



BIOSINO BIO-TECHNOLOGY  
AND SCIENCE  
INCORPORATION

**ENVIRONMENTAL SOCIAL  
AND GOVERNANCE  
REPORT**

**2022**

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## MESSAGE FROM THE CHAIRMAN



### Dear stakeholders:

Thank you for reading the 2022 Environmental, Social, and Governance (ESG) report of the Biosino Bio-Technology and Science Incorporation (the "Company" or "Biosino", together with its subsidiaries, the "Group").

2022 was an extraordinary year. Biosino carried out its mission of "using technology to beautify life" and aimed to become "the greenest and most innovative in vitro diagnostic enterprise." We overcame challenges, made breakthroughs in cutting-edge technology, and actively fulfilled our social responsibility to promote green development, resulting in impressive achievements.

In terms of business, Biosino was successfully selected in the liver function biochemical joint procurement of 23 provinces, and most of our projects were at the top. In June 2022, the production line of the second-generation flow cytometer and supporting reagents was completed at the Biosino medical production base. In addition, we also launched the C8 automatic biochemical analyzer in collaboration with external institutions, filling the gap in high-speed biochemical instruments in China and opening a new era of "instruments + reagents."

In terms of research and development, Biosino was granted 10 invention patents in 2022, including "Virus genome nucleic acid extraction kit, method, and application" and "A primer combination, reagent kit, and detection method for detecting MTHFR gene polymorphisms." The Company also passed the qualification review and regular review of the China National Accreditation Service for Conformity Assessment, upgrading its calibration and testing service capabilities. In March 2022, the Company was awarded the title of "Beijing Specialized and Innovative Small Giant" and the "Beijing New Technology and New Product (Service) Certificate."

In terms of green development, Biosino led the in vitro diagnostic industry in proposing the goal of "carbon peak in 2028 and carbon neutrality in 2050" and integrated the low-carbon and green concept into the entire process of product development, supply chain, production operation, and sales. In particular, it is necessary to take practical and feasible actions throughout the entire industry chain, starting from the raw material and procurement ends. For example, in the raw material end of IVD reagents, the Company will systematically implement green raw material substitution. Currently, antigens, antibodies, and some enzymes are extracted from animals, and the Company will promote upstream suppliers to gradually transition to the technology path of cell engineering cultivation, striving to significantly reduce carbon emissions per unit of output.

In 2022, Biosino conducted carbon accounting and carbon inspection work based on the "Enterprise Carbon Evaluation Standard" and conducted low-carbon office evaluations based on the "Low-carbon Office Evaluation Standard." We also developed the "Employee Low-carbon Behavior Code of Conduct." In addition, to better understand the carbon emissions of the supply chain and support Scope 3 emissions reduction, Biosino collected carbon emissions data from three key suppliers of enzymes, biological antibodies, and packaging materials.

In terms of social responsibility, the Company has always adhered to the spirit and principles of "people-oriented, people first, and life first." In 2022, in the face of the challenge of the COVID-19 epidemic, Biosino Medical Laboratory under the Company took on the responsibility of accounting testing, with a daily testing capacity of 100,000 people, while promoting the Company's culture and playing an active role in social development.

In terms of corporate governance, under the leadership of the ESG committee, Sino Biological Nordics carefully reviewed the progress of ESG goals, integrated ESG concepts and strategies into every aspect of the Company's strategy and operations, and also drove the industry chain and stakeholders to actively participate in the ESG construction.

In future development, Biosino will adhere to the "one body, two wings" strategy, with the Biosino Technology Transformation Center as the main body and the development of two wings focused on the research, development, incubation and transformation of innovative products, precision medicine laboratories, and the National Health Science Center. Biosino will also adhere to the "dual-drive" approach, which involves the conversion and incubation of hardcore scientific and technological products, the development of innovative product application scenarios and service formats to achieve the linkage of the three chains of innovation, industry, and capital. On the one hand, Biosino will continue to explore the technological competition in the IVD field, and on the other hand, it will focus on the construction of innovative channels, transform its thinking, and seize the development opportunities of the new era.

Finally, I would like to express my sincere gratitude to all stakeholders who have always supported and trusted Sino Biological Nordics. In the future, we will continue to innovate and improve, adhere to the concept of sustainable development, and strive to achieve win-win cooperation with all stakeholders. Thank you!

Chairman of Biosino

# 2022 PERFORMANCE HIGHLIGHTS



## Financial performance



2022 total revenue:  
¥ 373 million

**373,000,000**



## Corporate Governance

**16** ESG committee members  
**24** ESG Materiality Issues  
**100%** board members vparticipate  
in business ethics-related training courses

**16,24,100%**



## Product innovation

R&D investment in 2022: RMB **13.1011** million  
Number of R&D personnel in 2022: **21**  
In 2022, the number of invention patents applied by the Company: **6**  
In 2022, the number of patents authorized by the Company: **10**  
Software copyright: **5**  
Number of registration certificates for IVD reagents: **268** items  
**4** kinds of products won the "Beijing New Technology and New Product (Service) Certificate"  
"Quality Manual" revision times: **16** times



## Green and low carbon



Total carbon emissions in 2022:  
**1358.33** CO<sub>2</sub>e  
Carbon emission intensity in 2022:  
**0.0364** CO<sub>2</sub>e / RMB 10,000



## Ecological co-construction



**3** key suppliers provide carbon emission data of the goods or enterprises they supply;



## Talent development

Total number of employees: **544**  
Proportion of female employees: **45.96%**  
Staff training coverage: **100%**  
Anti-corruption training rate for all staff: **100%**  
Employee ESG training coverage: **100%**

**544,45.96,100%**



## Community participation



Carrying out nucleic acid testing, the daily testing capacity reaches

**100,000** person-times.

# EVENTS IN 2022

## Corporate Governance

### Awarded as the 2022 Credit Leading Enterprise

As a high-tech listed company founded by the Institute of Biophysics of the Chinese Academy of Sciences, Biosino has won the credit leader action support unit and social Recognized by many parties from all walks of life.

## Product Innovation

### Successfully passed CNAS re-evaluation

Biosino successfully passed the qualification review and regular re-evaluation of conformity assessment of the China National Accreditation Service for Conformity Assessment ("CNAS" or National Accreditation Service for short), which marks the upgrade of Biosino's calibration and testing service capabilities; it means the Company's management level and technical ability have been recognized by the state: the Company's comprehensive strength has reached the industry leader.

### Several achievements have been authorized by national invention patents

10 invention patents such as "Virus Genome Nucleic Acid Extraction Kit, Method and Application" and "A Primer Combination, Kit and Detection Method for Detecting MTHFR Gene Polymorphism" applied by Biosino have been authorized, and the scientific and technological research and development have repeatedly Picking great fruits once again demonstrates the innovative ability of Biosino to make breakthroughs and bravely stand at the forefront.

### Successfully broke through and selected in the 23 provincial liver function biochemical collections

In the fierce competition of centralized procurement, Biosino stood out, was selected and successfully broke through Group A, and most of the projects were among the best. This means that Biosino's achievements in the field of biochemistry for decades have been continuously recognized by the market.

### The instrument and GMP production line of Biosino Medical (Hefei) were completed and the second-generation flow cytometer and supporting reagents were launched

Biosino flow cytometer is mainly used in hematology, oncology, infection, respiratory, obstetrics, pediatrics, rheumatology, reproductive and other major departments, as well as HIV and AIDS disease detection in the Center for Disease Control and Prevention. The product has the advantages of high sensitivity, strong fluorescence linearity, and short analysis time.

### Launched TORCH instrument reagents to enter the eugenics track

In 2022, Biosino launched TORCH ten reagents (chemiluminescence method and supporting automatic chemiluminescence instrument. Tethys automatic chemiluminescence enzyme immunoassay instrument integrates a number of advanced technologies, which can realize ELISA or chemiluminescence experiment It is fully automatic on the same platform, realizing multi-task, multi-channel and parallel processing.

### Launched C8 automatic biochemical instrument to open a new situation of instrument + reagent

In 2022, Biosino will launch the C8 automatic biochemical instrument, which is efficient and easy to use, and has the characteristics of fast detection speed, high resolution, and thorough cleaning, making up for the gap in high-speed biochemical instruments.

## Green low carbon

### Independently released ESG report for the first time

On May 27, Biosino independently released the "Environmental, Social and Governance Report 2021" (referred to as the ESG Report) for the first time, becoming the first IVD company to propose a "dual carbon" goal. The report presents a panoramic view of the measures and achievements of Sino-Bio Beijing Enterprises in corporate governance, environmental responsibility, social responsibility, and talent development in the past year, reflecting the Company's unremitting efforts to deepen the implementation of the ESG concept.

### Published the "Employee Low Carbon Code of Conduct"

In order to implement the Company's vision and aim to become a green and low-carbon organization, the Company takes the lead in setting an example. According to the group standard of "Low-carbon Office Evaluation", Biosino sorted out its own low-carbon office situation, established and implemented the "Employee Low-Carbon Code of Conduct", standardize the low-carbon behavior of employees, save energy, and improve the efficiency of resource utilization.

## Ecological co-construction

### Formally reached a strategic cooperation with New Industry Biotech

At the beginning of the Year of the Tiger, Biosino Bio-Technology and Science Incorporation and Shenzhen New Industry Biomedical Engineering Co., Ltd. (hereinafter referred to as "New Industry Bio") formally reached a strategic partnership. The two parties will start a comprehensive strategic cooperation in the fields of marketing, research and development, production, and ecological circle co-construction.

### Nanchang CACLP · German MEDICA Chinese and foreign exhibition shines brilliantly

At the exhibition, the product matrix of Biosino includes biochemistry, immunity, POCT, molecular, hemagglutination, flow cytometry and other fields. Biosino has touched product features and technical advantages through various demonstrations and professional explanations Users, good design concepts and excellent performance have also been recognized by many customers.

### Hefei Comprehensive National Science Center Great Health Research Institute established the Sino-Bio Science and Technology Achievement Transformation Center

The establishment of the Biosino Science and Technology Achievement Transformation Center of the Comprehensive Health Research Institute of the Hefei Comprehensive National Science Center marks that Biosino has achieved a phased victory in further promoting the cooperation between colleges and enterprises, scientific research cooperation, scientific and technological exchanges and achievement transformation. An important step in the industrial strategic layout.

## Employee Development

### Biosino All-staff Conference and Marketing Meeting and Team Building

On July 21, Biosino held the 2022 Commendation Conference and "Re-Entrepreneurship Mobilization Meeting", solemnly commending advanced groups and individuals who have made outstanding contributions to the Company's development in the past year, and comprehensively summarizing the Company's work results. Then the Company held a In the annual marketing meeting, the sales elites of Biosino gathered together to praise the original intention and talk about the future together, and organized team building activities in Jingzihu Holiday Villa.

## Community Involvement

### Carrying out nucleic acid testing, the daily testing capacity reaches 100,000 person-times

In the face of the challenge of the new crown epidemic, Biosino Medical Laboratory, a subsidiary of Biosino, has bravely assumed responsibility, carried out comprehensive nucleic acid testing, and continued to protect the health of the people, interpreting the great anti-epidemic spirit and embodying the responsibility of state-owned enterprises and responsible.

# ABOUT BIOSINO



Biosino is a listed high-tech company founded and controlled by the Chinese Academy of Sciences. It is mainly engaged in R&D, production, sales and service of IVD products. Since its inception in 1973, it has always been oriented to meeting the needs of the people's livelihood, actively promote the development of the national IVD industry, create an independent innovation system combining production, learning, research and use, and explore the operation of "internationalization, grouping, and compounding". The model builds a four-in-one industrial chain of "systematization, serialization, integration, and intellectualization" to enhance its core competitiveness and lay a leading position in the industry.

Since Biosino initiated single-double clinical chemistry reagents of enzymatic method in China, after decades of development, it has established a complete clinical chemistry testing series product platform, and developed in vitro diagnostic products such as immunology, molecular, flow cytometry and mass spectrometer. Biosino has R&D teams consisting of 3 people with doctorate degrees and more than 24 people with master degrees. It has established a "corporate postdoctoral research center" established an in vitro diagnostic engineering research center jointly with top-level scientific research institutions in the domestic life sciences field, and has carried out comprehensive cooperation with internationally renowned enterprises. Biosino has undertaken a series of national scientific and technological tasks such as the National Medical "863 Program", the National Science and Technology Support Program, the National High-tech Industry Demonstration Project, and the Chinese Academy of Sciences Knowledge

Innovation Project, and has been recognized as an "innovative enterprise" in the national independent innovation demonstration zone.

Biosino has a production base of 16,000 square meters strictly in accordance with GMP standards, and has passed ISO9001, ISO13485, EU CE, Korean KGMP and Canadian CDMCAS quality management system certifications, and passed ISO/ICE17025:2005 "General requirements for the competence of testing and calibration laboratories", obtained the use of the CNAS laboratory accreditation mark. At present, 260 IVD assays registration certificates have been obtained, mainly covering 12 kinds of clinical chemistry testing items such as liver function, kidney function, blood lipid, cardiovascular, diabetes and rheumatism. It is one of the most complete manufacturers of clinical chemistry reagents in China.

Biosino has more than 500 agents and distributors, set up branches in most domestic provinces and overseas, and established a nationwide marketing network and technical service support system. Over the years, Biosino clinical chemistry products have been at the forefront of the domestic market, and overseas market is expanding continuously, the products are exported to more than 50 countries and regions in Europe, North America, Africa, Middle East and Southeast Asia. In the future, Biosino will continue to introduce more, newer and better products and services as always, and strive to make greater contribution to the development of China's IVD industry and the health of the Chinese people.

