

# Research on ESG Information Disclosure Issues and Countermeasures of Pharmaceutical Listed Companies: A Case Study of HL Pharmaceutical

Xuanqiao Long, Haiyan Zhao\*

*Business School, Lingnan Normal University, Zhanjiang, China*

*\*Corresponding Author*

**Abstract:** With the promotion of ESG (Environmental, Social, and Governance) concepts, the fulfillment of social responsibilities and sustainable development in pharmaceutical enterprises have garnered significant attention. This paper takes HL Pharmaceutical as the research subject to explore the current status and improvement strategies of ESG information disclosure among Chinese pharmaceutical listed companies. The study constructs an ESG information disclosure quality evaluation system comprising 50 indicators across three dimensions: environment, society, and governance. A longitudinal and horizontal comparative analysis is conducted to assess the quality of HL Pharmaceutical's ESG information disclosure. This research provides practical references for pharmaceutical enterprises to enhance ESG information disclosure quality and offers insights for promoting sustainable development in the industry.

**Keywords:** ESG; ESG Information Disclosure; HL Pharmaceutical

## 1. Introduction

ESG is the abbreviation of Environmental, Social and Governance. It is an investment concept and enterprise evaluation standard that focuses on the environmental, social and governance performance of enterprises. In 2004, the United Nations introduced the ESG concept, which has accelerated the development of ESG information disclosure. The pharmaceutical industry, known for its high pollution and significant impact on public health, has a critical role in the environmental and health impacts of ESG information disclosure. This article focuses on HL Pharmaceutical, a pharmaceutical company listed on the stock market, to examine its ESG information disclosure issues and

propose solutions. The aim is to highlight the problems and shortcomings in ESG information disclosure among pharmaceutical companies, provide improvement directions and suggestions, enhance the quality of disclosure for the case company, offer insights for the entire pharmaceutical industry, and enrich the research on ESG information disclosure in China.

## 2. Literature Review

(1) Research on ESG information disclosure content

Zhang Sa summarized the international development experience of ESG system, pointed out the deficiencies in China's system, and put forward suggestions for the establishment of ESG system in China [1]. Sakis K et al. pointed out that with the increasing use of ESG data in investment decisions and the increasing demand for ESG information from stakeholders, enterprises should take the initiative to disclose ESG related information, and jointly develop comparable indicators with the industry to further disclose ESG data [2]. Jaeyoung L argues that using current ESG ratings as a reliable indicator has certain limitations. Due to the varying standards of different evaluation agencies, the same company may receive different ESG ratings from different agencies [3]. To address this issue, he developed a classifier capable of distinguishing ESG information, which will provide stakeholders with more accurate ESG data. Dong Jiangchun analyzed the existing problems of current international ESG standards, and believed that ESG standards should be coordinated with financial reporting standards to provide effective information for stakeholders [4]. Wang Kai et al. studied the impact of executives' overseas background on ESG evaluation differences [5]. The empirical test showed that executives with overseas background could significantly reduce evaluation differences, and the mechanism was

to improve disclosure quality and attention allocation. This provides a new perspective for evaluating the effect of overseas talent introduction policies, and has implications for the realization of the “double carbon” goals. Huang Shizhong Outlined the release of the “Corporate Sustainable Disclosure Guidelines—Basic Guidelines (Draft for Comments)” and the ten hot issues it triggered [6]. These issues are directly related to the content, standards, practices and verification of ESG information disclosure, and are an important part of the research on the content of ESG information disclosure. Huang Shiqing and Zhao Peng Based on the latest developments of ESG information disclosure systems such as ISSB, ESRS and China’s “Guidelines for Sustainable Development Reports of Listed Companies”, they compare their commonalities and differences, draw lessons from them, provide reference for the practice of ESG information disclosure of listed companies, and promote the integration and development of international ESG systems [7].

