

**HARBOUR**  
BIOMED

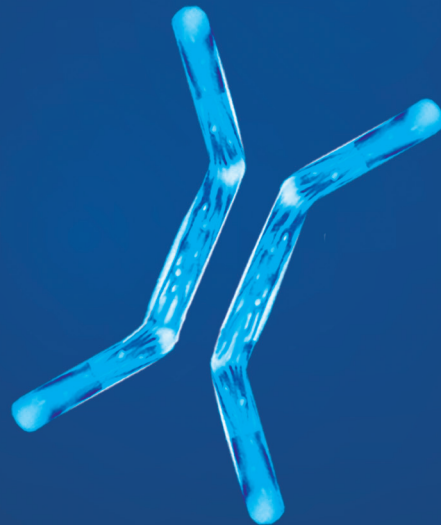
**和 鉑 醫 藥 控 股 有 限 公 司**  
**HBM HOLDINGS LIMITED**

( incorporated in the Cayman Islands with limited liability )

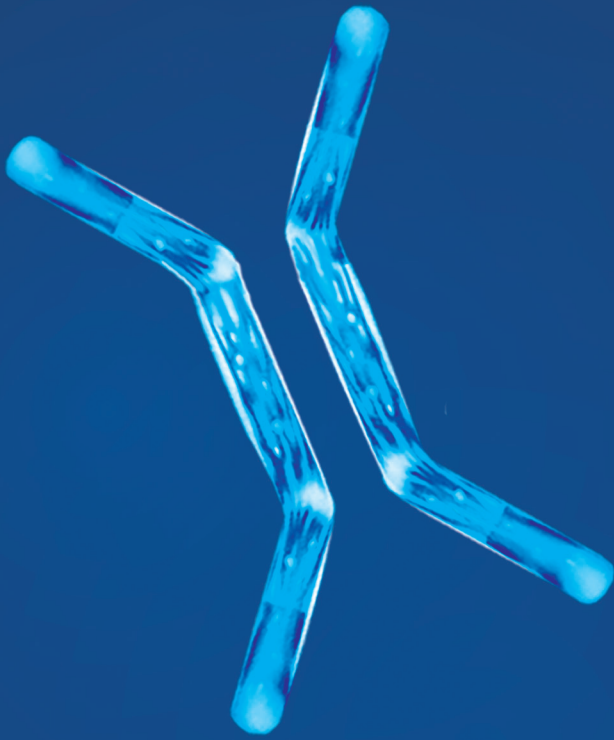
Stock Code : 02142

**2022**

Environmental, Social and  
Governance Report







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# About This Report

## OVERVIEW

This is the third Environmental, Social and Governance (“ESG”) report published by HBM Holdings Limited (the “Company”). This report, which will be published annually, focuses on the Company’s performance in the areas of corporate governance, value innovation, people development, employee safety, and social contribution.

## REPORT SCOPE

Unless otherwise stated, the information contained in this report covers the period from 1 January to 31 December 2022 (hereinafter referred to as “the year” or “the reporting period”), with some references to information from prior years. The scope of this report includes HBM Holdings Limited and its subsidiaries (collectively referred to as “the Group”, “HBM” or “We”).

## PREPARATION BASIS

This report was prepared in accordance with the Environmental, Social and Governance Reporting Guide (the “Guide”), as set out in Appendix 27 of the Rules (“Listing Rules”) Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (“HKEx”).

## SOURCES AND RELIABILITY ASSURANCE

Unless otherwise stated, the data in this report were obtained from the Company’s internal information, survey interview records, and other relevant documents. The Board of Directors of the Company (the Board) undertakes that this report does not contain any false information or misleading statements and that the Board is responsible for the truthfulness, accuracy, and completeness of its contents.

## CONFIRMATION AND APPROVAL

This report was confirmed by management and approved by the Board in March 2023.

## ACCESS TO AND FEEDBACK ON THIS REPORT

This report is available in both traditional Chinese and English. An electronic version of the report is available on our website: [www.harbourbiomed.com/investor](http://www.harbourbiomed.com/investor), and on the website of the HKEx: [www.hkexnews.hk](http://www.hkexnews.hk). In case of any discrepancy between the English and Chinese versions of this report, please refer to the English version.



# Management Message

This report is the third environmental, social and governance report issued by HBM, reporting our efforts and achievements in social responsibility, environment and corporate governance in 2022 to all stakeholders such as users, employees, the government, investors and people who care about HBM.

Since its establishment, HBM has focused on the research and development (“R&D”) of innovative drugs for tumor and immune diseases and the commercialization of the global pharmaceutical industry, adhered to the great mission of “Healthy Life, Breakthrough Medicines”, and expanded its R&D pipeline through independent R&D and collaborative R&D.

HBM is committed to prudent governance and steady progress. In 2022, we constantly improved the corporate governance structure and promoted the principle of business ethics, and carried out investor communication activities, striving to improve the management system and achieve compliance in business operations. We have analyzed and presented materiality issues in combination with ESG issues concerned by the capital market and the needs of various stakeholders.

HBM prioritizes quality and values innovation to achieve a win-win situation. We pay attention to R&D and innovation and constantly bring forth the new through the old while ensuring the quality and safety of our products and controlling the quality risks of our suppliers to make contributions to promoting progress in the industry. We expect to bring innovative drugs to patients through drug innovation to meet patients’ needs and contribute to the industry.

HBM believes in talent cultivation and common development. The Company strictly abides by laws and regulations when recruiting employees, provides all-round training for employees, and protects employees’ rights and interests through diversified communication methods and promotion channels to improve the talent cultivation system, realize talent development and attraction, and help employees develop.

HBM focuses on environmental protection and green operation. As a practitioner of low-carbon operations, we prioritize the environment, health and safety, carry out various publicity and training and emergency management, identify the risks of climate change during the operation and countermeasures to control environmental risks and reduce environmental impact.

HBM aims to build a beautiful community and give back to society. In 2022, We contributed to charity, actively participated in industry activities and innovation, kept improving patients’ quality of life and serving the health of mankind to give back to society in a responsible manner and contribute our strength.

In the future, HBM will enhance its innovation ability, accelerate the creation of more innovative treatments for patients, improve its management, continuously strengthen the concept of sustainable development, fulfill corporate social responsibility and economic responsibility, improve product quality, and join hands with all stakeholders to make unremitting efforts for the development and progress of the industry.





# 2022 Honors and Milestones

## HONORS AND AWARDS

Honors	Organizers
The Most Valuable Pharmaceutical and Medical Company	RoyalFlush Finance
TOP20 Most Influential Antibody Pharmaceutical Companies	Hua Yi Research Institute
TOP20 Most Influential Antibody Pharmaceutical Companies	Organizing Committee of China Bio-Pharm Partnering Forum
2022 T+Employer® Employer Brand Certification of the Healthcare Industry	MedTalent, Med+ Institute, and a Strategic Partner
2022 China Biopharmaceutical Science and Technology Innovation Value List	Organizing Committee of China Biotechnology and Pharmaceutical Innovation Forum
2022 China Biopharmaceutical Industry Value List	Organizing Committee of China Bio-Pharm Partnering Forum
2022 A-level quality enterprise in Jiangsu Province	Suzhou Administration for Market Regulation



**MAJOR EVENTS IN 2022**







# 1. About HBM

Founded in 2016, HBM has always taken “Healthy Life, Breakthrough Medicines” as its mission. To realize this mission, HBM has built a senior management team with rich experience in drug research and development and cooperated with top academic institutions and biopharmaceutical companies in the world to establish an international biopharmaceutical company focusing on the fields of immunity and oncology and adhere to the business philosophy of “Committed to Improving Patients’ Life”.

In 2022, the Company established an international innovative biotechnology company, Nona Biosciences, leveraging Harbour Mice®, transgenic mouse platforms for generating fully human antibodies, and HBICE®, a new generation platform developed independently that generates immune cell articulator bispecific antibodies, and giving full play to its unique advantages and rich experience in antibody-related R&D to innovate business models and provide its partners with a total solution from “Idea to IND” (I to I™), ranging from target validation and antibody discovery through preclinical research.

The Company insists on utilizing its proprietary core technology platforms and its professional knowledge and rich experience accumulated over the years to lead the new generation of biotherapy innovation strategy on a global scale. In the future, HBM will continue to strengthen its advantages of technologies and platforms, continuously improve its innovation capability and market competitiveness, and create more opportunities for steady development.

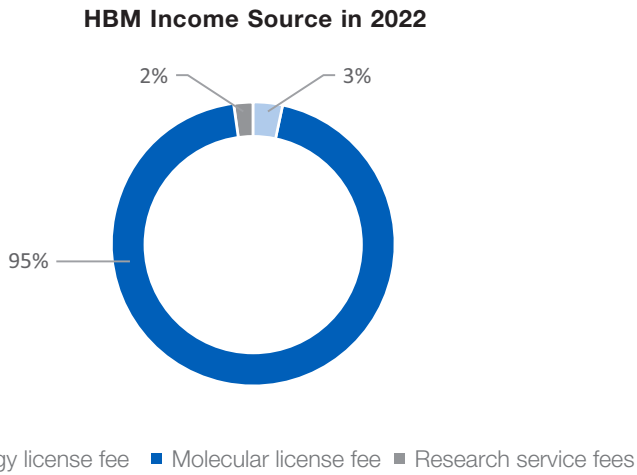
## DEVELOPMENT HISTORY OF HBM

Time	Development History of HBM
2016.7	HBM Holdings Limited was established
2017.1	The Series A round financing was completed
2018.1	The Series A+ round financing was completed
2018.9	The Series B round financing of US\$85 Million was completed
2019.1	The Beacon® single-cell light guide system was integrated
2020.3	The Series B+ round financing of US\$75 Million was completed
2020.7	in the Series C round financing of US\$102.8 Billion was completed
2020.12	HBM was listed on the HKEx, the global offer raised US\$216 Million
2021	HBM9161 entered the registered clinical stage
2022.4	HBM announced a global license agreement with AstraZeneca for HBM7022
2022.11	HBM entered into a license and collaboration agreement with Moderna, announced the establishment of Nona Biosciences, and “Ideas to IND” (I to ITM) one-stop preclinical solutions to empower innovative biologic therapeutics worldwide
2022.12	POC data of Porustobart, the Company’s first product innovated independently, was released



# 1. About HBM

During the reporting period, the Group's total revenue was US\$40,659,000, including US\$1,404,000 in technology license fees<sup>1</sup>, US\$38,437,000 in molecular license fees<sup>2</sup> and US\$818,000 in research service fees<sup>3</sup>.



## 1.1 BUSINESS DEVELOPMENT

HBM focuses on the R&D of innovative drugs for oncology and immune diseases and the commercialization of biopharmaceuticals worldwide, with an emphasis on developing two brands, Harbour Therapeutics and Nona Biosciences. The main business of Harbour Therapeutics is the pipeline and clinical development of innovative drugs. Harbour Therapeutics is committed to clinical and commercial collaboration on innovative target drugs, especially in the area of immune-oncology. Nona Biosciences utilizes the expansion of the collaboration network based on technology platforms to empower preclinical products in the whole industry.

In 2022, based on the original three platforms with leading technological advantages, we added a new technology platform, Nona Biosciences, as our commitment to leading the development of technologies, driving innovative therapies, and accelerating the development process of innovative antibody drugs through a comprehensive platform of technologies. Based on Harbour Mice®, the world's leading transgenic mouse platform for fully-human antibodies, Nona Biosciences produces classic fully-human antibodies H2L2 and fully-human heavy chain antibodies HCAB, providing a one-stop solution for antibody discovery, engineering, and development. Our innovative R&D services cover a series of technology combinations and have promising applications in IO therapy, cell therapy, multi-specific antibody development, and ADC development.

<sup>1</sup> Technology license fee: The performance obligation is satisfied over time throughout the license period as the customer is granted the right to access know-how the Group has the exclusive right to use. An upfront payment is generally due within 10 days after the effective date of the contract, and other payments are generally due 30 to 45 days from the date of billing.

<sup>2</sup> Molecular license fee: The performance obligations are fulfilled when the customer obtains the right to use the underlying license. Payment is generally due within 10 business days from the date of billing.

<sup>3</sup> The performance obligation is satisfied at a point in time when research results are delivered to and accepted by the customer. For certain type of the contracts, the performance obligation is satisfied over the service period based on the stage of completion of the contract. The payment is generally due within 30 days from the date of billing.





## 1. About HBM

Technology Platform/ Service Brand	Description
Harbour Mice®	Transgenic mice are becoming a decisive factor in biopharmaceutical R&D because of their characteristic of producing fully human antibodies. This platform can be used to develop antibodies with various molecular structures and other derivative products. It can produce fully human, affinity-matured monoclonal antibodies with excellent druggability and novel antibodies, which have a wide range of application value and potential.
HBICE®	HBICE® is an HCAb-based Immune Cell Interface platform, which allows the rapid development of multiple specific antibodies to redirect immune cells to the tumor microenvironment (TME) for tumor eradication.
Single cell technical platform	We are experienced in the use of the single cell technical platform. The platform established a complete single B cell cloning technology. Compared with the traditional monoclonal antibody screening technology, single B cell cloning can greatly improve the efficiency and success rate of antibody drug discovery.

## 2. Responsible Governance

HBM continues to improve corporate management systems and governance structure such as the risk governance structure and crisis management team and further improve our corporate ESG governance.

### 2.1 CORPORATE GOVERNANCE

HBM improves our corporate management system, maintains a high level of corporate governance, realizes compliant operations, and integrates the concepts of social responsibility and sustainability into our corporate strategy to further promote ESG governance.

HBM adheres to the *Securities Law of the People's Republic of China*, the *Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited*, the *Code of Corporate Governance for Listed Companies* and other laws and regulations in the places where we operate. The Company incorporated in the Cayman Islands has revised its Articles of Association according to the requirements of the HKEx, and its corporate governance has reached the core standards to protect the rights and interests of shareholders and stakeholders while building a sound corporate management system.

