Stock Code: 6446

PharmaEssentia Corp.

2020 Annual Report

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1. **The name, title, contact number, and e-mail address of the Company's spokesperson or acting spokesperson:**

   Spokesperson: Ko-Chung Lin　　E-mail: ir@pharmaessentia.com
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2. **The address and contact number of the Company's headquarters, branch offices, and factories:**

   Address of Headquarters: 13F, No. 3, Yuanqu Street, Nankang District, Taipei City
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3. **The name, address, website, and contact number of the agency handling share transfers:**

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4. **The name of the certified public accountant who duly audited the annual financial report for the most recent fiscal year, and the name, address, website, and contact number of said person's accounting firm:**

   Name of Certified Public Accountant: Chien-Ju Yu, Li-Feng Lin
   Name of Accounting Firm: Ernst & Young　　Address: No. 333, Section 1, Keelung Rd, Xinyi District, Taipei City
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5. **The name of any exchanges where the company's securities are traded offshore, and the method for accessing information on said offshore securities:** None.
6. **The Company's website:** http://www.pharmaessentia.com

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I. Letter to Shareholders

Dear Shareholders,

First of all, we wish to thank all of you for your years of love and support. The following is a summary of our business achievements in 2019 and the business plan for 2020:

1. 2020 Operations Report

(1) Business plan results

BESREMi® (ropeginterferon alfa-2b), which was developed and produced by this company, was formally approved by the European Medicines Agency (EMA) for polycythemia vera (PV) and is currently sold in various countries and nearly half of all EU countries, including Germany, Austria, the United Kingdom, France, Denmark, the Czech Republic, and Sweden. BESREMi® has also been approved in Switzerland and Israel. P1101 is the first frontline, long-term interferon treatment approved for PV, and with the sale of BESREMi® along with its pricing being approved in an increasing number of European countries, the European market for this drug will continue to expand.

With regard to PV in the United States, a biologics license application (BLA) for BESREMi® has been submitted to the US Food and Drug Administration (FDA). During the drug review period, we have communicated and worked closely with the FDA. FDA officials visited a biostatistics contract research organization in New Jersey and our US subsidiary in Boston, Massachusetts in mid-June and early July to conduct on-site reviews of the statistical data and clinical operations; these were carried out successfully and did not reveal any major problems. The FDA also traveled to California in January 2020 to perform an inspection of Pyramid, a drug product (DP) contractor; similarly, no major problems were identified. Moreover, the FDA performed an inspection of our Taichung factory that produces the P1101 drug substance (DS). Furthermore, on the basis of suggestions from former US FDA officials, we have provided, in our response to the FDA, various alternative dates for their inspections. We also stated in our response that Pharmaessentia's epidemic prevention plan has been approved by Taiwan's health authorities, indicating that we are fully prepared and will fully cooperate with the factory inspections. Together with the FDA, Phramaessentia held a late cycle review meeting on Jan. 6, 2021 on the approval of P1101 for the treatment of PV in the United States. The U.S. Food and Drug Administration (FDA) has issued a complete response letter (CRL) for the company's Biologics License Application (BLA) for ropeginterferon alfa-2b-njft for the treatment of polycythemia vera (PV), a rare blood cancer.The rationale for the CRL was COVID-related travel restrictions, which delayed a required pre-approval inspection of the company's manufacturing facility in Taiwan. The

FDA also indicated a need for additional data about the administration format with the product. Importantly, no concerns were raised about the clinical profile of the product.

In regards to PV in Japan, we have finally reached an agreement with Japan's Pharmaceuticals and Medical Devices Agency (PMDA), an independent administrative institution in Japan, after lengthy negotiations. To date, we have performed phase II bridging clinical trials with 30 Japanese patients.

In South Korea, our benchmark product BESREMi® has been used to treat PV. Our South Korean subsidiary applied to South Korea's Ministry of Food and Drug Safety (MFDS) for an orphan drug designation (ODD), which has been granted. In September 2020, a drug inspection and registration application for BESREMi® was submitted to the MFDS; in February 2021, the drug passed a factory inspection by the MFDS and received a good manufacturing practice (GMP) certification. BESREMi® is expected to receive drug certification in South Korea in the second quarter of 2021.

In November 2018, China's National Medical Products Administration (NMPA) approved phase I human clinical PV trials; the summary of phase 1 clinical studies was received in June, 2020. We plan to submit an application for a communication meeting with the NMPA, with the goal of using data from the European PV clinical trials and the Chinese phase I clinical trials to apply for P1101 to be conditionally listed in China.

In May 2020, our new drug application was reviewed and approved by Taiwan's Ministry of Health and Welfare (MHW), and in June, we received a drug permit from the MHW. Taiwan is now the first country in Asia to treat patients with PV with BESREMi®, and we are now applying for the National Health Insurance price.

Our new drug BESREMi® is not only used for treating patients with polycythemia, it can also treat essential thrombocythemia (ET) to benefit more patients with rare diseases. Phase III clinical trials of P1101 treatment for ET are being conducted in multiple countries (or regions) and centers around the world, including the United States, Taiwan, China, Japan, South Korea, and Hong Kong; as of August 25, 2020, Japan has received the first patient for this trial. The clinical trials are expected to include 160 patients and to be completed in 2022, after which, ET licenses shall be obtained in each of the participating countries.

(2) Budget

Unit: NT$1000

	2020 annual budget (A)	2020 actual figures (B)	Difference (B − A)
Operating revenue	1,327,896	557,257	(770,639)
Operating costs	(582,279)	(373,323)	208,956
Gross profit (loss)	745,617	183,934	(561,683)
Operating expenses	(2,386,382)	(1,899,786)	486,596
Net profit (loss)	(1,640,765)	(1,715,852)	(75,087)
Nonoperating revenue	15,832	(232,164)	(247,996)
Net profit (loss) before tax	(1,624,933)	(1,948,016)	(323,083)
Net profit (loss) this period	(1,624,933)	(1,948,142)	(323,209)
Other gains and losses	-	(13,089)	(13,089)
Total gains and losses this period	(1,624,933)	(1,961,231)	(336,298)

(3) Income and expenditure and profitability analysis

After receiving a PV license in Europe in 2020, we have continually released our products to AOP, resulting in a considerable growth in our operating revenue. However, as a new biotechnology drug company, we are still investing substantial amounts of money into researching and developing new drugs; therefore, we are still operating at an overall loss. The operating revenue for this year was NT$557,257,000, the operating net loss was NT$1,715,852,000, and the total loss for this period was NT$1,961,231,000; the loss per share was NT$8.04.

(4) Research and development

- 2020 annual research and development (R&D) staffing and expenses

Unit: NT$1000

Item/year		2020
R & D expenses	Operating revenue (A)	557,257
	R&D funds (B)	922,380
	Total staffing (C)	201 人
	Total R&D staffing (D)	60 人
	R&D funding as percentage of	209%

	operating revenue (B/A)	
	R&D staff percentage (D/C)	29.85%

- As a new biotechnology drug company, in addition to conducting phase III clinical trials for treating ET in multiple countries and centers around the world, we are also investing heavily in researching and developing new drugs. The overall R&D expenses for 2020 is expected to be at least 80% of the 2020 operating revenue.

- Recent awards and R&D achievements
  - **2020 Taipei Biotech awards:** Go-Global gold medal award for the Globalization marketing of BESREMI
  - GMP certification from the EMA and Taiwan's MHW for the Taichung factory
  - GMP certification from the EMA for our Taipei pilot production
  - Marketing authorization (MA) by the EMA for BESREMi®.

- 2020 Patent applications

Date of patent	Country	Patent Name	Patent Number
2020/1/15	European Union	Peptide-Polymer Conjugates	2313457
2020/2/12	European Union	Therapeutic Use of Protein-polymer Conjugates	2509593

2. Summary of the 2021 Business Plan

(1) P1101: for the treatment of blood diseases

- P1101 as a PV treatment: as of March 2020, we have submitted a BLA to the US FDA. On January 6, 2021, together with the FDA, Phramaessentia held a late cycle review meeting on the approval of P1101 in the US. The review meeting was successful, and the approval timeline has not changed; the PDUFA date remains March 13, 2021. Furthermore, we have expanded the PV clinical studies to Asia, and Japan's PMDA has approved the first phase of human clinical trials. Japan's PMDA requires the completion of 1 year of treatment for 30 Japanese patients to verify the safety and effectiveness of the drug before drug companies may apply for a drug license; these 1-year treatments are currently underway, and the bridging trials are proceeding smoothly; we expect to receive the drug license in

2022. In China, data from the bridging trials have been submitted as of September 2020, and we expect to receive the drug license in 2023. The application to license the drug in South Korea was submitted to the MFDS on September 1, 2020, and is expected to be approved in the second quarter of 2021.

- P1101 as a treatment for ET: As of August 2020, phase III human trials are being conducted in multiple countries and centers (e.g., the United States, Taiwan, Japan, China, and South Korea) around the world. These trials involve patients with ET who have received hydroxyurea (HU) treatments but demonstrated either resistance or intolerance to the treatments. The clinical trials are expected to include 160 patients and to be completed in 2022, after which, ET licenses shall be obtained in each of the countries where trials are being conducted.