## (2) Research on influencing factors of ESG information disclosure

Maaloul et al. studied how ESG information affects corporate reputation and how corporate reputation in turn affects the cost of debt financing, and concluded that companies that disclose ESG issues have better reputation and can also reduce their debt financing costs [8]. Wang Yu et al. found that the greening of tax system can significantly improve the ESG performance of heavy polluting enterprises, which is realized through encouraging environmental protection investment and green innovation, and has spillover effects, which is of great practical significance to promote the green and low-carbon development of enterprises [9]. Huang Shizhong and Ye Fengying According to the ESRS guidelines issued by the European Union for sustainable development reports, they made analysis and discussed the implications for the formulation of China’s standards [10]. The implications show that governance, strategy, IRO management, stakeholders, risk management, internal control and other factors have a significant impact on the formulation and implementation of sustainable development reports. Jiang Fuxiu et al. discussed the nature and legitimacy basis of ESG, analyzed the practical challenges and Chinese characteristics of ESG from the perspective of corporate goals

and stakeholders, provided theoretical support for the development of ESG theory and practice, and had enlightening significance for the study of factors affecting ESG information disclosure [11]. Dai T discusses the relationship between green growth and ESG in Southeast Asia. The research results show that investment is an effective tool to promote sustainable development, and the green growth index will increase by 0.56% for every 1% increase in environmental investment [12]. It is suggested that in order to promote green growth, Southeast Asian countries should give priority to ESG investment.

To sum up, both domestic and foreign scholars have studied ESG information disclosure. Most scholars focus on the content of ESG information disclosure and the influencing factors of ESG information disclosure, and their research provides guidance for enterprise practice. In this paper, the information disclosure index method, which is the most common ESG evaluation method at home and abroad, is used to construct the ESG information disclosure evaluation system of HL Pharmaceutical.

## 3. Analysis of ESG Information Disclosure Status of HL Pharmaceutical

The ESG information disclosure of HL Pharmaceutical includes three aspects: environmental management, social responsibility and corporate governance.

### (1) Environmental management

The environmental information disclosure of HL Pharmaceutical mainly focuses on three aspects: environmental management system, energy and resource use management and pollutant discharge management. First of all, the company has established a strict punishment system for environmental management violations. In its ESG report for 2021-2024, the company said it had been penalized once for violating environmental laws and regulations. Guangxi Weiwei Pharmaceutical Co., a subsidiary of HL Pharmaceutical, was fined 334,000 yuan by the Laibin Municipal Bureau of Ecology and Environment for discharging sewage in an attempt to evade supervision, according to the Laibin municipal government. Secondly, HL Pharmaceutical disclosed the information of energy consumption in detail in the ESG report, and began to disclose the amount of purchased steam in 2023. This information not only reflects

the company's efforts in sustainable development, but also provides an important reference for investors and stakeholders. Finally, in its ESG report, the company has made detailed disclosure of emissions and waste management information, reflecting the company's emphasis on environmental protection and social responsibility. The total amount of wastewater discharged by the company from 2021 to 2024 showed a trend of increasing year by year. As can be seen from the report notes, this growth trend is related to the increase in the scope of the company's consolidated financial statements in Jiangxi Rongxing, so the total data of wastewater discharge has increased significantly. But in 2024, Guangxi Weiwei Pharmaceutical Co., a subsidiary of HL Pharmaceutical, was fined 334,000 yuan by the Laibin Municipal Bureau of Ecology and Environment for discharging sewage in an attempt to evade regulation. Therefore, the company should continue to pay attention to the discharge of wastewater, strengthen the construction and operation management of wastewater treatment facilities, in order to reduce the impact of wastewater discharge on the environment.

#### (2) Social responsibility

In terms of employee health and safety, according to the ESG reporting guidelines of the Shanghai Stock Exchange, listed companies should fulfill their responsibilities for the health and safety of employees' rights and interests according to the composition of employees. HL Pharmaceutical has been publishing occupational health and safety information since 2022, and has established an employee communication system since 2023. From 2021 to 2024, the disclosure content at the employee level is mainly qualitative information, with less quantitative information. In particular, the disclosure of employee compensation and welfare is superficial, with only qualitative analysis and no quantitative analysis. In terms of product quality and safety, HL Pharmaceutical has established a quality management system and passed ISO9001 quality management system certification; formulated internal quality management system; set up an independent quality assurance department responsible for product audit; formulated annual quality objectives; established a nonconforming product treatment mechanism and product recall procedures. In terms of supplier management,

during the reporting period of 2024, the company's supplier audit coverage rate reached 100%. However, the content of the supply chain level only disclosed the supplier management and the number of suppliers, and the disclosure level was not high on the whole. In terms of social welfare, the company focuses on the medical and health care of vulnerable groups and grassroots children's health education. It collaborates with charitable foundations to organize public lectures on safe medication use for children and has donated funds to build welfare homes, supporting the response to public health emergencies. In 2023-2024, the company also donated supplies and medicines to areas affected by typhoons.