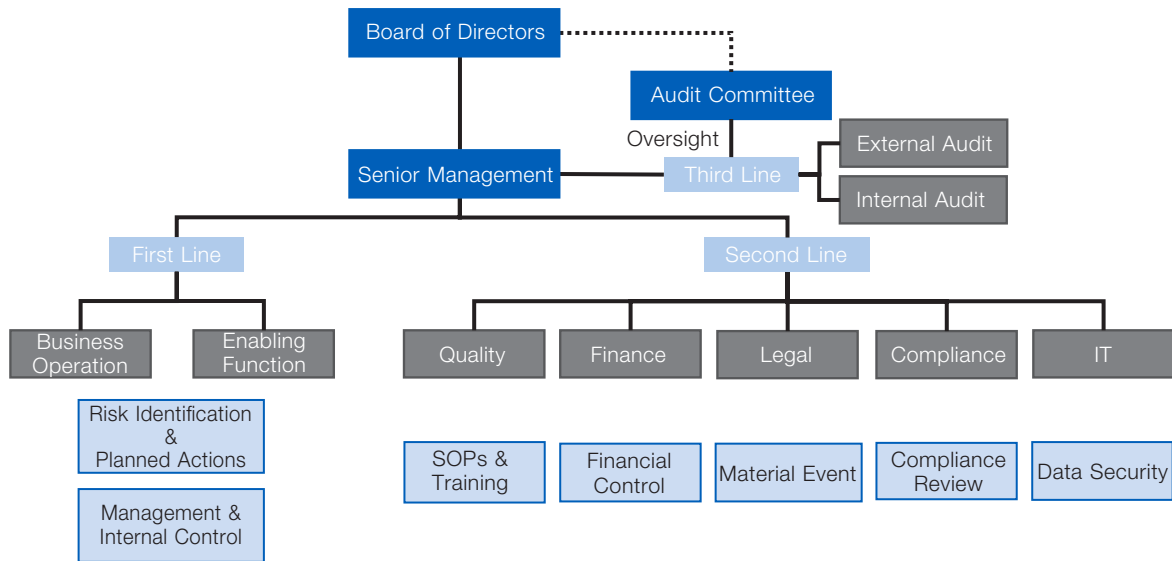
The Group has established a three-tier governance structure comprising the general meeting of shareholders, the Board, and the management. Among them, the Board consists of the Audit Committee, the Remuneration Committee, and the Nomination Committee. The members of each committee are appointed by the Board. We attach great importance to the diversity of our Board in terms of gender, background, and expertise. The Board consisted of eight directors, including three independent non-executive directors, one female director, and four directors with PhDs. Directors with high educational and professional backgrounds and extensive industry experience will better contribute to the development of the Group.



## 2. Responsible Governance

### INTERNAL CONTROL AND RISK MANAGEMENT

Under the supervision and guidance of the Board of Directors and in combination with the actual needs of the Company, HBM adopted the “three lines of defense” model as the formal organizational structure for risk management and internal control, clarified the responsibilities for each level for our risk management framework, and actively conducted risk assessments to mitigate the risks involved in operation management.



**HBM Risk Management Structure**



## 2. Responsible Governance

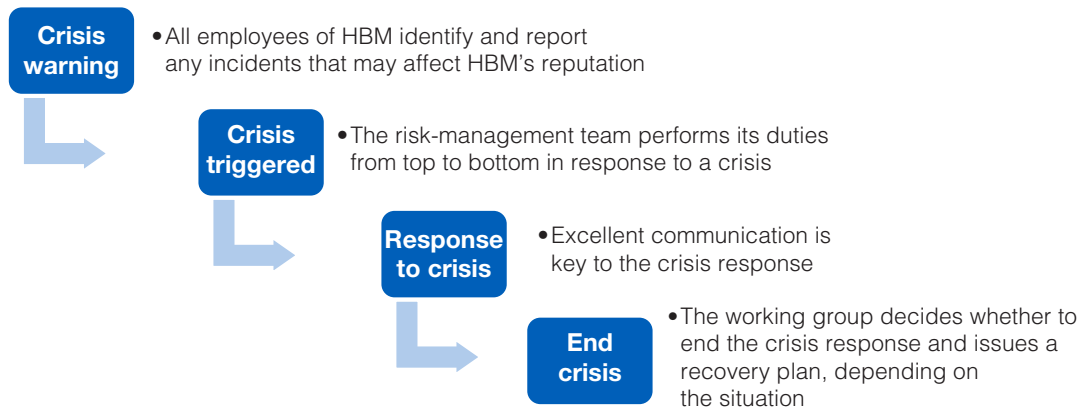
First line of defense	Each of the functional departments and business units, as well as personnel holding the respective business position, shall be the first responsible unit for handling matters within their terms of reference for risk identification and management.
Second line of defense	Supervision and support for risk management – Relevant functional departments shall assist the front-line business departments to assume joint responsibilities for overseeing, inspecting, and evaluating those works relating to the implementation of risk management.
Third line of defense	Independent assurance – The Audit Committee of the Board shall be responsible for overseeing and reviewing the results of risk management and external audit report.

To cope with public opinion events, HBM formulated the *HBM Crisis Handling Procedure* and established a crisis-management team. The team comprises the senior management of the Group acting as the leader, the persons in charge of corporate public relations and legal departments serving as team members, and the persons in charge of corporate public relations as the coordinators. The team conducts two public opinion monitoring every day, once in the morning and once in the evening, reviews the results every week and adjusts the optimization scheme accordingly. In the case of special public opinion events, a manual public opinion search will be added at noon and in the afternoon every day apart from regular monitoring. In this way, we can monitor in real time the policy topics in the biopharmaceutical industry, industry development, and both positive and negative news on the Company itself from China and the world.



**Responsibilities of the HBM Crisis Management Team**

## 2. Responsible Governance



### HBM Full-Cycle Crisis-Management Process

#### BUSINESS ETHICS

HBM abides by laws and regulations related to bribery, extortion, fraud, and money laundering, such as the *Anti-Money Laundering Law of the People's Republic of China*, the *Criminal Law of the People's Republic of China*, the *Bidding Law of the People's Republic of China*, and the *Anti-Unfair Competition Law of the People's Republic of China*, continues to improve internal management systems such as updating the *Employee Handbook* and *HBM Compliance Policy*, including code of ethics, anti-bribery and anti-corruption, whistleblowing channels and external events management, supervises and manages the business ethics behavior of all employees, and continues to strengthen our integrity and compliance, and adheres to the operational standards of business and anti-monopoly to create a healthy atmosphere. During the reporting period, corruption litigation cases did not occur.

We maintain strict anti-corruption policies among all staff and personnel. We ensure that our employees comply with the requirements, including restrictions on the purchasing and business cooperation, restrictions on the promotion of drugs for unapproved uses or populations and restrictions on industry-sponsored scientific and educational activities. In addition, we update a whistleblowing policy and system regularly for employees and those who deal with the Company to raise concerns, in confidence and anonymity, with the Audit Committee about possible improprieties in any matter related to the Company.

At the same time, HBM pays attention to the integrity and behavior of suppliers. This year, 100% of the new suppliers have signed the *Commitment Letter for Communication on HBM's Suppliers Code of Ethics for Business Conduct*. In 2022, we added an electronic version of this commitment letter to the supplier management system to ensure the supplier's knowledge and consent to relative HBM policies. If a supplier has reasonable reasons to suspect that another supplier or HBM employees have or may have violated the compliance rules, it must be reported by email with under real name or anonymously.

## 2. Responsible Governance

HBM Quality Team periodically reviews and tracks the Company's annual audit plan in the semi-monthly internal meeting to ensure that all audits can be carried out as expected and schedule the next audits. The review includes but is not limited to the progress of the projects to be audited, whether the project meets the audit standards, and priority assessment. At the end of each year, the quality team reviews the problems identified in the audits and counts the ratio and trend of various types of compliance problems in fields such as GCP and GLP to identify key risks, which can guide the targeted training for relevant business departments and may also reflect some systems and processes that should be improved to make continuous progress.

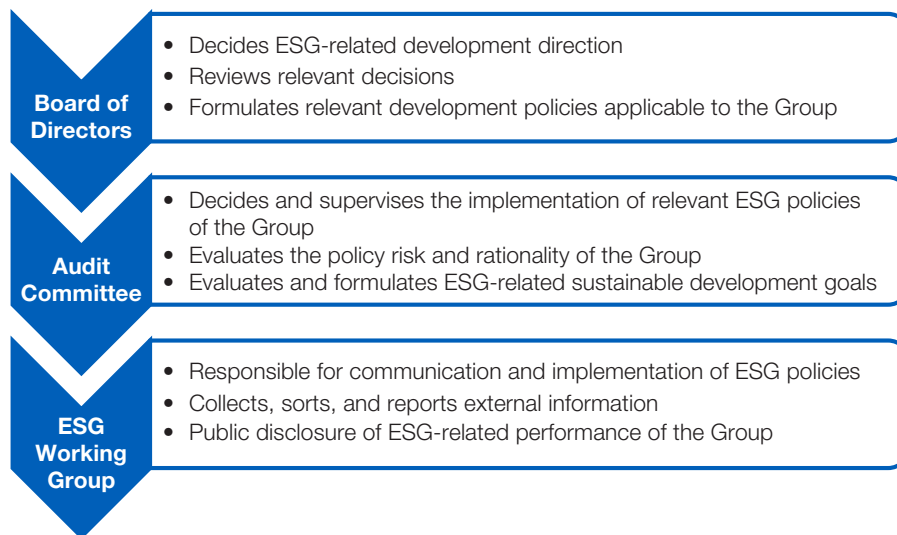
**Supplier Compliance Salon**

Due to the pandemic, the person in charge of procurement of each category has conducted online and offline communication with relevant suppliers separately, actively participated in relevant industry forums such as the supply chain summits of the pharmaceutical industry, the corporate compliance and risk prevention salons, the bio-industry conferences, and pre-clinical and clinical professional exchange meetings of various categories, which aim at further strengthening the interaction with suppliers, increasing the understanding of the supply market, and studying and sharing the best practices in the industry.

### 2.2 ESG GOVERNANCE

HBM adheres to the concept of sustainable development, creates a win-win situation for environmental protection and economic benefits, and continuously improves the ESG system to contribute to the development of social environment.

HBM always adopts the top-down ESG governance structure from the Board and Audit Committee to the ESG Working Group to ensure the implementation of ESG policies.



**ESG Governance Structure and Key Responsibilities**



## 2. Responsible Governance

### BOARD OF DIRECTORS STATEMENT

<p><b>Responsibilities of Board of Directors</b></p>	<p>As the highest responsible body for the management and public disclosure of HBM’s ESG issues, the Board is ultimately responsible for HBM’s sustainable development strategy, ESG policies, ESG risks, formulation of relevant goals, and ESG performance. The Board holds regular meetings to review sustainable development strategies, ESG policies, ESG risks, and related goals, as well as ESG issues involved in the operations of the Group, and to discuss whether key ESG areas need to be added, removed, or revised to ensure the Group’s sustainable development based on the execution of ESG tasks, strategies, business model, and operational process of the Group.</p>
<p><b>ESG Work Execution</b></p>	<p>At the executive level, the Audit Committee takes the lead to guide and supervise the implementation of sustainable development strategies, objectives and management policies of the ESG working group, so as to integrate sustainable development factors into daily operations.</p>
<p><b>ESG Risk Management</b></p>	<p>As the monitoring body for ESG issues, the Audit Committee is responsible for identifying and evaluating HBM’s related issues, supervising the implementation of ESG risk identification, objectives, and various other tasks, coordinating ESG-related resources, and regularly reporting to the Board.</p>
<p><b>Priority ESG Topics</b></p>	<p>We work closely with internal and external stakeholders to identify and assess critical issues to develop sustainable development strategies. Based on the priorities of key ESG issues identified in the assessment, we will update our policies and initiatives to better respond to stakeholders’ concerns and improve governance in all aspects of the company.</p>

### STAKEHOLDER COMMUNICATION

While continuously improving the ESG governance within the Company, the Group also actively communicates with stakeholders and establishes diversified communication channels according to stakeholder type. We listen to the voices of all stakeholders to various interests accurately and efficiently and establish a good relationship with stakeholders.

## 2. Responsible Governance



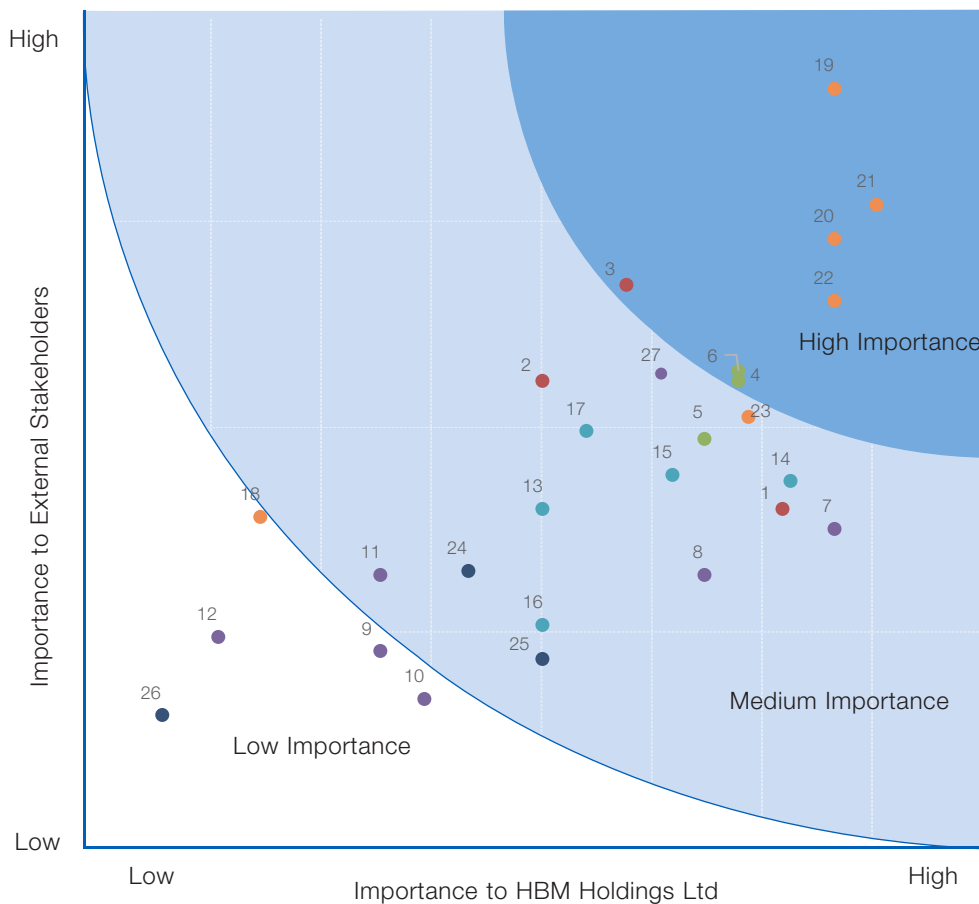
The Group has identified seven types of stakeholders who have a significant influence on the daily operations of the Company, and communicated with them in the following channels:

