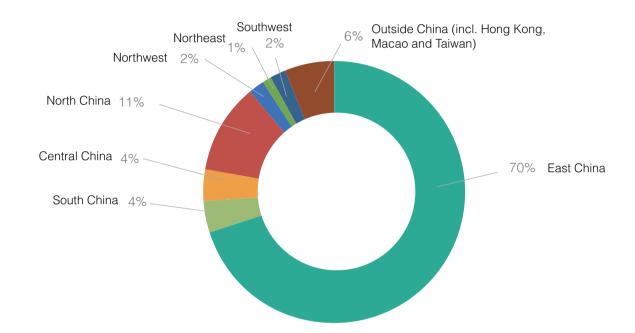


Employees in a quality system forum

Supply chain management

The development of an enterprise is inseparable from suppliers' products and services. Therefore, we continuously values supply chain management and persistently build a competitive supply chain system. While improving the Company's environmental and social governance ability, we promote healthy development of suppliers and drive win-win results.

The Company established and strictly follows the *Procurement and Bidding Management Process*, the *Management Procedures for Third-Party GMP Service Providers*, and the *Management Procedures for Material Suppliers* to manage the suppliers. In strict observance of these rules, we verify the qualification of potential suppliers, and conduct on-site audit or paper audit based on the specific situations. Only after the suppliers' qualification is verified to meet national standards can they be included in the qualified supplier system. In addition, we consider the suppliers' performance of environmental and social responsibilities and records of illegal acts as important evaluation indicators. We will first choose to cooperate with the suppliers with good environmental protection performance. We set down terms in the contracts with suppliers to clarify their environmental protection and social responsibilities and urge them to use environment-friendly materials.



At present, we cooperate with 591 suppliers, mainly from East China :

Compliance management

Compliance management is an important foundation of smooth operation and also the basic premise for mitigating operational risks. We regard compliance management as an indispensable part of our daily operation and management. While strictly observing business ethics, we continuously improve the internal control system for compliance, optimize supporting systems, and periodically perform specific audits to enhance our comprehensive competitiveness and risk resistance capacity.

Business ethics

We strictly abide by the *Criminal Law of the People's Republic of China* and the *Anti-Unfair Competition Law of the People's Republic of China*. We also formulated the *Anti-Fraud and Reporting Management System*, the *Anti-Bribery and Anti-Corruption Management System* and other internal regulations to further raise the moral bottom line. As gifts and hospitality expenditure is an especially sensitive aspect during operation, the Company formulated complete standards and guidelines to prevent risk of corruption. We specify anti-fraud, anti-bribery and anti-corruption requirements in the *Employee Handbook* to regulate employees' behaviours at work. We organized 8 anti-fraud training for new employees and 1 clinical compliance training in 2020 to strengthen their awareness of compliance and integrate compliance behaviours into daily routine of the Company.

Reporting of violations

Reporting channels are an important window for employees to communicate with the management about the incidents detrimental to the interests of the Company. We have set up reporting mailboxes and hotlines, and employees are encouraged to report any non-compliance incidents. The Internal Control and Audit Department leads and cooperates with other relevant departments to form an investigation team, which is responsible for accepting reports in accordance with the standard procedures, conducting investigations based on the clues reported, and reporting the investigation results. The establishment of reporting channels reflects the values of the Company and plays an important role in depressing and preventing non-compliance behaviours. We are committed to protecting whistleblowers and those who cooperate with the investigations and taking appropriate measures to prevent all possible retaliation. In 2020, the Company did not have any act of corruption, bribery, extortion, fraud and money laundering, nor any litigation caused by above-mentioned matters.

> Audit & inspection

In order to supervise and inspect the operation compliance of the Company, we perform special audits for in-depth inspection in key areas, so as to ensure the legal compliance of economic activities. We give full play to the supervision and inspection function of the Internal Control and Audit Department. In 2020, we conducted several special audits focusing on important areas such as procurement, inventory, contracts, fixed assets and intangible assets to further optimize the relevant processes.

R&D and Innovation

Alphamab adheres to the original aspiration of "bringing health to patients and happiness to families", and values R&D and innovation as the impetus of the Company's sustainable development. The company continues to improve R&D efficiency, abides by R&D ethics, protects intellectual property rights, and constantly seeks strategic cooperation opportunities to contribute to the medical and health cause.

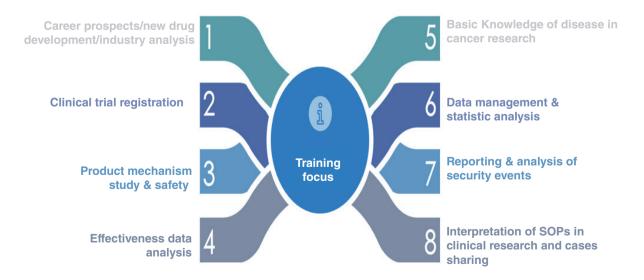
R&D capability

R&D team and investment

The Company has a R&D team with strong expertise which is led by founder Dr. Xu Ting. With years of R&D experience, Dr. Xu has contributed to more than 100 patents and patent applications. In addition, we constantly strengthen our R&D team building, attract and retain R&D talent by enhancing the rationality of project planning and offering competitive remuneration and equity incentives. As of December 31, 2020, our R&D personnel totalled 252, accounting for 75% of all employees.