#### (3) Corporate governance

In terms of corporate governance, HL Pharmaceutical attaches great importance to standardization and transparency. The company standardized the governance of the three meetings and improved the level of corporate governance. The company formulates system documents related to risk management and internal control, and builds a risk management mechanism to support the implementation of strategy and integrity construction. At the same time, an anti-corruption management system has been established, a complaint and reporting channel has been set up, and a Letter of Commitment against Commercial Bribery has been signed with staff within the marketing system. However, the disclosure of executive compensation and tax payment is insufficient.

### 4. Quality Evaluation of ESG Information Disclosure of HL Pharmaceutical

#### 4.1 Construction of ESG Information Disclosure Quality Evaluation System for HL Pharmaceutical

##### 4.1.1 Principles of evaluation system construction

##### (1) Comparability principle

Refers to the longitudinal comparability of different reporting periods of the same enterprise and the horizontal comparability of different enterprises in the same industry.

##### (2) Operability principle

The selection of indicators should be available and quantifiable to ensure that the evaluation process can proceed smoothly and that the results can be effectively applied.

##### (3) Dynamic principle

ESG information disclosure is a dynamic process, and the evaluation system should be flexible enough to adjust and optimize according to the changes of external environment and the development of enterprises themselves, so as to ensure the timeliness and adaptability of the evaluation system.

#### 4.1.2 Determination of price system

To establish a more objective and scientific evaluation system, this paper draws on the Ministry of Ecology and Environment's 'Format Guidelines for the Legal Disclosure of Corporate Environmental Information, 'the international

NSCI rating system, the China Enterprise Reform and Development Research Association's 'Guide to ESG Disclosure by Enterprises,' and the GRI's 'G4 Sustainability Reporting Guidelines.' It also takes into account the unique characteristics of the pharmaceutical industry. ESG refers to the reporting on environmental, social, and governance (ESG) aspects by companies. These aspects are used as primary indicators in the evaluation system, with 15 secondary indicators under each primary indicator and a total of 50 tertiary indicators. The specific details are presented in Table 1:

**Table 1. Specific Index System of ESG Information Disclosure Quality**

Level 1 indicators	Secondary indicators	Level 3 indicators
Environment (E)	Natural Resources	Water Consumption (E1)
		Power Consumption (E2)
		Use of Packaging Materials (E3)
		Biodiversity (E4)
	Energy Conservation Management	Energy-saving Measures (E5)
		Energy-saving Effect (E6)
	Pollutant Emission	Wastewater Discharge (E7)
		Exhaust Gas Emission (E8)
		Waste Discharge (E9)
	Pollution Prevention and Control	Construction of Pollution Prevention and Control Facilities (E10)
		Operation and Construction Status of Pollution Prevention and Control (E11)
	Climate Change	Carbon Emission Information (E12)
		Emission Reduction Measures (E13)
		Emission Reduction Measures (E14)
	Environmental Management	Environmental Management System (E15)
		Environmental Management Objectives (E16)
		Environmental Incident Emergency Response Mechanism (E17)
		Environmental Penalty Status (E18)
		Environmental Investment Status (E19)
		Development Status of Environmental Technologies (E20)
Society(S)	Employee Rights and Interests	Employee Structure (S1)
		Employee Turnover Rate (S2)
		Employee Safety Measures (S3)
		Status of Labor Contract Signing (S4)
		Compensation and Benefits (S5)
		Humanistic Care (S6)
	Quality Management	Product Quality Management System (S7)
		Product Quality Management Measures (S8)
		Product Quality Management Certification (S9)
	Intellectual Property	Intellectual Property Protection Mechanism (S10)
		Intellectual Property Protection Measures (S11)
	Customer Management	Customer Service (S12)
		Customer Satisfaction Level (S13)
		Customer Complaint Mechanism Development (S14)
	Supply Control	Supplier Management (S15)
		Supply Chain Link Management (S16)
	Social	Supporting Education (S17)