Number	Stakeholder	Communication Channel
1	Shareholders and investors	<ul style="list-style-type: none"> <li>• General meeting of shareholders</li> <li>• Earnings briefing</li> <li>• Roadshow</li> <li>• Investor research</li> <li>• Investor emails, forums and other online communication</li> <li>• Company news</li> <li>• WeChat public account</li> </ul>
2	Government and regulatory institutions	<ul style="list-style-type: none"> <li>• Press releases/news announcements</li> <li>• Regular communication</li> </ul>
3	Staff	<ul style="list-style-type: none"> <li>• Opinion box</li> <li>• Team-building activities</li> <li>• Staff communication meetings</li> </ul>
4	General public	<ul style="list-style-type: none"> <li>• Public welfare activities</li> <li>• Paying attention to the needs of doctors and patients</li> <li>• Regular visits</li> </ul>
5	Suppliers	<ul style="list-style-type: none"> <li>• On-site reviews</li> <li>• Supplier assessment</li> <li>• Technical training</li> </ul>
6	Partners	<ul style="list-style-type: none"> <li>• technical meetings</li> <li>• Online communication</li> <li>• Industry communication meetings</li> </ul>
7	Customers	<ul style="list-style-type: none"> <li>• Customer communication meetings</li> </ul>

## 2. Responsible Governance

### ANALYSIS OF MATERIALITY ISSUES

In addition to daily interaction with stakeholders, we conducted interviews, questionnaires, and other methods to better understand the concerns of various stakeholders about the Group's ESG issues. Through communication, we clarified the focus of our ESG practices and information disclosure and improve the relevance of the report. Combined with our survey results, corporate status, and market development trends and national policies, the materiality issues of this year were identified and evaluated to ensure the accuracy and comprehensiveness of information disclosure.



**Materiality matrix of HBM Holdings Ltd in 2022**

## 2. Responsible Governance



Economic issues*		Labor issues	
1	Corporate tax policy	13	Employee diversity and equal opportunities
2	Government support	14	Employee occupational safety and health management
3	<b>Trade environment impact</b>	15	Employee welfare, development and training
Governance issues*		16	prevention of child labor and forced labor
4	<b>Sustainability governance framework and objectives</b>	17	Employee rights protection
5	Sustainable development risk identification	Product and value chain issues*	
6	<b>Corruption response</b>	18	Supplier ESG performance
Environmental issues		19	<b>Product development capability</b>
7	Emission management (effluent, emissions, waste)	20	<b>Product and service quality</b>
8	Water use management	21	<b>Product safety and traceability</b>
9	Energy use and GHG emissions management	22	<b>Customer/partner privacy protection</b>
10	Materials and packaging use management	23	Customer/partner complaint management
11	Biodiversity concerns	Community issues	
12	Animal welfare concerns	24	Inclusive healthcare
27	Combating climate change	25	Public service and charity activities
Labor issues		26	Community involvement

\* Bold font is high importance materiality issue





## 3. Product Innovation

Product quality safety is the foundation of enterprise development, and product innovation leads enterprises to create higher value. With efficient R&D capability, HBM has built a strong R&D team under an open and inclusive cooperation attitude. By establishing a strict quality control system, building a mutually beneficial and win-win partnership, and implementing open and transparent supplier management. As a global biopharmaceutical company focused on the development and commercialization of innovative drugs, we are helping to bring more new drugs to market, promote medical progress, create social value and benefit human health.

### 3.1 INNOVATION ORIENTATION

HBM always aims at solving the unmet clinical needs in society and strives to create innovative products with high social value. During the reporting period, we have a diversified research team of 140 people, and we guard the research development by creating a first-class technology platform. In 2022, our research expenditure totaled US\$135,143,000.

#### R&D MANAGEMENT

A good R&D management model is one of the important conditions that determines the research progress and efficiency. HBM always creates a good scientific research environment, constantly optimizes the R&D management mechanism, and improves scientific research efficiency. We set up a Company Project Review Board (CPRB) to centralize project decisions. In addition, we introduced a cooperative management model mobilizing project leaders and project managers to advance the progress of research projects. Furthermore, HBM continues to improve the decision-making, project implementation and tracking mechanism, to clarify the scope of project responsibility and responsible person, and ensure that the obligations of each member are further determined and controlled.

Riding on the wave of digitalization, we fully seized the opportunity to empower R&D. We used AI technology to build a platform powered by immunogenicity prediction algorithm with preliminary capabilities of predicting and evaluating the physiochemical properties of antibodies. At the same time, we actively seek external cooperation and work with BioMap to develop a new generation of model to predict lead antibody candidate drugs in antibody prediction for specific targets. Applying AI technology to research allows us to increase the success of antibody druggability and reduce the experimental work, supporting a more efficient and economic antibody discovery.

On this basis, we constantly update and optimize scientific research equipment to create higher value more efficiently.



#### Adding BD Flow Cytometry to Improve Experimental Efficiency

During the reporting period, we added a new BD flow cytometer. The instrument can excite antibody-coupled fluorescent molecules by laser to emit fluorescence, which is received by the receiver through optical path conduction and converted into electronic signals, and then the signals are processed and analyzed by the host computer to detect the fluorescence generated by laser excitation on the cell surface to understand the antigen expression, thus ensuring a more efficient experiment.



### 3. Product Innovation

#### Introducing SARTORIUS Octet R8 biomolecular Interactor to Improve Experimental Efficiency

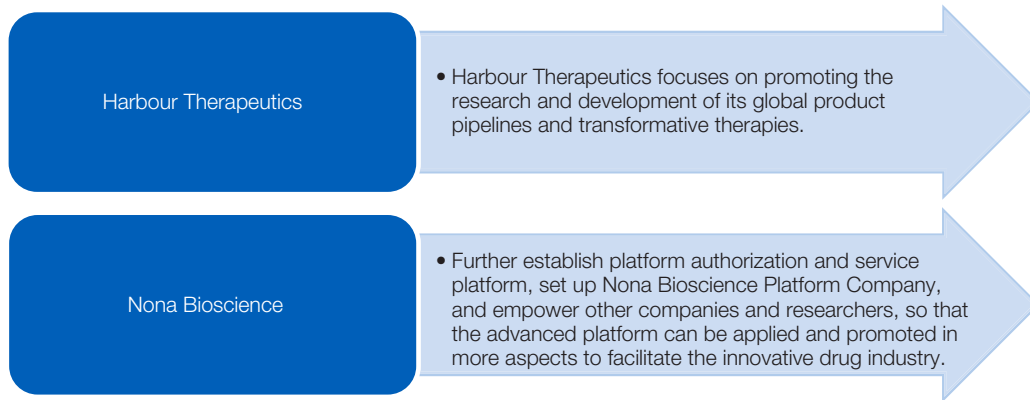
During the reporting period, HBM introduced a SARTORIUS Octet R8 biomolecular interaction instrument. The unlabeled protein analysis system can provide fast, high throughput, and accurate characterization of biomolecules, which is suitable for longer experimental running time and can be seamlessly integrated into laboratories meeting GxP requirements during biopharmaceutical development. The 8-channel Octet R8 system can quantitatively and dynamically analyze up to 96 samples within 30 minutes to 2.5 hours, greatly improving the experimental efficiency.





#### TWO PILLARS OF INNOVATION STRATEGY

HBM explores new scientific research modes and expands diversified cooperation modes to promote the development of product research. At present, HBM boasts two core pillars – Harbour Therapeutics and Nona Bioscience. Being open-minded in cooperation, we leverage the HBM proprietary core technology platform as well as the professional knowledge and rich experience accumulated over the years to lead the new generation of innovative biotherapeutics in the world.



#### Pillars of HBM Innovation Strategy

Based on the Harbour Therapeutics strategy, HBM further explores innovative biotherapeutics and expands diversified treatment areas. Leveraging our powerful platform technology and professional expertise, we aim to accelerate and empower global biotherapeutics innovation with an open and innovative business model, benefiting patients around the world.



### 3. Product Innovation

A next generation of antibody-based therapies	Bispecific antibodies	A new generation of cell therapies	Innovative ADCs
<ul style="list-style-type: none"><li>• Batoclimab (HBM9161) for myasthenia gravis and primary immune thrombocytopenia.</li><li>• HBM4003 enhances antibody-dependent cytotoxicity and has high specificity for Treg cells with high expression of CTLA-4 in tumor microenvironment.</li><li>• HBM1020 is the world's first fully human monoclonal antibody, which enhances anti-tumor immunity by blocking the binding of immune checkpoint targets with ligands.</li></ul>	<ul style="list-style-type: none"><li>• HBICE® platform develops a range of products for immune cell engager.</li><li>• HBM7008 is a global first-in-class bispecific antibody and also the first innovative bispecific antibody to enter the clinical phase in China.</li><li>• HBM7022 is the first bispecific product in China to achieve global license-out and the first product that realized license-out during the preclinical phase.</li></ul>	<ul style="list-style-type: none"><li>• Collaborated with Dana-Farber at Harvard Medical School to develop innovative tumor immunotherapies including bispecific antibodies and CAR-T.</li><li>• Strategic collaboration with NK Celltech to incubate NK cell therapy. In 2022, a financing of over RMB100 million was completed.</li></ul>	<ul style="list-style-type: none"><li>• Created a unique platform based on Harbour Mice®. Combining the strengths of small and large molecules to expand Harbour Biomed's antibody platform applications and pipeline layout.</li><li>• Clinical trials have shown potential efficacy in cold and hot tumors.</li></ul>

#### HBM Diversified Therapies

### 3. Product Innovation



Based on Nona Bioscience, HBM is committed to providing biotechnological companies, pharmaceutical companies, and research institutes with one-stop comprehensive solutions from ideas to clinical research and approval of new drugs.

#### **Harbour Mice® – Fully human antibody drug generation platform**

- Utilizing the transgenic mouse platform of Harbour Mice® to generate fully human-derived therapeutic antibody. The Harbour Mice® platform has an extensive application value and potential to produce fully human monoclonal antibodies and novel antibodies with established affinity and excellent druggability.

#### **HBICE® – HCAb-based HBICE®immune cell engager**

- The HCAb platform can generate diverse and stable fully human heavy chain antibody and its derived fully human single-domain antibody, enabling us to leverage smaller molecule size and fewer number of polypeptide chains to generate novel polyspecific antibodies.

#### **Harbour HCAb PLUS – Next generation of treatment mode**

- HCAb PLUS uses the potent penetration, high flexibility, and other advantages of HCAb that can combine multiple molecular patterns to develop various new drugs and next generation of innovative therapy to boost industrial development.

#### **Innovative Technologies of Nona Bioscience**

### 3. Product Innovation

#### LEADING R&D ACHIEVEMENTS

Supported by a nurturing environment of scientific research, HBM continues to upgrade our technical platform and enhance the industry's innovation capacity to bring more innovative therapies to patients quicker. At the same time, during the reporting period, we have achieved a number of ground-breaking innovations. We have 16 products in the innovative R&D pipeline of HBM, with 3 products in the clinical stage (HBM4003, HBM7008, HBM9378).

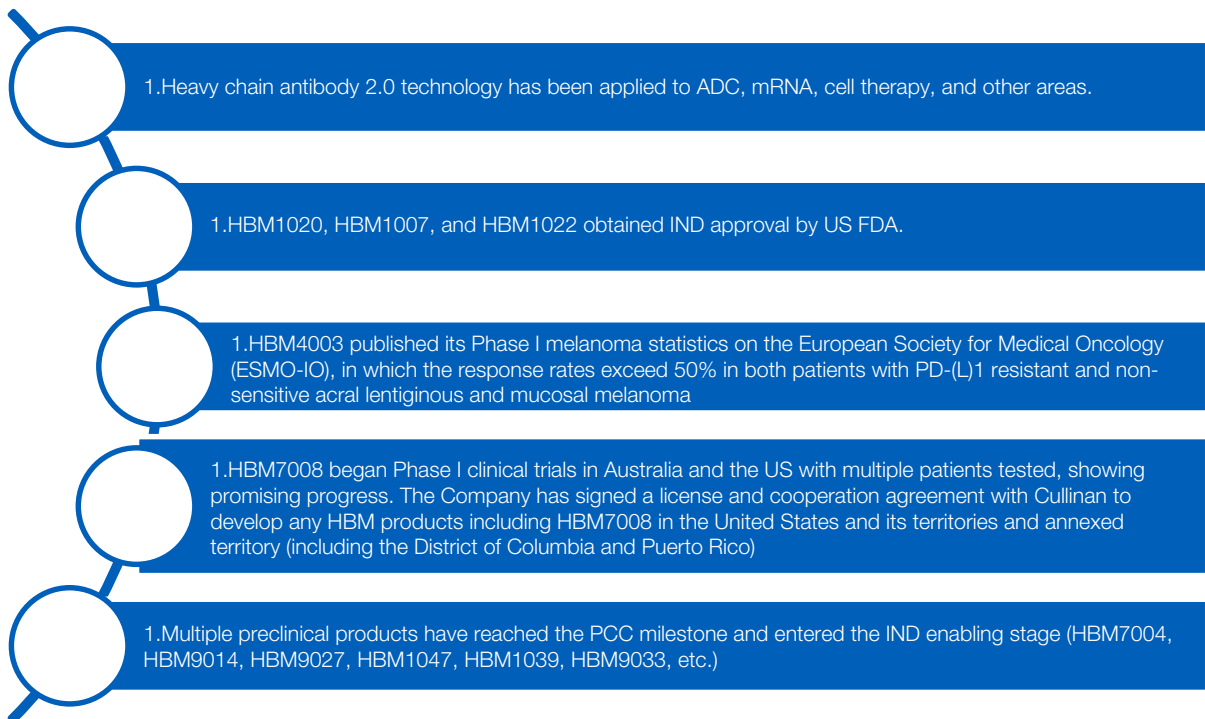
#### Transgenic mouse platform upgrade

- We have continued to build on our previous foundation to improve the efficiency and properties of the fully human antibody mouse in all aspects through technical modifications at several genetic levels.