The Company continues to strengthen training and communication to enhance the professional skills of the R&D team. In 2020, the National Medical Products Administration (NMPA) revised the Good Clinical Practice for Drug Trials (GCP 2020). To help employees better understand the GCP 2020 and facilitate clinical development, the Company organized GCP 2020 training for clinical personnel – 75 of them completed the training and obtained the NMPA GCP certificate.

In addition, the Company organized one online and two offline professional training sessions for clinical staff.



By combining the theory with practice, the team is familiar with the Company's relevant operating procedures as well as the development process of clinical trials and helped them consolidate the knowledge accumulated from previous clinical trials.

In addition, to further standardize R&D behavior, the Company sorted out the R&D management systems, adding 15 standard operating rules for clinical trials, and updating and supplementing the 21 standard operating rules.

The Company plans to carry out the second stage of Phase I expansion project for R&D, pilot production and preparation workshop to further upgrade the R&D environment in 2021. It includes the construction of R&D Building No.1, covering an area of about 9,500 m², which is expected to be put into use in the fourth guarter of 2021. About 4,000 m² of the R&D Building No.1 will realize the R&D functions of the entire process of preclinical development of biopharmaceuticals, including early-stage R&D, pharmacological efficacy, process development and validation, and guality analysis. In addition, the company also designs a 2,000 m² shared laboratory to better incubate global innovative technology platforms and projects of universities and scientific research institutes. The improvement of R&D facilities provides the Company with project and technology basis for developing outstanding drug candidate molecules and platforms and lays a solid foundation for the Company's pipeline development. The pilot plant contains 250L and 500L scale bioreactors. The upstream process takes into account cell culture technology such as fed-batch and perfusion. The downstream process adopts on-line liquid preparation and chromatography system, realizing seamless connection with the purification technology to meet the requirements of different scale production of drug substance. The preparation workshop is constructed in accordance with the current GMP standards at home and abroad, and the core equipment is from industry-leading manufacturers such as Syntegon, with an annual production capacity of tens of millions of vials. To ensure and improve product R&D capabilities, we continuously increase investment in product innovation and R&D. In 2020, Alphamab's R&D expenditure exceeded RMB331 million, an increase of 99% year on year.

> Technology platform

Based on the full understanding of the structure and function of antibodies and proteins, as well as the bioinformatics analysis and forecasts, our R&D team successfully developed technology platforms for innovative anticancer drugs, namely the bispecific antibody development platform and the mixed antibody development platform, laying a solid foundation for R&D and innovation.

- Bispecific antibody development platform (CRIB): Compared with monospecific antibodies, bispecific antibodies can enhance tumor specific targeting and efficacy, and are more cost-effective in clinical practice, but they were accompanied by the technical challenges of unstable quality and low yield. After a decade of efforts, we successfully created a world-leading R&D platform for heterodimer Fc-based bispecific antibodies, which can solve the chemical, production and control (CMC) problems during the R&D of bispecific antibodies.
- 2. Mixed antibody development platform (CRAM): It is a leading technology platform independently developed by the Company. The platform enables the Company to clone and produce a variety of antibody molecules based on a single cell. Compared with other technologies, CRAM platform can effectively reduce R&D and production costs, and greatly ease the medical burden of patients.

Based on the molecular characteristics of antibody endowed by cell technology in antibody production, The Company also cooperated with Nanjing University to develop a glycosite-specific antibody drug conjugates (ADCs) platform¹. At present, technical route of the site-specific conjugation platform has been completed, which has been applied in the JSKN003 HER2 bispecific ADC project. This project is at the process development and optimization stage and is expected to submit investigational new drug application in China in the first quarter of 2022. Other ADC projects based on this platform are in the early stages of molecular screening and functional verification.

R&D progress

Supported by the innovative technology platforms with independent intellectual property rights, the Company developed a series of product pipelines composed of eight tumor drug candidates, six of which are world-leading bispecific antibodies and four are in phase II~III clinical trial.

In 2020, the Company's core product R&D saw milestone progresses: we conducted nearly 20 clinical trials of different stages for KN046 (PD-L1/CTLA4 bispecific antibody) globally, and started registered clinical trials for some indications; clinical trials of KN026 (anti-HER2 bispecific antibody) were conducted simultaneously in China and the United States; breakthrough achievements were made in the overall layout of KN046 and KN026 drug combination strategy; KN035 (PD-L1 single domain antibody Fc fusion protein) registration application was initiated; phase II clinical trial of KN019 (CTLA-4-based immunosuppressant fusion protein drug candidate) progressed smoothly.

KN046 is the world's first recombinant humanized PD-L1/CTLA-4 bispecific antibody independently developed by Alphamab. Currently, nearly 20 clinical trials of different stages are being conducted around the world, covering over 10 types of tumors such as non-small cell lung cancer (NSCLC), triple negative breast cancer, esophageal cancer, thymus cancer, liver cancer, and pancreatic cancer. On April 16, 2020, Alphamab received Safe to Proceed Letter from the U.S. Food & Drug Administration ("FDA") for KN046, to initiate Phase II clinical trial in anti-PD-(L)1 refractory or relapsed NSCLC. In September 2020, KN046 was granted the orphan drug designation by the FDA. In December 2020, the combination therapy of KN026 and KN046 was granted the orphan drug designation by the FAD. At present, the Phase III clinical trial of KN046 for the treatment of advanced squamous NSCLC has been officially launched and smoothly carried out. The Phase II clinical trial of KN046 combined with chemotherapy drugs or targeted drugs for the First-Line treatment of advanced liver cancer or pancreatic cancer has also achieved good efficacy and safety.