	Responsiveness	Public Welfare Medical Lecture (S18)
Corporate Governance(G)	Governance Structure	Corporate Governance Structure (G1)
		Status of the 'Three Meetings' (G2)
		Executive Compensation Level (G3)
		Dividend Distribution (G4)
	Governance Mechanism	Cultivation of Business Ethics (G5)
		Preventive Measures for Business Ethics (G6)
		Internal Control (G7)
		Risk Management System (G8)
	Corporate Behavior	Anti-corruption and Bribery Prevention Mechanism (G9)
		Reporting System (G10)
		Tax Transparency (G11)
		Negative Incidents (G12)

4.1.3 Determination of evaluation methods content of HL Pharmaceutical, and the specific  
The information disclosure index method was scoring criteria are shown in Table 2:  
used to evaluate the ESG information disclosure

**Table 2. ESG Information Index System Scoring Criteria**

Classification of scoring indicators	Scoring Criteria	Score
Quantifiable indicators	Not described	0
	Simple qualitative / Quantitative description	1
	Qualitative + quantitative description	2
Management indicators	Not described	0
	Brief description	1
	Specific description of the case	2

**4.2 Quality Analysis of ESG Information Disclosure of HL Pharmaceutical** comparative analysis to evaluate the quality of  
ESG information disclosure of HL  
Pharmaceutical. The specific analysis is shown

4.2.1 Vertical comparative analysis

The ESG reports of HL Pharmaceutical from 2021 to 2024 were selected for longitudinal in Table 3:

**Table 3. HL Pharmaceutical ESG Report Score 2021-2024**

Level 1 indicators	Secondary indicators	In 2021	In 2022	In 2023	In 2024
Environment (E)	Natural Resources	6	5	5	7
	Energy Conservation Management	4	4	4	4
	Pollutant Emission	6	6	6	6
	Pollution Prevention and Control	1	3	3	4
	Climate Change	1	3	4	4
	Environmental Management	6	7	10	10
Society (S)	Employee Rights and Interests	10	10	11	11
	Quality Management	6	6	6	6
	Intellectual Property	2	3	4	4
	Customer Management	4	4	4	4
	Supply Control	3	2	2	3
	Social Responsiveness	4	4	4	4
Corporate Governance (G)	Governance Structure	4	4	5	4
	Governance Mechanism	4	7	8	8
	Corporate Behavior	4	4	5	5
Aggregate score		65	72	81	84

As can be seen from Table 3, the ESG report scores of HL Pharmaceutical from 2021 to 2024 are 65 points, 72 points, 81 points and 84 points respectively. As can be seen from the scores, the ESG information disclosure of the company is constantly enriched, the awareness of disclosure

is gradually strengthened, and the level of disclosure is constantly improved. But 84 points is still room for improvement relative to the total score of 100 points in the evaluation system. The following is a specific analysis of the company's ESG information disclosure issues.

## (1) Environmental information section

As can be seen from Table 4, the ESG report information disclosure indicators of HL Pharmaceutical from 2021 to 2024 are gradually enriched. The company continues to strengthen its environmental management system and strengthen the information disclosure of the environmental sector. However, indicators of environmental investment and environmental technology development have been disclosed in a simple qualitative or quantitative description,

which is not detailed enough. In terms of environmental penalties, Guangxi Weiwei Pharmaceutical Co., a subsidiary of HL Pharmaceutical Co., was fined 334,000 yuan by the Laibin Municipal Bureau of Ecology and Environment for discharging sewage in an attempt to evade supervision. To sum up, the quality of environmental information disclosure of HL Pharmaceutical has been improved year by year, but there are still some problems such as incomplete information disclosure.

**Table 4. HL Pharmaceutical Disclosed the Quality Analysis of the Environmental Part**

Level 1 indicators	Secondary indicators	Level 3 indicators	In 2021	In 2022	In 2023	In 2024
Environment (E)	Natural Resources	Water Consumption (E1)	2	2	2	2
		Power Consumption (E2)	2	2	2	2
		Use of Packaging Materials (E3)	1	1	1	1
		Biodiversity (E4)	1	0	0	2
	Energy Conservation Management	Energy-saving Measures (E5)	2	2	2	2
		Energy-saving Effect (E6)	2	2	2	2
	Pollutant Emission	Wastewater Discharge (E7)	2	2	2	2
		Exhaust Gas Emission (E8)	2	2	2	2
		Waste Discharge (E9)	2	2	2	2
	Pollution Prevention and Control	Construction of Pollution Prevention and Control Facilities (E10)	1	1	1	2
		Operation and Construction Status of Pollution Prevention and Control (E11)	0	2	2	2
	Climate Change	Carbon Emission Information (E12)	1	2	2	2
		Emission Reduction Measures (E13)	0	1	1	1
		Emission Reduction Achievements (E14)	0	0	1	1
	Environmental Management	Environmental Management System (E15)	1	2	2	2
		Environmental Management Objectives (E16)	0	0	2	2
		Environmental Incident Emergency Response Mechanism (E17)	1	1	2	2
		Environmental Penalty Status (E18)	2	2	2	2
		Environmental Investment Status (E19)	1	1	1	1
		Development Status of Environmental Technologies (E20)	1	1	1	1