(2) P1101 as a treatment for chronic hepatitis

- Hepatitis C genotype 2 (HCV GT2): the top-line results of our phase III clinical trials of P1101 as a treatment for HCV GT2 met the main efficacy indicators and have been submitted to the MHW as part of our application for a new drug registration. Pharmacokinetic trials of P1101 combined with ribavarin for treating patients with HCV GT2 have also been completed, and the trial results will be provided as supplementary information during the drug review process in accordance with relevant regulations.

(3) Cancer

- Anti-PD-1 antibodies: these are immune-checkpont inhibitors that can be used to treat various malignant tumors, such as malignant pigment tumors, non-small-cell lung cancer, and advanced renal cancer to considerably increase cancer patients' survival rates. However, this is an extremely expensive drug, placing a heavy burden on typical families. We intend to leverage our biological drugs R&D experience, production efficiency, and expertise in quality control to develop a high-quality and stable anti-PD-1 antibody and a platform for developing new monoclonal antibodies to lower production costs and lower the financial burden on patients. A small-scale trial production was carried out in 2019, and we plan to apply for clinical trials for an investigational new drug (IND) in 2021.
- Oraxol as a treatment for breast cancer: we have partnered with US company Athenex to codevelop Oraxol, an oral cancer treatment. Safety bridging studies in Taiwan will be merged with Athenex's South American three-stage clinical results and sent for review, in accordance with regulations in the United States, the United Kingdom, Australia, and New Zealand. Athenex has applied to the FDA for a drug license, which they expect to receive in the first quarter of 2021. This move will accelerate our timeline for acquiring drug

licenses in Taiwan, Singapore, and Vietnam.

- KX-01 (psoriasis): this product was licensed by Athenex, and we plan to develop a topical drug to treat indications of psoriasis. The phase I clinical trials began in the fourth quarter of 2015, and at present, we have progressed to the fourth stage of the phase I clinical trials, during which the highest dose is determined. In December 2020, the licensor acquired a US drug license to treat actinic keratosis (AK), and we plan to apply for a Taiwanese drug license in the first half of 2021. In regards to KX-01 as a treatment for psoriasis, the optimal treatment period under the highest dosage has yet to be determined, and the three phases of clinical trials will be scheduled according to the results.

(4) Expected sales volume and the basis of its calculation

BESREMi® has been approved by the EMA as a treatment for PV since February 2019, formally moving from clinical drug demands to commercialized mass production. Currently, BESREMi® is on the market in various countries and nearly half of all EU countries including Germany, Austria, the United Kingdom, France, Denmark, the Czech Republic, Sweden, Finland, Switzerland, and Liechtenstein. As BESREMi® gains approval in more EU countries along with the approval of drug prices, we envision a gradual expansion of the market for P1101 in Europe. The expected sales volume is mainly based on estimated orders provided by AOP, an authorized distributor in Europe. With regards to the US pharmaceutical market, in 2012, we expect to receive a US drug license for BESREMi® for treating PV. The expected sales volumes in the United States, Taiwan, South Korea, Hong Kong, and Singapore markets are based on local estimates on the number of patients and average number of injections per patient.

(5) Major production and marketing policies

- To facilitate applications for local drug licenses and government medical insurance subsidies, we will actively promote the international visibility of BESREMi®, strengthen the distribution of talent across subsidiaries in various regions, and appropriately use resources to grasp local regulations and medical needs. Furthermore, we will continue to maintain robust relationships with opinion leaders and hospital physicians treating blood cancer. We will also strive to receive priority certification in PV drug license applications in each country to shorten the licensing timeline and accelerate the market release.
- We will continue to promote the optimization and commercialized mass production of new generation process technologies in API protein factories to enhance productivity and lower costs.
- We will formally launch the Taichung injection plant to comply with the Pharmaceutical

Inspection Cooperation Scheme (PIC/S) GMP specifications on manufacturing injection products, effectively link upstream and downstream manufacturing, and improve the integrity of the product line. In the future, P1101 injections can be directly manufactured and shipped worldwide from Taiwan, fulfilling our vision for global market deployment.

- In anticipation of receiving a US FDA drug license for PV, we have established comprehensive sales and marketing teams, developed marketing approaches, applied for drug prices, and integrated our supply chain systems.

3. Future company development strategies

(1) Operation plans

In 2020, a drug license application for PV in the United Stated was submitted in March, and an application for a drug license for PV and an ODD in South Korea was submitted in September. The drug license for PV in Taiwan was awarded in the second quarter of 2020. We will continue to conduct three-phase ET clinical trials in the United States, South Korea, Japan, Taiwan, and China, as well as small-scale PV bridging studies in China and Japan. In 2021, we plan to request drug licenses from Taiwan's FDA for two licensed products, Oraxol (breast cancer) and KX-01 (AK).

(2) Marketing plans

The company's overall operations have formally shifted from R&D, clinical, and production stages into the independent planning and marketing stage. As stated, we received a PV drug license in Taiwan in June 2020 and expect to receive a PV drug license in the United States in 2021. We have also continued to hire marketing planning teams in Taiwan and the United States, especially targeting the US market. Our marketing planning teams have already completed market surveys and market entry planning; the next step is partnering with suppliers to complete the market and channel deployment. Our US subsidiary team will continue to form sales, marketing, and medical teams to establish a comprehensive operations team.

4. Effects from external competition, legal, and overall business environments

Since its establishment, our mission has been to develop new drugs and invest our resources into discovering innovative drugs, developing trials, establishing factories for production, and acquiring drug licenses to market our products internationally. We look forward to creating new drugs that are completely developed and made in Taiwan through a comprehensive vertical integration, as well as being able to keep pace with the rest of the world in clinical trials and sales.

Therefore, since its establishment in 2012, the Taichung biologics pilot plant has handled trial mass productions, Taiwan FDA inspections, and verification production required for drug license applications. Moreover, in 2018, the Taichung plant and the Taipei laboratory received GMP certifications from the EMA, making us Taiwan's first new drugs company with EMA-certified biologics plants. In December 2018, the EMA's Committee for Medicinal Products for Human Use recommended the approval of BESREMi®, and in February 2019, we formally received a drug license from the EMA. We will build a supply chain based on our global marketing plan and sales demand to fulfill our vision of "based in Taiwan, marketed around the world."

Through the P1101 technology platform that we developed, in addition to a complete global patent layout, we continue to use external resources and partner with reputable vendors for outsourcing. We have also built supply chains and sales channels through strategic alliances. Additionally, we have hired international experts with local knowledge to form core teams to ensure the quality of clinical trials and observe local regulations governing clinical trials to minimize the disparity between different countries. This helps us navigate local regulations and successfully control the progress and quality of our ongoing projects. Therefore, we will continue to focus on long-term sustainable development and fulfill our social obligations in the innovation of R&D technologies, marketing of released drugs, and integration of operational resources in order to achieve the greatest benefits for our shareholders.

Chairman: Ching-Leou Teng　　President: Jack Hwang　　Accounting Manager: Snow Chang

II. Company Profile

1. Date of Establishment

PharmaEssentia (hereinafter also referred to as "the Company") was founded on May 9, 1990 and began operations in October 2003. The Company is committed to developing new drug products, with Taiwan as the base where new drugs are innovated, invented, tested, produced, developed, and distributed across European and American countries to integrate with international markets.

2. Company History

Year	Important Milestones
1990	The Company was established, with paid-in capital of NT$1,000,000.
2003	Received additional capital of NT$500,000,000, raising paid-in capital to NT$501,000,000.
2004	Awarded the Small Business Innovation Research (SBIR) grant by the Department of Industrial Technology (DOIT), Ministry of Economic Affairs (MOEA), for the first stage of the Company's PEC002 drug development.
2005	Awarded the SBIR grant by the DOIT for the second stage of the Company's PEC002 drug development.
2006	Awarded a grant by Taiwan's MOEA for a project on the development of third generation Ropeginterferon alfa-2b (P1101). Invited to present new drug R&D results at the BIO International Convention. Received a drug permit for Gemflor (Gemcitabine; GCTB) from Taiwan's health regulatory authorities. Awarded the 4th National Innovation Award by the Institute for Biotechnology and Medicine Industry (IBMI). Received additional capital of NT$489,000,000, raising paid-in capital to NT$990,000,000.
2007	Awarded the SBIR grant by the DOIT for a project on PEG-EPO (pegylated erythropoietin) drug development. Received the Industry Innovation Award in Recognition of Achievement - Product/System Innovation Category from the DOIT.
2008	Designated a biotech and new biopharmaceutical company by the MOEA in accordance with the Act For The Development of Biotech and New Pharmaceuticals Industry. Received additional capital of NT$92,500,000, raising paid-in capital to NT$1,082,500,000.