#### Bispecific antibody platform upgrade

- We have expanded the bispecific antibodies based on immune cell engagers, including NK cell engager bispecific antibody. At the same time, we were exploring and upgrading trispecific antibodies, multi-specific antibodies, and hexavalent antibodies.

#### HBM Technology Platform Upgrade



#### Highlights of HBM's Innovations

#### INTELLECTUAL PROPERTY PROTECTION

HBM always strictly abides by the laws and regulations such as the *Trademark Law of the People's Republic of China* and the *Patent Law of the People's Republic of China*. We have formulated internal systems such as the *Intellectual Property Protection Management System* to protect our own R&D achievements while respecting the intellectual property rights of our partners. During the reporting period, we filed 93 new invention patent applications, with a total number of 231 patent applications, 30 of which were granted patents, and our trademark registrations have total 67.

To strengthen employees' awareness of intellectual property protection and prevent employees from infringing, we conducted many trainings related to intellectual property rights during the reporting period to enhance their awareness of intellectual property protection.





### 3. Product Innovation

With our outstanding performance in the field of medical research, HBM has been recognized by the industry and beyond, and every significant award is a recognition of HBM in pharmaceutical research and development.



**2022 China Biological Medicine Science and Technology Innovation Value Award**



**China Bio-Pharm Industry Value List 2022**

### 3.2 QUALITY ASSURANCE

HBM regards quality and safety as the most important part in our research and development to make clinical research more reliable and efficient, so that more patients can obtain safe and effective drugs. HBM strictly abides by the laws and regulations including the *Product Quality Law of the People's Republic of China* and the *Drug Administration Law of the People's Republic of China*. We formulated and updated our internal management systems such as the *Product Quality Standard Management Regulations* and the *Quality Risk Management policy*, put forward management requirements for quality and product recall, and expanded the coverage to improve the quality management from the system level. During the reporting period, no product recall related to safety and health reason has occurred, and no complaints have been received about products or services.



#### QUALITY CONTROL

To strictly control the quality of new drug development, our quality department regularly reviews and revises various quality-related management plans and processes of the Company to control the quality issues in the process of new drug development from the top.

##### Reviews of rules and regulations

- Reviewing the GxP-related matters in the daily work with the responsible person participating in the supervision of the Company's processes and rules. All company-level processes and rules should be reviewed periodically at least biannually to ensure their relevance to actual operations and compliance with relevant laws, regulations, and industry standards. During the reporting period, over 200 regular reviews and upgrades were completed.

##### Quality audits and periodic reviews

- The quality team holds semimonthly internal meetings to review and follow up on the Company's annual audit to ensure that audits are carried out within the expected timeframe and to schedule the next audit. At the end of each year, the quality team performs a retrospective review on the issues discovered during the audits of the year to identify risk points.

##### Updated training matrix

- The quality team assists relevant business departments in setting up employee training matrices and regularly reviews the relevance of job training. Business training administrator is recommended to make adjustments according to the actual needs of the work.

##### Periodic review of auditors' qualification

- The quality team conducts bi-annual GxP employee qualification audits and reminds the business segment of improvements to ensure the professional qualifications and quality of the staff in the position.

#### HBM Quality Audit Mechanism



### 3. Product Innovation

To reduce the risk of quality problems, HBM conducts risk-based quality and safety management according to GCP requirements for sponsors, covering the standardization, safety, ethics, and other aspects of the trials, to ensure that the implementation of clinical trials meets the requirements of trial protocols, standard operating procedures, and relevant laws and regulations, protecting the safety and rights of subjects.

#### Internal audit

- Makes an audit plan for experiments in accordance with the monitoring SOPs of HBM Research Center.
- The quality control department conducts spot-check on ongoing clinical trial sites for quality control and feedbacks results in the form of quality control reports.

#### External audit

- Entrusts third-party audit firms to conduct independent audits on HBM's trial sites, suppliers, etc.
- External quality assurance teams to audit the completeness and accuracy of the master file of the clinical trials for HBM programs.

#### HBM Quality Audits

Due to the global coverage and diversity of HBM offices, we have launched Veeva QualityDocs software to improve the ease of process and compliance of document management at HBM to address the inconvenience of signing and approving of off-site documents and increase the traceability of management. We migrated the offline management documents to the Veeva system for full life cycle management of the documents, enabling us to audit and track the information completely, quickly trace the trajectory of the full life cycle of the documents, meeting the audit tracking requirements of GxP system, and improving the completion of the overall quality management system of HBM.

HBM attaches great importance to raising employees' quality awareness and devotes tremendous efforts in quality training to strengthen employees' knowledge of rules and regulations and their control of the details in product quality. During the reporting period, we launched the ComplianceWire Staff Training System, which meets the requirements of GxP-related laws and regulations in the pharmaceutical industry and provides a complete traceability of training record for each person to quickly confirm their job qualification, realizing a basic automated training.

### 3. Product Innovation



Specialized training	All-Employee training	External training
<ul style="list-style-type: none"><li>• Department-initiated quality-specific training for target departments</li></ul>	<ul style="list-style-type: none"><li>• Organize company-wide quality awareness training with HR</li></ul>	<ul style="list-style-type: none"><li>• Every HBM employee is given the opportunity to apply to their immediate supervisor for external training to learn about the latest industry news and regulations</li></ul>

#### HBM Quality Training System



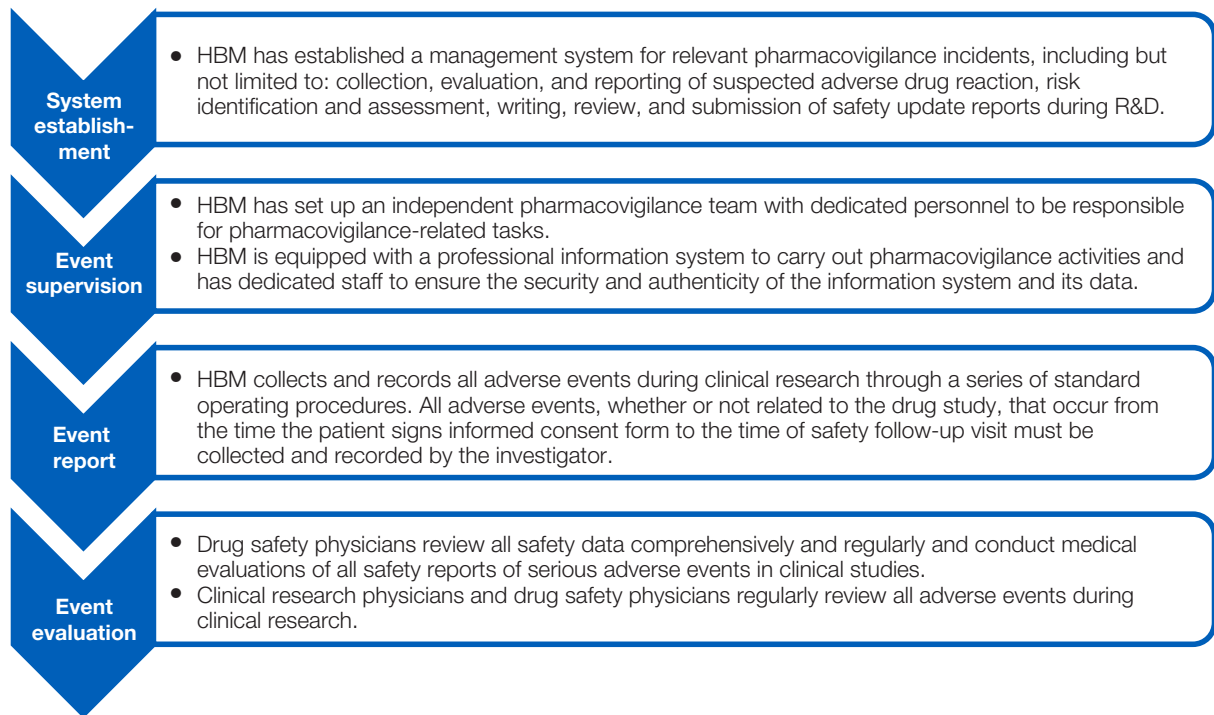
#### Training on the Drug Administration Law

### 3. Product Innovation

#### 3.3 SAFETY FIRST

##### DRUG SAFETY

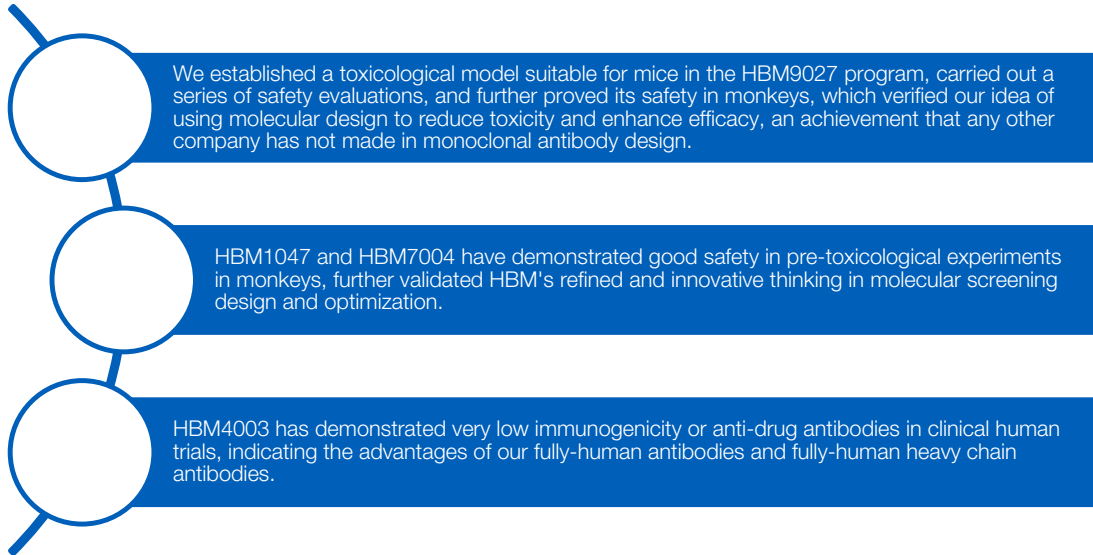
HBM actively develops drug risk management plans, adopts standard HBM pharmacovigilance measures and risk control activities, and continuously evaluates the safety profile of research drug throughout the whole clinical development process according to the requirements of operating procedures and guiding principles to reduce drug safety risks.



#### HBM Adverse Drug Reaction Risk Management Plan



During the reporting period, based on a sound adverse drug reaction risk management plan, HBM has achieved fruitful results in enhancing drug safety.



#### Highlights of HBM Drug Safety Management

##### PROTECTION OF SUBJECT PRIVACY

HBM always strictly abides by the laws and documents on the protection of subjects' privacy and safety, such as the *Good Clinical Practice (GCP)*, the *Civil Code of the People's Republic of China*, and the *World Medical Association Declaration of Helsinki*. SOP-00074 specification is formulated internally to regulate and clarify the requirements for data/privacy confidentiality of subjects when participating in trials, preventing the incidence of subject privacy leakage and firmly safeguarding subject privacy.



### 3. Product Innovation

#### Informed consent

- To inform subjects of the risks of the test drug, the use of test data, and how their privacy is protected, so that they can fully protect their rights and interests.

#### Authorization management

- The subject's original medical data files are kept in the study site, except for the investigators of the site, only authorized clinical research inspectors and auditors, quality controllers from the sponsor, members of the ethics committee, and officers from the drug administration authority, have direct access to the files.

#### Data desensitization

- The subjects are assigned a unique code to replace their name and other identifiable information before participating in the trial, HBM uses an electronic data collection system to collect and manage the encoded anonymous test data.

#### Privacy training

- Both personnel and employees performing clinical trial-related operations are required to receive training in GCP and business standard operating procedures before the commencement of relevant activities to raise their awareness of subject privacy protection.

#### Subject Privacy Protection Measures

#### ANIMAL ETHICS

HBM strictly abides by the *Regulations for the Administration of Affairs Concerning Experimental Animals* and the *Administrative Measures for Laboratory Animal Licenses (Trial)*, and establishes an animal management committee internally which formulates policies and systems related to animal welfare to secure the welfare of laboratory animals. HBM does not raise animals for experiments. By cooperating with the Institutional Animal Care and Use Committee (IACUC) of Vital River, we jointly optimize the application process of IACUC to ensure that the whole experiment was under the management of animal welfare and IACUC from the beginning to the end. The submitted Animal Utilization Protocols shall be first reviewed and proposed by the secretary of the Animal Ethics Committee and finally approved by the chair of the Ethics Committee before proceeding.

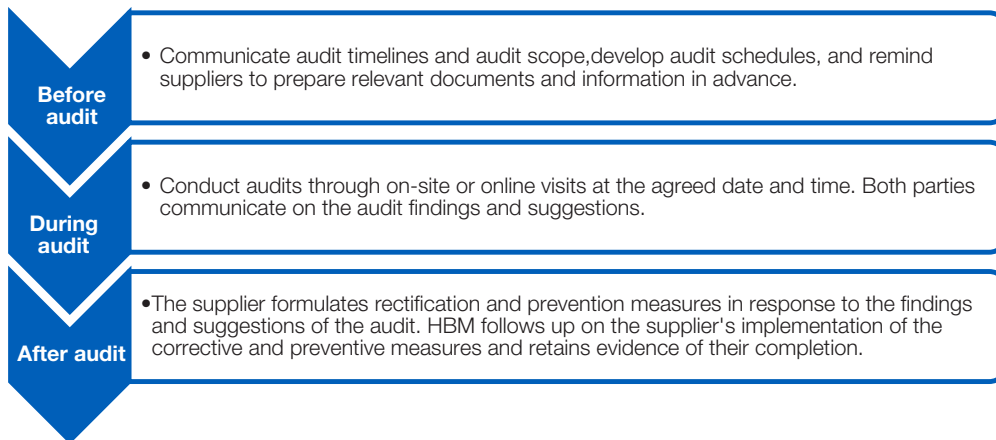


In addition, all HBM staff involved in animal experiments shall receive strict internal training. In addition to the basic orientation for new employees, we also carry out detailed job training to introduce the work related to the experiment and familiarize employees with the working environment. At present, HBM has a total of 3 certified laboratory staff carrying out animal-related experiments.