Another core product KN035 is the recombinant humanized PD-L1 single domain antibody Fc fusion protein independently developed by Alphamab. It was granted the orphan drug designation by the FDA in January 2020 for the treatment of biliary tract cancer. In December 2020, the biologic license application for KN035 was submitted to the NMPA for the treatment of MSI-H (microsatellite instability-high) and dMMR (deficient mismatch repair) solid tumors.

Alphamab's antibody technology enables antibody molecules to have homogeneous glycan. Based on this characteristic, the site-specific conjugation platform features higher serum stability, better safety, simpler process, lower costs, and more homogeneous DAR (Drug Antibody Ratio) compared with thiol-conjugation; the glycosite-specific conjugation can conjugate four toxin molecules.

In addition, clinical studies on KN026 for treating advanced HER2-positive solid tumor, relapsed/ metastatic breast cancer, advanced gastric cancer and gastroesophageal junction cancer progressed with satisfactory results. The phase II clinical study of KN019 for treatment of patients with active rheumatoid arthritis and inadequate response to MTX completed subject enrollment.

Case: Academic conferences

In 2020, many R&D projects of the Company saw preliminary results, which were demonstrated in several academic conferences.

American Society of Clinical Oncology (ASCO) 2020 Annual Meeting

- ASCO is the largest and most influential professional academic organization of oncology in the world. ASCO Annual Meeting brings together the elite of clinical oncology research from around the world and is recognized as one of the most important oncology conferences in the world.
- On May 14, 2020, the KN046 and KN026 phase I clinical trial achievements of the Company were demonstrated at the ASCO Annual Meeting.

American Association for Cancer Research (AACR) 2020 Annual Meeting

- AACR Annual Meeting is one of the oldest and largest oncology conferences in the world. The meeting covers every aspect of high-quality cancer research and innovation and gathers the most cutting-edge research achievements.
- On May 18, 2020, the Company's KN026 research results were released at the AACR Annual Meeting.



- SITC Annual Meeting is the largest international event focusing on cancer immunotherapy, and attracts thousands of academic, regulator and government leaders and representatives from around the world.
- The Company achieved good results in phase Ib clinical trial of KN026 and KN046 combination therapy, and the research data were published at SITC 2020.

Protection of subjects' rights and interests

The Company always abides by ethics during clinical research and animal experiments. We strictly follow the *Declaration of Helsinki* and other medical ethical principles, as well as *China's Good Clinical Practice for Drug Trials*, to pursue medical innovation and development. By reference to relevant regulations and standards, we established the *Protection of Subjects' Rights and Interests* to fully protect subjects' rights of life and health, informed consent, privacy, medical treatment, economic compensation and others. The Company requires the authorized researchers to inform the subjects of every aspect of the clinical trial before the clinical trial begins, and the subjects must voluntarily sign the informed consent form with full knowledge of the trial. We pay close attention to the subjects during clinical trials. We have established and followed the *Management of Serious Adverse Events*, which defines adverse events and serious adverse events.

Fight against COVID-19

COVID-19 raged across the globe and become the major public health event across the world. The Company takes various measures to ensure normal progress of clinical trials, such as paying for the transportation, accommodation and meals of the subjects who had difficulty traveling between their residence and the research center due to the pandemic, ensuring clinical compliance while protecting the rights and interests of subjects. In addition, to effectively fight COVID-19, on June 10, 2020, the Company and Institute Pasteur of Shanghai, Chinese Academy of Sciences ("Institute Pasteur of Shanghai") entered a cooperative agreement on the global R&D, preclinical and clinical development, registration, manufacturing and sales of therapeutic antibody for COVID-19. By leveraging Institute Pasteur of Shanghai's R&D advantages and prior research findings in infectious diseases as well as Alphamab's R&D strengths and proprietary Mixed Antibodies Platform, this cooperation will provide antibody treatment options for COVID-19 and contribute to disease prevention and control for China and the world.

Strategic cooperation

On the basis of independent research and development, the Company fully utilized its advantages and innovation capabilities to establish strategic cooperation with the world's leading pharmaceutical companies.

On March 27, 2020, Alphamab entered a clinical supply agreement with Pfizer Inc. ("Pfizer") to advance a clinical study to investigate KN026 (an anti-HER2 bispecific monoclonal antibody) in combination with Ibrance[®] (palbociclib), an oral CDK4/6 inhibitor, in patients with previously-treated locally advanced and/or metastatic HER2-positive breast cancer.

On March 30, 2020, Alphamab announced the establishment of a strategic partnership with Jiangsu Simcere Pharmaceutical Co., Ltd ("Simcere") and 3D Medicines (Beijing) Co., Ltd. ("3DMed") to advance the development and commercialization of KN035, a checkpoint inhibitor for PD-L1, for oncology indications in mainland China. Under the terms of the agreement, Alphamab is the exclusive manufacturer of KN035 and responsible for the production and supply of KN035; 3DMed will oversee KN035's clinical development, registration and commercialization; Simcere will exclusively market KN035 in mainland China upon the product's registration.

On June 9, 2020, Alphamab signed an agreement with Sanofi (China) Investment Co., Ltd ("Sanofi") to establish strategic collaboration to advance clinical studies to investigate KN026 in combination with Taxotere[®] (docetaxel) in patients with HER2+ breast cancer.