Year	Important Milestones
2009	Granted US patent for stereoselective synthesis of β-nucleosides of Gemcitabine. Obtained TFDA approval for a P1101 Phase I clinical trial (MOHWFDA No. 0980303443 on June 11, 2009). Obtained U.S. FD approval for a P1101 Phase I clinical trial (IND 105,653, 7/20/2009). Obtained BGTD approval for a P1101 Phase I clinical trial in Canada (control # 131397, 8/14/2009). Licensed P1101 to AOP Orphan Pharmaceutical (AOP) of Austria for clinical trials of P1101 in the treatment of rare hematologic diseases in European regions and obtained a permit to sell P1101. Awarded an SBRI grant by the DOIT for a project on the research and development of new processes for anti-cancer GCTB and pilot production. Awarded an SBRI grant by the DOIT for a project on the development of long-acting interferon beta drugs. Initiated a P1101 Phase I clinical trial in Montreal, Canada. Received additional capital of NT$126,485,000, including NT$58,571,000 in capital contributions by claims, raising paid-in capital to NT$1,208,985,000.
2010	Awarded the 7th National Innovation Award - Corporate Group/R&D Technique Category by the IBMI. Awarded the 2010 Industry Innovation Award in Recognition of Achievement by the DOIT. Won Silver Award - Pharmaceutical Category in the 2010 Incentive Reward for Research and Development of Pharmaceutical Technology. Obtained US FDA Drug Master File (DMF) (No.24278) for GCTB API (active pharmaceutical ingredients). Received a TFDA drug permit for GCTB API. Concluded P1101 Phase I clinical trial in Canada; 48 subjects completed the trial. Initiated a P1101 Phase I/II clinical trial for treatment of PV (polycythemia vera) in Europe.
2011	Granted TFDA approval to conduct a P1101 Phase II clinical trial for treatment of hepatitis C (Genotype 1) (FDA No. 1005016854 dated May 17, 2011 and FDA No. 1015061146 dated February 4, 2013). P1101 received Orphan Designation from the EMA (European Medicines Agency) (127th plenary meeting of Committee for Orpha Medicinal Products, 10/5/2011). Won Award of Excellence – Biomedical Group in the 2011 Taiwan Biomedical and Biotech Agriculture Contest. AOP presented Phase I/II interim data of P1101 for PV in Europe at the America

Year	Important Milestones
	Society of Hematology (ASH) Annual Meeting and Exposition.
2012	P1101 obtained US patent for N-terminal modified interferon alpha. P1101 obtained US patent for protein–polymer conjugates. GCTB obtained US patent for novel synthesis of β-nucleosides. GCTB obtained an R.O.C. patent for stereoselective synthesis of β-nucleosides. Long-acting PEG-EPO obtained a US patent for protein–polymer conjugates. P1101 received Orphan Designation from the US FDA (#12-3670, 4/2/2012). Granted TFDA approval to conduct a P1101 Phase II clinical trial for the treatment of hepatitis C (Genotype 2) (FDA No. 1015013110 dated April 19, 2012 and FDA No. 1025015443 dated May 17, 2013). Completed plant construction for new protein drugs manufacturing in Taichung and commenced pilot production for validation in November. AOP presented Phase I/II clinical trial data of P1101 for PV in Europe at the ASH Annual Meeting and Exposition.
2013	Received NT$252,015,000 in capital contributions by claims, raising paid-in capital to NT$1,461,000,000. Production plant for protein new drugs in Taichung obtained a TFDA GMP certificate on April 18. P1101 obtained an R.O.C. patent for protein–polymer conjugates. P1101 obtained patents for protein–polymer conjugates from nine member states of the Eurasian Economic Union. Received NT$220,000,000 in cash, raising paid-in capital to NT$1,681,000,000. Received NT$70,000,000 in cash, raising paid-in capital to NT$1,751,000,000. Initiated a Phase III clinical trial of P1101 for PV in Europe. Won the Taipei Biotech Award – Gold in the 2013 R&D Innovation Award. Received NT$17,520,000 from subscription of employee stock options, raising paid-in capital to NT$1,768,520,000. Won Gold Award – Biomedical Group in the 2013 Taiwan Biomedical and Biotech Agriculture Contest. Received NT$100,000,000 in cash, raising paid-in capital to NT$1,868,520,000. Held a Pre-IND meeting with the US FDA to talk about Phase III clinical trial of P1101 for PV treatment in the US. AOP and multiple hematologic specialists presented the results of the P1101 PV clinical trial in Europe and other groundbreaking basic study results at the ASH Annual Meeting and Exposition. Listed as a public company by the Securities and Futures Bureau, Financial Supervisory Commission (stock code: 6446).

Year	Important Milestones
2014	Received NT$23,302,000 from subscription of employee stock options, raising paid-in capital to NT$1,888,828,000. Listed on the Emerging Stock Market by Taipei Exchange. P1101 obtained Australia patent for protein–polymer conjugates. P1101 for MF (myelofibrosis) treatment received Orphan Designation from the US FDA (#14-4244, 4/1/2014). P1101 for ET (essential thrombocythemia) treatment received Orphan Designation from the US FDA (#14-4245, 4/1/2014). Completed recruitment in Taiwan for a Phase II clinical trial of P1101 hepatitis C GT2 treatment. Received notice of IND (investigational new drug) acceptance from the US FDA for Phase III trial of P1101 for ET. Awarded the 11th National Innovation Award - Corporate Group/Innovative Product Category by the IBMI.
2015	Received US FDA approval to conduct a clinical trial of P1101 on primary myelofibrosis in the US. Completed the recruitment of a Phase III study (PROUD-PV) of P1101 for the treatment of PV. Received TFDA approval to conduct a Phase III clinical trial of P1101 for HCV GT2. Obtained a “successful and marketable opinion on science and technology business and product or technology development” issued by the Industrial Development Bureau, MOEA. Submitted an IND application to the TFDA in December 2014 after obtaining the licensing rights from Kinex Pharmaceuticals for the development of the new drug KX01 in Greater China and Southeast Asian territories, and received approval from the TFDA on May 27, 2014. Won the MOHW & MOEA Pharmaceutical Technology Research and Development Award and Gold Award – Pharmaceutical Category. Received NT$14,004,000 from subscription of employee stock options, raising paid-in capital to NT$1,902,832,000.
2016	Collaborated with the Hematology Society of Taiwan to jointly organize “MPN Asia,” the 1st Annual International Symposium on Myeloproliferative Neoplasms. Received MFDS approval to conduct a Phase III clinical study of P1101 for HCV GT2 treatment. Received TFDA approval to conduct a clinical trial protocol (IND) for Oraxol (HM30181 tablets 15 mg/Paclitaxel capsules 30 mg) in breast cancer treatment. Publicly listed on the Taipei Exchange.

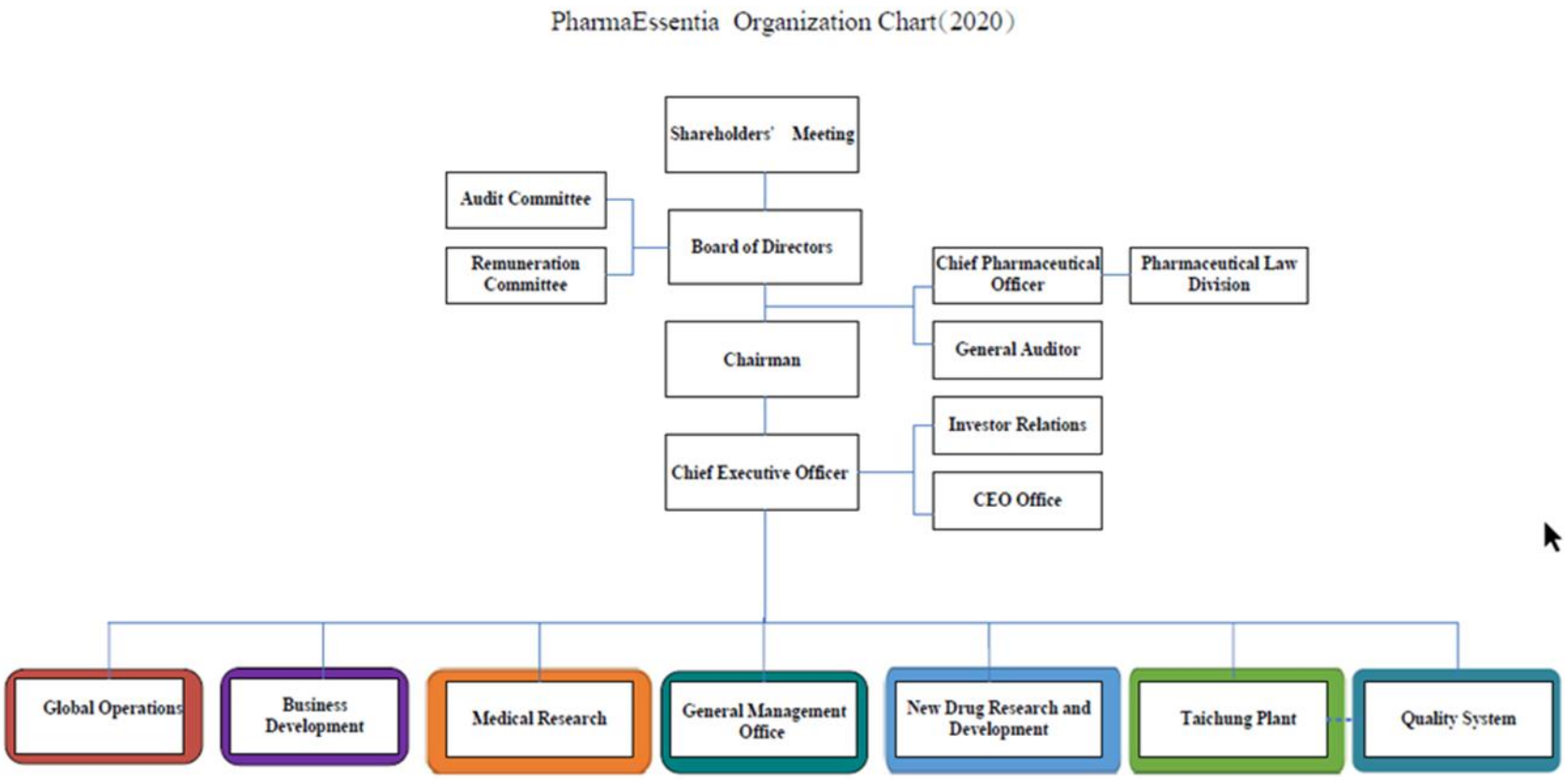
Year	Important Milestones
	AOP presented the pivotal study results of P1101 in PV treatment at the 2016 ASH Annual Meeting and Exposition. P1101 obtained a South Korea patent for protein–polymer conjugates. Received NT$14,004,000 from subscription of employee stock options, NT$23,708,000 from restricted employee stocks, and NT$250,000,000 in cash, raising paid-in capital to NT$2,184,601,000.
2017	Established the subsidiaries PharmaEssentia Japan KK and PharmaEssentia USA Corporation.. Received TFDA approval to conduct a registration trial of the concurrent use of Oraxol and Ramucirumab Solution in the treatment of advanced gastric and esophageal cancer. Hosted the MPN Asia 2nd Annual International Symposium on Myeloproliferative Neoplasms in Japan. Received US FDA approval for Compassionate Use of P1101 for treatment of PV patients stably controlled on Pegasys. The Company's P1101 was listed in Priority Review by the CFDA. Received approval from the MOHW for the compassionate use of P1101 in patients with persistent MF and ET. The Company's European partner AOP Orphan submitted an application to EMA for permission to sell the Company's P1101 on the market. The Company's strategic partner AOP presented the CONTI-PV clinical result of P1101 for PV treatment at the 2017 ASH Annual Meeting and Exposition. Received NT$5,649,000 from subscription of employee stock options and cancelled NT$(2,954,000) in restricted employee stocks, raising paid-in capital to NT$2,187,208,000.
2018	PharmaEssentia's Taichung Plant received a GMP certificate approved by the EMA and Taiwan's MOHW. PharmaEssentia's Taipei Laboratory received a GMP certificate approved by the EMA. TGA permitted a Phase I trial for P1101 in Japan. Filed anti-arbitration injunction with the International Chamber of Commerce (ICC) for the AOP arbitration case. Received CFDA approval to conduct a clinical trial of P1101 in China. CHMP recommended granting marketing authorization for Besremi® (P1101) by AOP. Received CFDA approval to conduct an international multicenter clinical trial of P1101 for chronic hepatitis C GT2 in China.