- **Enterprise mission:**  
Beautify life with science and technology

- **Corporate vision:**  
To become a pioneer in IVD industry with international competitiveness

- **Enterprise values:**  
Be an honest person and be the first in the world

# RECOGNITION AND AWARDS



- State-level high-tech enterprises
- Beijing Specialization, refinement, characteristic and novelty company
- Famous Trademark of Beijing
- Innovative Enterprise in National Independent Innovation Demonstration Zone
- Leading Credit Enterprise

# GOVERNANCE

For the year ended 31 December 2022 (the "Reporting Period"), the Company complied with all Code Provisions and, where appropriate, adopted the recommended best practices set out in the Corporate Governance Code, with the exception of Code Provision D.2.5 as addressed in the Corporate Governance Report in the annual report of the Company for the Reporting Period.

## BOARD DIVERSITY

The board (the "Board") of directors ("Director(s)") of the Company adopted the revised Board Diversity Policy for board members on January 8, 2019, which states that the selection of candidates for board members will be based on a series of diversity categories and refer to the business model and specific needs of the Company, including but not limited to gender, age, race, language, cultural background, educational background, industry experience and professional experience.

At present, the Board has 2 executive Directors, 2 non-executive Directors and 3 independent non-executive Directors. From the educational background of the Directors, there are 2 people with doctoral degrees, 3 people with master's degrees and 2 people with bachelor's and other degrees; There are 6 men and 1 woman on the Board; In terms of the number of years as a director of the Company, one director has served for more than 20 years, one has served between 6 to 9 years, and the other Directors have served for less than 5 years.



- executive director
- Non executive director
- Independent non-executive director

## GOVERNANCE STRUCTURE

The Board has established three board committees, namely, the remuneration committee, the nomination committee and the audit committee, to monitor the affairs of the Company.

## INTERNAL CONTROLS AND RISK MANAGEMENT

The Board is responsible for maintaining an appropriate and effective internal control and risk management system to protect the interests of the Company and shareholders. Regularly review and supervise the effectiveness of the internal control and risk management system to ensure that the system is complete and sufficient. The relevant internal audit functions performed by the Board include: the Board formulates formal arrangements and applies the principles of financial reporting and internal control in accounting and financial matters to ensure compliance with the Rules ("Listing Rules") Governing the Listing of Securities on GEM of The Stock Exchange of Hong Kong Limited (the "Stock Exchange") and all relevant laws and regulations; Biosino appoints external consultants to conduct internal review on the scope determined by the audit committee. The existing organizational structure, close supervision of the management and the above-mentioned appointment of external consultants can enable the Company to maintain adequate risk management and internal control. The Board will review the necessity of establishing an internal audit function from time to time and may establish an internal audit team when necessary. Biosino holds regular meetings to discuss the procedures of finance, operation, compliance control and risk management, and reviews the performance of the Company with the audit committee every quarter, so as to ensure that effective safeguards have been implemented, identify potential risks and protect important assets.

## ANTI-CORRUPTION POLICY

Biosino issued the anti corruption policy to fully support and uphold the high standards of integrity, honesty and fair competition in carrying out the Company's business, and will never tolerate any form of bribery or corruption. The policy clearly states that employees should abide by all applicable anti bribery laws, especially the Hong Kong bribery Prevention Ordinance, the British Anti Bribery Act, the People's Republic of China ("PRC") Criminal Law and the PRC Anti Unfair Competition Act, and common law relating to crimes to avoid misconduct of public officials. The Company regularly provides anti-corruption training and briefings for all employees. The training courses include online courses and on-site demonstrations. The Company actively encourages employees to report any concerns about bribery and corruption. All business departments keep records of suspected and actual accidents, and report relevant statistics to the financial controller of the Company on a quarterly basis. During the Reporting Period, there was no corruption incident in the Company.

The Board is responsible for the implementation of the Group's anti-bribery and anti-corruption work. The executive directors of the Company are responsible for ensuring the effective implementation and monitoring of any material bribery or corruption within the Group. During the Reporting Period, Biosino launched two special trainings on anti-commercial bribery, and shared the training materials with all employees. The training content mainly includes: the meaning of commercial bribery, the manifestations of commercial bribery and the analysis of misunderstandings, the responsibility and risk control of commercial bribery, etc.

### WHISTLEBLOWING MECHANISM

Biosino maintains an open, trusting, and respectful atmosphere, and accepts anonymous reports (reporting email: mxm@zhongsheng.com.cn), ensuring that everyone can raise issues with peace of mind. Biosino has established an anti-corruption system to ensure effective prevention, monitoring, and implementation of anti-corruption measures. The "Biosino Whistleblowing System" has been formulated, which clearly stipulates the reporting requirements, scope, investigation process, and measures for protecting whistleblowers. Once a report is received, the management will take timely action to ensure that no whistleblower is subjected to discrimination, unfair treatment, or retaliation, to the maximum extent possible to protect the whistleblower.

## BUSINESS INFORMATION SECURITY

Biosino strictly complies with relevant laws, regulations, rules of the Hong Kong Stock Exchange, as well as its own Company Articles and Information Disclosure System, to fulfill its obligations to disclose information as a listed company. Biosino ensures that the disclosure of information is timely, fair, truthful, accurate, and complete, and that investors have equal and timely access to the Company's public information. During the year, the Company did not identify any information that needed to be disclosed in a timely manner.

Biosino's corporate governance practices are not significantly different from those required by the China Securities Regulatory Commission and the Hong Kong Stock Exchange. The Company will continue to consolidate and further enhance its corporate governance level, improve its competitiveness, and provide better returns to investors through better operating performance.

N.B. Please include the following disclosure items as required under part B of Appendix 20

14. A description of, or an explanation on, the application of the following Reporting Principles in the preparation of the ESG report:  
 Quantitative: Information on the standards, methodologies, assumptions and/or calculation tools used, and source of conversion factor used, for the reporting of emissions/energy consumption (where applicable) should be disclosed.  
 Consistency: The issuer should disclose in the ESG report any changes to the methods or KPIs used, or any other relevant factors affecting a meaningful comparison.

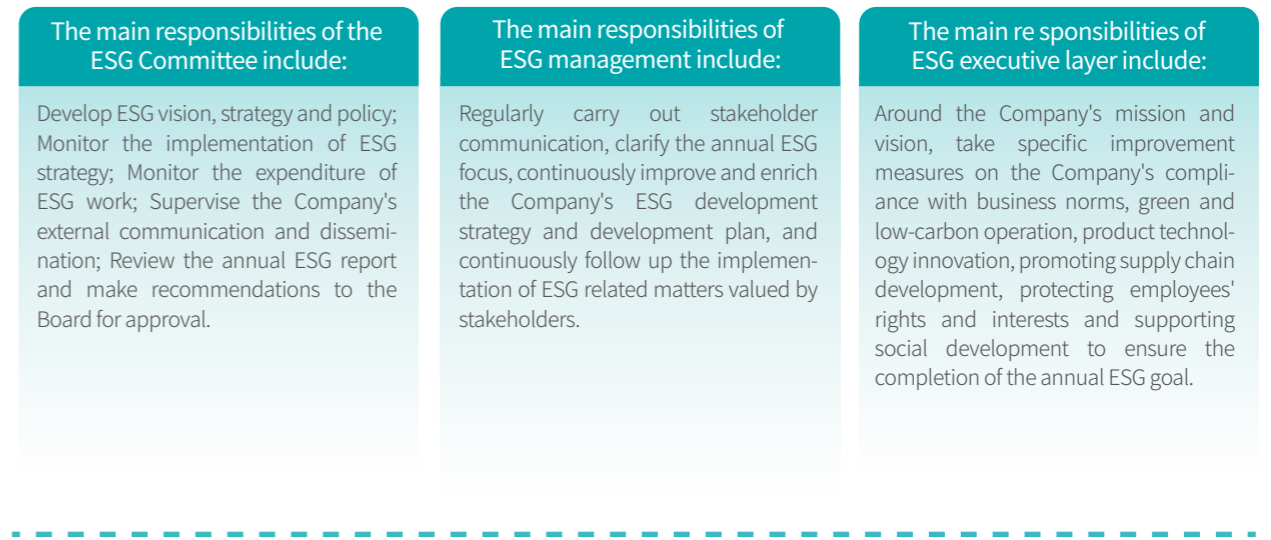
15. A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change.

Biosino has established a whistleblowing and monitoring system, conducts regular internal audits, and accepts audits from customers on our data security, data center management, and general control processes to ensure that risks are maintained at a manageable level. Regarding network security issues, we have also established a complaint reporting channel (reporting email: mxm@zhongsheng.com.cn), and all employees can provide feedback through phone or email. No significant network security or business information leakage incidents occurred during the Reporting Period.

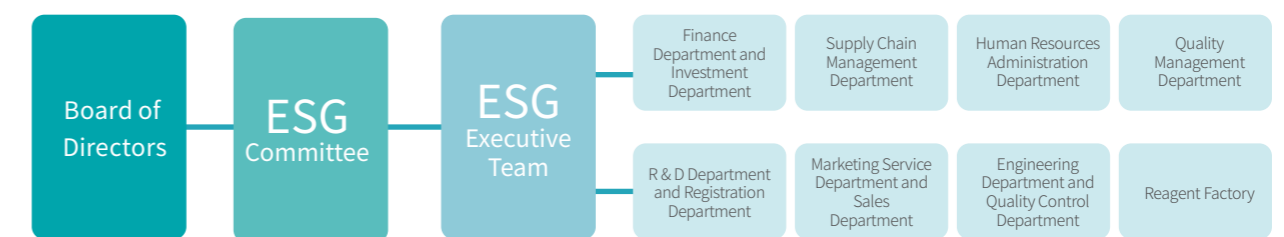
## BOARD'S ESG STATEMENT

Biosino has established an ESG control structure covering three levels: decision-making level, management level and executive level. The Board is the decision-making level of ESG and the highest decision-making body of ESG. The ESG Committee of the Board is responsible for formulating the Company's ESG strategic policy, reviewing and making decisions on major ESG matters of the Company, regularly supervising and inspecting the progress of ESG related matters, fulfilling the ESG work requirements put forward by the Listing Supervision Department to the Board, and providing support for ESG decisions of the Board. At the same time, timely and accurately identifying the demands of various stakeholders, carrying out evaluation, and determining and revising material ESG issues. At the same time, we would discuss relevant issues, including but not limited to product quality, climate change, anti-corruption and other fields, and respond to the demands of various stakeholders.

The chairman takes charge of the ESG Committee and is responsible for presiding over the work of the Committee. The Secretary of the Board and all senior executives of the Company form the ESG leading group to formulate the Company's ESG management system, monthly inspect the implementation of the Company's ESG work, and regularly report the work progress to the ESG Committee. All departments of Biosino dispatch a representative to form an ESG working group to implement the decisions of the management and be responsible for the implementation of ESG objectives. On April 15, 2022, the chairman of the Board, Mr. Wu Lebin announced the establishment of the ESG Committee and the executive group under the Board, and held the deployment meeting of the Company's ESG and carbon assessment, which conducted on-site discussion and work deployment on important topics, annual objectives and future implementation plans of ESG.



### ESG ORGANIZATIONAL STRUCTURE





## STAKEHOLDER IDENTIFICATION

It is confirmed that in combination with the Company's own business characteristics and drawing on the experience of its peers, the main stakeholders of Biosino include: shareholders and investors, customers, employees, the Board and management, suppliers and partners, regulators and the government, as well as local society, non-governmental organizations and the media. Biosino can fully respect the legitimate rights of stakeholders and actively cooperate with them on the basis of fairness, rationality and mutual benefit to jointly promote the sustainable and healthy development of the Company. This year, we communicated with stakeholders in many ways through online and offline meetings, face-to-face interviews, questionnaire, etc.