### 3.4 RESPONSIBLE PROCUREMENT

HBM strictly controls the quality of procurement and efficiently manages upstream and downstream suppliers in terms of access, daily audits, etc. HBM has formulated a series of supporting systems including the *Communication Guidance with External Stakeholders* and the *Indirect Logistics and Service Procurement Process* to further clarify the management principles and requirements across the supply chain and guarantee the procurement quality.

HBM has formed a set of strict supplier access standards. By conducting on-site and online audits of new suppliers, we ensure that suppliers meet the high standards of HBM. The audit includes on-site/online visits, documents review, and interviews with relevant personnel. During the audit process, any identified quality non-compliance findings, or problems to be improved shall be recorded for follow up and correction. After auditing the suppliers, HBM will sign quality agreements with qualified suppliers to dynamically supervise and manage the suppliers and create a file for each supplier, which contains the supplier's qualifications, audit records, and other documents.



#### Supplier Access Audit

In our daily supplier management, we constantly monitor the behavior of our suppliers. We examine and evaluate qualified suppliers annually to strengthen supplier management. The quality team of HBM audits suppliers annually and prepares annual review reports to summarize the quality of suppliers and provide continuous improvement measures for the management of suppliers. We distinguish the audit workflow by factors such as the proportion and scope of business with suppliers. For example, we conduct general qualification review for suppliers of low business weight.

### 3. Product Innovation

- 1. Collect and review the supplier's business license to ensure that they have the legal qualifications for the target business.
- 1. Collect and review the supplier's quality management system certificate (if available) to ensure that their quality system is certified by an authoritative third party.
- 1. Collect and review supplier questionnaires to understand their quality management system.

#### General Supplier Qualification Review

Whether a supplier has a good ESG performance will directly determine the risk level of HBM's procurement. Therefore, HBM attaches great importance to the supplier's ESG performance. We review the supplier's ESG performance by incorporating ESG assessment factors into the supplier questionnaire. In addition, for on-site or online supplier audits, we will ask relevant ESG questions according to the service type of the supplier during the audit to assess their ESG performance.

- 1. Inspect the supplier's equipment and facilities to check whether there are serious air pollutant emissions.
- 1. Check whether the supplier has complete EHS regulatory framework and SOPs, whether employee safety measures are adequate, and whether the first aid equipment is adequate and functional; Ensure qualification and training of relevant personnel.
- 1. Inspect clinical suppliers to see if they have a standard procedures for adverse events in clinical studies and whether they protect the rights and interests of subjects, and request Development Safety Update Reports (DSUR) from suppliers.

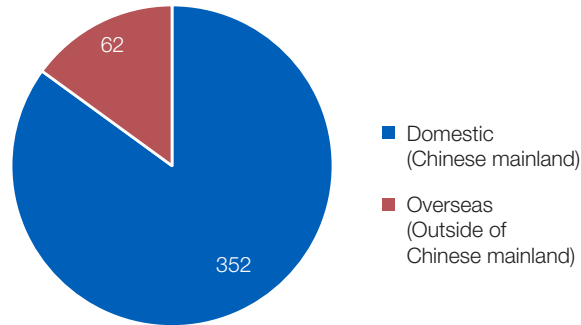
#### HBM Requirements for Supplier ESG Assessment

To manage suppliers efficiently and effectively, HBM adopts supplier management system (SMS) for supplier management and maintenance. Suppliers upload the evaluation data required by the HBM quality department through SMS system, in which our quality department gives the assessment results and basis after the audit is completed. The SMS can realize the full life cycle management of suppliers and greatly increase the efficiency of supplier management.

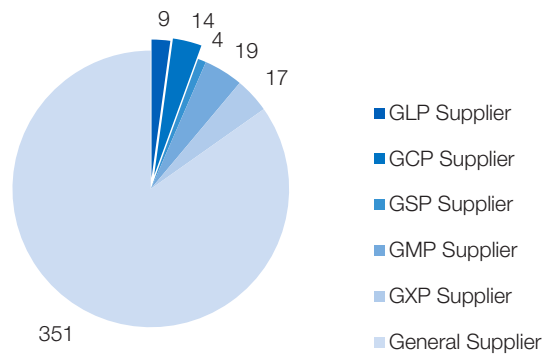
During the reporting period, HBM had a total of 414 suppliers. Among them, 100% have signed the Commitment to Integrity, 96 suppliers have passed ISO9001 quality management system certification, and 40 suppliers have obtained the ISO14001 environment management system certification. The distribution of suppliers is as follows:



**Number of suppliers by region**



**Number of suppliers by procurement type**



### 3.5 INDUSTRY CO-CREATION

A good and orderly industry environment is the basis and guarantee for the stable development of new drug research. The long-term development of the industry will inevitably require the improvement of the overall level of the industry, rather than just a few enterprises leading the development of the industry, at the same time, the overall development of the industry will benefit each enterprise.

As a leading novel drug research and development company in China, HBM takes it as its duty to advance the technology of novel drug development. We actively participate in the international innovative cooperation carried out by the world’s top academic institutions and biopharmaceutical companies to fully promote the R&D progress of the next generation of innovative therapies through independent innovation and diversified cooperation, contributing to the development of the industry.

### 3. Product Innovation

Drug Type	Highlights
Bispecific antibody/ CAR-T	Cooperated with Dana-Farber, Harvard Medical School, to develop innovative tumor immunotherapies including bispecific antibodies and CAR-T.
CAR-NK	HBM reached a strategic cooperation with NK CellTech to realize cross-border application by using the leading technology platform of HBM, demonstrating our active engagement and presence in the field of cell therapy.
Bispecific antibody	HBM and AstraZeneca reached a Global Out-License Agreement on CLDN18.2xCD3 bispecific antibody HBM7022, which is the second time we partnered with an internationally renowned pharmaceutical company.
ADC	HBM entered a collaborative project with LCB and Duality Biologics to develop antibody-drug conjugates (ADC).
Antibody	HBM and CSPC Pharmaceutical Group Limited reached an agreement on the rights and interests of Batoclimab (HBM9161) in Greater China.
Nucleic acid drug	HBM reached a strategic cooperation with Moderna, focusing on the discovery and development of nucleic acid-based immunotherapy using our proprietary heavy chain-only antibody (HCAb) discovery platform.
Bispecific antibody/ multi-specific antibody	Signed a cooperation agreement with Dragonfly Therapeutics and used our proprietary HCAb transgenic mouse platform to generate fully-human heavy chain antibodies for the development of bispecific antibodies and multi-specific antibodies.
Antibody	HBM Alpha Therapeutics (HBMAT), which was incubated by HBM, has obtained the relevant technical license from Boston Children's Hospital, and continues to provide precision treatment for patients with endocrine dyscrasia.

#### Highlights of Industrial Cooperation with HBM in 2022

In addition, we were active in various industrial associations, working with outstanding peers to study and solve crucial and forward-looking technical problems in new drug research and development, sharing and exchanging research results, strategic experience and market trends, and promoting continuous innovation and progress in the new drug research and development industry.

### 3. Product Innovation



HBM published the clinical and preclinical research results of next-generation anti-CTLA-4 fully-human heavy chain antibody, Porustobart (HBM4003), in the Proceedings of the National Academy of Sciences (PNAS), the 2022 European Society for Medical Oncology Congress (ESMO I-O), the 2022 World Lung Cancer Congress (WCLC), and the 2022 American Society of Clinical Oncology (ASCO), in which the research results demonstrated the antitumor activity and safety of the next-generation antibody.

At the 37th annual meeting of the Society for Immunotherapy of Cancer (SITC), HBM published the pre-clinical research results of five products in poster presentations, including B7H4 × 4-1BB bispecific antibody (HBM7008), B7H4 × CD3 bispecific antibody (HBM7004), anti-B7H7 monoclonal antibody (HBM1020), anti-CCR8 monoclonal antibody (HBM1022), and anti-CD200R1 monoclonal antibody, promoting the industrial development.

According to a study published by HBM in Science Immunology, the fully human monoclonal antibody 87G7, which originated from the HBM Harbour Mice® platform, maintains significant in vitro neutralization activity against the Variants of Concern of SARS-CoV-2, including Alpha, Beta, Gamma, Delta, and Omicron.

HBM published the preclinical data of PD-L1 × CD40 bispecific antibody (HBM9027) in a poster presentation at the 2022 American Association for Cancer Research (AACR).

#### **Highlights of Industrial Participation in 2022**





## 4. Personnel Cultivation

HBM is committed to actively recruiting and attracting top talents in science and business to build a diversified talent team.

### 4.1 DIVERSIFIED EMPLOYMENT

In 2022, based upon the original recruitment channels, we adopted LinkedIn as a new recruitment channel to find international talents, fully improving the recruitment efficiency. In addition, we actively exchange and cooperate with colleges and universities and arrange for college students to visit our Company to attract and employ outstanding talents. At the same time, we actively provide employment opportunities for vulnerable groups and recruit people with disabilities to help them find jobs. In 2022, HBM recruited 39 new employees. The Company currently employs 3 people with disabilities.

During the recruitment process, we strictly implement the requirements of the *Labor Law of the People's Republic of China*, *Provisions on the Prohibition of Using Child Labor*, and related laws and regulations, and prohibit recruiting minors under the age of 16 to prevent the use of child labor. If any cases of child labor or forced labor are found, we strictly follow relevant procedures and punish relevant personnel.

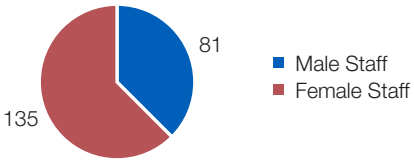
We strictly abide by the principle of “equal employment” and never discriminate against job seekers regardless of their characteristics, such as race, gender, color, age, family background, cultural background, religion, physical fitness, and nationality, ensuring that they receive fair treatment at work. In 2022, we further emphasized this principle and related guidelines in the *Employee Handbook* of the United States office and committed to establishing a diversified and inclusive workplace.



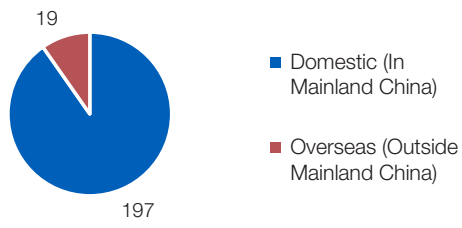
## 4. Personnel Cultivation

By the end of the reporting period, HBM had 216 employees, including 3 employees with disabilities. The detail is as follows:

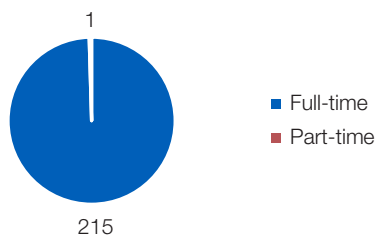
**Number of employees by gender**



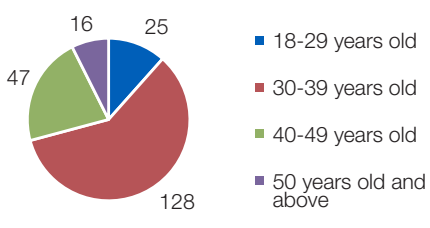
**Number of employees by region**



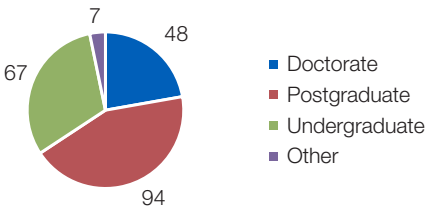
**Number of employees by type of employment**



**Number of employees by age**

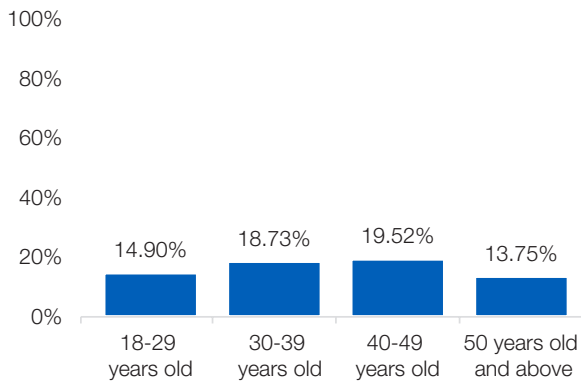


**Number of employees by education**

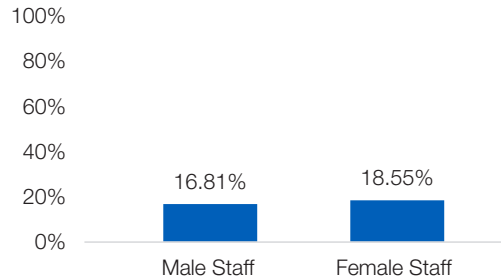


## 4. Personnel Cultivation

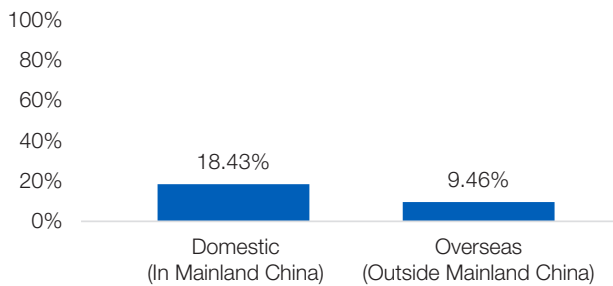
**Staff turnover by age**



**Staff turnover by gender**



**Staff turnover by region**



### 4.2 TALENT EMPOWERMENT

Talent is one of the driving forces for a company's sustainable development. HBM is committed to providing employees with a fair and equitable platform for career development. We have a well-established pay-for-performance system, a clear promotion policy, and an all-around training system, striving for the mutual development of employees and the Company.