Year	Important Milestones
	Received NT$5,750,000 from subscription of employee stock options and cancelled NT$(2,109,000) in restricted employee stocks, raising paid-in capital to NT$2,190,849,000.
2019	The EMA granted marketing authorization application (MAA) for AOP's P1101 (Besremi®) on February 19. Received TFDA approval to conduct a registration trial of the Company's P1101 (injection 500 μg/mL). Received meeting minutes of face-to-face discussion with the US FDA on PV treatment. Received approval from the MOHW to conduct a registrational trial of Oraxol for prostate cancer treatment. EMA website announced AOP's withdrawal of orphan designation for Besremi® for PV treatment.
2020	The Corporation submitted a New Drug Application for PV to the U.S. FDA. The new pharmaceutical manufacturing branch of the Corporation's Taichung Plant passed the certification for GMP and GDP issued by Taiwan's Ministry of Health and Welfare. The Corporation's New Drug Application for Ropeginterferon alfa-2b was approved by Taiwan's Ministry of Health and Welfare; the indication is adult PV in the absence of symptomatic splenomegaly. PharmaEssentia Corporation acquired 100% ownership of Panco Healthcare Co. Ltd., which is responsible for the marketing, sale, and distribution of PharmaEssentia's pharmaceutical products. The Corporation's phase Ib clinical trial proposal for P1101, which is used to treat chronic hepatitis B or chronic hepatitis B with hepatitis D, was approved for implementation by Taiwan's Ministry of Health and Welfare. The Corporation submitted a New Drug Application for Ropeginterferon alfa-2b to South Korea's Ministry of Food and Drug Safety; the indication is PV.
	The Corporation's Taichung Plant was certified by the South Korea's Ministry of Food and Drug Safety for GMP. Pyramid, a US syringe-filling service provider contracted by the Corporation, completed the U.S. FDA's preapproval inspection, which revealed no serious or major nonconformity. The Corporation signed an additional agreement of authorization for KX01 with Athenex to authorize the drug for use in additional countries and to include more indications in the agreement.

III. Corporate Governance

1. Organization System

A. Organization Chart



B. Major Department Functions

Department	Functions
CEO	Execute policies and major plans resolved by the Board of Directors. Establish a group vision, seek development opportunities, and build organizational power to realize the Company's vision. Collate and stipulate the group's global operation plans as well as policies and strategies for the development of regional operations. Develop various resources and seek a market niche to devise future mid-/long-term development plans. Supervise and manage the various plans made and goals achieved by the Company.
Global Operations	Collate and stipulate short-/mid-/long-term strategies for global business operations to develop new drug markets in different countries. Conduct market trend assessment and development planning. Plan and conduct product commercialization management. Plan technology transfer and product authorization. Vie for international strategic partners.
Operations in Taiwan	Develop and cultivate the market in Taiwan and plan operational strategies and goals for Taiwan. Plan and implement mid-/long-term operational plans for Taiwan. Promote key academic research collaboration and supervise technology development programs for industries. Supervise and manage the various plans made and goals achieved by various units.
New Drug R&D	Screen for and assess candidate drugs, research and develop dosage/formulas, and develop drug products. Evaluate in-vitro screening methods and build animal assessment models (primarily outsourced). Conduct small mass production of candidate drugs for early toxicological or animal testing requirements. Transfer technology to GMP (good manufacturing practice) production department (or outsourced GMP manufacturer) for mass production. Ensure that product does not infringe upon patent and apply for patent. Develop, verify, and validate drug molecular analysis methods. Characterize and identify product purity and impurity structure. Assess and introduce new technologies, improve analytical methods, and transfer analytical techniques. Manufacture, identify, and analyze the activities of new antibody drugs.

Department	Functions
Medical Research	Plan clinical trial protocols, compile and submit clinical trial protocols for review, select study center and investigators, and assess and select a contact research organization (CRO). Conduct clinical trials and coordinate with institutional review boards (IRBs), the CRO, medical institutions, clinical study centers, study investigators, and researchers to ensure trial quality and progress. Track clinical trial progress, write up reports on the adverse reactions of the studied drug, report on statistical analysis of study results, and study reports, as well as communicate with relevant regulatory units in Taiwan and overseas. Plan product medical strategies, interact and communicate with external academic experts, and launch academic events for the medical community. Assist with application for technology development programs.
Taichung Plant	Conduct process development and feasibility study. Conduct process amplification, improvement, and technology transfer. Synthesize drugs and conduct small mass production for early toxicological or animal testing requirements. Apply for patents and assist with completing drug development and market introduction. Plan and conduct GMP biopharmaceutical product production and manufacturing operations. Plan and conduct production and logistics management operations. Plan and conduct improvements to construction works and maintenance and servicing of various support systems. Ensure that production procedures are compliant with GMP regulations. Plan and conduct procurement operations for the Taichung Plant to achieve the purpose of cost-effective procurements. Plan and conduct operations related to plant safety and health, including environmental protection, fire prevention management, and building safety inspections. Conduct matters related to the management of general affairs, company cars, and dormitories. Conduct matters concerning liaison and business dealings with the Central Taiwan Science Park.

Department	Functions
Quality System	Plan and conduct GMP quality control (QC) operations at QC laboratories. Conduct raw material monitoring, in-process control (IPC), and intermediate and product inspections. Conduct water for injection (WFI) system and heating, ventilation, and air conditioning (HVAC) monitoring. Conduct lab procedures in accordance with GMP regulations (accept transfer of analytical methods, conduct instrument verification, accept validation of analytical methods, and perform stability tests). Plan and conduct operational management and educational training related to GMP-based quality assurance systems. Conduct quality system operating procedures in line with GMP regulations (conduct product release, documentation management, out of specification [OOS] tests, corrective and preventive measures, change of control, and validation implementation operations).
General Management Office	Business Planning: Plan and conduct business analysis and propose planning recommendations. Finance and Accounting: Plan budgeting system, supervise budgeting progress, and conduct various financial and accounting operations. Intellectual Property and Legal Affairs: Plan and conduct personnel and training systems for stronger human resource management. Information: Plan and establish informational systems and manage computer systems and information safety. Procurement: Plan and conduct procurement operations to achieve the purpose of cost-effective procurements. Investor Relations: Establish a sound spokesperson system, maintain media relations and disclose information, organize investor relation activities, and handle investor opinions.