Stakeholders	Issues of Concern	Communication Channels
Shareholders and Investors	<ul style="list-style-type: none"> <li>Compliance operation</li> <li>Information transparency</li> <li>Return on investment</li> <li>Improve product and service quality</li> <li>Risk management</li> <li>Corporate governance</li> <li>Market position</li> </ul>	<ul style="list-style-type: none"> <li>General meeting of shareholders</li> <li>Timely release, information on the Stock Exchange's and the Company's website</li> <li>Roadshows and public events</li> <li>Set up telephone, email and other communication channels</li> </ul>
Customers	<ul style="list-style-type: none"> <li>Stable relationship</li> <li>Customer service quality</li> <li>Protect customer privacy</li> <li>Business integrity and ethics</li> <li>Health and safety</li> </ul>	<ul style="list-style-type: none"> <li>Service visit</li> <li>Satisfaction survey</li> <li>Product training</li> <li>Telephone</li> <li>Wechat</li> <li>Email</li> </ul>
Employees	<ul style="list-style-type: none"> <li>Development and training</li> <li>Occupational health and safety</li> <li>Compensation and benefits</li> <li>Employee care</li> <li>Employee communication</li> </ul>	<ul style="list-style-type: none"> <li>Satisfaction survey</li> <li>Signing agreements</li> <li>Hold meetings</li> <li>Discussion</li> <li>Organizing activities</li> </ul>
The Board of Directors and	<ul style="list-style-type: none"> <li>Compliance operation</li> <li>Anti corruption</li> <li>Talent retention</li> <li>Enterprise sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>Online communication</li> </ul>
Suppliers and Partners	<ul style="list-style-type: none"> <li>Fair bidding</li> <li>Business ethics and reputation</li> <li>Long term cooperative relationship</li> </ul>	<ul style="list-style-type: none"> <li>Supplier meetings</li> <li>Field investigation</li> <li>Signing the contract</li> <li>Telephone</li> <li>Wechat</li> <li>Email real-time communication</li> </ul>
Government and Regulators	<ul style="list-style-type: none"> <li>Compliance with regulations</li> <li>Policy implementation</li> <li>Pay taxes</li> <li>Responding to national strategies</li> </ul>	<ul style="list-style-type: none"> <li>Accept inspection and research</li> <li>Fill out forms</li> <li>Assist in review</li> </ul>
NGO and Media	<ul style="list-style-type: none"> <li>Give back to society</li> <li>Environmental protection</li> <li>Social welfare</li> <li>Health and safety</li> </ul>	<ul style="list-style-type: none"> <li>Exchange, interview and contact</li> <li>Community activities</li> </ul>

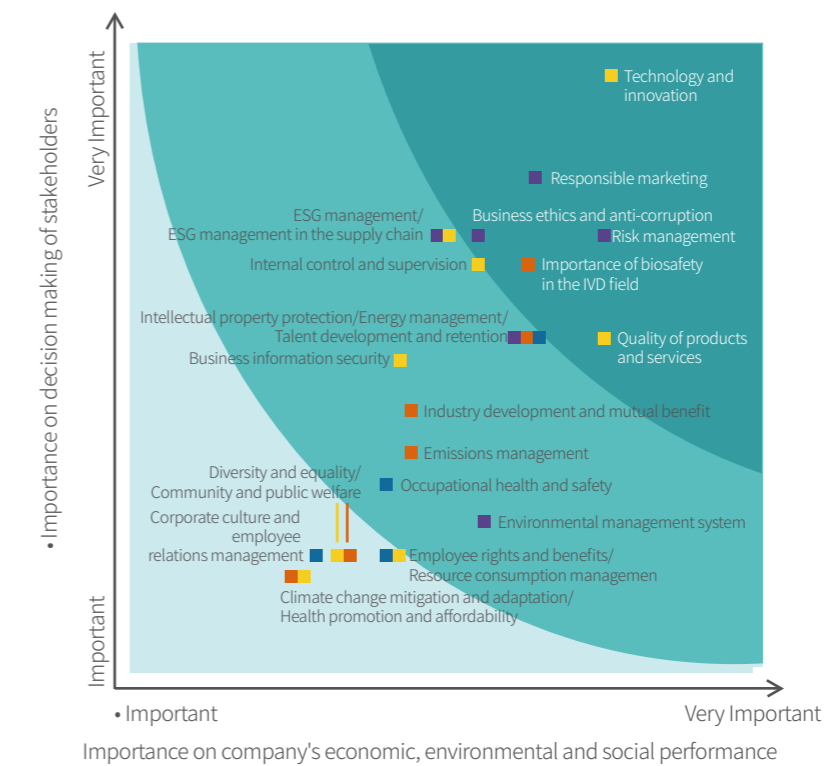
Biosino is able to fully respect the legitimate rights and interests of stakeholders such as product users, creditors, suppliers, employees, and communities. We will actively cooperate with them on the basis of fairness, reciprocity, and compliance with laws and regulations, to promote the sustainable and healthy development of our company.

Our company strictly follows the procedures stipulated in the "Articles of Association" to appoint supervisors. The board of supervisors consists of three members, including two representatives recommended by shareholders and one employee representative recommended by the staff and workers congress. The board of supervisors of our company can independently and effectively exercise its supervisory and inspection powers over directors and senior management. The board of supervisors holds regular meetings and convenes ad hoc meetings as needed.

## MATERIALITY ASSESSMENT

Biosino identifies and summarizes materiality issues related to the Company in accordance with the guidelines on environmental, social and governance reports of the Hong Kong stock exchange, combining the evaluation of issues of internal and external stakeholders in the list of potential material measures, and the business attributes of Biosino. On the executive meeting of ESG and carbon assessment held on April 15, 2022, the opinions of ESG representatives were collected, the matrix of material issues was established. Based on this, the contents of ESG performance in this report were confirmed.

Materiality assessment



### Highlights: 24 Materiality assessments

For ESG materiality issues, this report is based on the reporting principles of importance, quantification, balance and consistency. Major content changes have been reviewed and presented in the form of annual comparison for review by stakeholders.

- Importance. When the issues related to ESG will have a significant impact on investors and other equity holders, they need to be disclosed in the report.
- Quantification. Make the key performance indicators measurable so that the benefits of ESG management system can be evaluated and verified.
- Balance. The ESG report presents the performance of the issuer in an impartial manner to avoid the possibility of improperly affecting the decision-making or judgment of the readers.
- Consistency. This report adopts the same data disclosure method as in previous years, without comparing data from different years, and includes changes in statistical methods and key performance indicators.

## PRODUCT INNOVATION

Biosino attaches great importance to product innovation and technological innovation, and recognizes the importance of intellectual property. Biosino continues to invest heavily in research and development, promoting innovation in technology and products. The Company has established a dedicated research and development center, with a team of high-level professionals including doctors and masters, constantly innovating and forging ahead, to provide customers with more valuable products and services.

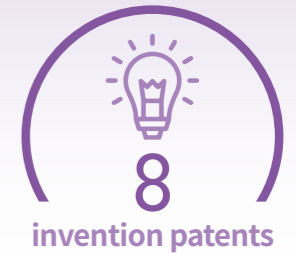
## R&D AND INNOVATION

Biosino has established a performance appraisal system with the project as the core to change the focus of R&D center management from project process control to project initiation and achievement acceptance.

Since the foundation of China's enzyme single and double biochemical reagents, Biosino has been guided by meeting the needs of people's livelihood, taking promoting the development of national IVD industry as its own responsibility, paying attention to technological R&D investment, actively carrying out technological innovation, improving the intellectual property protection system, and giving full play to the advantages of independent intellectual property rights. The Company has a R&D team of more than 21 people, a 3,000 square meter R&D center and advanced diagnostic equipment. At present, the Company has obtained more than 73 patents, software copyright and trademarks.

### Action objectives for 2023

- Replace imported raw materials with domestic raw materials, optimize product quality, reduce costs and improve profit margins.
- 8 invention patents have been reviewed
- Participated in the drafting and validation of the three line standards of Glucose Determination Kit, Triglyceride Determination Kit and Calibrator for Biochemical Analyzer



## INTELLECTUAL PROPERTY PROTECTION

Biosino, while adhering to the path of independent innovation, continues to deepen product reform, with a focus on strengthening the protection and use of intellectual property rights, accelerating product innovation, and promoting the transformation of achievements.

In 2022, the Company obtained EU CE certificates for 16 immunochromatography, colloidal gold, and enzyme immunoassay platform products, including the novel coronavirus (2019-nCoV) IgG/IgM antibody test kit (colloidal gold method), and an EU CE certificate for a real-time fluorescence immunoassay analyzer. Ten patents, including the "Uric Acid Test Kit Resistant to Anti-Gliadin Interference," were granted invention patents. The Company's scientific research and development have repeatedly borne fruit, once again demonstrating Biosino's innovative ability to break through and lead the way.

In March 2022, Biosino's biochemistry compound calibrators, retinol binding protein assay kit (latex immuno-turbidimetric method), C-reactive protein assay kit (latex immuno-turbidimetric method), and apolipoprotein E assay kit (immuno-turbidimetric method) won the "Beijing New Technology New Product (Service) Certificate." The assessed enterprise must have technological advancement and innovation, as well as independent intellectual property rights, while the evaluated products (services) should have potential economic benefits and a large market prospect, among other criteria. After winning this award in 2015, the Company was recognized again thanks to its advantages in product research and development, technological innovation, and scientific and technological achievements transformation.

In 2022, the company applied for eight invention patents and submitted five applications for Beijing Technical Innovation Product Certification. In 2023, the company will develop new products that are more closely tailored to clinical needs and market requirements, as well as further improving the quality of existing products. While consolidating existing biochemistry products around precision medicine, Biosino will vigorously develop new products in the fields of immunology and molecular biology.

During the Reporting Period, the company also participated in drafting industry and group standards, including the measurement of biological source samples IVD medical device, deafness gene mutation detection test kit, performance evaluation method for IVD testing systems, serum amyloid A assay kit (latex immuno-turbidimetric method), and application guidelines for IVD calibrators.



Access to intellectual property

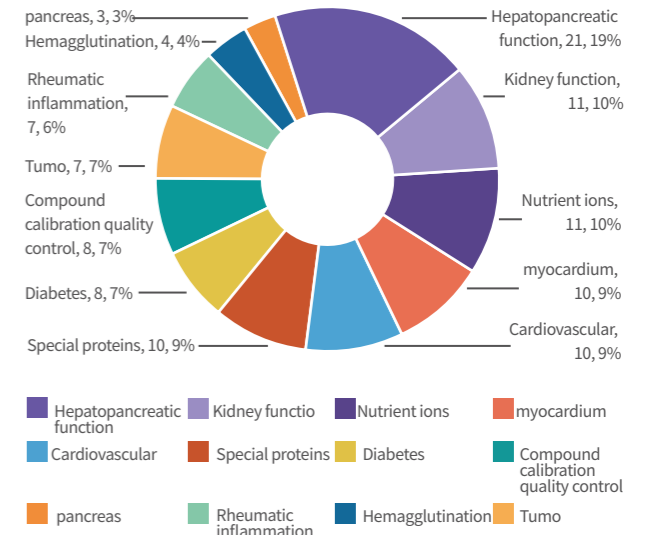
	Unit	2016	2017	2018	2019	2020	2021	2022
Patent Authorization	Number	20	5	3	0	1	4	10
R&D Investment	RMB Ten thousand yuan	2850	2685	2640	2932	2823	2390	1310.11

REGISTERED PRODUCTS

In 2022, The company has obtained 17 CE registered products in the EU and 23 products registered in China; Apply for 4 new technologies and products. At present, it has obtained 268 IVD reagent product registrations, mainly covering 12 types of biochemical testing items such as liver function, kidney function, blood lipid, cardiovascular, diabetes and rheumatism. It is one of the most complete manufacturers of biochemical diagnostic reagent products in China.

Existing biochemical projects: 12 categories and 110 projects, including 21 items of hepatopancreatic function and 11 items of renal function and nutritional ions; 10 myocardial, cardiovascular and special proteins; 8 items for calibration and quality control of diabetes and complex; Rheumatism, inflammation and tumor 7; Hemagglutination 3 items; Pancreas 3.

The classification and distribution map of biochemical diagnostic reagents, total number: 110 (Category name, number of items, percentage in the total)



list: Product registration

		2016	2017	2018	2019	2020	2021	2022
New product registratio	Item	51	9	9	2	2	2	17
Product renewal registration	Item	125	2	3	64	74	101	23

In 2022, the company focused on the development platform for immune chromatography, colloidal gold, and enzyme immunoassay products, and achieved EU CE certification for 16 test kits and a real-time fluorescence immunoassay analyzer, including the 2019-nCoV IgG/IgM antibody detection kit (colloidal gold method), 2019-nCoV antigen detection kit (colloidal gold method), 2019-nCoV saliva antigen detection kit (colloidal gold method), 2019-nCoV antigen detection kit (fluorescence quantitative chromatography method), 2019-nCoV neutralizing antibody detection kit (enzyme-linked immunoassay method), cardiac troponin I (fluorescence quantitative chromatography method), vitamin D3 assay kit (fluorescence quantitative

method), serum amyloid A protein assay kit (fluorescence quantitative chromatography method), procalcitonin assay kit (fluorescence quantitative chromatography method), myoglobin assay kit (fluorescence quantitative chromatography method), interleukin-6 assay kit (fluorescence quantitative chromatography method), C-reactive protein assay kit (fluorescence quantitative chromatography method), rheumatoid factor assay kit (fluorescence quantitative chromatography method), streptococcus group O antibody assay kit (fluorescence quantitative chromatography method), and D-dimer assay kit (fluorescence quantitative chromatography method), etc.

## FEATURED PRODUCTS

### Typical case : lithium Determination Kit

Biosino is the first enterprise in China to use the biochemical platform "phosphatase method" to detect the blood lithium concentration. This product can be used in the field of mental diseases to quantitatively determine the serum lithium concentration of patients taking lithium salt (lithium carbonate) drugs in vitro. Lithium salt has always been the preferred recommended drug for the clinical treatment of bi-directional disorder. Due to its narrow treatment window, the determination of blood lithium concentration, as an important index to monitor the effective dose and toxic dose of lithium salt, is of great significance to guide the safe and rational use of drugs in clinic. The product is ready to use on the automatic biochemical analyzer and easy to operate; The test results are accurate and have good correlation with atomic absorption spectrometry and ion selective electrode method. It is suitable for routine use in clinical laboratories.



### Typical case :Ischemia modified albumin assay kit

Ischemia modified albumin assay kit (IMA) is a biochemical diagnostic reagent, which has obtained KGMP quality system certification. This certification is one of the five quality system certifications. This reagent can be used as an early indicator of acute myocardial ischemia. During myocardial ischemia, IMA appears earlier than other myocardial markers (such as H-FABP, myo, CKMB, CTN). IMA can rise within minutes after ischemia and maintain a high level for several hours after ischemia remission. The early diagnosis index of acute myocardial ischemia can significantly improve the sensitivity of early diagnosis of myocardial ischemia, assist in the exclusion diagnosis and short-term risk stratification of acute coronary syndrome (ACS), predict the detection results of troponin, and determine the severity of myocardial ischemia. It is the assessment index of coronary events after PCI.



### Typical case :novel coronavirus (sars-cov-2) antigen detection kit

In 2020, the Company obtained the first-class product filing certificate for the two products of novel coronavirus nucleic acid extract and sample preservation solution. At the same time, the Biosino novel coronavirus (sars-cov-2) antigen (colloidal gold method) test kit was listed in the export white list of the Ministry of Commerce of China after obtaining CE access. The kit can quickly assist in the diagnosis of pneumonia infected by novel coronavirus, and can assist in the judgment of false negatives in nucleic acid detection methods.