#### EMPLOYEE TRAINING

According to the employees' requirements at different stages and positions, HBM provides employees with a diversified learning platform and various learning resources, constantly improving our training system. In addition, we fully meet the self-improvement needs of our employees by formulating the *Education Aid Policy* to provide financial support for employees to obtain vocational certificates. In 2022, we carried out a number of special training activities to help employees continuously improve their professional knowledge and managerial ability.



## 4. Personnel Cultivation

### Professional Training

- To continuously develop the learning habits and expand the knowledge of our employees, we insisted on arranging 33 weeks of technical seminars, each of which attracted over 35% of the employees to attend.
- To increase the exposure of the core talents and build a communication platform for talents, HBM invited talents from all departments to attend Harbour Town to inspire them to show themselves in a novel form of communication.

### Corporate Culture Training

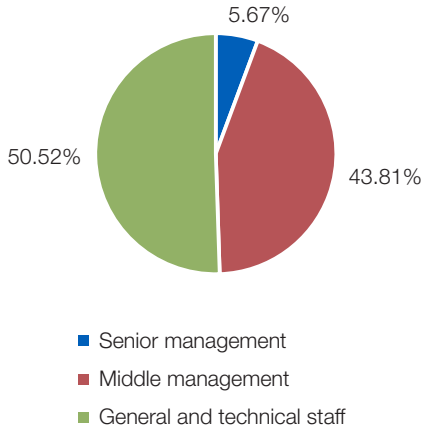
- To help employees practice our corporate culture, we organized cultural workshops for new employee and the management to help them understand what kind of roles they are playing in the corporate culture.

### Management Training

- In 2022, we continued to invite senior advisors to our workshops to enhance the management's understanding and application of the Growth and Success concept.
- We organize weekly meetings with team managers to constantly improve their managerial concepts by exchanging ideas on management topics.

During the reporting period, we invested a total of RMB1,099,200 in employee training with a total of 4,543.7 training hours, averaging 21.04 hours per capita.

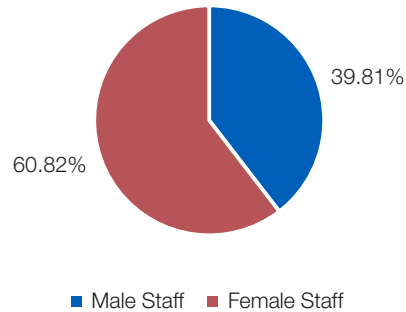
Percentage of Employee Training by Grade<sup>4</sup>



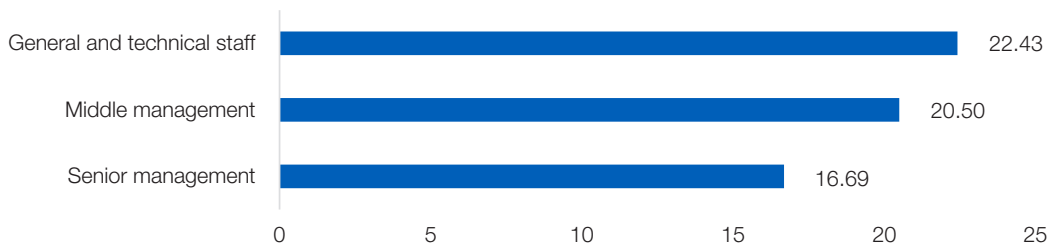
<sup>4</sup> Calculation formula: number of employees trained at this level/total number of employees trained.

## 4. Personnel Cultivation

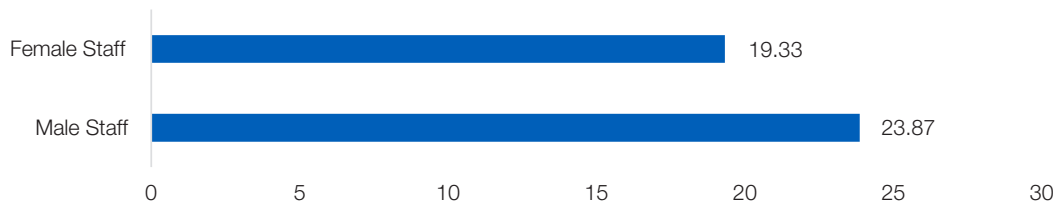
**Percentage of Employee Training by Gender<sup>5</sup>**



**Coverage of employees receiving training by grade**



**Coverage of employees receiving training by gender**



### EMPLOYEE PROMOTION

In 2022, HBM continued to implement the standards of the *Position and Rank Management Regulations*, and insisted on providing employees with clear, explicit and transparent career development direction to help employees determine their own career paths. We also advocate the self-development of employees and offer all employees the right to apply for internal development on their own initiative, and the capable ones can take on additional responsibilities to make full use of talents. We have established a clear performance appraisal mechanism. Top-down performance reviews are held every half year, mid-year, and year-end. During the employee promotion and staffing adjustment periods in April and October every year, the Human Resources Department and line managers organize one-on-one employee interviews to help them with a better professional growth.

<sup>5</sup> Calculation formula: Number of employees trained of this gender/Total number of employees trained.



## 4. Personnel Cultivation

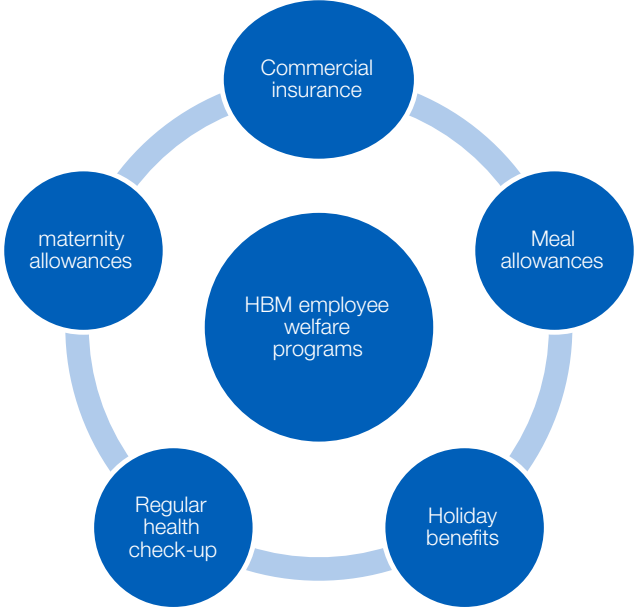
### 4.3 CARING FOR EMPLOYEES

HBM cares about every employee and their families, strives to develop communication channels and listen to their voice closely. We actively organize a variety of employee engagement activities to allow employees work and live happily.

#### Remuneration and Benefits

We provide employees with competitive salaries and comprehensive employee perks and advocate rewards-for-contributions. The Human Resources Department conducts regular market salary surveys in April and October each year to provide employees with competitive salaries that are in line with the salary benchmark in the region where we operate. In addition, we also grant corporate equity to some employees to share the development achievements with the Company.

According to laws, our employees are entitled to annual leave, sick leave, maternity leave, nursing leave, marriage leave, bereavement leave, and other leave rights and the Five Insurances and One Fund, we have also added additional employee perks to repay employees' hard work. During the reporting period, we extended the maternity leave of female employees in the United States by an additional 8 days on a statutory basis, putting employee care into practice.







## 4. Personnel Cultivation

### EMPLOYEE COMMUNICATION

We pay attention to employees' voices, actively build channels for employees' communication and feedback, listen to the difficulties and bottlenecks they encountered in their work, coordinate resources from all sides to address employees' needs and problems, and enhance their work experience.

#### Email HR

- Employees can contact their respective HRBP for job inquiries and communication by emailing the HR or by face-to-face communication directly.

#### One-on-one interviews with the CEO

- The CEO holds regular one-on-one interviews with some of the employees to share work experience, listen to their recent updates, and care about their personal development.

#### Townhall meeting

- Communicate the latest development trends, business status, and policy advocacy directly to all employees through townhall meeting. Award outstanding individuals and teams at staff meetings to boost the morale of all employees. Employees can raise their questions directly in the Q&A session and the CEO answers questions on the spot.

#### LT meeting

- The Company holds regular management meetings and monthly Executive Meetings to discuss major management issues of the Company. Leadership Team Meeting (include middle managers) is arranged as required to convey important development strategies and corporate decisions, and discuss important matters for business development.

### Major Employee Communication Channels at HBM

In addition to top-down communication, we place equal emphasis on positive communication among colleagues. In August 2022, we officially launched HBM Recognition System and Give-a-Like platform, which provided employees with an online communication channel of mutual encouragement, mutual recognition, and real-time communication. Employees can express their gratitude online for the support and assistance they received from their team or colleagues from other departments, and the employee with the most likes will receive corporate souvenirs and an electronic certificate.



## 4. Personnel Cultivation



**HBM Recognition System and Give-a-Like Platform**

We actively collected feedback from our employees on their work and conducted a group-wide employee satisfaction survey during the year as part of our participation in the T+Employer Awards. With our excellent practice in human resource management, HBM was awarded the T+ Employer (best employer).



## 4. Personnel Cultivation

### CARING FOR EMPLOYEES

HBM actively carries out various employee activities to continuously create a warm and loving workplace for our employees.

#### HBM Goddess Festival: a tribute to the most beautiful woman

On March 8, 2022, Women's Day, the Company held three craft activities in Shanghai, Suzhou, and Beijing offices simultaneously, attracting enthusiastic participation. The female employees actively engaged in and enjoyed the activity. On the same day, the Company also gave each female employee a platform welfare points worth RMB200, and the benefit of a half-day paid leave.





### Team Building Activities

In 2022, various departments of the Company spontaneously held a variety of team building activities every quarter to promote team harmony, build trust, and create better work environment among employees. Harbour Clubs have also been formed within the Company to regularly carry out diversified activities.



In 2022, with epidemic outbreaks across the country, HBM strictly complied with the national and local policies on epidemic prevention. In addition to strengthening management measures such as office disinfection and provision of face masks, the Company paid close attention to the epidemic situation in real time and made every effort to provide various care measures.

## 4. Personnel Cultivation

### Flexible working

- In March 2022, the Company adjusted its work model timely into flexible working hours and allowed employees to work from home due to the influence of the epidemic and other force majeure.

### Supportive supplies

- During the hardest period of lockdown in Shanghai in April 2022, HR, Procurement, and the CEO coordinated together to actively seek and integrate resources, find supplies and logistics, and provide all employees with care packages delivered to their homes. At the same time, a platform points benefits worth RMB500 is provided for each employee to shop online.

### Emotional support

- Considering the physical and mental health issues that may arise from various stressful sources faced by employees at home during Shanghai lockdown in April 2022, the Company immediately integrated its resources to launch Harbour EAP (Employee Assistance Program) for employees and their families to help them improve their work efficiency and life satisfaction.

### CEO Appreciation

- Some employees offered to return to the office to work when the Company was locked down during the epidemic. Our scientists provided material and mental support for the department on logistic service of food, clothing, housing, and transport and purchased soft mattresses to improve employees' living conditions.





Caring from HBM During the Epidemic

4.4 HEALTH AND SAFETY

HBM strictly abides by the laws and regulations on safety and fire safety at workplace, such as the *Work Safety Law of the People's Republic of China* and the *Fire Prevention Law of the People's Republic of China* to protect the safety and health of the employees effectively. Based on our business context, we strictly enforce production safety and laboratory management according to policies such as the *Emergency Plan for Production Safety Accidents of Harbour BioMed (Suzhou) Co., Ltd.* and the *Emergency Plan for Production Safety Accidents of Harbour BioMed (Shanghai) Co., Ltd.*

We have established an EHS prevention and control management framework of "department head -EHS coordinator-all employees and contractors" to control production safety. HBM has always insisted on providing annual physical examinations for all employees as well as occupational physical examinations specifically for those who will be, are, and were working at the laboratory and other key positions. At the same time, we signed the *Notice of Occupational Disease Hazards* with employees, clarified the occupational hazards at work beforehand, and formulated strict management system and operational guidance for risk points. Once an employee suffers from occupational diseases, we will provide treatment according to the requirements of laws and regulations.





## 4. Personnel Cultivation

HBM conducts safety training to enable every employee to quickly learn safety knowledge and enhance their overall safety awareness. In addition, fire drills are conducted on a regular basis to improve the coordination and cooperation of our employees in dealing with safety emergencies to minimize casualties and property damage as well as accident hazards.

In 2022, HBM has had two incidents of workplace injuries with a total loss of 522 working hours, both of which were resolved appropriately. Since the establishment of the Company, there have been no incidents of casualty.



# 5. Environment Friendliness

HBM adheres to the principle of environmental and social sustainability and strives to integrate green environmental protection elements into our daily management and operation. The Company continues to increase investment in environmental protection to promote energy conservation and emission reduction as well as the harmonious development between enterprises, society, and environment.

## 5.1 ENVIRONMENTAL MANAGEMENT

HBM is committed to the long-term sustainability of the environment and community in which we operate. The Group acts in an environmentally responsible manner, strives to comply with environmental laws and regulations, and takes effective measures to maximize resources utilization, energy conservation and waste reduction.

The Group follows the *Environmental Protection Law of People’s Republic of China (PRC)*, *Energy Conservation Law of People’s Republic of China (PRC)*, the *Water Law of People’s Republic of China*, the *Water Pollution Prevention Law of People’s Republic of China*, the *Air Pollution Prevention Law of People’s Republic of China*, and the laws and regulations of the places where we operate in Netherlands, the United States and Australia. In 2022, 5 EHS SOPs and 25 supporting documents came into effect, thus further improving the EHS management system. We are committed to protecting employees’ lives by providing a safe and healthy working environment.

Taking 2022 as the baseline, HBM has set four environmental targets with specified implementation pathways. We carried out targeted management in four aspects: greenhouse gas emissions, waste reduction, energy efficiency and water use efficiency, so as to further optimize the Group’s environmental performance system<sup>6</sup>.