Efficient production

Alphamab has a biological macromolecule drug R&D and industrialization base in Suzhou Industrial Park. The 75 mu (a Chinese unit of area, 1 mu = 0.0667 hectares) production base was built in line with the standards of NMPA, FDA and EMA for Good Manufacturing Practice, with a designed total capacity over 30,000 L. On July 6, 2020, the Phase I 2×2,000L production line of the industrialization base obtained the "Drug Production License" from Jiangsu Medical Products Administration, marking the further improvement of the Company's production capabilities.

We continuously improve production process to reduce costs while ensuring compliance and good quality, so as to improve the affordability of drugs and benefit more patients. For example, we utilize self-developed culture media for cell culture. Compared with commercially available culture media, the protein expression of self-developed culture media can be increased by 1.5 to 2 times, and the monomial cost of each batch can be reduced by more than 50%. The purification column adopts ion-exchange multimodal resin to replace affinity resin, which will not affect the purity and yield of purified protein drugs but will extend the lifetime of the column by 1.5 times or more and reduce the monomial cost of the column resin by 3 to 5 times.

In 2020, for the KN035 project, we completed key clinical trial and process validation, and for the KN046, KN026 and KN019 projects, we conducted 2,000L scale-up and clinical sample production.

Intellectual property

We always attach great importance to intellectual property protection and have adopted various measures to ensure confidentiality throughout the life cycle of a project. We abide by the *Intellectual Property Law of the People's Republic of China*, the *Patent Law of the People's Republic of China*, the *Trademark Law of the People's Republic of China*, and other laws and regulations. Based on the *Administrative Practice on Enterprise Intellectual Property* and other relevant national standards, we revised the *Patent Management System* in 2020 to regulate the patent management process of the Company. We utilize authoritative databases to search and analyze intellectual property, and coordinate with intellectual property agencies to track and preserve our existing patents by creating management files, backing up relevant documents and other ways. In addition, in order to strengthen employees' awareness of IPR protection, we formulated the *Administrative Measures for Information Security*, strictly implemented it throughout the Company, and signed confidentiality agreements with key employees.

As of December 31, 2020, the Company submitted 57 applications for invention patents, of which 15 were granted; in 2020, the Company submitted 11 new applications for invention patents (including PCT applications and applications to national patent offices via PCT) and secured 7 new patents. The granted patents cover China, the United States, Japan, Europe and five other countries/regions. In addition, the company has obtained eight registered trademarks and has 17 trademarks in application.

Green development

Alphamab is committed to practicing the corporate philosophy of green development through practical actions. We strictly abide by the *Environmental Protection Law of the People's Republic of China*, the *Environmental Protection Regulations of Jiangsu Province*, and other national and local laws and regulations. We timely identify and eliminate potential pollution hazards by monitoring environmental data during daily operation. In 2020, the Company modified and upgraded the equipment used in the production and construction projects, built various new energy recycling and sorting facilities, and promoted green workplace throughout the Company, to reduce the negative impact on the environment.

Energy saving and emission reduction

Many a little makes a mickle. We are dedicated to lean management of energy use and greenhouse gas emissions during daily operation. According to the *Energy Conservation Law of the People's Republic of China*, the *Circular of the State Council on Issuing the Work Plan for the Control of Greenhouse Gas Emissions during the 13th Five-Year Period* and other national regulations and guiding documents, we strive to reduce energy consumption and environmental impact caused by greenhouse gas emissions without compromising corporate profitability. The main energy sources we consume in daily operation are electricity, natural gas, and gasoline, which are the main cause of our greenhouse gases. In 2020, we consumed a total of 8,602.6 MWh electricity, 10,933.89 MWh natural gas and 56.27 MWh gasoline. The direct and indirect greenhouse gas emissions amounted to 2,249.38 tons and 6,051.93 tons respectively.

In 2020, the production was expanded, which inevitably led to an increase in energy use and greenhouse gas emissions. However, we continued our previous effective energy saving measures, striving to advance large-scale production whiling improving resource utilization efficiency. Our production plants are installed with low energy consumption equipment in line with GMP requirements. In addition, the Company deployed utility facilities reasonably to avoid energy waste due to improper pipeline transportation paths. The air pipes and tubing of air conditioners in the production plants are made of thermal insulation materials to reduce heat dissipation. The Company uses intelligent-control inverter air conditioners to conserve energy. During daily work, the Company regularly organizes publicity activities and putting up posters to raise employees' awareness of energy conservation. We uphold and practice the energy saving and environmental protection concept of "lifting a finger to protect the earth". Specifically, we encourage employees to timely turn off the tap and lights, close the doors when leaving the rooms, use as less lights as possible during the day, use air conditioners only when needed with the temperature set at a reasonable range, check the papers before printing, and save sanitary paper; we collect harmful waste such as batteries, ink cartridges, recyclable waste-paper and plastic bottles, and transfer them to external recyclable waste collectors.

Water resource management

Facing the environmental problem of water shortage, we strive to "reuse and save water". We built a collection and reuse system and sewage treatment facility to effectively recycle resources. Our condensate water collection and reuse system can save 15,000 tons of water per year, and the sewage treatment facility, which was put into operation in June 2020, generated 6,274 tons of recycled water by the end of the year, realizing the efficient reuse of water resource. In terms of water saving, we strongly advocate water conservation among the employees during daily operation and use as many water-saving devices as possible. The Company did not encounter any problem in sourcing water that is fit for purpose.

Emission management

We keep daily monitoring and record of wastewater, exhaust gas, and solid waste to ensure that the discharging process and waste are compliant with the relevant laws. We take active measures to reduce emissions from the beginning, and effectively utilize recyclable resources to minimize the impact on the natural environment.