### Second-generation flow cytometry and matching reagents

Biosino has launched second-generation flow cytometers and supporting reagents. Clinical applications of Biosino flow cytometers include hematology, oncology, infectious diseases, respiratory diseases, obstetrics and gynecology, pediatrics, rheumatology and immunology, reproductive medicine, and disease detection such as HIV/AIDS in CDCs. The products have the advantages of high sensitivity, strong fluorescence linearity, and short analysis time.



### TORCH instrument reagent

In 2022, Biosino launched TORCH ten-item reagents (chemiluminescence method) and a matching fully automated chemiluminescence immunoassay analyzer. The Tethys fully automated chemiluminescence immunoassay analyzer integrates multiple advanced technologies, enabling enzyme-linked immunosorbent assay or chemiluminescence experiments to be fully automated on the same platform, achieving multi-tasking, multi-channel, and parallel processing.

### C8 automatic biochemical instrument

In 2022, Biosino launched the C8 fully automated biochemical analyzer, which is efficient and easy to use, with characteristics such as fast detection speed, high resolution, and thorough cleaning, filling the gap in high-speed biochemical analyzers.



## PRODUCT AND SERVICE QUALITY

As one of the largest industrial bases of medical biochemical diagnostic reagents in China, Biosino adopts international advanced management mode to realize advanced production processes such as microcomputer networking and automatic connection, and the production environment is fully closed, clean and automatic temperature control. At the same time, in strict accordance with the standard requirements of ISO 13485:2016, quality management personnel, quality control personnel and production operators with strong sense of responsibility and excellent technology are equipped to monitor the whole production process, and a perfect and strict quality control system is established. Quality control is carried out in the production process to ensure the repeatability and stability within and between batches of products; By participating in the inter room quality assessment activities of the Ministry of health and Beijing authorities, the accuracy of the products can meet or exceed the standard requirements. During the Reporting Period, the Company did not return products for safety and health reasons. Because the products sold by the Company do not reach consumers directly, it does not involve the protection of consumer data and privacy policies.

During the Reporting Period, the Company continued to increase R&D investment, continuously improve technology, improve production process, pay attention to the construction of product quality system, prolong product life cycle, reduce costs, and provide safer and more effective products and services. The R&D personnel write corresponding patent applications for the products developed, and protect relevant intellectual property rights through patent applications.

In order to promote partners to continuously improve their quality management level, the quality manual formulated in 2009 is revised and improved every year according to the requirements of laws, regulations and quality management system. 2022 is the 16th revision.

### Highlight

- the 16th revision Quality Manual



## QUALITY MANAGEMENT COMMITMENT

The highest ranked supervisor of the Company's quality management system is the president. In order to ensure the establishment, implementation and effectiveness of the Company's quality management system, the Company promises:

- Establish the guiding ideology of "focusing on customers" among all employees and translate it into the specific requirements of the Company;
- Formulate quality policy;
- Formulate quality objectives;
- Conduct management review regularly;
- Ensure the availability of resources and continuously improve the effectiveness of the quality management system

# QUALITY MANAGEMENT SYSTEM

As a manufacturer of IVD, Biosino establishes, implements and maintains a quality management system and maintains its effectiveness in accordance with the requirements of ISO 13485:2016 “Medical Device Quality Management System Requirements for Regulations” and “Medical Device Production Quality Management Specifications”.

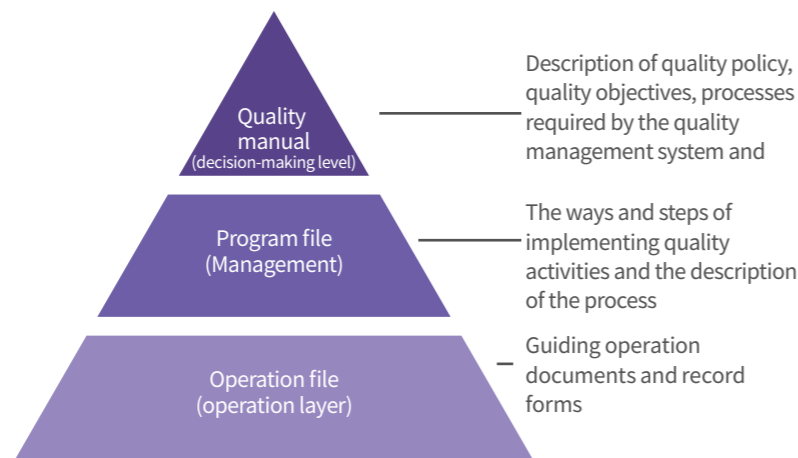
**Quality policy**

- High quality, efficient, innovative premium
- reagent products Accurate, stable, detect life functions



As a manufacturer of IVD, Biosino determines the required processes, including those related to management responsibilities, resource management, product realization, measurement analysis and improvement; the risk management control procedure is established and implemented to manage the process throughout the product life cycle. The sequence and interaction of the processes are clearly defined.

## Document structure of quality management system



In 2005, Biosino was the first to establish a microcomputer managed automatic production line in China and built a new plant in strict accordance with GMP standards. At the same time, in order to ensure the stability of product quality, the Company is equipped with international leading full-automatic biochemical analyzers such as Hitachi, Beckman and Abbott. It has automatic filling and plugging linkage machine, three head screw sub packer, freeze dryer and other automatic production equipment. Pure water treatment system and ultra pure water device are introduced. Combined with advanced production technology and management means, it provides strong technical support for the all-round compliance of clinical diagnostic reagents of Biosino.

# SAFETY AND QUALITY SYSTEM CERTIFICATION

Biosino has obtained a series of safety and quality management system certification, laboratory accreditation and other certificates: (1) Three level review certificate of enterprise safety production standardization issued by the State Emergency Management Bureau;



(2) ISO13485:2016 Medical Device Quality Management System Certification

(3) ISO / IEC 17025:2017 General requirements for the competence of the laboratories in testing and calibration.



Since its establishment in 1988, Biosino has placed great emphasis on technology research and development and innovation, continuously improving its management and technical capabilities, and strictly controlling product quality, always striving for innovation and excellence. Biosino has once again successfully passed the qualification review and regular review of the China National Accreditation Service for Conformity Assessment (CNAS), indicating that its calibration and testing services have been upgraded and its management and technical capabilities have been recognized by the state, demonstrating the company's comprehensive strength in the industry.

## SERVICE GUARANTEE

Biosino pursues the purpose of "technical service first", and has set up a technical service department to appoint high-quality talents majoring in inspection, pharmacy, medicine and marketing to conduct regular market patrol research and user follow-up. By holding training courses, holding academic exchanges, regularly publishing the bulletin of laboratory medicine technology, and combining with online interaction, we can provide users with professional technical support and services, and solve various difficult problems in product application on site. We also endeavour to provide customers with the best service at the first time.

The Company has established and implemented the customer feedback management procedure to standardize the customer complaint handling process in accordance with applicable laws and regulations, clarify the responsibilities of each department, and clarify the timeliness and effectiveness of customer complaint handling. The quality management department shall keep complaint handling records. The record includes:

- Receiving and recording information;
- Evaluate the information to determine whether the feedback constitutes a complaint;
- Investigate complaints;
- Determine whether information needs to be reported to the appropriate regulatory authorities;
- Dispose of products related to complaints;
- Determine whether corrective actions need to be initiated or not.

In 2022, there were no complaints regarding product quality, but there were 95 complaints about damaged product packaging and a few cases of product leakage. All related complaints were promptly addressed and satisfactorily resolved. Zero of total products shipped were subject to recalled during 2022.

The Company has simultaneously established and implemented the control procedure for adverse event monitoring and re evaluation of medical devices, carried out adverse event monitoring and re evaluation, and reported major quality accidents or advisory notices to relevant regulatory authorities. The quality management department shall keep records of reports to the regulatory authority.

In addition, the Company has established and implemented the product monitoring and measurement control procedure to monitor and measure the characteristics of products to verify that the product requirements are met. For the control of nonconforming products, the company has established and implemented the nonconforming product control procedure to ensure the identification and control of nonconforming products to prevent unexpected use or delivery.

## RESPONSIBLE MARKETING



### Biosino Technology Transfer Center at the Health Research Institute of the Comprehensive National Science Center in Hefei

The establishment of the Biosino Technology Transfer Center at the Health Research Institute of the Comprehensive National Science Center in Hefei marks a significant milestone for Biosino in advancing cooperation between academia and industry, research collaboration, technology exchange, and commercialization of research achievements. This is an important step in Biosino's industrial strategic layout.

### Successful breakthrough in 23 provincial liver function biochemical collection

In the fierce competition, Biosino stood out and successfully broke through Group A, with most of its projects ranking at the top! According to the group purchasing bidding and selection rules, only enterprises whose purchasing volume ranks among the top 70% of 23 provincial medical institutions or whose cumulative intended purchase volume ranks among the top 70% by 2023 can enter Group A; within the same bidding group, the ranking is based on the order of quotation from low to high; for enterprises with the same quotation, they are ranked based on their competitiveness, inter-laboratory quality evaluation scores in previous years, and brand medical institution demand for purchasing, and only 68 enterprises ultimately entered Group A.

Biosino's leading position in Group A is due to its customers' recognition and support for its products over the years, as well as its proactive response and implementation of healthcare reform policies and actions to promote quality improvement, cost reduction, and benefit to the people. In this procurement, Biosino declared 23 projects, 21 of which entered Group A, with 9 projects ranking first in the group. There are 7 projects ranked from second to fifth place. Biosino's testing projects for blood lipids, liver function, and other areas have always been its advantageous projects, favored by the market and users for years, with a sustained high market share based on stable performance and quality. Through this procurement, the company has demonstrated its technical advantages and cost control advantages accumulated through self-developed products since its inception, and was listed in the Group A procurement list. Biosino ranks among the top 10 enterprises in market share in this procurement, and analysis shows that the top ten manufacturers will account for two-thirds of the overall market capacity. This means that Biosino's decades of dedication to the field of biochemistry have been continuously recognized by the market, and it will take this procurement as an opportunity to be selected by more customers for its officially recognized "high-quality and cost-effective, branded products".

## GREEN AND LOW-CARBON DEVELOPMENT

Biosino attaches great importance to environmental protection, emphasizes the importance of environmental protection to corporate social responsibility and sustainable development, and actively promotes the construction and implementation of environmental protection management system.

## ENVIRONMENTAL PROTECTION POLICIES AND OBJECTIVES

From the strategic perspective of environmental and social sustainable development, Biosino strictly controls pollution, promotes energy conservation and emission reduction, protects the ecological environment, and strives to create an environment-friendly business community. During project screening, the Company focuses on its potential impact on the environment, attaches great importance to environmental protection, ensures the environmental impact compliance and compliance of Biosino's business activities, actively enables the wide application of advanced environmental technology in the Company's business activities, reduces resource consumption, and advocates the attention of all stakeholders to environmental protection.

During the Reporting Period, the Company and relevant departments carried out full coverage inspection on the environmental management status of all holding subsidiaries, promoted the improvement of environmental management of holding subsidiaries, and completed the construction and implementation of management system within a time limit, so as to effectively ensure the sustainable development of the enterprise. During the Reporting Period, Biosino, its subsidiaries and joint-stock enterprises did not have any environmental pollution incidents.

- To achieve the double carbon goal, we must have clear goals and realization paths. As a pioneer in the IVD industry, Biosino should actively respond to national policies and take the initiative. Biosino plans to achieve carbon peak by 2028 and carbon neutralization by 2050, promote the improvement of the overall value of the Company, continue to make contributions to the society and achieve win-win between the enterprise and the society.

—Chairman Lebin Wu

## ADDRESSING CLIMATE CHANGE

In 2022, Biosino calculated the greenhouse gas emissions of the Company based on the ISO 14064-1:2018 "Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals" and the "Guidelines for Greenhouse Gas Accounting and Reporting for Industrial and Other Organizations". Emission factors for Scope 1 and Scope 2 were based on recommended values from the "Guidelines for Greenhouse Gas Accounting and Reporting for Industrial and Other Organizations", while emission factors for Scope 3 were taken from the "China Life Cycle Greenhouse Gas Emission Coefficient Database" and data published by the UK Department for Environment.

The inventory and analysis of greenhouse gas data is the first step of carbon emission management by Biosino. From the perspective of the Company's main carbon emission sources, the Company's direct emissions (Scope 1) mainly come from the operation of its own vehicles and refrigerant escape emissions; Indirect emissions (Scope 2) mainly come from the power and steam of factories and office buildings; Other emissions (Scope 3) mainly come from product raw materials, purchased packaging materials, outsourced logistics and transportation services, sewage treatment and employee travel and commuting.

### Goal Setting

#### "Double carbon" Goal:

- Achieve carbon peak before 2028,
- Achieve carbon neutrality before 2050.





List of major carbon emission sources in 2021

Scope	Definition	Main emission activities
Scope1	Direct emissions from greenhouse gas emission sources owned or controlled by Biosino	<ul style="list-style-type: none"> <li>Owned vehicle operation</li> <li>Refrigerant escape</li> </ul>
Scope2	Indirect greenhouse gas emissions from electricity and steam purchased by Biosino	<ul style="list-style-type: none"> <li>Power consumption of factories and office buildings</li> <li>Plant steam</li> </ul>
Scope3	All other indirect emissions generated in the supply chain of Biosino	<ul style="list-style-type: none"> <li>Product raw materials</li> <li>Purchased packaging materials</li> <li>Outsourced logistics and transportation services</li> <li>Sewage treatment</li> <li>Staff travel and commuting</li> </ul>

Summary of greenhouse gas emissions (Scope 1 + Scope 2) controlled by Biosino during the Reporting Period:

- Scope 1: in 2022, the direct emission from greenhouse gas emission sources owned or controlled by Biosino is 78.385 tons of CO<sub>2</sub> equivalent, mainly including the operation of its own vehicles and refrigerant escape.
- Scope 2: in 2022, the indirect emission of greenhouse gases generated by electricity and steam purchased by Biosino is 1471.94 tons of CO<sub>2</sub> equivalent, mainly in terms of power and steam consumption of factories and office buildings.