**Emission Target**

**2022-2026 Scope 1 and 2 greenhouse gas emission intensity (greenhouse gas emission/R&D investment) compound decline of no less than 3%.**

- Integrating energy-saving design into the construction of new facilities.
- Increase the investment and use of renewable resources.
- Gradually integrate the current and future “dual carbon” goals and relevant policy guidance into the Company’s emission management.

**Waste Reduction Target**

**The final waste discharge amount exceeds the standard of the local waste discharge requirements of the production facility.**

- Commit to taking the first-level of cleaner production as a benchmark, adopt advanced and applicable technologies, processes and equipment to implement cleaner production technological transformation, and promote the full coverage of cleaner production.
- Conduct laboratory waste assessment to reduce the generation of hazardous waste.
- Assess opportunities for reducing and recycling materials.
- Advocate a paperless office.

<sup>6</sup> The compounded rate of decline in the target is the annual rate of decline for the period 2022-2026.

## 5. Environment Friendliness

### Water Use Efficiency Target

After 2026, the water resources use intensity (consumption/R&D investment) will achieve negative growth.

- Assess water risk in the R&D and production process.
- Maximize water recovery and reuse.

### Energy Efficiency Target

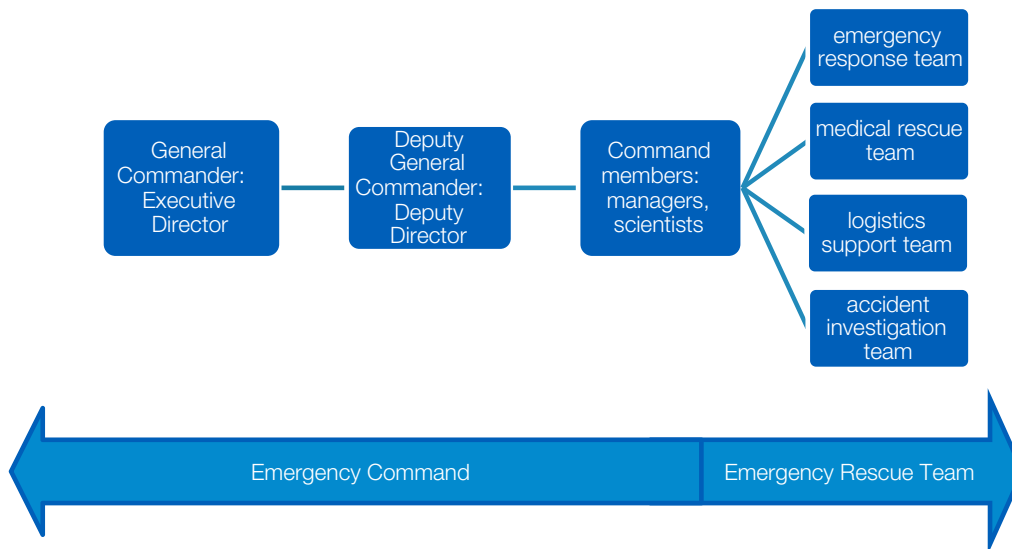
From 2022 to 2026, power consumption intensity (consumption/R&D expenses) will decrease by no less than 3%.

- By using innovative production technology, reduce the energy demand in the production process.
- Improve the energy efficiency of each facility.
- Use innovative renewable energy technologies.

### HBM Environmental Goals<sup>7</sup>

#### Environmental Emergency Plan

In view of possible environmental emergency, HBM has improved the framework of environmental emergency plan, defined the responsibilities of each department for emergency organization, and revised and implemented the *HBM (Suzhou) Emergency Response Plan for Environmental Incidents* and the *HBM (Shanghai) Emergency Response Plan for Environmental Incidents*, making every effort to reduce the risks and negative impacts caused by environmental accidents.



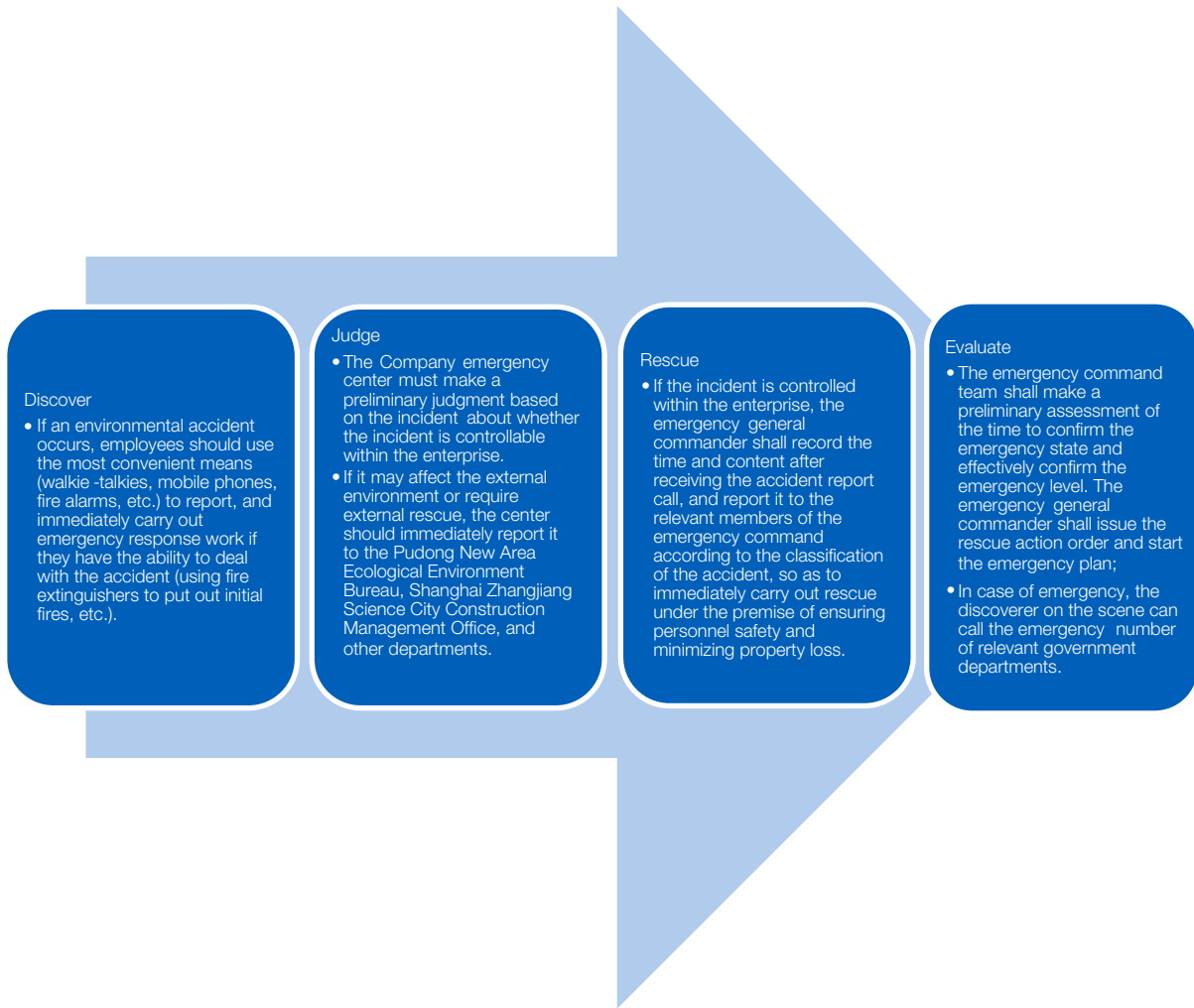
### Emergency Organization Framework

<sup>7</sup> Since HBM did not commence production during the reporting period, the target coverage does not include production bases; all targets will be reviewed and updated regularly in line with the Company's latest business development.



## 5. Environment Friendliness

Moreover, we simultaneously run the four-step emergency organization and processing procedure of “discover-judge-rescue-evaluate” to ensure compliance and effectiveness in handling environmental risks.



**Emergency Response Procedure Flowchart**

During the reporting period, we conducted several company-level emergency drills, so as to enhance the ability of all departments of the Company to respond to environmental emergencies. We also insist on carrying out EHS training for new employees to ensure that all employees are always prepared for emergencies.

## 5. Environment Friendliness

### 5.2 CLIMATE CHANGE

Based on the framework and suggestions of the Working Group on Climate-related Financial Information Disclosure (TCFD), HBM actively identified and analyzed the climate risks related to our Company, and incorporated climate change into the Group's sustainable development as a significant part to enhance our ability to cope with climate change. During the reporting period, we identified seven transition risks that may have an impact on the Group, formulated climate risk management rules and response measures, actively explored low-carbon transition, and prioritized different risks by evaluating their relevance to the Group's business.

Risk Type		Description	Response Measures	Impact
Procurement	Rising raw material costs	Climate change may affect biodiversity, resulting in increased difficulty in obtaining raw materials for HBM's operations (energy, water resources, experimental supplies, administrative consumption resources, etc.), and higher costs.	HBM continues to track the market price of raw materials, seek alternative materials, and reduce dependence on a single supply chain.	High
	Low-carbon technology investment failure	In the process of low-carbon technology transformation, new energy projects such as photovoltaic may be purchased or invested, and there is a certain risk of investment failure.	HBM strengthens the risk assessment before investing in low-carbon technologies to ensure that the risks are controllable.	Low
Technology	Low carbon technology transition cost	HBM's carbon emissions come mainly from the use of electricity, and the operation of its laboratory equipment. In the process of energy-saving transformation, HBM may face technical iteration and replacement from low-energy experimental equipment. HBM may also face the issue of re-installation, increasing the cost of investment.	Taking into account the cost of technology iterations, HBM conducts a comprehensive assessment of low-carbon technologies.	Low

## 5. Environment Friendliness



Risk Type		Description	Response Measures	Impact
Market	Changing consumer habits	With the publicity and advocacy of low-carbon emissions from all walks of life, customers may give priority to environmental-friendly enterprises for cooperation. Enterprises providing low-emission products or services will seize a stronger position in the low-carbon transition. Failure to transform into a low-carbon operating company in time may cause a loss of market share and lower profit.	HBM pays attention to market dynamics and grasps the market development trend in advance.	Low
	Uncertain market signals	Climate change could have knock-on effects regarding the availability of natural resources or shifts in disease patterns, resulting in new diseases. The spread of new diseases may lead to changes in the supply and demand structure of certain products and services of HBM, which may lead to missed market opportunities.		Medium
Policy and Law	Tighter emission reporting obligations and compliance requirements	<p>With the improvement and implementation of management measures such as reducing carbon emissions and carbon trading, China has put forward higher requirements for corporate emissions reporting. HBM will face increasingly stringent disclosure requirements for climate change-related information, which means that the Company needs more comprehensive and systematic collection of data and analysis of climate change-related information.</p> <p>In addition, due to the stricter policies, laws and regulations, the requirements for hazardous waste disposers of the company's laboratories will increase, which will lead to an increase in the cost of hazardous waste disposal.</p>	HBM improves its environmental data management system and information disclosure quality.	Low



## 5. Environment Friendliness

Risk Type		Description	Response Measures	Impact
Reputation	Attention and negative feedback from stakeholders	The expectations of various stakeholders for HBM to take more steps to effectively manage and reduce its environmental footprint are growing. Failure to meet the expectations of stakeholders may expose HBM to global reputational risks, thereby affecting the Company's reputation, resulting in consequences such as a decline in demand for our products and services.	HBM strengthens communication with stakeholders to keep abreast of stakeholders' concerns and needs.	Low

### 5.3 GREEN OPERATION

HBM integrates the concept of sustainability into our corporate culture and daily operation. Starting from the day-to-day details, we pay attention to energy and water conservation in the workplace, and actively practice green operation, aiming to be an advocate of green and low-carbon culture.

#### ENERGY CONSUMPTION MANAGEMENT

HBM strictly abides by the *Energy Conservation Law of People's Republic of China*, the *Energy Policy Act of the United States*, the *Environmental Management Law of the Netherlands* and other relevant laws and regulations to ensure compliance. In practice, employees are encouraged to save energy and reduce emissions for a green office, so as to promote the concept of green and low-carbon operation.

HBM always regards energy saving, cost reduction and efficiency improvement as the core of green operation, vigorously promoting energy-saving measures. Combined with our corporate context, we have implemented all-round energy-saving measures, and formulated the internal energy consumption management system in the laboratory, construction site and office to bring the concept of green operation into practice.

Laboratory Energy-Saving Measures	Office Energy-Saving Measures
<ul style="list-style-type: none"> <li>Shut down unnecessary equipment in time</li> <li>Install energy-saving devices, such as variable frequency air conditioners</li> <li>Use available radiation-sterilized consumables as much as possible, and avoid performing energy-intensive steam pressure sterilization</li> </ul>	<ul style="list-style-type: none"> <li>Install lighting delay switch</li> <li>Encourage all employees to travel by public transport, turn off the lights and air conditioners when not needed</li> <li>Put up posters for energy conservation and emission reduction in the office</li> </ul>

During the reporting period, the Group's energy consumption and greenhouse gas emissions were as follows. Purchased electricity consumption intensity, comprehensive energy consumption intensity and greenhouse gas emissions intensity decrease in 2022 compared to 2021. The growth of energy consumption and greenhouse gases has been effectively controlled.

## 5. Environment Friendliness



Specific items	Unit	2021	2022 <sup>8</sup>
Purchased electricity consumption	kWh	1,878,892.00	1,940,226.00
Purchased electricity consumption intensity	kWh/R&D investment	2,751.51	2,134.50
Comprehensive energy consumption <sup>9</sup>	ton of standard coal	230.92	238.45
Comprehensive energy consumption intensity	ton of standard coal/R&D investment	0.34	0.26
Greenhouse gas emissions amount <sup>10</sup>	ton of carbon dioxide equivalent	1,321.80	1,514.67
Greenhouse gas emissions intensity	ton of carbon dioxide equivalent/R&D investment	1.94	1.67

### RESOURCE MANAGEMENT

In line with the national strategy to cope with climate change, the Company actively responded to resource-saving measures with adequate, reasonable and efficient use of existing resources, reduced the waste of available energy and resources, and at the same time reduced operating costs. We advocate making the best use of everything in daily office. For example, we encourage double-sided, black-and-white and draft paper printing, reducing the use of disposable articles, reusing recyclable resources, and maximizing the utilization rate of materials.