> Wastewater

We strictly abide by the relevant provisions of the *Law of the People's Republic of China on the Prevention and Control of Water Pollution*, the *Regulations on Administration of the Taihu Lake Basin* and the *Regulations of Jiangsu Province on the Prevention and Control of Water Pollution of Taihu Lake*. The wastewater produced by the Company is discharged after treatment in accordance with relevant standards.

The wastewater generated from our daily operation mainly includes production wastewater and domestic sewage. The drainage system diverts wastewater from clean water and shunts rainwater and sewage. Production wastewater includes hypersaline wastewater, wastewater from equipment and plant cleaning, etc. Production wastewater will go through inactivation and disinfection, regulation and evaporation, and other treatment processes of the wastewater treatment station to meet relevant standards – the reusable water will be used for washing animal rooms, circulating cooling system and the unusable residue will be disposed by external specialized waste treatment stations. The domestic wastewater and the canteen wastewater from the oil separating tank will flow via the municipal sewage pipe network to the sewage disposal plant in the industrial park, then be discharged into Wusong River after meeting the discharge standards.

In addition, the Company conducts regular inspection on the wastewater treatment station and drainage pipeline network, and reports and deals with problems in time to reduce the risks of accidents. We improved employee management to enhance their sense of responsibility and work initiative. We cooperate with routine supervision and inspection to ensure stable and compliant wastewater discharge.

➢ Exhaust gas

The Company strictly follows the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, the *Regulations of Jiangsu Province on the Prevention and Control of Atmospheric Pollution*, and other national and local laws and regulations to discharge waste gas. In 2020, the exhaust gases of the Company were mainly organic waste gas, boiler flue gas, and malodour gases from the wastewater treatment facility.

The organic exhaust gas is mainly generated by the R&D base and laboratory. The exhaust gas collected from the fume hood and universal gas collecting hood in the laboratory will go through the high efficiency filters inside the exhaust pipe, activated carbon adsorption, then be discharged. The gas-fired boilers are fueled by natural gas, which generates exhaust gas containing a small amount of NOx, SO₂ and smoke dust during the combustion process. The exhaust gas will be discharged after going through the low-NOx burner to reduce the NOx. The odor gas generated from the wastewater treatment facility will be discharged after going through the scrubbing tower, UV oxidation and activated carbon adsorption to reach the emission standards.

> Waste management

The waste we generate includes hazardous waste and non-hazardous waste. The Company has established *Hazardous Waste Management System, Solid Waste Management Regulations, Hazardous Waste Safety Operation Regulations* and other regulations and systems, and recycles hazardous and non-hazardous waste accordingly to reduce the impact of waste on the environment.

The hazardous waste includes general industrial solid waste and harmful waste. The hazardous waste will be sorted, collected, and properly stored in the waste warehouse. The hazardous waste will be stored and managed in accordance with the *Standard for Pollution Control of Hazardous Waste Storage*, and regularly transferred to qualified units for treatment. In 2020, we generated approximately 69.36 tons of hazardous waste.

The non-hazardous waste mainly includes construction waste, packaging of finishing materials and household waste. In 2020, we produced 2 tons of household waste and 18 tons of construction waste. The packaging will be sorted first, then recycled or sold to salvage stations. The non-recyclable construction waste and household waste will be collected and disposed by the environmental sanitation department.



Garbage sorting station

> Noise control

Noise mainly comes from the running centrifuges, shaking incubators and vacuum pumps in the production area, as well as the air-cooled heat pump units and roof water pumps of office buildings. The production noise is unavoidable, and we adopt low-noise equipment wherever possible. Meanwhile, we made a reasonable layout of the production area according to the noise intensity of different production equipment, and implemented measures such as vibration absorption, sound insulation and distance attenuation to ensure the noise meeting the *Emission Standard for Noise at the Boundary of Industrial Enterprises*. For the noise in the office building area, we started the reconstruction project for improvement of noise source in 2020. We investigated the causes of noise and made partial modification. The noise was tested to have been significantly reduced.

Emergency response

To implement the national laws and regulations on environmental emergency management, ensure that all major environmental pollution emergencies occurring in the plant can be dealt with in a timely, orderly and efficient manner, and minimize the possible impact on the environment, we formulated the *Contingency Plan for Environmental Emergencies* to be used as a guiding document for emergency measures, which effectively strengthens and regulates the monitoring of environmental risk sources as well as the emergency measures for environmental pollution incidents.

In 2020, we comprehensively identified all possible hazard sources within the plant and classified in a summary table all risk sources (including environmental pollution risk sources) by location, personnel involved, consequence, risk level, control measure and other factors to effectively monitor the risk sources.

In addition, the Company set up the emergency rescue command center and formed various emergency teams. The responsibilities of all specialized departments were specified to ensure smooth, well-organized rescue work during emergencies. We prepared necessary emergency facilities and equipment, and set aside special funds for it. By conducting relevant emergency drills, we enhanced the rationality and scientificity of the emergency response plan, as well as the emergency response capabilities of all responsible departments. As the employees' crisis response awareness is improved, the environmental pollution risks will be reduced.

Talent-oriented philosophy

To protect employees' health and safety at work and create harmonious employment relations, Alphamab Oncology, upholding the talent-oriented philosophy, established a talent team in line with the Company's strategy and requirements for sustainable development. Alphamab Oncology strictly follows the laws and regulations such as the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China and the Employment Promotion Law of the People's Republic of China*. With established internal systems for employee recruitment, occupational health, and staff benefits, the Company strives to inspire employees with a shared vision, unite them through democratic management and warm them with genuine care. We promise not to use child labor, forced, bonded or indentured labor, and ensure the compliance in terms of dismissal,working hours, holidays, etc.