2. Information on the Company's Directors, Supervisors, General Manager, Assistant General Managers, Deputy Assistant General Managers, and the Heads of all the Company's Divisions and Branch Units

A. Directors

As of March 28, 2021; Shares; %

Title	Nationality or Place of Registration	Name	Gender	Date Elected	Term of Contract	Date First Elected	Shareholding When Elected		Current Shareholding		Spouse & Minor Shareholding		Shares Held Through Nominees		Principal Work Experience and Academic Qualifications	Selected Current Positions at PharmaEssentia and Other Companies	Spouse of or Related Within the Second Degree of Kinship to Any Head of Department, Director, or Supervisor		
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relationship
Chairman	R.O.C.	Ching-Leou Teng	Female	107.6.25	3 years	101.9.24	2,407,428	1.10	2,783,046	1.06	200,000	0.08	-	-	• Ph.D. in Pharmaceutics, University of Michigan • Post-Doctoral Fellowship, University of Michigan • Reviewer, US Food and Drug Administration (FDA) • Assistant Director, ISIS Pharmaceutical, Inc.	• Chief Pharmaceutical Officer, PharmaEssentia • Director, PharmaEssentia Asia (Hong Kong) Limited. • Director, PharmaEssentia (Hong Kong) Limited. • Director, PharmaEssentia Japan KK • Director, PharmaEssentia USA.,LLC	-	-	-
Director	R.O.C.	Chao-Ho Chen	Male	107.6.25	3 years	98.6.30	3,077,196	1.40	4,155,401	1.58	814,028	0.31	-	-	• National Taipei University of Technology	• Chairman, Hong Tai Co., Ltd. • Chairman, Hong Tai Investment Co., Ltd. • Supervisor, Hong Chih Co., Ltd. • Director, PharmaEssentia Asia (Hong Kong) Limited. • Director, PharmaEssentia (Hong Kong) Limited.	-	-	-
Director	R.O.C.	Tian Chang	Male	107.6.25	3 years	95.6.30	-	-	-	-	-	-	-	-	• Director, Chinese National Federation of Industries • Executive Director, Food Association of Taiwan • Consultant, Taiwan Bakery Association • Director & General Manager, Hunya Foods Co. Ltd.	• -	-	-	-

Title	Nationality or Place of Registration	Name	Gender	Date Elected	Term of Contract	Date First Elected	Shareholding When Elected		Current Shareholding		Spouse & Minor Shareholding		Shares Held Through Nominees		Principal Work Experience and Academic Qualifications	Selected Current Positions at PharmaEssentia and Other Companies	Spouse of or Related Within the Second Degree of Kinship to Any Head of Department, Director, or Supervisor		
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relationship
Director	R.O.C.	Ben-Yuan Chen	Male	107.6.25	3 years	95.6.30	1,426,886	0.65	1,855,415	0.70	217,752	0.08	-	-	• Department of Electronic Engineering, National Taipei University of Science and Technology • Chairman, Association of Taiwan Private School Culture and Education R.O.C. • Teacher, Department of Electronics, the Affiliated Industrial Vocational High School of National Changhua University of Education, Taichung Municipal Taichung Industrial High School • President, Alumni Association of Taichung Municipal Taichung Industrial High School • President, Alumni Association of National Taipei University of Science and Technology	• Chairman, Chuan Hwa Book Co., Ltd. • Chairman, Yui-Da Culture Business Co., Ltd. • Chairman, Chuen-Yi Information Co., Ltd. • Chairman, Chuan-Hsun Computers Co., Ltd. • Chairman, Taichung Chih-Yung Senior High School • Chairman, Nantou Jerry Foundation • Chairman, Da-Kao Communications Co., Ltd.	-	-	-
Director	R.O.C.	Rep: Lung-Chih Yu	Male	107.6.25	3 years	95.6.30	-	-	-	-	-	-	-	-	• Ph.D., Biochemical Science, National Taiwan University • Researcher, Medical Research Department, MacKay Memorial Hospital	• Professor & Director, Graduate Institute of Biochemical Science, National Taiwan University • Assistant Researcher, Graduate Institute of Biochemistry, Academia Sinica (jointly appointed)	-	-	-
	R.O.C.	National Development Fund, Executive Yuan					22,066,296	10.07	22,066,296	8.37	-	-	-	-			-	-	-
Director	R.O.C.	Rep: Hui-Ping Wang	Male	107.6.25	3 years	95.6.30	-	-	-	-	-	-	-	-	• Master's, Law, National Taiwan University • Officer, Ministry of Justice • Specialist, Chief, & Senior Executive Officer, Ministry of Economic Affairs • Supervisor, Taiwan Power Company	• Counsellor & Executive Secretary, Regulatory Committee, Ministry of Economic Affairs • Director, Taiyen Biotech	-	-	-
	R.O.C.	Yao-Hwa Co., Ltd. Management Commission					9,666,000	4.41	9,666,000	3.67	-	-	-	-			-	-	-

Title	Nationality or Place of Registration	Name	Gender	Date Elected	Term of Contract	Date First Elected	Shareholding When Elected		Current Shareholding		Spouse & Minor Shareholding		Shares Held Through Nominees		Principal Work Experience and Academic Qualifications	Selected Current Positions at PharmaEssentia and Other Companies	Spouse of or Related Within the Second Degree of Kinship to Any Head of Department, Director, or Supervisor		
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relationship
															• Supervisor, Taiyen Biotech • Director, CSBC Corporation				
Director	R.O.C.	Jack Hwang	Male	107.6.25	3 years	104.5.29	1,082,025	0.49	1,330,073	0.50	674,006	0.26	-	-	• Ph.D., Organic Chemistry, University of Pennsylvania, USA • Director, Optimer Pharmaceuticals, Inc., USA • Team Leader, Array BioPharma Inc., USA • Researcher, Amgen Inc., USA	• Supervisor, PharmaEssentia Biotechnology (Beijing) Co., Ltd.	-	-	-
Director	R.O.C.	Shi-Ying Hsu	Male	107.6.25	3 years	101.9.24	21,000	0.01	416,616	0.16	-	-	-	-	• School of Pharmacy, Taipei Medical University • Assistant General Manager, Business Division, Boehringer Ingelheim • Operations Consultant, VIS Pharmaceutical Company • Marketing/Business Consultant, Boehringer Ingelheim	• -	-	-	-
Independent Director	U.S.	Patrick Y. Yang	Male	107.6.25	3 years	103.3.27	-	-	-	-	-	-	-	-	• Ph.D., Electrical Engineering, Ohio State University, USA • Executive Vice President, Operations Department, Genentech Biotech, USA • President, Global Technology Operations, Roche Pharmaceuticals, Switzerland • Vice President, Merck, USA • Member, Bio Taiwan Committee, Executive Yuan	• Executive Vice President, Juno Therapeutics • Chairman, Acepodia, Inc. • Chairman, Stempodia Biotech, Inc. • Chairman, Archigen Biotech, Ltd. (UK) • CEO, Patrick Y. Yang, LLC • Senior Advisor to the CEO, AstraZeneca • Board Director, Andeavor Corporation • Board Director, Codexis, Inc. • Board Director, Amyris, Inc. • Director, AbGenomic • Director, Taiwania Capital	-	-	-

Title	Nationality or Place of Registration	Name	Gender	Date Elected	Term of Contract	Date First Elected	Shareholding When Elected		Current Shareholding		Spouse & Minor Shareholding		Shares Held Through Nominees		Principal Work Experience and Academic Qualifications	Selected Current Positions at PharmaEssentia and Other Companies	Spouse of or Related Within the Second Degree of Kinship to Any Head of Department, Director, or Supervisor		
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relationship
Independent Director	R.O.C.	Jinn-Der Chang	Male	107.6.25	3 years	103.3.27	-	-	91,511	0.03	-	-	-	-	• Ph.D., Accounting, Federal State International University, USA • Ph.D., Law, National Chung Cheng University • Dean, School of Management, Chaoyang University of Science and Technology/Chair Professor, Department of Accounting • Associate Professor, Graduate Institute of Accounting, National Chengchi University • Associate Professor, Graduate Institute of Business Administration, Taipei University • Associate Professor, Department of Financial and Economic Law, Asia University • Dean, Department of Accounting, Chinese Cultural University • First Chairman, R.O.C. Association of Accountants • Member, Taiwan Provincial Government Appeals Review Committee • Auditor, Taipei National Tax Bureau Audit Department, Ministry of Finance • Examiner, Examination Yuan • Consellor, National Audit Office, R.O.C.	• Director, CROWN& CO., CPAs • Chair Professor, Dept. of Financial and Economic Law & Dept. of Accounting and Information Systems, Asia University • Adjunct Professor, Department of Law, National Chung Hsing University • Independent Director, Taiwan Concord Capital Securities Limited • Independent Director, Hua Eng Wire & Cable • Chairman, Jude Enterprise Management Consulting Co., Ltd. • Chairman, Guanbao International Consulting Co., Ltd. • Director, CROWN& CO. Tairi Consulting • Director, CROWN& CO. Consulting •	-	-	-