LIST: Carbon emission structure in 2022

	Unit	2022	2021	2020
Scope 1	tons of CO <sub>2</sub> equivalent	111.07	78.385	86.99
Scope2	tons of CO <sub>2</sub> equivalent	1247.26	1471.94	1248.4
Total	tons of CO <sub>2</sub> equivalent	1358.33	1550.33	1335.39

Goal Setting

Energy saving and low carbon goal of equipment and power:

- The equipment of cold storage will be renewed one unit a year, and all of them will be renewed in 2028;
- 10% less harmless waste per year;
- Overhaul the bottom sewer pipe monthly to prevent water eakage.



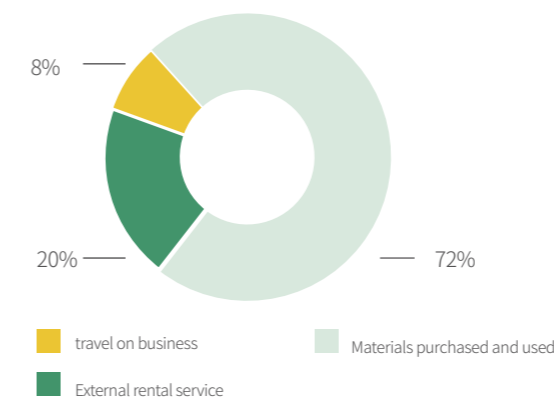
Energy Emission Reduction Plan:

- Explore plans to increase the proportion of green electricity usage: installing on-site distributed photovoltaics, purchasing green energy certificates, and purchasing green electricity;
- Establish the "Employee Low-Carbon Behavior Code" to regulate low-carbon behaviors of employees and save energy;
- Regularly replace high-energy-consuming equipment;
- Gradually replace traditional fuel vehicles with new energy vehicles.

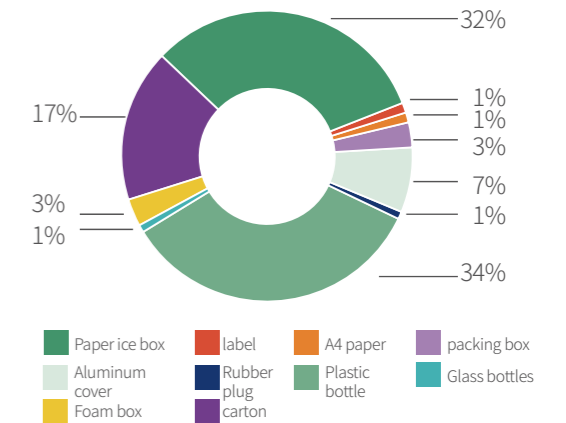
Supply Chain CO<sub>2</sub> Emission Reduction Plan:

- Actively explore the reduction, lightweighting, and greening of packaging. While ensuring product quality, reduce the use of packaging materials;
- Promote the utilization of recycled packaging materials, such as using reusable ice packs instead of disposable ones;
- Replace imported raw materials with domestic alternatives to reduce transportation emissions.

Scope 3 Carbon emission proportion



Carbon emission proportion of different packaging materials



# LOW-CARBON OFFICE

Since October 2022, Biosino has been promoting paperless office after adopting the OA system. This initiative not only greatly reduces tree felling and carbon emissions, but also improves information management efficiency, reduces office costs, and facilitates daily work for employees. We have implemented various workflows such as instant messaging, email, notice board, attendance management, administrative office, process center, public file cabinet, and mobile office. In addition, we use online approval processes for human resources and financial modules, contract approval, and other related processes, with a total of more than 6,600 processes approved online. These include more than 400 contract approval processes, more than 300 processes for stamping and sealing, more than 400 expenses application and reimbursement processes, and more than 300 procurement-related approval processes. The total carbon reduction achieved is about 1.16 tCO<sub>2</sub>.

Biosino also organized multiple online meetings and training activities throughout the year, such as weekly sales training on Tencent Meeting, daily short and effective communication and reporting meetings, personnel interviews, and interdepartmental communication and collaboration meetings, which cumulatively reduced carbon emissions by about 27.932 tCO<sub>2</sub>.

■ From October 2022 to the end of December 2022, the cumulative carbon reduction from paperless online office is approximately 1.16 tCO<sub>2</sub>.



■ The cumulative carbon reduction from online meetings in 2022 is approximately 27.932 tCO<sub>2</sub>.

## Establish the Low-Carbon Code of Conduct for Employees

Biosino, based on the Group Standard of Low-Carbon Office Evaluation, has sorted out its own low-carbon office situation, established and implemented the "Employee Low-Carbon Behavior Code of Conduct" to standardize employees' low-carbon behavior, save energy, and improve resource utilization efficiency.



## Energy Conservation Awareness Month activities

To raise the awareness of energy conservation and consumption reduction among all employees, and call on all staff to take practical actions to implement energy-saving and consumption reduction work, Biosino launched the "Energy Conservation and Consumption Reduction, Green Development, Everyone's Responsibility" themed energy-saving and consumption reduction publicity month activity in September.



## Employee green and low carbon behavior initiative:

- Encourage green office and green travel, and reduce the use of paper in the office through digital means;
- The existing vehicles will be replaced by pure electric vehicles in steps every year, and all of them will be replaced by 2028;
- Save energy through daily behavior and reduce power consumption by 5% every year;
- The ESG training rate of all staff in 2022 will reach 100%; Carry out a carbon public welfare action.



# EMISSION MANAGEMENT, THE UTILIZATION OF RESOURCE AND ENERGY

## Emission management

As the Company is mainly engaged in the production, sales and distribution of IVD reagent products, the business does not produce or discharge nitrogen oxides, sulfur oxides and other pollutants regulated by Chinese national laws and regulations. The Company entrusts a third-party organizations to uniformly dispose of the generated hazardous waste on a regular basis. On the premise of ensuring the safety of hazardous waste storage, transportation and disposal, Biosino realizes the reduction of hazardous waste by standardizing the behavior of employees and raw material substitution. In addition, the production of emissions is reduced through the design of products that reduce the generation of waste liquid.

### Pollutant emission classification:

- Sewage: it is composed of industrial sewage and domestic sewage. Main types of pollutants: five-day chemical oxygen demand, chemical oxygen demand, ammonia nitrogen, suspended solids and oils.
- Atmospheric emission: process waste gas, vehicle exhaust, etc
- Solid waste consists of hazardous waste and general waste. Hazardous wastes include chemical raw materials used in the production process, acids, alcohols, etc. and medical wastes generated in the laboratory. General wastes include recyclable wastes, such as packaging materials and domestic garbage generated by office.
- Biosino strictly abides by relevant laws and regulations and relevant standards for the discharge of waste gas, wastewater and waste in the place of operation, and manages it in accordance with the environmental protection management system.



**Pollutant discharge**  
Sewage, atmospheric discharge, solid waste

### Measures to control pollutant emission:

- After the sewage treatment and pretreatment and reaches the standard, it will be discharged into the back-end secondary sewage treatment plant or the municipal sewage pipe network.
- The atmosphere is adsorbed by activated carbon, and the liquid agent is sprayed or dedusted. The tail gas is discharged at high altitude in compliance with regulations.
- The traffic tail gas is used in compliance with national standards.
- Each holding subsidiary should carry out the final compliance disposal through the professional organization with disposal qualification approved by the local environmental protection bureau, and carry out incineration, landfill or reprocessing and utilization in accordance with the regulations.



**Control of pollutants**

### Typical case: product design to reduce waste liquid

#### Biochemical reagent albumin (ALB) - Project advantages:

The reagent reaction system is different from the succinic acid system commonly used in the market, but applies citric acid buffer system, avoids the use of sodium azide, and the reagent does not produce pollution and is environment-friendly. The reagent storage conditions are low, and it can be stable for 3 years at 2-8 °C. The reagent calibrator is traceable to the international reference material ERM-DA470K, and the measured value is accurate and reliable.



## Resource use, energy consumption and investment in environmental protection facilities

The Company and its holding subsidiaries advocate the use of water and electricity by departments and employees, reduce energy consumption and reduce the Company's operating costs. The Company's air conditioning cooling system adopts circulating water to avoid the consumption of cooling water, so as to improve the water efficiency plan and achievements. All production and office water is provided by the municipal waterworks without any problems.

During the Reporting Period, in order to improve the environmental protection performance, the Company continued to maintain the investment in environmental protection, optimized the production process and improved the efficiency of production facilities, so as to achieve energy conservation, emission reduction and environmental protection. Continue to invest in the construction, upgrading and transformation of environmental protection hardware facilities.

	Unit	2016	2017	2018	2019	2020	2021	2022
Use of water resources	cubic meter	28,433	24,360.7	17,842	18,000	16,724	14,800	20329
Power consumption	KWh	2,357,900	2,445,810	1,363,250	1,364,450	1,500,000	1,207,216	1178812
steam	ton	/	/	400	600	600	700	698.7
solid waste	ton	16.5	14.37	15.12	10	10	10	5.6
Hazardous waste	ton	/	/	/	2	2.3	3.2	2.1
Environmental protection facilities and transformation investment	Ten thousand yuan	66	14	3	5	115	4	0

## Use of packaging materials

The types of packaging materials used for the finished products used by the Company are mainly rubber products, glass products, plastic products and paper products. In 2022, Biosino will consume 3.64 tons of glass bottles, 55.31 tons of plastic bottles, 1.16 tons of rubber plugs, 3.96 tons of aluminum caps, 13.30 tons of packaging boxes, 3.51 tons of A4 paper, 2.47 tons of labels, 18.90 tons of paper ice boxes, 0.21 tons of plastic bags, 12.75 tons of paper boxes, and 5.64 tons of foam boxes.

# TALENT DEVELOPMENT

Talent is an essential cornerstone for corporate development. Therefore, Biosino has always been committed to building an open, inclusive, and competitive talent development system. We firmly believe that only through continuous talent cultivation and introduction can we constantly enhance the competitiveness and innovation ability of the Company and create greater value for society.

## CORPORATE CULTURE AND THE CONCEPT OF EMPLOYING

From the beginning, Biosino has accumulated profound cultural heritage. It has built a career platform for employees through various institutional arrangements and organizational construction; And enter a cultural atmosphere at high speed through various exciting or warm activities.

### BUSINESS PHILOSOPHY

**“Focus on the main business, build an industrial chain and build competitiveness”**

- Focus on product research and development, activate product sales and strengthen international cooperation
- Reshaping the core subsidiary strategy based on the principle of creating value
- Solve the main contradictions respectively in the front, middle and back stage, so as to improve and optimize organizational effectiveness

### VIEW OF EMPLOYMENT

**“Believe in the future, embrace change, change yourself and create value”**

- Cultivate a team of senior executives who have feelings, dare to take responsibility, understand operation and good at management
- Highlight performance orientation, stimulate innovation, Managers can be promoted or demoted, employees can be eliminated or re employed
- Establish an assessment system based on the principle of value creation, and establish a sharing mechanism between enterprise benefits and all employees

### PRODUCT MANAGEMENT PHILOSOPHY

**“High quality, efficient, Create reagent Boutique; Accurate, stable, Measure life function”**

- Clear R&D direction and improve R&D Efficiency
- Continuously optimize cost and seize market share
- Strictly control product quality and create market competitiveness

## TALENT TRAINING AND RETENTION

### Our Employees

Biosino has perfect system and standardized management, adheres to the principle of "respecting talents, trusting talents and understanding talents", creates a stage and opportunity for employees development, encourages employees to display their talents, makes the enterprise develop and grow by giving full play to employees talents, and reflects employees' own value through the development and growth of the enterprise.

Relevant employment systems include employee handbook, attendance and leave management system, salary management system of Biosino, performance appraisal management measures, probation management measures, employee transfer and promotion management measures, management measures for managers, welfare payment measures, harmony fund management measures, honor award regulations A series of regulations such as the regulations on the administration of labor insurance payment guarantee the rights and interests of employees, create fair and equal work opportunities for employees, provide rich welfare benefits, and provide protection for their career planning.

Biosino ensures that our recruitment process and system strictly comply with local laws and regulations. We have established a standardized workflow and an internal system to monitor and review the compliance of our employment process, to fully identify potential labor risks, and to take preventive and control measures in a timely manner, ensuring full compliance of our employment process. We also provide equal employment opportunities for disadvantaged groups.

Biosino establishes and implements a sound salary incentive system, determines the post salary of personnel through different positions and ranks, establishes the salary system of R&D technicians, functional departments and sales personnel, establishes a reasonable rising channel, gives full play to the incentive role of salary, selects and reserves excellent talents according to the management personnel assessment methods and personnel promotion management methods, and establishes a talent reserve mechanism. Biosino abides by the provisions of the labour law, works within 8 hours a day, implements the two-day rest system, and provides annual leaves, marriage leaves, parental leaves and other legal holidays. The relevant subsidies include health care expenses, fever subsidies, professional title subsidies, age subsidies, cold storage subsidies, etc.