Training & development

Comprehensive training system

Alphamab established and followed the *Training Management System*, and built a systematic training system, covering new employee orientation, pre-job training, professional ability training, general course training, special case training and special license training. We ensure that the trainings are professional and standardized to improve the comprehensive quality of employees. In 2020, we continued the traditional training courses, and added innovative and interesting training content. All employees participated in the training, with male and female employees averagely receiving 18 and 12 hours of training respectively.

Case: New employee orientation

In order to help new employees get a comprehensive understanding of the company environment and their job objectives and responsibilities, master working procedures and methods, and adapt to their roles as soon as possible, the Company organizes new employee training during the first two months of their employment, including company introduction, company rules and regulations, anti-corruption requirements, as well as product, industry, guality, and EHS knowledge.



New employee orientation

Case: Online training on COVID-19

During the epidemic, the Company conducted online training for employees covering "Self-protection against Covid-19", "Mental health of employees amid the epidemic", "Safety in epidemic prevention" and other subjects. The online training helped employees learn more about epidemic prevention and enhanced their epidemic prevention thoughts and practice.

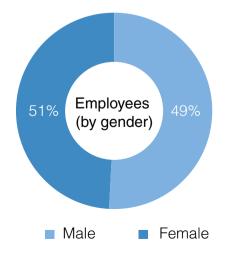
Promotion channel

The Company provides equal and transparent promotion channels for employees. We attach great importance to the growth and development of employees. Based on employees' personal and job characteristics and requirements, we provide two promotion channels, the technical path and management path, for employees to pursue career development. In addition, the Company conducts regular employee assessment according to the *Performance Management System*, combining qualitative and quantitative indexes to ensure that each employee is given reasonable and equal promotion opportunities.

Employee rights and benefits

Equal employment

Alphamab actively promotes diversified operation and development, and strives to provide equal employment opportunities. Therefore, the Company formulates the *Recruitment Management Policy*, the *Labor Contract Management Policy and Employee Handbook* to regulate issues regarding employee recruitment, job levelling, salary scaling and hiring. The Company signs standardized labor contracts with employees. We are committed to providing equal opportunities in recruitment, career development, promotion, training and rewards, for people of different skin colors, nationalities, races, ages, genders, religious beliefs and physical disabilities, and forbid any forms of discrimination or unfair treatment, so that all employees can find their proper place in the Company. In 2020, female employees accounted for about 51% of our workforce, achieving a balanced gender ratio and equal pay for equal work.



Compensation & benefits

Alphamab formulates and abides by the *Performance Management System* and the *Compensation Management Policy* to increase employees' enthusiasm for work from the policy perspective and to achieve the long-term goal of having employees grow together with the Company. The Company conducts a performance evaluation twice a year, and adjusts annual salaries and pays year-end bonus according to the evaluation results. In addition, we grant outstanding employees with stock options.

Meanwhile, the Company strictly abides by the relevant wage management regulations of local governments to ensure the basic wages of all categories of employees are not lower than the requirements of laws and regulations, and pays all kinds of social insurance in full and on time. In addition, the company also purchased additional commercial medical insurance and accident insurance for employees, and provided employees with high-temperature subsidies, meal subsidies, transportation, communication and post subsidies, holiday gifts, physical examination, annual parties and other welfare items.



In addition, the Company establishes an "online shopping mall", where employees can shop with credits granted by the Company. This improves employees' experience and sense of participation, as well as the convenience of benefits distribution and cost calculation.

Employee care

Alphamab Oncology is committed to creating a people-oriented work environment, advocating work-life balance, and is striving to bring joy and happiness to every employee. We hope that employees find joy and develop a sense of belonging at work. Therefore, the Company actively organizes various cultural activities for employees to create a positive working atmosphere and promote corporate culture.

"Core values" is an important guarantee to create the corporate image and achieve the development goals of the Company. The unified values can form a strong cohesion and enhance the sense of belonging of employees. Therefore, the Company regularly carries out "value star" selection activities, hoping to establish role models, transfer positive energy, motivate more colleagues and cultivate our sense of ownership and responsibility. In June 2020, seven colleagues were awarded the title of "star of values".

Case: Excellent employee selection

To honor the outstanding employees who made significant contributions to the Company in 2020 and motivate employees to achieve excellence in the next year, so as to further enhance the Company's core competitiveness and employees' overall quality, the Company carried out the selection of excellent employees in 2020, with 14 outstanding employees selected and awarded a laptop.



Case: Team building activities

In 2020, Alphamab Oncology conducted several team building activities in each department to help employees relax after work. Furthermore, the team building activities promoted understanding among employees and summarized each stage's work, which is conducive to future work.



Safety and health

➢ Guarantee occupational health

The Company puts high priority on the physical and mental health and occupational safety of employees. When building the R&D and production bases, the Company provides employees with high-guality labor supplies and protective equipment, such as safety helmets, safety shoes, masks, and safety ropes. We also built dust control equipment and green areas for dust and noise reduction so as to prevent occupational diseases. In addition, the Company hires a professional third-party inspection agency to conduct a full range of health check, risk identification, and hazardous factor detection in the work environment in accordance with the requirements and standards of the Code for Indoor Environment Control of Civil Building Engineering. The agency issued the Report on Air Quality Inspection in Workshops, and proposed rectification measures to address the potential risks to ensure employees' health and safety. The Company put up slogans, pasted warning tapes, and set up road maintenance protection to regulate employees' daily work behaviour and build a safe working environment. During debugging and pilot-production, the Company conducted comprehensive health examinations for employees exposed to occupational health hazards before, during and after work in accordance with the Technical Specifications for Occupational Health Surveillance and the results of the Occupational Health Pre-evaluation for the project, and issued the Health Examination Report. Employees can choose examination items and health protection services based on their requirements and job responsibilities to timely detect health problems and diseases and reduce health risks.