Title	Nationality or Place of Registration	Name	Gender	Date Elected	Term of Contract	Date First Elected	Shareholding When Elected		Current Shareholding		Spouse & Minor Shareholding		Shares Held Through Nominees		Principal Work Experience and Academic Qualifications	Selected Current Positions at PharmaEssentia and Other Companies	Spouse of or Related Within the Second Degree of Kinship to Any Head of Department, Director, or Supervisor		
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relationship
Independent Director	R.O.C.	Jien-Heh Tien	Male	107.6.25	3 years	107.6.25	2,000	0	2,000	0	-	-	-	-	• Ph.D., Organic Chemistry, University of Massachusetts, USA • Section Manager, Abbott Laboratories • Associate Director, Theravance Inc. • Senior Director, ARYx Therapeutics Inc., USA • Chairman, Sanli Pharmaceutical Technology Co., Ltd. • Consultant, Xufu Pharmaceutical Technology Co., Ltd.	• Chief Scientific Officer, Sunny Pharmatech Inc.	-	-	-

B. Major Shareholders of Institutional Shareholders

As of March 28, 2021

Name of Institutional Shareholders	Major Shareholders of Institutional Shareholders
National Development Fund, Executive Yuan	In accordance with Article 29 of the Statute for Industrial Innovation, the Executive Yuan establishes the National Development Fund and a Management Commission that organizes matters related to fund collection and payment, safekeeping, and use. The Management Commission shall comprise 11 to 13 members, all of whom shall be appointed (hired) by the Executive Yuan.
Yao-Hwa Co., Ltd. Management Commission	The Yao-Hwa Co., Ltd. Management Commission is a management commission managed by the Ministry of Economic Affairs. Currently, the Management Commission comprises 2–6 citizen representatives and 8 government representatives.

C. Major Shareholders of Institutions that serve as Institutional Shareholders

Name of Institution	Major Shareholder of Institution
-	-

D. Professional Qualifications and Independence Analysis of Directors

Name \ Criteria	Meet the Following Professional Qualification Requirements, Together With at Least 5 Years of Work Experience			Independence Criteria (Note)												Number of Other Taiwanese Public Companies in Which He or She Concurrently Serving as an Independent Director
	Instructor or Higher Position in a Department of Commerce, Law, Finance, Accounting, or Other Academic Department Related to the Business Needs of the Company in a Public or Private Junior College, College or University	Judge, Public Prosecutor, Attorney, Certified Public Accountant, or Other Professional or Technical Specialist Who Has Passed a National Examination and Been Awarded a Certificate in a Profession Necessary for the Business of the Company	Possesses Work Experience in Commerce, Law, Finance, or Accounting, or That is Otherwise Necessary for the Business of the Company	1	2	3	4	5	6	7	8	9	10	11	12	
Ching-Leou Teng			✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Chao-Ho Chen			✓	✓			✓		✓	✓	✓	✓	✓	✓	✓	0
Tian Chang			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Ben-Yuan Chen			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Lung-Chih Yu	✓		✓	✓		✓	✓		✓	✓	✓	✓	✓	✓		0
Hui-Ping Wang			✓	✓		✓	✓		✓	✓	✓	✓	✓	✓		0
Jack Hwang			✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Shi-Ying Hsu			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Patrick Y. Yang			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Jinn-Der Chang	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1
Jien-Heh Tien			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0

(1) Not an employee of the Company or any of its affiliates.
(2) Not a director or supervisor of any of the Company's affiliates (however, being an independent director concurrently in the Company, itsparent company, subsidiaries or subsidiaries of the same parent company in accordance with the Law or local regulations is not restricted here).
(3) Not a natural-person shareholder or holder of shares, together with those held by a spouse, minor children, or held by the person under other names, in an aggregate amount of one percent or more of the total number of issued shares of the company or ranking within the top 10 in holdings.
(4) Not a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship, of any of the managers mentioned in the paragraph (1) or persons mentioned in the paragraph (2), (3).
(5) Not a director, supervisor, or employee of an institutional shareholder that directly holds five percent or more of the total number of issued shares of the Company, or ranks as its top five shareholders, or has designated representative in accordance of Article 27 Section 1 or 2 in the Company as director/supervisor (however, being an independent director concurrently in the Company, its parent company, subsidiaries or subsidiaries of the same parent company in accordance with the Law or local regulations is not restricted here).
(6) Not a director, supervisor, or employee of other companies with the Board seats or more than half of the voting shares under control of one person (however, being an independent director concurrently in the Company, its parent company, subsidiaries or subsidiaries of the same parent company in accordance with the Law or local regulations is not restricted here).
(7) Not a director, supervisor, or employee of other companies whose chairman or general manager are the same person or spouse of the Company (however, being an independent director concurrently in the Company, its parent company, subsidiaries or subsidiaries of the same parent company in accordance with the Law or local regulations is not restricted here).
(8) Not a director, supervisor, manager, or shareholder holding five percent or more of the shares of a specified company or institution that has a financial or business relationship with the Company (however, if a specified company or institution possessing shareholdings of more than 20% and less than 50% of the total number of issued shares of the Company, and being an independent director concurrently in the Company, its parent company, subsidiaries or subsidiaries of the same parent company in accordance with the Law or local regulations is not restricted here).
(9) Not a professional individual, or an owner, partner, director, supervisor, or manager or spouse thereof of a sole proprietorship, partnership, company, or institution that provides auditing services or for the past two years, has provided commercial, legal, financial, accounting or consultation services amounted to less than a cumulative NTD500,000 to the Company or to any affiliate of the Company. However, members of the Remuneration Committee, Public Tender Offer Review Committee or Special Merger and Acquisition Committee acting in accordance of Securities and Exchange Act or Business Mergers and Acquisitions Act are not restricted here.
(10) Not having a marital relationship with, or not a relative within the second degree of kinship of any other director of the Company.
(11) Not under any circumstances as noted in Article 30 of Company Act.
(12) Not a governmental, juridical person or its representative as defined in Article 27 of Company Act.

E. The General Manager, Assistant General Managers, Deputy Assistant General Managers, and the Chiefs of all the Company's Divisions and Branch Units

Title	Nationality or Place of Registration	Name	Gender	Date Elected	Shareholding		Spouse & Minor Shareholding		Shares Held Through Nominees		Principal Work Experience and Academic Qualifications	Positions at Other Companies	Managers Who Are Spouses or Within Two Degrees of Kinship		
					Shares	%	Shares	%	Shares	%			Title	Name	Relationship
CEO	R.O.C.	Ko-Chung Lin	Male	106/1/1	3,553,964	1.35	1,300,000	0.49	-	-	• Ph.D., Chemistry, University of Missouri • Post-doctoral Fellowship, Anti-Cancer Drug Innovation Research, University of Missouri • Former Head of Adentri™ Program & Pegylated-Avonex™ Program, Biogen Inc. • Lead inventor of PEG-IFN b (Plegridy), Biogen Inc., Monsanto – Searle	• Director, PharmaEssentia USA Corporation. • Director, PharmaEssentia Japan KK • Executive Director, PharmaEssentia Biotechnology (Beijing) Co., Ltd.	-	-	-
General Manager	R.O.C.	Jack Hwang	Male	104/6/25	1,330,073	0.50	674,006	0.26	-	-	• Ph.D., Organic Chemistry, University of Pennsylvania, USA • Director, Optimer Pharmaceuticals, Inc., USA • Team Leader, Array BioPharma Inc., USA • Researcher, Amgen Inc., USA	• Supervisor, PharmaEssentia Biotechnology (Beijing) Co., Ltd. •	-	-	-
Chief Pharmaceutical Officer	R.O.C.	Ching-Leou Teng	Female	104/6/25	2,783,046	1.06	200,000	0.08	-	-	• Ph.D. in Pharmaceutics, University of Michigan • Post-Doctoral Research, University of Michigan • Reviewer, US FDA • Assistant Director, ISIS Pharmaceutical, Inc.	• Director, PharmaEssentia USA Corporation. • Director, PharmaEssentia Japan KK • Director representative, PharmaEssentia Asia (Hong Kong) Co., Ltd. • Director representative, PharmaEssentia (Hong Kong) Co., Ltd.	-	-	-
Medical Officer	USA	Albert Qin	Male	106/1/13	20,000	0.01	-	-	-	-	• Ph.D., Biochemistry and Molecular Pharmacology, Harvard University (1994) • Various positions at international advanced pharmaceutical companies, including senior scientists, clinical assistant directors, clinical general directors, chief	• -	-	-	-

Title	Nationality or Place of Registration	Name	Gender	Date Elected	Shareholding		Spouse & Minor Shareholding		Shares Held Through Nominees		Principal Work Experience and Academic Qualifications	Positions at Other Companies	Managers Who Are Spouses or Within Two Degrees of Kinship		
					Shares	%	Shares	%	Shares	%			Title	Name	Relationship
											scientific officers, and executive directors • Chief Scientific Officer, SymBio in Japan • Medical Director, ImmunoGen, USA • Associate Director, Pfizer • Pharmacologist, Bayer Pharmaceuticals, USA • Biologist, Biogen USA				
Chief Operating Officer, Taichung Plant	R.O.C.	Yen-Tung Luan	Male	103/10/1	167,612	0.06	-	-	-	-	• MSc, Biochemical Engineering, Drexel University, USA • Senior Engineer, Process Development, Genetics Institute, Inc., USA • Lead Engineer, Cell Culture Development, Wyeth Pharmaceuticals • Associate Lead Engineer, Process Development, Pfizer Pharmaceuticals	• -	-	-	-
Senior Manager of Finance	R.O.C.	Snow Chang	Female	104/10/14	61,943	0.02	-	-	-	-	• Master, Accounting, Soochow University • Senior Manager, KGI Securities • Manager, First Taiwan Securities Inc. • Assistant Manager, Jih Sun Securities Co., Ltd. • Senior Auditor, SOLOMON & CO., CPA	• Director, PharmaEssentia Japan KK	-	-	-