## (2) Social information section

As can be seen from Table 5, the information disclosure of HL Pharmaceutical in the social sector is relatively perfect. In terms of employee rights, in addition to the employee turnover rate, which was not disclosed in detail, employee safety measures, salary and benefits, and humanistic care were disclosed with pictures and detailed cases. In terms of quality management, although there are specific case descriptions and quantitative and qualitative descriptions, the negative information related to quality management is not disclosed in the ESG report. In terms of customer management, the company has set up a customer service department,

established a customer complaint handling mechanism and a customer communication mechanism. The company conducts customer satisfaction survey every quarter, but does not disclose the treatment plan and subsequent results. In terms of supply control, the management disclosure of suppliers is increasing year by year, but the management disclosure of supply chain links is not comprehensive. In short, the overall level of information disclosure of the company to the social sector is high, but there are still problems of insufficient and imperfect disclosure, so the company needs to further disclose social information.

**Table 5. Quality Analysis of Social Disclosure of HL Pharmaceutical**

Level 1 indicators	Secondary indicators	Level 3 indicators	In 2021	In 2022	In 2023	In 2024
Society (S)	Employee Rights and Interests	Employee Structure (S1)	2	2	2	2
		Employee Turnover Rate (S2)	0	0	1	1
		Employee Safety Measures (S3)	2	2	2	2
		Status of Labor Contract Signing (S4)	2	2	2	2
		Compensation and Benefits (S5)	2	2	2	2
		Humanistic Care (S6)	2	2	2	2
	Quality Management	Product Quality Management System (S7)	2	2	2	2
		Product Quality Management Measures (S8)	2	2	2	2
		Product Quality Management Certification (S9)	2	2	2	2
	Intellectual Property	Intellectual Property Protection Mechanism (S10)	1	2	2	2
		Intellectual Property Protection Measures (S11)	1	1	2	2
	Customer Management	Customer Service (S12)	2	2	2	2
		Customer Satisfaction Level (S13)	1	1	1	1
		Customer Complaint Mechanism Development (S14)	1	1	1	1
	Supply Control	Supplier Management (S15)	1	2	2	2
		Supply Chain Link Management (S16)	2	0	0	1
	Social Responsiveness	Supporting Education (S17)	2	2	2	2
		Public Welfare Medical Lecture (S18)	2	2	2	2

**(3) Governance information section**

As can be seen from Table 6, the corporate governance sector is gradually improving. In terms of governance structure, the executive salary level index has not been disclosed, and the specific cash dividend amount has only been disclosed in 2023. The specific dividend distribution plan and distribution mechanism have not been mentioned. In terms of corporate behavior, the tax transparency is not high. Only the total amount of tax paid was disclosed in

2021, and no relevant information was disclosed in other years. In terms of negative events, the information disclosure is not comprehensive enough. For example, the negative events such as the short-term trading problem of senior executives occurred in 2022 were not disclosed. In short, the level of corporate governance information disclosure has improved, but there is still room for improvement in its disclosure content, especially in the disclosure of negative events.