**list1: Business centers**

	Biosino Beijing	Sinofn	Biosino Anhui	Biosino Jin Yu	Biosino Jiangsu
senior executive	9	15	2	4	8
Marketing Center	110	24	3	21	13
Product R&D Center	21	10	0	19	25
Manufacturing center	76	38	0	42	11
Management Support Center	45	15	5	18	0
total	261	102	20	104	57

**list2: Education**

	Biosino Beijing	Sinofn	Biosino Anhui	Biosino Jin Yu	Biosino Jiangsu
doctor	4	2	0	0	1
master	29	15	0	7	8
undergraduate	107	45	4	25	30
Junior college or below	121	40	16	72	18
total	261	102	20	104	57

**list3: Title**

	Biosino Beijing	Sinofn	Biosino Anhui	Biosino Jin Yu	Biosino Jiangsu
senior	12	3	0	1	3
intermediate	27	9	3	8	12
primary	35	0	17	2	32
nothing	187	90	0	93	10
total	261	102	20	104	57

**list4: Age**

	Biosino Beijing	Sinofn	Biosino Anhui	Biosino Jin Yu	Biosino Jiangsu
20-30years old	54	23	8	8	8
31-40years old	129	53	11	37	28
41-50years old	61	21	1	37	21
51-60years old	17	5	0	22	/
total	261	102	20	104	57

**表5: Gender**

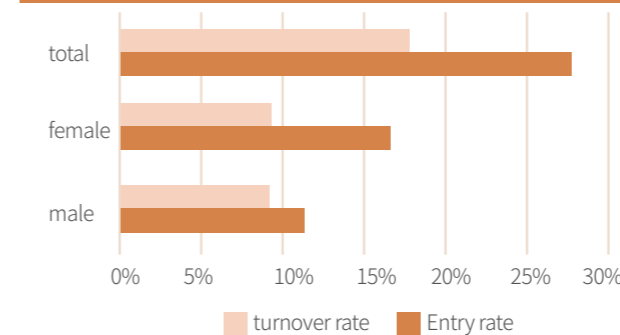
	Biosino Beijing	Sinofn	Biosino Anhui	Biosino Jin Yu	Biosino Jiangsu
male	150	60	8	34	42
female	111	42	12	70	15
total	261	102	20	104	57

**Information disclosure on employee enrollment rate and turnover rate (Biosino)**

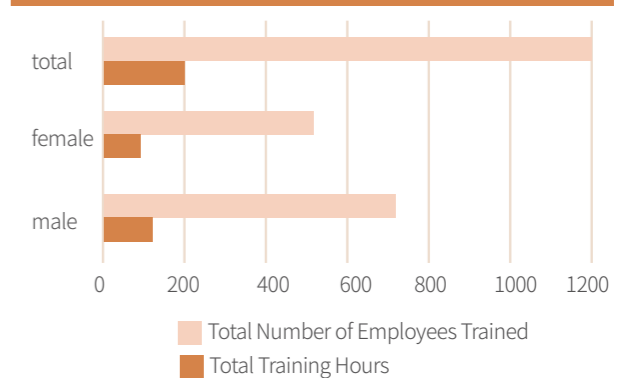
the Company provides every employee with equal opportunities for entry and promotion, and has perfected management systems and regulations, which are strictly enforced.

Last year, Biosino adjusted its organizational structure, strengthened performance appraisal and personnel management, strengthened the survival of the fittest mechanism internally, eliminated the last element of incompetent personnel through appraisal, optimized personnel structure and improved personnel efficiency, resulting in the resignation of some personnel. In addition, there are employees who left for personal reasons, including not adapting to new positions after job change, relocating to a place far away from the Company and seeking other personal development.

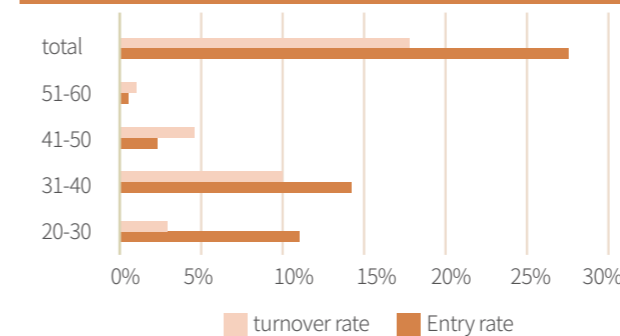
**Employee turnover rate and entry rate by gender**



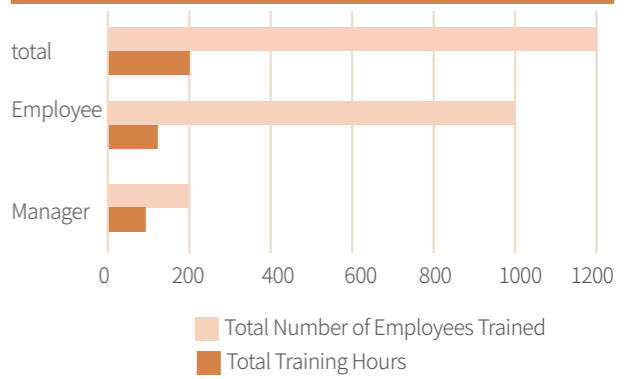
**Training Status of Employees by Gender and Job Level in 2022**



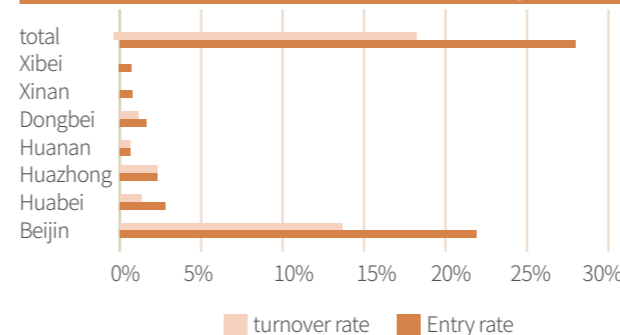
**Employee turnover rate and entry rate by age**



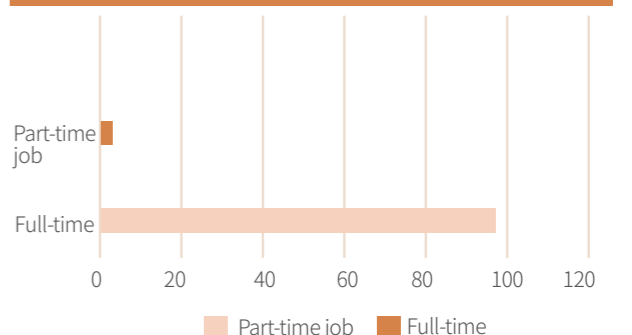
**Employees divided by Job Level**



**Employee turnover rate and entry rate by region**



**Employment type**



## DEVELOPMENT AND TRAINING

Biosino has seven training types: senior management training, middle-level management training, marketing training, professional technical training, professional skill training, general training for all staff and new employee training, including company level, department level and team level. Conduct in-depth training demand analysis for various types of training, enhance the pertinence of training contents, strengthen the tracking, assessment and evaluation of trainees, apply what they have learned, develop in an every aspect, and improve the comprehensive quality and ability of employees through various trainings.

In 2022, Biosino's quality management system and safety production system training management system have been operating well. The Company has assisted the quality management department and registration department in implementing regulatory-related training, as well as providing daily training for quality management system records, job training, and continuing education for specialized equipment operations. The Company conducted two company-level new employee trainings and over 20 department-level new employee trainings, allowing new employees to quickly understand the Company's corporate culture, integrate into the Company, and become familiar with their work environment and job responsibilities and skills, thus quickly entering a working state.

In addition, the Human Resources and Administration Department also organized and implemented occupational skills training under the Beijing Municipal Vocational Skill Improvement Action, covering general management, professional quality, safety production, job skills, health and epidemic prevention training content, improving employee's professional literacy, professional skills, and management level.

On April 15, 2022, Biosino, led by Chairman Wu Lebin, held a meeting on the theme of launching ESG and carbon assessment work deployment, and simultaneously carried out corporate ESG management-related training for ESG committee members and company middle and high-level management. The meeting emphasized that the most important driving factor of global climate change is the emission of carbon dioxide caused by human activities, which has gradually threatened the survival and development of human society. With the increasing attention paid to environmental protection, ESG has become a hotly discussed topic worldwide. ESG indicators more effectively measure the sustainable development capabilities and social impacts of enterprises from the perspectives of environment, society, and corporate governance. Focusing on ESG strategy is an internal need for a company's development, and the core is to strike a balance between business value and social impact. Starting from the Company itself, responding to national strategies and achieving the "dual-carbon" goal is a social responsibility and mission for a company.



## ASSESSMENT AND INCENTIVE

Biosino has formed a performance appraisal system based on KPI and balanced scorecard. Based on the post responsibilities of senior managers, set assessment indicators according to the Company's strategic objectives and budget decomposition at the beginning of each year, sign performance assessment letters and conduct performance assessment level by level. By the end of the year, their salaries had not been approved according to their performance indicators, and the performance evaluation standards and assessment procedures of senior managers had been effectively implemented. And make corresponding amendments and improvements according to the implementation.

At the same time, Biosino has established a targeted and operational evaluation and incentive mechanism at all levels, so as to further improve the corporate governance structure and all staff incentive mechanism, fully mobilize the enthusiasm of management and key employees, effectively combine the interests of shareholders, the Company and the personal interests of operators, and make all shareholders pay attention to the long-term development of the Company.

Biosino has established an internal control system, and the effectiveness and rationality of the system are supervised and evaluated through internal audit. The effective internal control system ensures the effective implementation of applicable laws and internal systems, effectively reduces the risk of corruption and violation, and improves the operation ability of the Company.

Biosino has issued additional domestic shares to key employees, further strengthened the incentive mechanism for senior managers and key personnel, and promoted the long-term and stable development of the Company.

## OCCUPATIONAL HEALTH AND SAFETY

Biosino attaches importance to the occupational health protection of employees to avoid occupational hazards to their health, organizes relevant personnel to carry out occupational health examination in accordance with the requirements of laws and regulations, establishes special occupational health committees and working groups, sets up occupational health education billboards, publicizes and implements the requirements of laws and regulations, strengthens the occupational health protection of employees, provides labor protection articles, and replaces them regularly to ensure their safety and effectiveness. In terms of occupational health management, Biosino has mainly achieved the following: annual testing and triennial evaluation of occupational hazards; employees working in positions related to occupational hazards are informed in writing of possible occupational health hazards when signing their labor contracts; for employees working in positions related to occupational hazards, individual occupational health monitoring records are established; pre-employment, post-employment, and regular occupational health examinations are carried out, and the health status of employees is monitored. If employees with occupational contraindications are identified through health examinations, they will be transferred to other positions to prevent the occurrence of occupational diseases.

Biosino strictly implements the provisions of the labor law of the people's Republic of China, the labor contract law of the people's Republic of China and other laws and regulations, eliminates the employment of child labor and forced labor, and no relevant events have occurred. Follow China's employment law in recruitment standards to ensure fairness and equality. Since 2014, Biosino has started the work of meeting the safety production standard, established the safety production leading group, occupational health leading group, biosafety Committee

and leading group, and achieved the "national level II standard enterprise of safety production", the "level III standard enterprise of safety production" and the "standard unit of occupational health infrastructure construction activities in Beijing" in 2021. In terms of production and operation, the Company supervises and manages all work related to safety production, biosafety and occupational health in accordance with the requirements of laws and regulations.

During the Reporting Period, Biosino implemented a hierarchical responsibility system for safety production, and took seriously the construction and implementation of the production safety management system in the Company and its subsidiaries. Through comprehensive compliance risk assessments, team building and professional capacity building, upgrading and renovation of relevant facilities, periodic independent inspections and audits, reporting and rectification of hidden dangers, technical support and response for improvement projects, and other strengthening measures, the management has established a system for regular review of performance and decision-making mechanisms to ensure the legal and compliant operation and continuous improvement of the group. The group has organized and implemented centralized professional training and other related production safety management and improvement activities, which have greatly reduced the safety risks in the operation of the group, standardized employee operation management, and continued to deepen the safety concept and cultural construction. In terms of resource conservation and environmentally friendly construction, the group attaches importance to the promotion and application of energy-saving advanced technologies and energy contract management projects, and has achieved good economic and environmental benefits.

### Highlight

■ The number of deaths due to work in 2022 is 0

		2019	2020	2021	2022
Death at work	times	0	0	0	0

■ No industrial accidents in 2022

		2019	2020	2021	2022
Work-related accidents	times	0	0	0	0

■ Employee training coverage: more than 100%

■ Total training time of employees in 2022: 200 hours.

■ The average training time for employees in 2022: 11 hours.

Biosino has implemented occupational health management work such as company occupational health examinations, occupational health training, and occupational health declaration to ensure the smooth implementation of occupational health management. We completed the environmental monitoring of occupational health factors in 2022, which complies with industry regulations.

## ECOLOGICAL CO-CONSTRUCTION

As a responsible enterprise, Biosino has been actively promoting ecological construction. We hope to lead industry peers to actively participate in the cause of ecological co-construction through our actions, and jointly build a better and sustainable future.

## THE IMPORTANCE OF BIOSAFETY IN IVD

In order to establish biosafety protection procedures, strengthen biosafety management in laboratories and production workshops, protect the health of laboratory and production workshop personnel, and ensure that the surrounding environment is not contaminated by pathogenic microorganisms, Biosino has established the "Biosafety Protection Procedures". This includes biosafety protection procedures for laboratories and production workshops, as well as emergency response measures. In addition, Biosino has also established related documents such as the "Waste Management Procedures", "Personnel Access Control Procedures for Production Areas", "Clean-up Management Procedures", and "Container and Equipment Cleaning Procedures".

## SUPPLY CHAIN ESG MANAGEMENT

In order to ensure that suppliers meet the requirements and expectations of the Company and conduct supplier management efficiently, Biosino has established a perfect supplier management system. We carry out supplier management in accordance with supplier review control procedure and procurement control procedure.