3. Remuneration Paid to Directors, Supervisors, General Managers, Assistant General Managers

A. Remuneration Paid to Directors (Including Independent Directors)

Unit: NT$1,000; 1,000 shares

Title	Name	Directors' Remuneration								Ratio of Total Remuneration (A+B+C+D) to Net Income After Tax (%)		Relevant Remuneration Received by Directors Who are Also Employees								Ratio of Total Remuneration (A+B+C+D+E+F+G) to Net Income After Tax (%)		Compensation Paid to Directors From Invested Companies, Other Than Subsidiaries
		Base Compensation (A)		Severance Pay and Pensions (B)		Compensation to Director (C)		Allowances (D)				Salary, Bonuses, and Allowances (E)		Severance Pay and Pensions (F)		Employee Bonus (G)						
		From PharmaEssentia	From All Consolidated Entities	From PharmaEssentia	From All Consolidated Entities	From PharmaEssentia	From All Consolidated Entities	From PharmaEssentia	From All Consolidated Entities	From PharmaEssentia	From All Consolidated Entities	From PharmaEssentia	From All Consolidated Entities	From PharmaEssentia	From All Consolidated Entities	From PharmaEssentia		From All Consolidated Entities		From PharmaEssentia	From All Consolidated Entities	
																Cash	Stock	Cash	Stock			
Chairman	Ching-Leou Teng	-	-	-	-	-	-	40	40	-	-	8,055	8,055	-	-	-	-	-	-	-0.41%	-0.41%	None
Director	Chao-Ho Chen	-	-	-	-	-	-	40	40	-	-	-	-	-	-	-	-	-	-	-	-	None
Director	Tian Chang	-	-	-	-	-	-	40	40	-	-	-	-	-	-	-	-	-	-	-	-	None
Director	Ben-Yuan Chen	-	-	-	-	-	-	40	40	-	-	-	-	-	-	-	-	-	-	-	-	None
Director	Lung-Chih Yu	-	-	-	-	-	-	35	35	-	-	-	-	-	-	-	-	-	-	-	-	None
Director	Hui-Ping Wang	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	-	None
Director	Jack Hwang	-	-	-	-	-	-	40	40	-	-	8,055	8,055	-	-	-	-	-	-	-0.41%	-0.41%	None
Director	Shi-Ying Hsu	-	-	-	-	-	-	40	40	-	-	-	-	-	-	-	-	-	-	-	-	None
Independent Director	Patrick Y. Yang	-	-	-	-	-	-	40	40	-	-	-	-	-	-	-	-	-	-	-	-	None
Independent Director	Jinn-Der Chang	-	-	-	-	-	-	40	40	-	-	-	-	-	-	-	-	-	-	-	-	None
Independent Director	Jien-Heh Tien	-	-	-	-	-	-	40	40	-	-	-	-	-	-	-	-	-	-	-	-	None

* Management Committee Representative of Yao Hwa Glass Co. Ltd reappointed representative Hui-Ping Wang as the director on June 11, 2020

1. Please describe the payment policy, system, standard and structure of remuneration of independent directors, and describe the factors considered when determining directors' fees such as the borne responsibility, risk and time commitment etc. According to the regulations of Articles of Incorporation of the Company, Remuneration Committee will determine remuneration of the directors according to their engagement in the operations of the Company by considering the normal industry payment standard, and make proposal to Board of Directors for resolution. Currently the Company pays NT$5,000 as traffic allowance for each attending Board of Directors Meeting.

2.Apart from those disclosed in the above table, the remuneration received by company directors for providing service to all companies in financial report in recent years (such as taking a post as an adviser other than an employee etc.): N.A.

Director Remuneration Bracket

Remuneration the Company Paid to Each Director by Range	Name of Director			
	Total Remuneration from (A+B+C+D)		Total Remuneration from (A+B+C+D+E+F+G)	
	From PharmaEssentia	From All Consolidated Entities I	From PharmaEssentia	From All Consolidated Entities J
< NT$1,000,000	Ching-Leou Teng, Lung-Chih Yu, Chao-Ho Chen, Tian Chang, Patrick Y. Yang, Jinn-Der Chang, Jack Hwang, Shi-Ying Hsu, Ben-Yuan Chen, Hui-Ping Wang, Jien-Heh Tien	Ching-Leou Teng, Lung-Chih Yu, Chao-Ho Chen, Tian Chang, Patrick Y. Yang, Jinn-Der Chang, Jack Hwang, Shi-Ying Hsu, Ben-Yuan Chen, Hui-Ping Wang, Jien-Heh Tien	Lung-Chih Yu, Chao-Ho Chen, Tian Chang, Patrick Y. Yang, Jinn-Der Chang, Shi-Ying Hsu, Ben-Yuan Chen, Hui-Ping Wang, Jien-Heh Tien	Lung-Chih Yu, Chao-Ho Chen, Tian Chang, Patrick Y. Yang, Jinn-Der Chang, Shi-Ying Hsu, Ben-Yuan Chen, Hui-Ping Wang, Jien-Heh Tien
NT$1,000,000–NT$2,000,000	None	None	None	None
NT$2,000,000–NT$3,500,000	None	None	None	None
NT$3,500,000–NT$5,000,000	None	None	None	None
NT$5,000,000– NT$10,000,000	None	None	Ching-Leou Teng, Jack Hwang	Ching-Leou Teng, Jack Hwang
NT$10,000,000– NT$15,000,000	None	None	None	None
NT$15,000,000– NT$30,000,000	None	None	None	None
NT$30,000,000– NT$50,000,000	None	None	None	None
NT$50,000,000– NT$100,000,000	None	None	None	None
> NT$100,000,000	None	None	None	None
Total	11	11	11	11

Note 1: Directors name must be shown separately (for institutional directors, both the institution and the representative are required). All compensation paid must be added together. For directors who are also the general manager or assistant general managers, Table (3-1) or (3-2) below must be filled in.

Note 2: This refers to remuneration paid to directors in the most recent year (including salary, compensation for professional services, severance pay, and all bonus and monetary rewards).

Note 3: This refers to filling in directors' profit sharing of the latest fiscal year proposed and resolved by the Board.

Note 4: Payments to directors to cover business expenses (including travel expenditures, allowances, reimbursements, accommodation, company cars, and in-kind supplies). If accommodations, cars, and other transportation or personal allowances are provided, information about the assets (including classification, cost, actual or fair market values of rent, gasoline expenses, and other perks) must be disclosed. Compensation paid to personal drivers must be noted, but not accumulated under the remuneration received.

Note 5: Payments to directors, who are also employees (including general manager, assistant general manager, manager, and employee) to cover business expenses (including salary, compensation for professional services, severance pay, all bonus and monetary rewards, travel expenditures, allowances, reimbursements, accommodation, company cars, and in-kind supplies). If accommodations, cars, and other transportation or personal allowances are provided, information about the assets (including classification, cost, actual or fair market values of the rent, gasoline expenses, and other perks) must be disclosed. Compensation paid to personal drivers must be noted but not accumulated under the remuneration received. Salary expenses recognized in accordance with the International Financial Reporting Standards (IFRS) 2 "Share-based Payments" include the acquisition of employee stock warrants, new restricted employee shares, and participation in capital increases by cash subscription, which shall all be calculated as remuneration.

Note 6: A person receiving employee remuneration (stock and cash bonus) to the director (including those concurrently serving as a general manager, assistant general manager, other manager, or employee) shall disclose the rewarded amount proposed and resolved by the Board in the latest fiscal year. If the amount cannot be estimated, the distribution amount of this year shall be determined by the actual distribution ratio of the previous year. Tables 1–3 shall be filled in.

Note 7: Total remuneration paid by all companies (including the Company) in the consolidated report to the Company's director.

Note 8: Disclose remuneration paid by the Company to the director under the suitable range. The name of the receiver must be shown under the suitable range.

Note 9: Disclose remuneration paid by the Group companies (including the Company) in the consolidated report to the director under the suitable range. The name of the receiver must be shown under the suitable range.

Note 10: After-tax net income refers to the after-tax net income in the most recent year; net income after tax reported in accordance with the IFRS refers to after-tax net income in the individual financial statement of the most recent year.

Note 11:

a. Fill in the remuneration amount received by directors from investees other than subsidiaries of the Company in this column.

b. If the directors of the Company receive remuneration from investees other than subsidiaries of the Company, it shall be combined into Column I of the remuneration ranking table and the column renamed as "All Investments."

c. The remuneration refers to remuneration, compensation (including compensation to employees, directors, and supervisors) and related remunerations for the performance of duties received by a director of the Company serving as a director, supervisor, or manager of an investee of the Company other than subsidiaries.