Safety training and education

To raise safety awareness of employees during daily life and work, Alphamab Oncology made a three-level safety training and education plan according to the *Work Safety Law of the People's Republic of China*, the *Labor Law of the People's Republic of China* and other related regulations. We regularly carry out safety knowledge training and tests, and employees are allowed to work only after they pass the tests. In 2020, the Company conducted the three-level safety education, safety technology exchange and major hazard analysis. With the corresponding tests, employees gained a deeper understanding of the Company's safety policies, rules and regulations, safe use of chemicals and fire-fighting equipment, as well as the relevant emergency rescue knowledge. After the extensive training, the employees were more familiar with the Company's safety rules and regulations and their awareness of safety responsibilities was enhanced. In addition, to improve employees' ability to deal with emergencies, the Company organized fire-fighting equipment training and fire drills for all employees and suppliers. In 2020, there were no work-related injury accidents in the Company.





Production safety training



Emergency rescue training



Practice using portable fire extinguisher

Community benefit activities

As a leading R&D and manufacturing company of anti-tumor pharmaceuticals, our ultimate goal is to benefit the public and contribute to society with high-quality, efficient and affordable drugs. In 2020, during the critical time when the whole country was fighting against the epidemic, as a pharmaceutical company, we were deeply aware of our social responsibility and contributed to the prevention and control of the epidemic.

Dr. Ting Xu, Founder, Chairman and CEO of Jiangsu Alphamab, said: "We would like to express our heart-felt respect to the selfless hard-working medical personnel who have risen up to the challenge in this critical time. Alphamab was founded to "bring health to patients and happiness to families", this donation is a sincere expression of our commitment to support this war against the coronavirus. Alphamab will work with everyone to fight this war by believing in scientific guidance and following the instructions from the government. We hope that we will win this war as soon as possible and bring health and peace to everyone."

At the beginning of January, the epidemic broke out and materials were in short supply. We donated RMB1,000,000 to Wuhan Red Cross to support the fight against and prevention of the epidemic in Wuhan and the surrounding areas, striving to go through the difficulties together with the front-line medical staff and patients.

捐赠项目 For purpose	实物(外币)种类 Material objects(Currency)	数量 Amount	金额 Total amount
肺炎疫情捐款		1. 1.	and the statistic sector
转账		a de la compañía de l	
13/18	- 1	31 1	19 BUSINES Julian
金额合计(小写)In Fig	gures		¥ 1,000,000.00

Since the outbreak of the pandemic, we are actively cooperating with the national regulations and requirements on pandemic prevention and control, we also took the initiative to carry out anti-pandemic actions while conducting self-protection. We aim to promote health at workplace by further aligning our company policy to national health standard and explore opportunities to make additional contributions to the communities.

Appendixes

Appendix I – ESG Key Performance Indicators

Indicator	2019	2020
Emission		
Total greenhouse gas emissions (Scope 1 & Scope 2) (ton)	874.07	8,301.30 ²
Direct greenhouse gas emissions (Scope 1)	75.81	2,249.38
Indirect greenhouse gas emissions (Scope 2)	798.26	6,051.93
Greenhouse gas emissions per employee (ton/person)	3.902	24.706
Total exhaust gas emissions (ton)	0.04	1.67 ³
Nitrogen oxides emissions	0.04	1.25
Sulfur oxides emissions	0.00	0.19
Total PM emissions	0.001	0.05
VOCs emissions	/	0.11
Ammonia gas emissions	/	0.07
Total hazardous waste emissions (ton)	1.00	69.36 ⁴
Hazardous waste emissions per employee (ton/person)	0.004	0.004
Total non-hazardous waste emissions (ton)	444.00	20.005
Non-hazardous waste emissions per employee (ton/person)	1.982	0.060

² The start of large-scale production in 2020 has caused a substantial increase in energy use, resulting in a substantial increase in greenhouse gas emissions compared to 2019.

- ³ The total exhaust gas emissions in 2020 will increase substantially compared to 2019. It is mainly caused by the increase in NOx, SOx and PM emissions associated with new production requirements, as well as the increased emissions of VOCs from laboratories that are included in the statistics for the first time, and a large amount of ammonia generated by the increase in sewage treatment station sewage treatment.
- ⁴ The start of large-scale production in 2020 has led to an increase in the amount of hazardous waste in the production process; and after the official operation of the sewage treatment station, the amount of evaporation residue produced is relatively large, resulting in an increase in the total amount of hazardous waste discharge.
- ⁵ The total discharge of non-hazardous waste in 2020 will be significantly lower than that in 2019. Because there will be no large-scale construction in 2020, construction waste will be significantly reduced.