Water shortage is a common challenge faced by the whole world. HBM strictly abides by the laws and regulations of the place where we operate, such as the *Water Law of People's Republic of China (PRC)*, and constantly strengthens the concept of a waterwise workplace. During the reporting period, the Company's main water source was municipal water. In order to increase the recycling of water resources and achieve emission compliance, HBM encourages employees to save water and pay attention to water conservation in their work and life.

<sup>8</sup> The purchased electricity consumption, comprehensive energy consumption and greenhouse gas emissions amount of 2022 increase compared to 2021 due to R&D business growth.

<sup>9</sup> Energy consumption: Calculated according to the General Principles of Comprehensive Energy Consumption Calculation (GB2589-2020).

<sup>10</sup> Greenhouse gas emissions come from indirect emissions from purchased electricity. The electricity emissions factor is adopted from the "2011 and 2012 China Regional Power Grid Average Carbon Dioxide Emission Factors"; the calculation of greenhouse gas emissions refers to the "Guidelines for Accounting Methods and Reporting of Greenhouse Gas Emissions of Enterprises in Other Industries (Trial)".

## 5. Environment Friendliness

### Case: Proposal for Electricity Saving in Suzhou Plant of HBM.

HBM resolutely responded to the national policy in green and low-carbon production and living, and issued the notice of Suzhou Bio-industrial Park's electricity saving initiative for two consecutive years, making contributions to ensuring power grid security and people's livelihood.



During the reporting period, the resource use of the Group was as follows:

Specific items	Unit	2021	2022
Water use	ton	2,487.00	2,162.00
Water use intensity	ton/R&D investment	3.64	2.38
Use of packaging materials	kg	110.00	300.00 <sup>11</sup>
Packaging materials usage intensity	kg/R&D investment	0.16	0.33

### MANAGEMENT OF THREE TYPES OF WASTE

HBM strictly abides by the domestic and international laws, regulations and industry standards of places where we operate, such as the *Water Pollution Prevention and Control Law of the People's Republic of China*, the *Air Pollution Prevention and Control Law of the People's Republic of China*, the *Clean Water Act of the United States*, *Clean Air Act*, and the *Solid Pollutant Disposal Act*. We formulated the waste management system based on our situation, and took corresponding measures to dispose of wastes. The Company continues to carry out the annual inspection of exhaust gas and wastewater.

<sup>11</sup> Packaging materials usage increases in 2022 compared to 2021 due to construction projects.

## 5. Environment Friendliness



The wastewater generated in the daily production and office of HBM is mainly experimental wastewater and domestic sewage, among which the laboratory wastewater enters the sewage pipe network through our dedicated experimental wastewater discharge pipeline after harmless treatment, and then be discharged into the municipal sewage pipe network together with domestic sewage through the sewage pipe in the park. During the reporting period, we renovated the sump for the collection of laboratory waste liquids to improve work efficiency by optimizing the facilities for collecting hazardous liquid wastes and simplifying the operations of users to avoid damage to the environment due to maloperation. In 2022, the discharge concentration of harmful substances in our wastewater was lower than the indirect discharge limit in the *Biopharmaceutical Industry Pollutant Discharge Standard*.

HBM's air emission comes mainly from the fume hood and exhaust devices of various physical and chemical tests. We use an active carbon device to adsorb the air emission before it is discharged, and replace the active carbon regularly to ensure the effectiveness of our air emission treatment. In 2022, we continued our regular monitoring and evaluation of the air emission generated according to the local standards of each park.

The type, the management and the disposal process of the three types of waste found at HBM Laboratory in 2022.

<b>Air emission</b>	We regularly entrust qualified external enterprises to test the emissions of non-methane hydrocarbons and isopropanol, and issue relevant reports to ensure that the emission standards meet the requirements of relevant laws and regulations. We replace the activated carbon filter in the ventilation system of the laboratory regularly.
<b>Wastewater</b>	Every quarter, we entrust external enterprises to test wastewater indicators, including pH value, suspended solids, ammonia nitrogen, chemical oxygen demand, biochemical oxygen demand, and coliform bacteria, to ensure that the discharge meets the requirements of relevant laws and regulations, and issue relevant reports.
<b>Solid waste</b>	We make an annual declaration of hazardous waste in Shanghai Hazardous Waste Management Information System every year, and regularly contact Tianhan and Solid Waste Center to dispose of solid waste, medical waste, and waste liquid. The hazardous waste disposal form is filed and archived, and the solid waste management ledger is maintained in real time.
<b>Noise</b>	Check the noise at and around the building every quarter to ensure that the noise meets the <i>Emission Standard for Industrial Enterprises Noise at Boundary</i> , and issue relevant reports.

## 5. Environment Friendliness

Wastewater discharge, air emissions and solid waste generation amounts decrease in 2022 compared to 2021 to mitigate the impacts to environment. The following is the discharge of wastewater and air emission from HBM during the reporting period:

Category	Item	Unit	2021	2022
Wastewater	Wastewater discharge	m <sup>3</sup>	2,238.3	1946.8
Air emission	Air emission	m <sup>3</sup>	3.24*10 <sup>7</sup>	1.07*10 <sup>8</sup>
	Emissions of volatile organic compounds (VOC)	kg	15.05	56.33

In addition, HBM attaches great importance to the environmentally disposal of wastes, and all wastes are handled in strict accordance with the standards such as the *Hazardous Waste Storage Pollution Control Standard (GB18597-2001)*, the *Hazardous Waste Collection, Storage and Transportation Technical Specifications (HJ2025-2012)*, and the *Standards for Pollution Control of General Industrial Solid Waste Storage and Disposal Sites (GB18599-2001)*. Non-hazardous waste will be transported to the designated garbage collection point for recycling. For hazardous wastes generated, we will classify, collect, and package them according to their composition and characteristics, take temporary protection measures, store them in the temporary storage room for physical isolation, and entrust qualified hazardous waste disposal companies for disposal on a regular basis.

During the reporting period, the waste generated by HBM is as followed:

Category	Item	Unit	2021	2022
Hazardous waste	Medical waste	ton	7.30	6.36
	Other wastes	ton	13.19	11.43
	Total hazardous waste	ton	20.49	17.79
	Intensity	ton/R&D investment	0.03	0.02
Non-hazardous waste	Non-recyclable waste	ton	30.00	12.58
	Recyclable domestic waste	ton	11.50	3.95
	Total non-hazardous waste	ton	41.50	16.53
	Intensity	ton/R&D investment	0.06	0.02

## 6. Harmonious Society

HBM actively fulfills our social responsibilities. In the journey of our corporate development, we also make contributions to charity and social welfare and pay close attention to trending industry events, aiming to create a beautiful home of mutual assistance and contribute to a harmonious society.

### 6.1 CHARITABLE DONATION

HBM is engaged in charitable activities to help common development. We have always insisted on sharing love with society and building a good industry ecosystem.

For the self-purchased instruments and equipment at clinical research centers, through multiple internal evaluation and meetings, HBM decided to donate them to the center for free after study completion, as an effort to give back to society and boost medical and scientific development.

#### Case: COVID Prevention Volunteers

In February 2022, the COVID-19 broke out in Suzhou. HBM actively cooperated with the industrial park in epidemic prevention by notifying employees to stay at home and disinfecting and sterilizing the office space. At the same time, the Suzhou operation team provided multi-dimensional support for the epidemic prevention in the park, and effectively organized the “We care, We cat!” activity. Four of our employees joined the volunteer team of Suzhou Industrial Park to combat COVID-19 at the frontline.





## Appendix – List of Main Applicable Laws and Regulations

Category	Laws and Regulations
Environmental Protection	Environmental Protection Law of the People’s Republic of China
	Energy Conservation Law of the People’s Republic of China
	Water Law of the People’s Republic of China
	Water Pollution Prevention and Control Law of the People’s Republic of China
	Air Pollution Prevention and Control Law of the People’s Republic of China
	The Energy Policy Act of 2005 of the United States
	The Clean Water Act of the United States
	The Clean Air Act of the United States
	The Solid Waste Disposal Act of the United States
	The Dutch National Environmental Policy Plan
Labor	Labor Law of the People’s Republic of China
	Labor Contract Law of the People’s Republic of China
	Social Insurance Law of the People’s Republic of China
	Provisions on the Prohibition of Using Child Labor “
	Work Safety Law of the People’s Republic of China
	Law of the People’s Republic of China on the Prevention and Control of Occupational Diseases
	Emergency Response Law of the People’s Republic of China
	Occupational Safety and Health Act of the United States
Anti-Corruption and Corporate Governance	Securities Law of the People’s Republic of China Regulations of Listing Companies
	Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited
	Regulations of Listing Companies
Intellectual Property Rights	Patent Law of the People’s Republic of China
	Trademark Law of the People’s Republic of China
	Copyright Law of the People’s Republic of China
Product Responsibility and Service	Law of the People’s Republic of China on Product Quality
	Drug Administration Law of the People’s Republic of China
	Good Practice for Clinical Trials of Drugs
	Civil Code of the People’s Republic of China
	Administration of Affairs Concerning Experimental Animals
	Measures for the Administration of Laboratory Animal Licenses (Trial)
	World Medical Association Declaration of Helsinki

# Appendix – HKEx Environmental, Social and Governance Reporting Guide



Subject Areas, Aspects, General Disclosures and KPIs		Section
<b>Environment</b>		
<b>Aspect A1</b>	<b>Emissions</b>	
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.	5.3 Green Operation
KPI A1.1	The types of emissions and respective emissions data.	5.3 Green Operation
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in ton) and, where appropriate, intensity (e.g., per unit of production volume, per facility).	5.3 Green Operation
KPI A1.3	Total hazardous waste produced (in ton) and, where appropriate, intensity (e.g., per unit of production volume, per facility).	5.3 Green Operation
KPI A1.4	Total non-hazardous waste produced (in ton) and where appropriate, intensity (e.g., per unit of production volume, per facility).	5.3 Green Operation
KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	5.3 Green Operation
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.	5.3 Green Operation

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Subject Areas, Aspects, General Disclosures and KPIs		Section
<b>Aspect A2</b>	<b>Use of Resources</b>	
General Disclosure	<p>Policies on the efficient use of resources, including energy, water and other raw materials.</p> <p><i>Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.</i></p>	5.3 Green Operation
KPI 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).	5.3 Green Operation
KPI A2.2	Water consumption in total and intensity (e.g., per unit of production volume, per facility).	5.3 Green Operation
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	5.1 Environmental Management
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.	5.1 Environmental Management
KPI A2.5	Total packaging material used for finished products (in ton) and, if applicable, with reference to per unit produced.	5.3 Green Operation
<b>Aspect A3</b>	<b>The Environment and Natural Resources</b>	
General Disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	5.1 Environmental Management 5.2 Climate Change
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	5.1 Environmental Management
<b>Aspect A4</b>	<b>Climate Change</b>	
General Disclosure	<p>General Disclosure</p> <p>Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.</p>	5.2 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.	5.2 Climate Change

# Appendix – HKEx Environmental, Social and Governance Reporting Guide



Subject Areas, Aspects, General Disclosures and KPIs		Section
<b>Social</b>		
<b>Aspect B1</b>	<b>Employment and Labor Practices</b>	
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.	4.1 Diversified Employment
KPI B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	4.1 Diversified Employment
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	4.1 Diversified Employment
<b>Aspect B2</b>	<b>Health and Safety</b>	
General Disclosure	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 providing a safe working environment and protecting employees from occupational hazards.	4.4 Health and Safety
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	4.4 Health and Safety
KPI B2.2	Lost days due to work injury.	4.4 Health and Safety
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	4.4 Health and Safety

# Appendix – HKEx Environmental, Social and Governance Reporting Guide

Subject Areas, Aspects, General Disclosures and KPIs		Section
<b>Aspect B3</b>	<b>Development and Training</b>	
General Disclosure	<p>Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.</p> <p><i>Note: Training refers to vocational training. It may include internal and external courses paid by the employer.</i></p>	4.2 Talent Empowerment
KPI B3.1	The percentage of employees trained by gender and employee category (e.g., senior management, middle management).	4.2 Talent Empowerment
KPI B3.2	The average training hours completed per employee by gender and employee category. Labor Standards	4.2 Talent Empowerment
<b>Aspect B4</b>	<b>Labor Standards</b>	
General Disclosure	<p>Information on:</p> <p>(a) the policies; and</p> <p>(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labor.</p>	4.1 Diversified Employment
KPI B4.1	Description of measures to review employment practices to avoid child and forced labor.	4.1 Diversified Employment
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	4.1 Diversified Employment
<b>Aspect B5</b>	<b>Supply Chain Management</b>	
General Disclosure	Policies on managing environmental and social risks of the supply chain.	3.4 Responsible Procurement
KPI B5.1	Number of suppliers by geographical region.	3.4 Responsible Procurement
KPI 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.	3.4 Responsible Procurement
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	3.4 Responsible Procurement
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	3.4 Responsible Procurement

# Appendix – HKEx Environmental, Social and Governance Reporting Guide



Subject Areas, Aspects, General Disclosures and KPIs		Section
<b>Aspect B6</b>	<b>Product Responsibility</b>	
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.	3.3 Safety First
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	3.2 Quality Assurance
KPI B6.2	Number of products and service-related complaints received and how they are dealt with.	3.2 Quality Assurance
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	3.1 Innovation Orientation
KPI B6.4	Description of quality assurance process and recall procedures.	3.2 Quality Assurance
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	3.3 Safety First
<b>Aspect B7</b>	<b>Anti-corruption</b>	
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.	2.1 Corporate Governance
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.	2.1 Corporate Governance
KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	2.1 Corporate Governance
KPI B7.2	Description of anti-corruption training provided to directors and staff.	2.1 Corporate Governance





## Appendix – HKEx Environmental, Social and Governance Reporting Guide

Subject Areas, Aspects, General Disclosures and KPIs		Section
<b>Aspect B8</b>	<b>Community Investment</b>	
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	6.1 Charitable Donation
KPI B8.1	Focus areas of contribution (e.g., education, environmental concerns, labor needs, health, culture, sport).	6.1 Charitable Donation
KPI B8.2	Resources contributed (e.g., money or time) to the focus area.	6.1 Charitable Donation