2.5 Data Security and Privacy Protection



Strengthening of Information Security Measures:

In 2022, to enhance our information security defenses and management mechanisms, and to comply with the "Guidelines on the Establishment of Internal Control Systems by Publicly Listed Companies," PharmaEssentia announced on the website that it amended its "Information Security Management Procedures." Additionally, established a Cybersecurity Promotion Team, responsible for driving, coordinating, supervising, and reviewing matters related to information security management. The information security officer reports annually to the Board of Directors, with the most recent report completed on December 26, 2023.

Implementation and Certification of ISO 27001:

In October 2023, PharmaEssentia implemented the ISO 27001 Information Security Management System and anticipates receiving third-party certification by June 2024. To enhance the information security awareness of all employees, the company conducted a social engineering training session and two educational sessions focused on ISO 27001 in 2023, involving a total of 271 participants and approximately 323.5 hours. Additionally, one employee undertook a 40-hour course to become a Lead Auditor for ISO/IEC 27001:2022, and has since obtained the certification. Plans are underway to replicate these management practices in subsidiaries in the United States and Japan, starting with the Taiwan production site, and to continue their maintenance and operation.

Data Security Initiatives in the United States:

While PharmaEssentia USA has not implemented the ISO 27001 Information Security Management System, it has initiated cybersecurity training programs. All employees are required to regularly complete these training sessions to enhance their security

Implementation of Customer Privacy Protection (GRI418-1)

Scope of Information Security and Privacy Protection:

In addition to our internal employees, the scope of our information security and privacy protection efforts extends to healthcare professionals, medical institutions, outsourced partners, and clinical trial participants.

Patient Information Security:

All external research organizations working with PharmaEssentia and medical staff involved in clinical trials at hospital sites are required to strictly adhere to our privacy

awareness. In 2023, ten draft policy documents related to information security were created, which are to be confirmed and implemented by the management in 2024.

Information Security Management Activities and Actions at Headquarters

Initiatives & Roadmap

• 2023 Performance

- Data Loss Prevention (DLP) End-Point Security Protection
- Quality Assurance Department Document Encryption (Phase One)
- EDR Deep Learning Threat Detection and Protection Software
- Zero Trust Network Architecture Optimization & Access Services
- Email Archiving
- Patching High-Risk Vulnerabilities and Annual Cybersecurity Social Engineering Drills
- ISO 27001:2022 Information Security Certification Guidance

2024 Short-Term Goals

- Obtaining ISO 27001 Certification
- Implementation of a SIEM (Security Information and Event Management) System

• 2025-2030 Medium to Long-Term Goals

- Planning and Implementation of a Data Management Platform (DMP) for File Encryption.
- Zero Trust Cybersecurity: Integrated System and Network Defense with Proactive Alert Mechanisms.
- Continuous System Operations, Disaster Recovery (DR) Backup Planning and Implementation.

protection policies. They must also comply with various national and international regulations, such as the European Union's General Data Protection Regulation (GDPR), Good Clinical Practice (GCP) guidelines, the Declaration of Helsinki, Taiwan's Human Research Ethics Policy Guidelines, and the Medical Act. These measures are part of our commitment to ensuring the protection of personal data. In 2023, there were no incidents of employee or customer data protection and privacy complaints, nor were there any complaints regarding the loss of customer data across all PharmaEssentia