Environmental, Social and Governance Report

Indicator	2019	2020	
Water consumption			
Total water consumption (m ³)	61,730	98,147.04	
Running water	61,533	91,873	
Recycled water	197	6,274	
Water consumption per employee (m ³ /person)	275.580	292.104	
Energy consumption			
Total energy consumption (MWh)	1,501.82	19,591.76	
Electricity	1,134.70	8,602.60	
Natural gas	352.24	10,933.89	
Gasoline	14.88	56.27	
Energy consumption per employee (MWh/person)	6.705	58.312	
Packaging material			
Total amounts of packaging material (ton)	12.00	10.47	
Inner packaging material (coated rubber stopper, penicillin bottle, etc.)	11.80	10.09	
Outer packaging material (product box, cork base, etc.)	0.20	0.38	

Indicator	2019	2020
Employment		
Headcount	224	336
By gender		
Male	115	165
Female	109	171
By age		
Under 30	110	152
30-50	110	178
Above 50	4	6
By employee category		
Senior management	8	29
Middle management	34	46
General staff	182	261
By employment category		
Full-time	224	335
Part-time	0	0
Contract employee	0	1
By region		
Beijing	11	23
Shanghai	32	43
Suzhou	173	257
Others	8	13
Employee turnover rate	26%	26%
By gender		
Male	31%	33%
Female	20%	19%
By age		
Under 30	30%	27%
30-50	22%	25%
Above 50	0%	40%

Environmental, Social and Governance Report

Indicator	2019	2020
By region		
Beijing	18%	29%
Shanghai	9%	29%
Suzhou	28%	26%
Others	50%	10%
Safety	· · ·	
Number of work related fatalities	0	0
Rate of work related fatalities	0%	0%
Lost days due to work injury	0	0
Development	· · ·	
Percentage of trained employees	100%	100%
By gender		
Male	100%	100%
Female	100%	100%
By employee category		
Senior management	100%	100%
Middle management	100%	100%
General staff	100%	100%
Average training hours completed per employee	4.53	15.28
By gender		
Female	5	12
Male	4	18
By employee category		
Senior management	2	16
Middle management	3	18
General staff	5	17

Appendix II – Index of the Environmental, Social and Governance Reporting Guide of HKEX

Aspect	Description	Location/Remark
A. Environmental		
Aspect A1: Emission	S	
General disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer 	Green development Energy saving and emission reduction Emissions management
	relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	
A1.1	The types of emissions and respective emissions data.	Emission management
A1.2	Greenhouse gas emissions in total (ton) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	ESG key performance indicators
A1.3	Total hazardous waste produced (ton) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	ESG key performance indicators
A1.4	Total non-hazardous waste produced (ton) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	ESG key performance indicators
A1.5	Description of measures to mitigate emissions and results achieved.	Energy saving and emission reduction Emissions management
A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Emission management

Aspect	Description	Location/Remark			
Aspect A2: Use of Resources					
General disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Energy saving and emission reduction Water resource management			
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	ESG key performance indicators			
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	ESG key performance indicators			
A2.3	Description of energy use efficiency initiatives and results achieved.	Energy saving and emission reduction			
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Water resource management			
A2.5	Total packaging material used for finished products (ton) and, if applicable, with reference to per unit produced.	ESG key performance indicators			
Aspect A3: The Environment and Natural Resources					
General disclosure	Policies on minimizing the issuer's significant impacts on the environment and natural resources.	Green development			
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Green development			

Aspect	Description	Location/Remark		
B. Social				
Aspect B1: Employment				
General disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer 	Employee rights and benefits Employee care Training & development		
	relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.			
B1.1	Total workforce by gender, employment type, age group and geographical region.	ESG key performance indicators		
B1.2	Employee turnover rate by gender, age group and geographical region.	ESG key performance indicators		
Aspect B2: Health and	d Safety			
General disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer 	Safety and health		
	relating to providing a safe working environment and protecting employees from occupational hazards.			
B2.1	Number and rate of work related fatalities.	ESG key performance indicators		
B2.2	Lost days due to work injury.	ESG key performance indicators		
B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Safety and health		

Aspect	Description	Location/Remark		
Aspect B3: Development and Training				
General disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Training & development		
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	ESG key performance indicators		
B3.2	The average training hours completed per employee by gender and employee category.	ESG key performance indicators		
Aspect B4: Labor Star	dards			
General disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer 	Employee rights and benefits		
	relating to preventing child and forced labor.			
B4.1	Description of measures to review employment practices to avoid child and forced labor.	Employee rights and benefits		
B4.2	Description of steps taken to eliminate such practices when discovered.	Employee rights and benefits		
Aspect B5: Supply Ch	ain Management			
General disclosure	Policies on managing environmental and social risks of the supply chain.	Supply chain management		
B5.1	Number of suppliers by geographical region.	Supply chain management		
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Supply chain management		

Aspect	Description	Location/Remark		
Aspect B6: Product Responsibility				
General disclosure	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer 	Quality management		
	relating to health and safety, advertising, labeling and privacy matters relating to products and services provided and methods of redress.			
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	N.A., no commercial production and sales yet		
B6.2	Number of products and service related complaints received and how they are dealt with.	Quality management		
B6.3	Description of practices relating to observing and protecting intellectual property rights.	Intellectual property		
B6.4	Description of quality assurance process and recall procedures.	Quality management		
B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	N.A., no commercial production and sales yet		

Aspect	Description	Location/Remark
Aspect B7: Anti – corruption		
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. 	Compliance management
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.	Compliance management
B7.2	Description of preventive measures and whistleblowing procedures, and how they are implemented and monitored.	Compliance management
Aspect B8: Community Investment		
General disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Community benefit activities
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	Community benefit activities
B8.2	Resources contributed (e.g. money or time) to the focus area.	Community benefit activities