**Table 6. Quality Analysis of the Governance Part of HL Pharmaceutical was Disclosed**

Level 1 indicators	Secondary indicators	Level 3 indicators	In 2021	In 2022	In 2023	In 2024
Corporate Governance (G)	Governance Structure	Corporate Governance Structure (G1)	2	2	2	2
		Status of the 'Three Meetings' (G2)	2	2	2	2
		Executive Compensation Level (G3)	0	0	0	0
		Dividend Distribution (G4)	0	0	1	0
	Governance Mechanism	Cultivation of Business Ethics (G5)	1	2	2	2
		Preventive Measures for Business Ethics (G6)	1	1	2	2
		Internal Control (G7)	1	2	2	2
		Risk Management System (G8)	1	2	2	2
	Corporate Behavior	Anti-corruption and Bribery Prevention Mechanism (G9)	1	2	2	2
		Reporting System (G10)	1	1	1	1
		Tax Transparency (G11)	1	0	0	0
		Negative Incidents (G12)	1	1	2	2

**4.2.2 Horizontal comparative analysis**

HL Pharmaceutical focuses on scientific drug

use for children. The same layout of children's medicine was selected from JM Group and HT

Group for longitudinal comparison. JM Group is a traditional pediatric Chinese medicine leader, HL Pharmaceutical is a pediatric pharmaceutical enterprise combining Chinese and Western medicine, and HT Group is the benchmark of modernization of western medicine for children. They all focus on pediatric drug research in their

respective fields. At the same time, all three are domestic listed enterprises, which are uniformly constrained by the Measures for the Administration of Information Disclosure of Listed Companies, and have the same regulatory environment.

**Table 7. Horizontal Comparison of ESG Information Disclosure Scores of HL Pharmaceutical In 2024**

Rank	Enterprise Name	Environmental score	Society scores	Governance score	Total score
1	HL Pharmaceutical	35	32	17	84
2	JM Group	36	30	16	82
3	HT Group	28	30	13	71

As can be seen from Table 7, the total score of HL Pharmaceutical is 84 points, JM Group's total score is 82 points, and HT Group's total score is 71 points. HL Pharmaceutical ranks first. The quality of information disclosure of HL Pharmaceutical in the social and corporate governance sector is high, but the score of information disclosure in the environmental sector is lower than that of JM Group.

## 5. Analysis of Problems and Causes of ESG Information Disclosure in HL Pharmaceutical

### 5.1 Problems in ESG Information Disclosure

#### 5.1.1 Information disclosure is incomplete

Although HL Pharmaceutical has a high score, some information is not disclosed properly. Regarding environmental management, the company only disclosed the annual investment in environmental protection. In contrast, JM Group provided detailed information on its environmental investments, including specific annual expenditures, relevant cases, and outcomes. After 2021, the company did not disclose its supply chain management practices, whereas JM Group detailed its supply chain management system, including annual supplier reviews and training programs. The company also did not provide detailed information on dividend distribution, while HT Group and JM Group both published detailed qualitative and quantitative descriptions of their dividend distribution policies. In addition, the company did not disclose negative information such as the content of active ingredients in drugs not up to standard and labor disputes.

#### 5.1.2 Quantitative information is insufficient

Most of the information in the ESG report of HL Pharmaceutical is qualitative disclosure and case description, supplemented by quantitative data.

In terms of environmental information, less disclosure is made of emission reduction measures and indicators of emission reduction effectiveness, which are not elaborated. The indicators of environmental investment and environmental technology development have been disclosed in a simple qualitative or quantitative description, which is not detailed enough. Regarding social information disclosure, the employee turnover rate has not been disclosed in detail. It was only mentioned in the 2023 ESG report that it would help reduce employee turnover. The ESG report also mentions 'supplier management,' but does not disclose the supplier's ESG evaluation criteria or any cases of non-compliance. Previously, the company was reported by the National Medical Products Administration for drug quality issues from suppliers, highlighting the weaknesses in supply chain risk management. In terms of corporate governance, executive pay levels are not disclosed and there is a lack of detailed pay structure.

#### 5.1.3 Lack of industry characteristic indicators

The disclosure of characteristic indicators of HL pharmaceutical industry is not perfect. The drug qualification rate is an important manifestation of product quality management, but HL Pharmaceutical, HT Group and JM Group have not disclosed the drug qualification rate. At the same time, the company has been carrying out long-term education activities on children's drug safety, but has not disclosed the effect evaluation after receiving training.

## 5.2 Cause Analysis of ESG Information Disclosure

### 5.2.1 The ESG information disclosure system is not perfect

At present, China has not established a sound ESG information disclosure system, nor has it



formed detailed implementation rules for ESG disclosure in various industries, resulting in the lack of unified reference standards for ESG information disclosure by enterprises. The compilation standard of HL Pharmaceutical is the “Self-regulatory Guidance for Listed Companies” issued by the Shanghai Stock Exchange, and refers to the GRI standard and the “International Financial Reporting Sustainable Disclosure Standard No.2 — Climate-related Disclosure”.