The supplier review control procedure can effectively select, evaluate and control suppliers to ensure that the products and services provided meet the requirements of the Biosino's production, development, testing and services. The supplier review team is composed of the heads of the Company's quality management department, finance department, reagent factory, procurement department, R&D department and quality control department. It is responsible for the evaluation of the supplier's quality system and the determination of qualified suppliers.

Biosino comprehensively evaluates the supplier's "quality system" from the aspects of the supplier's plant, personnel and training, material management, equipment, documents, production technology management, quality management, processing or testing products, delivery, contract signing and after-sales service. At the same time, Measures for Supervision and Administration of Medical Device Production, Specifications for the Production Quality Management of Medical Devices, Guidelines for the Audit of Suppliers of Medical Device Manufacturers, as well as the laws, regulations and industrial standards that suppliers should follow to ensure the quality of the products provided.

Class A material suppliers, which constitute the main part or key part of the Company's final products, could pass only when their qualification, quality management system, personnel qualification and sample evaluation meet the requirements. In addition, the purchasing department reviews the qualification of qualified material suppliers every six months, internally scores the supply quality, delivery date, use and after-sales service of suppliers, and eliminates unqualified suppliers.

We not only care about the quality of supplier products, but also attach great importance to the ESG performance of suppliers in the areas of environment, society, and governance. We conduct regular training on environmental, social, and other related topics for our suppliers.

### Highlight

#### ESG supply chain management goals for 2023:

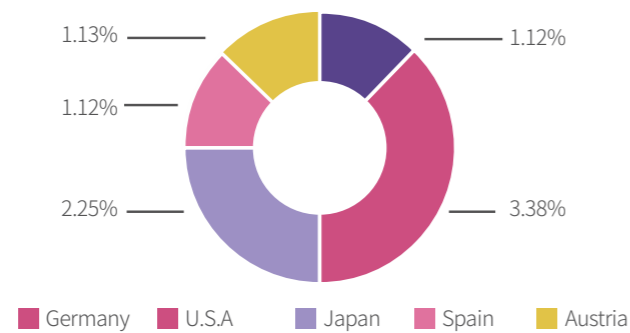
- Hold 1 carbon training session for suppliers: Provide low-carbon training to suppliers, help them understand carbon inspection content, promote the use of low-carbon energy by suppliers, and use low-carbon materials in their products;
- Launch a low-carbon supply chain initiative: Jointly initiate a low-carbon supply chain initiative with supplier enterprises, advocating for suppliers to regularly identify emission sources, calculate their Scope 1 and Scope 2 carbon emissions, and promote supplier participation and compliance with low-carbon commitments.



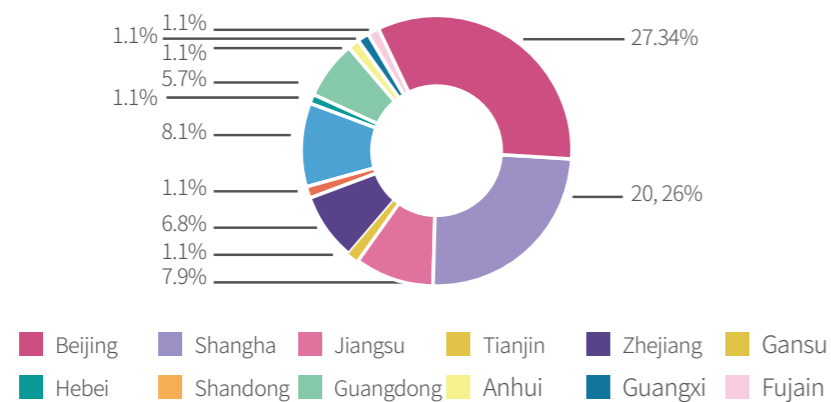
**According to the impact of purchased materials on Biosino's products, purchased materials are divided into three categories:**

- Class A materials: raw materials that constitute the main part or key part of the final product and have a significant impact on product quality or safety performance, mostly enzymes, antiserum and other raw materials;
- Class B materials: raw materials that constitute non key parts of the final product, generally do not affect the quality of the final product, or even if there is a slight impact, measures can be taken to correct it. They are all raw materials other than class A materials;
- Class C materials: refer to all packaging materials, including inner packaging materials (bottles, plugs, covers) and outer packaging materials (labels, packaging boxes, shipping cartons, etc.).

**Summary of multinational suppliers in different regions**



**Summary of China suppliers in different regions**



Biosino is taking concrete and feasible actions across the entire industry chain, particularly starting from the raw materials and procurement side. For example, in the raw materials for in vitro diagnostic reagents, the Company will implement a planned and step-by-step substitution of green raw materials. Currently, antigens, antibodies, and some enzymes are extracted from animals. The Company aims to promote upstream suppliers to gradually transition to the technology of cell engineering cultivation, in order to achieve a significant reduction in carbon emissions per unit of output.

**PARTICIPATE IN THE FORMULATION OF INDUSTRY STANDARDS AND GROUPS STANDARDS**

Participating in the formulation of national standards, industrial standards and group standards is of great significance to Biosino. They can not only take the lead in adjusting product quality, seize market opportunities, improve the popularity of enterprises in the same industry and market, and build enterprise brands. It can also guide the development direction of the IVD industry, even cause the new positioning of the industry, improve the market recognition of the enterprise's products, and then expand the market share and improve the competitiveness. At present, there are 12 industry standards and group standards drafted and issued by Biosino.

**List: Industry standards and group standards**

	Standard name	Standard number	Release date	Implementation date	remarks
1	Total protein assay kit	YY/T 1444-2016	2016/1/26	2017/1/1	Industry standard
2	Lipoprotein (a) detection kit	YY/T 1448-2016	2016/1/26	2017/1/1	Industry standard
3	Carbon dioxide determination kit	YY/T 1523-2017	2017/3/28	2018/4/1	Industry standard
4	C-reactive protein assay kit	YY/T 1513-2017	2017/3/28	2018/4/1	Industry standard
5	Creatine kinase isoenzyme MB assay kit	YY/T 1580—2018	2018/2/24	2019/3/1	Industry standard
6	Heart type fatty acid binding protein assay kit (immunoturbidimetry)	YY/T 1590—2018	2018/2/24	2019/3/1	Industry standard
7	Glycosylated hemoglobin determination kit (latex immunoturbidimetry)	YY/T 1605—2018	2018/2/24	2019/3/1	Industry standard
8	Allergen specific IgE antibody detection kit	YY/T 1581—2018	2018/2/24	2019/3/1	Industry standard
9	Evaluation of measurement uncertainty of calibrators for IVD reagents	YY/T 1709—2020	2020/6/30	2021/12/1	Industry standard
10	Deafness gene mutation detection kit	YY/T 1800-2021	2021/9/6	2023/3/1	Industry standard
11	IVD test system performance evaluation methods Part 1: precision	YY/T 1789.1-2021	2021/9/6	2023/3/1	Industry standard
12	IVD calibrator Assignment Application Guide	T/ZMDS 40001-2021	2021/8/25	2021/8/25	Group standard

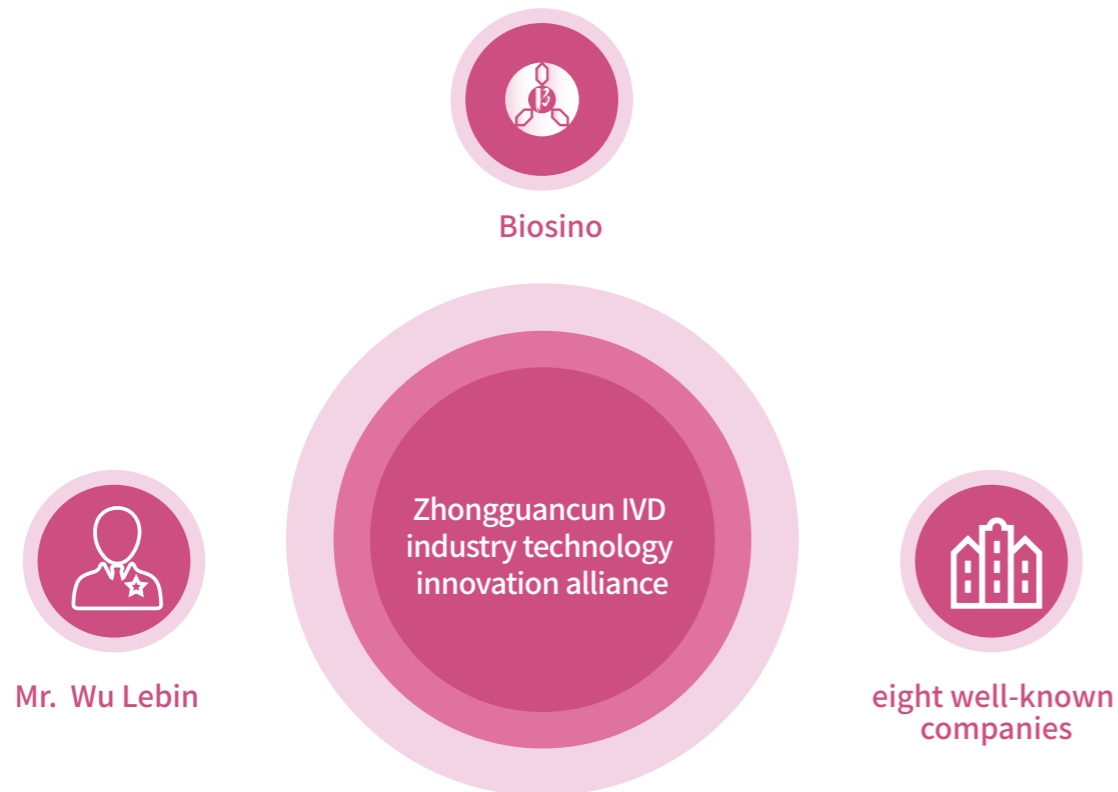


## JOINTLY PUSH THE EVALUATION STANDARD OF "QUALITY LEVEL"

Zhongguancun IVD industry technology innovation alliance, united 36 alliance companies to put forward suggestions to the National Medical Security Bureau: the evaluation standard of "quality level" is established during the process of vintro diagnostic reagent procurement to meet the requirements of precision medicine for the accuracy of clinical test results. It is necessary to conduct a comprehensive and unified evaluation of the "quality level" of reagents. After all, cost reduction under the premise of ensuring medical quality, is responsible behavior to the industry and the country.

### Zhongguancun IVD industry technology innovation alliance

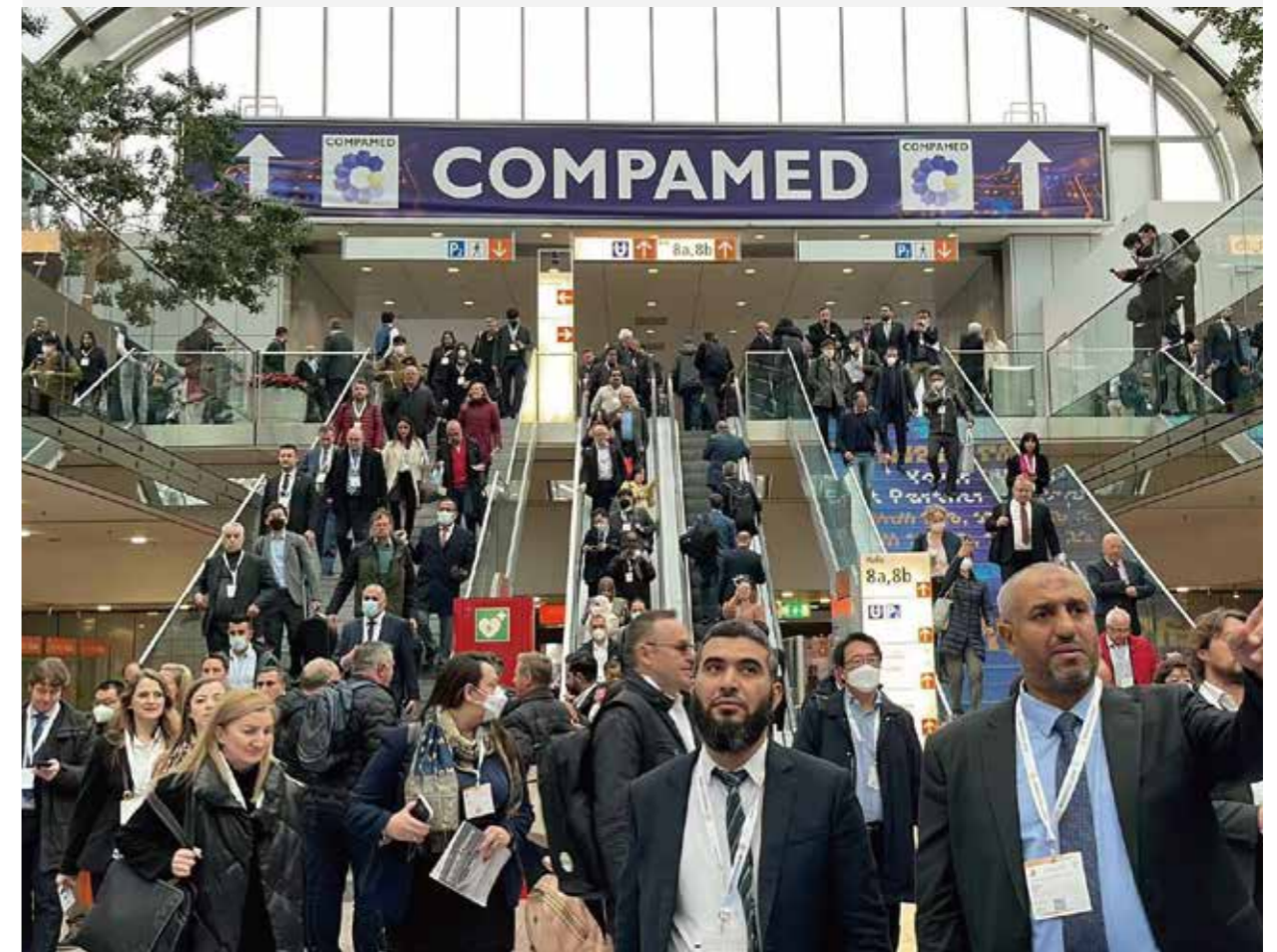
Biosino is the chair member of Zhongguancun IVD industry technology innovation alliance. As the chairman of the alliance, Mr. Wu Lebin jointly initiated the establishment with eight well-known companies in the IVD industry. Guided by industrial technological innovation and centered on the implementation and industrialization of technological achievements, it will further solve the common technical problems of China's IVD industry and promote the further development of the national IVD industry.