The compilation standards of the HT Group are the “Self-regulatory Guidance for Listed Companies” issued by the Shenzhen Stock Exchange. Some companies also compile ESG reports according to the rating system issued by the international rating agency MSCI. Due to different compilation standards, ESG reports of enterprises are unique and less comparable.

#### 5.2.2 There is a lack of expertise in ESG reporting

The introduction of ESG report in China is relatively short, and China has not yet formed a unified ESG information disclosure system, and there are few talents with sufficient experience in compiling ESG report. At the same time, most companies assign ESG report preparation tasks to employees in various departments, but there is little ESG related training, and there is no ESG related exam to provide professional talents for enterprises to prepare ESG reports. According to the ESG report of HL Pharmaceutical, the board secretary is responsible for coordinating the report, and the specific work is carried out by relevant functional departments and subsidiaries. The company only assigns the task of ESG report preparation to various departments and subsidiaries, and does not introduce professional talents for ESG report preparation.

#### 5.2.3 Disclosure system is not sound

ESG information disclosure system is the core of non-financial information disclosure of enterprises. The Shanghai and Shenzhen stock exchanges do not require listed companies to disclose ESG reports, while the Hong Kong Stock Exchange does. At present, ESG information disclosure in China is mainly voluntary, and there are no relevant punishment regulations published. Therefore, when disclosing ESG reports, many enterprises will selectively disclose, thus affecting the authenticity and rigor of disclosure. The insufficient disclosure of negative information on ESG information disclosure of HL

Pharmaceutical is closely related to the defects of the disclosure system.

## 6. Countermeasures to Improve ESG Information Disclosure of HL Pharmaceutical

### 6.1 Improve ESG Information Disclosure Awareness

Improving ESG information disclosure awareness is the cognitive basis for enterprises to achieve high-quality disclosure, and promote the transformation of ESG awareness from passive compliance to active value creation. For example, an ESG management committee shall be established under the direct leadership of the chairman, and its members shall include the heads of production, research and development, finance and other departments. An ESG office shall be set up to clarify the division of responsibilities. Establish a cross-departmental cooperation mechanism, hold ESG joint meetings every month, require the production department to provide raw data of environmental monitoring, the R&D department to submit clinical trial ethics records, and the marketing department to disclose ESG risks in the supply chain, and incorporate them into the performance assessment of departments.

### 6.2 Improve the Content of Information Disclosure

In terms of quantitative data, HL Pharmaceutical needs to disclose more key indicators, such as the drug qualification rate and employee turnover rate, as well as information on biodiversity metrics and supply chain management. Regarding industry-specific indicators, it should follow the ESG Information Disclosure Guidelines for Pharmaceutical Enterprises, the first such standard in China, drafted by the Shanghai Institute of Quality Management Science in 2023, to enhance the disclosure of pharmaceutical industry indicators. In terms of negative information, the company should actively disclose negative information, describe in detail the causes of negative events and the response measures of the enterprise, so as to ensure the authenticity and integrity of ESG information disclosure.

### 6.3 Attach Importance to ESG Professional Talent Training

The cultivation of ESG talents is conducive to

improving the quality of ESG information disclosure. In terms of education system, we will promote interdisciplinary integration in higher education and support universities to offer ESG courses with special features, such as pharmaceutical ESG governance. Government departments set ESG related exams and certificates for various industries. The education department can set up a special fund to encourage colleges and universities to build a medical ESG case library, which includes localized teaching materials. In terms of industry-university-research collaboration, the university and enterprises cooperate to develop ESG practical training modules, focusing on cultivating applied skills such as environmental risk assessment.

#### **6.4 Improve the ESG Information Disclosure System**

Led by the State Administration for Market Regulation, China Securities Regulatory Commission and other departments, the national ESG standards will be formulated by integrating international frameworks (GRI, ISSB) with domestic policies (such as the Measures for the Administration of Disclosure of Environmental Information by Enterprises in accordance with the Law) by industry. For the pharmaceutical industry, core indicators such as pollution prevention and control, drug accessibility and traditional Chinese medicine inheritance should be clearly defined, listed companies should be forced to disclose them, small and medium-sized enterprises should be encouraged to participate voluntarily through tax incentives, and the adaptability of standards to local conditions should be enhanced. The Securities Law and other regulations will be revised to severely punish data fraud, and blockchain technology will be used to realize the environment and trace the source of data; enterprises with excellent ESG ratings will be provided with incentives such as green credit and preferential government procurement, so as to guide state-owned capital to give priority to investment in high-rated pharmaceutical companies, thus forming a positive cycle of “compliance and optimization”.

#### **6.5 We will Strengthen Media Supervision over Public Opinion**

The Press Law and the Regulations on Enterprise Information Disclosure have been revised to clarify the rights and boundaries of

media to obtain and report ESG information of enterprises in accordance with the law, and require enterprises not to refuse to disclose key ESG data (such as pollution emission records and compliance of drug clinical trials) on the grounds of “commercial secrets”. Enterprises that obstruct the media’s legitimate oversight will be listed as untrustworthy by the Cyberspace Administration and publicly notified. For ESG issues exposed by the media, local regulatory authorities are required to initiate an investigation and publicize progress within 10 working days. The results of these investigations will be incorporated into the company’s ESG rating. Pharmaceutical companies that are criticized by authoritative media for two consecutive years will lose their eligibility to participate in national drug procurement.

#### **7. Conclusion**

Through the evaluation of the quality of ESG disclosure of HL Pharmaceutical, it can be seen that the level of ESG information disclosure of HL Pharmaceutical has been improving year by year. However, there are still some problems in the overall disclosure, such as incomplete information disclosure, insufficient quantitative information disclosure, and lack of industry characteristic indicators. This paper puts forward countermeasures and suggestions on the ESG information disclosure of the company from the enterprise level, social level and national level.

#### **Acknowledgments**

This work was supported by the followings: (1) Talent Introduction Project (number:ZW2025) of Lingnan Normal University. (2) The project (number: 20233L02) of Guangdong Coastal Economic Development Research Center.

#### **References**

- [1] Zhang Sa. Application research of ESG system in China. *Financial Horizons*, 2017(11):80-85.
- [2] Sakis K, George S. Four Things No One Will Tell You About ESG Data. *Journal of Applied Corporate Finance*, 2019, 31(2):50-58.
- [3] Jaeyoung L, Misuk K. ESG information extraction with cross-sectoral and multi-source adaptation based on domain-tuned language models. *Expert Systems with Applications*, 2023, 221
- [4] Dong Jiangchun, Sun Weizhang, and Chen

- Zhi. International ESG Standards Development: Progress, Issues, and Suggestions. *Accounting Communications*, 2022, (19):147-153+161.
- [5] Wang Kai, Ding Ning, Liu Xuexin, et al. Overseas Background of Senior Executives and Disputes in Corporate ESG Evaluation. *Management Science*, 2023, 36(05):32-52.
- [6] Huang Shizhong. Analysis of the Top Ten Hot Issues in Sustainable Disclosure Standards. *China Certified Public Accountant*, 2024, (06):11-16+5.
- [7] Huang Shiqing and Zhao Peng. International Comparison and Reference of ESG Information Disclosure Systems in Listed Companies. *Accounting and Finance Communications*, 2025, (01):157-161.
- [8] Maaloul, Anis, Zéghal, et al. The Effect of Environmental, Social and Governance (ESG) Performance and Disclosure on Cost of Debt: The Mediating Effect of Corporate Reputation. *Corporate Reputation Review*, 2021, (prepublish):1-18.
- [9] Wang Yu, Wang Haoyu, and Xue Shuang. Greening Tax System and Corporate ESG Performance-A Quasi-Natural Experiment Based on the Environmental Protection Tax Law. *Finance and Economics Research*, 2022, 48(09):47-62.
- [10] Huang Shizhong and Ye Fengying. Interpretation of European Sustainable Development Reporting Standards: General Disclosure. *Accounting Monthly*, 2023, 44(22):3-8
- [11] Jiang Fuxiu, Chen Si, and Wang Aoran. The Legitimacy Foundation of ESG. *Journal of Sun Yat-sen University (Social Sciences Edition)*, 2024, 64(06):413-428.
- [12] Dai T. Delving into the green growth dilemma and ESG investing in Southeast Asia. *Humanities and Social Sciences Communications*, 2025, 12(1):193-193.