## CARRY OUT ACADEMIC DISCUSSION

### New technology / product seminar

The first new technology / product seminar in 2021 -meeting on research progress and application prospects of nano antibody was successfully held in the conference hall on the 5th floor of Building 9, Institute of Biophysics, Chinese Academy of Sciences, on the morning of March 24, 2021. Government officials, alliance members, many inspection experts and enterprise colleagues gathered together, conducted in-depth discussions on how to break the import monopoly and solve the problem of "neck sticking" of reagent consumables and raw materials under the new situation. Topics also included independent research and development from the source of antibody raw material supply chain and how to use the industrial innovation alliance platform to realize the transformation of scientific and technological achievements.



# COMMUNITY PARTICIPATION

During the Reporting Period, the Group continued to support social welfare initiatives such as funding scientific research, fighting against epidemics, and providing disaster relief. Specifically, in the community, schools, and streets where the Company operates, the Group actively established nucleic acid testing centers and undertook social responsibilities to give back to society.

## Biosino's all-staff meeting, marketing conference, and team-building event.

On July 21st, Biosino held the 2022 Commendation Conference and "Relaunch Mobilization Conference", which honored the outstanding collectives and individuals who made remarkable contributions to the Company's development in the past year and comprehensively summarized the Company's work achievements. Subsequently, the Company held its annual marketing conference, where Biosino's sales elites gathered together to celebrate their original aspirations, discuss the future, and organized team-building activities.



## FIGHT THE COVID-19

In response to the COVID-19, Biosino has bravely undertaken the mission and responsibility of a national enterprise. Since the outbreak of the pandemic, Biosino has donated anti-epidemic materials to hospitals in Hubei and other areas, and as an official procurement channel authorized by the British Embassy, has purchased anti-epidemic materials for them in the global spread of the pandemic. Biosino has been listed as one of the first hundred epidemic prevention product enterprises to receive financial support from the Beijing municipal government.

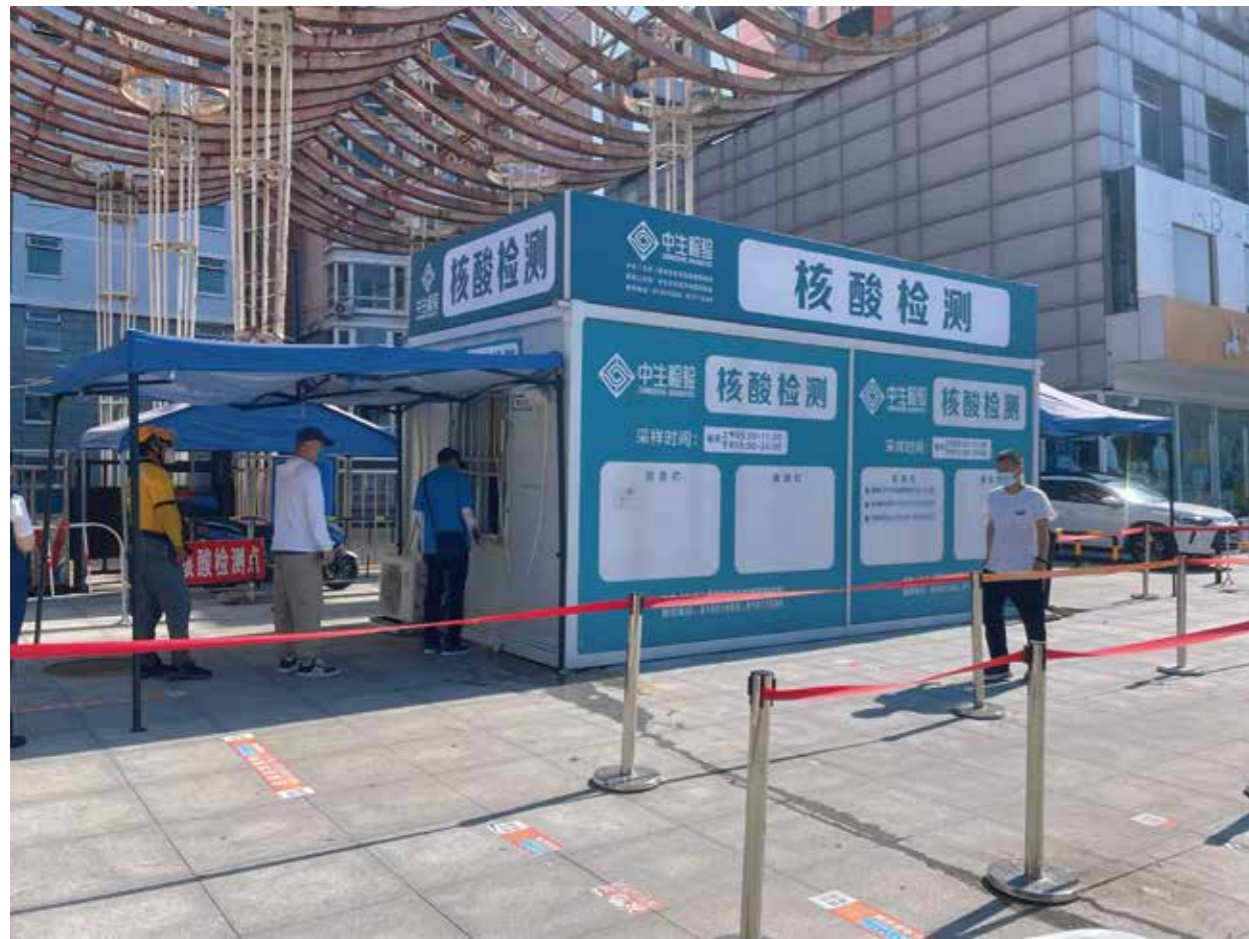
In the face of the challenges posed by the COVID-19, the Biosino Medical Laboratory, a subsidiary of Biosino, has shouldered its responsibility and carried out nucleic acid testing comprehensively. The daily testing capacity of nucleic acid testing has reached 100,000 person-times, providing sustained support for people's health and embodying the great spirit of fighting against the epidemic, demonstrating the responsibility and duty of a state-owned enterprise.



## Overall solution for COVID-19 infection

To meet the requirements of epidemic prevention and control, Biosino has been committed to providing more effective solutions to help medical institutions ensure service guarantees. As a high-tech listed company founded by the Institute of Biophysics of the Chinese Academy of Sciences, Biosino has deep technical reserves in product development and innovation, covering a series of product lines such as biochemistry, chemiluminescence, and flow cytometry, which can smoothly complete the detection of the recommended indicators for COVID-19.

Over the years, Biosino has maintained a good development momentum by improving product quality and service quality, creating a comprehensive solution for clinical in vitro diagnostics, and receiving widespread market acclaim. While deeply cultivating IVD products, Biosino has actively responded to government policies, shouldered social responsibilities, and contributed to the national public health work with its profound technical accumulation.



## PUBLIC WELFARE ACTIONS OF EMPLOYEES

Between May and October 2022, the Company sent 8 employees to participate in community service activities, such as community patrols and garbage sorting. In the second half of 2022, all employees cooperated with the nucleic acid testing project and rushed to the scene to support the maintenance of order during nucleic acid testing, distribution of supplies, temporary repairs of sampling booths, and information technology support in the face of urgent and heavy tasks, contributing to the nucleic acid testing work.



## HARMONIOUS DEVELOPMENT FUND

Biosino established the Enterprise Harmonious Development Fund in 2005, mainly used to provide gifts for employees who get married or whose children take the college entrance exam, provide assistance for employees and their immediate family members who become ill, and issue honorary bonuses for retired employees. The total amount of cumulative disbursements exceeds 1 million yuan. During the Reporting Period, under the initiative and organization of the Company's leaders, the Company's trade union, and the party branch, a donation campaign was launched for an employee who fell ill, raising more than 60,000 yuan. When the employee passed away due to illness, the Company and its employees donated 55,000 yuan as a condolence payment. the Company's party branch donated 3,000 yuan as assistance to a party member in financial difficulties. the Company donated 2,700 yuan worth of books and learning materials to a primary school in a mountainous area.

## APPENDIX I: INDEX TABLE OF HKEX ESG REPORTING GUIDE

Subject Areas, Aspects, General Disclosures and KPIs		Chapter and page
A. Environment		
<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. Note: Air emissions include NOx, Sox, and other pollutants regulated under national laws and regulations.	P28
KPI A1.1	The types of emissions and respective emissions data.	P29
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P29-30
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P34
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P34
KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	P28/31
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.	P33-34
<b>Aspect A2</b>	<b>Use of Resources</b>	
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials. Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.	P34
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).	P34
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P34
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	P30
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.	P34
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	P34
<b>Aspect A3</b>	<b>The Environment and Natural Resources</b>	
General Disclosure	Policies on minimizing the issuer's significant impacts on the environment and natural resources.	P28
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions	P28
<b>Aspect A4</b>	<b>Climate Change</b>	
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	P28
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.	P28

## APPENDIX I: INDEX TABLE OF HKEX ESG REPORTING GUIDE

Subject Areas, Aspects, General Disclosures and KPIs		Chapter and page
B. Social		
<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.	P36-37
KPI B1.1	Total workforce by gender, employment type (for example, full – or part – time), age group and geographical region.	P37
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	P38
<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.	P40
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P40
KPI B2.2	Lost days due to work injury.	P40
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	P40
<b>Aspect B3</b>	<b>Development and Training</b>	
General Disclosure	Policies on improving employees knowledge and skills for discharging duties at work. Description of training activities. Note: Training refers to vocational training. It may include internal and external courses paid by the employer.	P39
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P38
KPI B3.2	The average training hours completed per employee by gender and employee category.	P38/40
<b>Aspect B4</b>	<b>Labor Standards</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 preventing	P40
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour	P40
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	P36
<b>Aspect B5</b>	<b>Supply Chain Management</b>	
General Disclosure	Policies on managing environmental and social risks of the supply chain.	P42
KPI B5.1	Number of suppliers by geographical region.	P43
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.	P42
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P42
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P43

## APPENDIX I: INDEX TABLE OF HKEX ESG REPORTING GUIDE

Subject Areas, Aspects, General Disclosures and KPIs		Chapter and page
B. Social		
<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.	P16
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	P25
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	P25
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights	P16-17
KPI B6.4	Description of quality assurance process and recall procedures	P22-23
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored	P11
<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.	P11
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.	P10
KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	P11
KPI B7.3	Description of anti-corruption training provided to directors and staff.	P11
<b>Aspect B8</b>	<b>Community Investment</b>	
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operatesand to ensure its activities take into consideration the communities' interests.	P47
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	P47
KPI B8.2	Resources contributed (e.g. money or time) to the focus area	P48-50

## ABOUT THIS REPORT

### Overview

This report is the second environmental, social and governance report independently issued by Biosino Bio-Technology and Science Incorporation, hereinafter referred to as "Biosino", the "Company" and "we", which comprehensively reflects the Company's performance in ESG. This report covers the performance of the financial year from January 1, 2022 to December 31, 2022. Some related information is traced out of the Reporting Period.

### Report methodology

This report is prepared in accordance with the requirements of Appendix 20 to the Rules Governing the Listing of Securities on GEM (the "GEM Listing Rules") of the Stock Exchange of Hong Kong Limited (the "Stock Exchange").

In terms of climate change information disclosure, the reference is made to the requirements of the guidelines on "Report climate information in accordance with TCFD recommendations of the Stock Exchange".

### Report scope

The policies and data provided in this report covers the Company and its subsidiaries, and the scope of the report is consistent with the annual report. The data and cases in this report are mainly from the Company's statistic reports and relevant documents. **The disclosure boundary is: (a) subsidiaries with consolidated financial statements; (b) subsidiaries actually controlled; (c) the Company has been put into operation for two natural years or more.**

The Board confirms that there are no false records and misleading statements in this report, and is responsible for the authenticity, accuracy and completeness of its contents.

### Report language

The report is drafted in Chinese and English.

### Confirmation and Approval

This report was approved by the Board on March 31, 2023, following confirmation by the Board.

### Acquisition method

This report is provided in both paper and electronic forms. The electronic version of this report can be viewed and downloaded from the official website of Biosino, and published on the website of the stock exchange at the same time.

## READER FEEDBACK

### Dear readers:

Thank you for reading this report. This is the sixth consecutive year that Biosino has disclosed environmental, social and governance information. It is the first time that Biosino has independently released the ESG report. We hope that you can evaluate this report and put forward your valuable opinions to help us continuously improve the report.

### Feedback questionnaire: :

1. Did you get the information you need from this report?
2. What further information do you think needs to be disclosed in this report?
3. Do you have any other suggestions for this report?

Contact: Xiaoming Ma

Address: No. 27, Chaoqian Road, Changping District, Beijing

Email: mxm@zhongsheng.com.cn



**中生北控生物科技股份有限公司**  
BIOSINO BIO-TECHNOLOGY AND SCIENCE INC