*The remuneration content disclosed in this Table differs from the income concept of the Income Tax Act; therefore, this Table acts as a form of information disclosure and does not serve the purpose of taxation

B. Remuneration Paid to General Managers and Assistant General Managers

Unit: NT$1,000

Title	Name	Salary (A) (Note 2)		Severance Pay and Pensions (B)		Bonuses and Allowances (C) (Note 3)		Amount of Employee Remuneration (D) (Note 4)				Ratio of Total Remuneration (A+B+C+D) to Net Income After Tax (%)(Note 8)		Compensation Paid to Directors from Invested Companies Other Than Subsidiaries (Note 9)
		From PharmaEssentia	From All Consolidated Entities (Note 5)	From PharmaEssentia	From All Consolidated Entities (Note 5)	From PharmaEssentia	From All Consolidated Entities (Note 5)	From PharmaEssentia		From All Consolidated Entities (Note 5)		From PharmaEssentia	From All Consolidated Entities (Note 5)	
								Cash	Stock	Cash	Stock			
CEO	Ko-Chung Lin	8,690	8,690	220	220	-	-	-	-	-	-	-0.45	-0.45	None
General Manager	Jack Hwang	8,055	8,055	-	-	-	-	-	-	-	-	-0.41	-041	None

Note: Actual severance pay and pension paid in 2020 was NT$0.

General Managers and Assistant General Managers Remuneration Bracket

Remuneration Paid by the Company to Each General Manager and Assistant General Manager by Range	Name of General Manager and Assistant General Manager	
	From PharmaEssentia	From All Consolidated Entities (E)
< NT$1,000,000	None	None
NT$1,000,000–NT$2,000,000	None	None
NT$2,000,000–NT$3,500,000	None	None
NT$3,500,000–NT$5,000,000	None	None
NT$5,000,000– NT$10,000,000	Ko-Chung Lin, Jack Hwang	Ko-Chung Lin, Jack Hwang
NT$10,000,000– NT$15,000,000	None	None
NT$15,000,000– NT$30,000,000	None	None
NT$30,000,000– NT$50,000,000	None	None
NT$50,000,000– NT$100,000,000	None	None
> NT$100,000,000	None	None
Total	2	2

Note 1: Names of the general manager and assistant general managers must be shown separately. For directors who are also the general manager or assistant general managers, Table (1-1) or (1-2) above must be filled in.

Note 2: This includes salary, compensation for professional services, and severance pay paid to the general manager and assistant general managers in the most recent year.

Note 3: Payments to the general manager and assistant general managers to cover business expenses, including bonuses, monetary rewards, travel expenditures, allowances, reimbursements, accommodation, company cars, and in-kind supplies. If accommodations, cars, and other transportation or personal allowances are provided, information about the assets (including classification, cost, actual or fair market values of rent, gasoline expenses, and other perks) must be disclosed. Compensation paid to personal drivers must be noted but not accumulated under the remuneration received. Salary expenses recognized in accordance with IFRS 2 “Share-Based Payment” include acquisition of employee stock warrants, new restricted employee shares, and participation in capital increases by cash subscription, which shall all be calculated as remuneration.

Note 4: Employee remuneration amount (stock and cash) resolved by the Board for distribution to the general manager and assistant general managers. If the distribution amount of this year cannot be estimated, it shall be determined by the actual distribution ratio of last year. Table 1-3 shall be filled in. After-tax net income refers to the after-tax net income in the most recent year; net income after tax reported in accordance with IFRS refers to after-tax net income in the individual financial statement of the most recent year.

Note 5: Aggregated amount of individual compensation paid by all companies (including the Company) in the consolidated statement to the general manager and assistant general managers.

Note 6: Aggregated amount of individual compensation paid by the Company to the general manager and assistant general managers. Names of the receivers must be shown under the suitable range.

Note 7: Aggregated amount of individual compensation paid by all companies (including the Company) in the consolidated statement to the general manager and assistant general managers. Names of the receivers must be shown under the suitable range.

Note 8: After-tax net income refers to the after-tax net income in the most recent year; net income after tax reported in accordance with IFRS refers to after-tax net income in the individual financial statement of the most recent year.

Note 9:

a. Fill in the remuneration amount received by the general manager and assistant general managers from investees other than subsidiaries of the Company in this column.

b. If the general manager and assistant general managers of the Company receive remuneration from investees other than subsidiaries of the Company, it shall be combined into Column E of the remuneration ranking table and the column renamed as “All Investments.”

c. The remuneration refers to remuneration, compensation (including compensation to employees, directors, and supervisors), and related remuneration for the performance of duties received by the general manager and assistant general managers of the Company serving as a director, supervisor, or manager of an investee of the Company other than subsidiaries.

*The remuneration content disclosed in this table differs from the income concept of the Income Tax Act; therefore, this table acts as a form of information disclosure and does not serve the purpose of taxation.

C. Name of Managers Receiving Employee Compensation and the Distribution Status

Title	Name	Salary (A) (Note 2)		Severance Pay and Pensions (B)		Bonuses and Allowances (C) (Note 3)		Amount of Employee Remuneration (D) (Note 4)				Ratio of Total Remuneration (A+B+C+D) to Net Income After Tax (%)(Note 8)		Compensation Paid to Directors from Invested Companies Other Than Subsidiaries (Note 9)
		From PharmaEssentia	From All Consolidated Entities (Note 5)	From PharmaEssentia	From All Consolidated Entities (Note 5)	From PharmaEssentia	From All Consolidated Entities (Note 5)	From PharmaEssentia		From All Consolidated Entities (Note 5)		From PharmaEssentia	From All Consolidated Entities (Note 5)	
								Cash	Stock	Cash	Stock			
CEO	Ko-Chung Lin	8,690	8,690	220	220	-	-	-	-	-	-	-0.45	-0.45	None
General Manager	Jack Hwang	8,055	8,055	-	-	-	-	-	-	-	-	-0.41	-0.41	None
Chief Pharmaceutical Officer	Ching-Leou Teng	8,055	8,055	-	-	-	-	-	-	-	-	-0.41	-0.41	None
Medical Officer	Albert Qin	6,147	6,147	-	-	-	-	-	-	-	-	-0.31	-0.31	None
Chief Operating Officer, Taichung Plant	Yen-Tung Luan	5,643	5,643	108	108	-	-	-	-	-	-	-0.29	-0.29	None

D. Employee remuneration distributed to managers and distribution situation: None

E. This section presents a comparison of the ratio of the total amount of remuneration paid to directors, supervisors, general managers, and assistant general managers of the Company and all companies covered in the consolidated financial statements in the past 2 years to after-tax net income shown through the individual or respective financial statements; in addition to explanations of the policies, standards, and composition for remuneration payment, procedures to fix remuneration, and the interrelationship between the business performance and future risks.

a. Analysis of the ratio of the total amount of remuneration paid to directors, supervisors, general managers, and assistant general managers of the Company and all companies covered in the consolidated financial statements in the past 2 years to after-tax net income:

Unit: NT$1,000

Item	2019				2020			
	Total Remuneration		As a Percentage of Net Income After Tax (%)		Total Remuneration		As a Percentage of Net Income After Tax (%)	
	From PharmaEssentia	From All Consolidated Entities	From PharmaEssentia	From All Consolidated Entities	From PharmaEssentia	From All Consolidated Entities	From PharmaEssentia	From All Consolidated Entities
Directors	15,839	15,839	-1.88	-1.88	16,530	16,530	-0.84	-0.84
CEO and General Manager	16,348	16,348,	-1.94	-1.94	16,965	16,965	-0.86	-0.86

Note：Jack Hwang serves as director and general manager

b. Policies, standards, and composition for remuneration payment, procedures to fix remuneration, and the interrelationship between business performance and future risk.

i. Remuneration paid to directors and supervisors is handled in accordance with the Company's Articles of Incorporation and determined by considering the position of the director/supervisor in the Company and the value of their participation and contribution to Company operations. The remuneration is internally proposed by the company to the Remuneration Committee for approval and presented to the Board of Directors for review.

(1) "Director Remuneration" is the travel expenditure spent to attend Board

meetings.

(2) "Relevant Remuneration Received by Directors Who are Also Employees" refers to the salary paid to Chairman Ching-Leou Teng, who is also the Chief Pharmaceutical Officer.

ii. Remuneration paid to the CEO and general manager is handled in accordance with the Company's internal personnel rules and determined by considering the position of the CEO and general manager in the Company, the responsibility they assume, and their contribution to the Company, as well as industry benchmarks. The remuneration is proposed by the Company to the Remuneration Committee for approval and presented to the Board of Directors for review.

In sum, the policies and procedures to fix remuneration paid by the Company to directors, the CEO, and general manager are positively related to the Company's business performance.

4. Corporate Governance

A. Operation of the Board of Directors

As of the time of publication, the Board of Directors have been convened for 10 times (A) for 2019 and 2020. The attendance of the directors is as follows:

Title	Name	Attendance in Person (B)	Attendance By Proxy	Attendance Rate in Person (B/A)	Notes
Chairman	Ching-Leou Teng	11	0	100%	
Director	Chao-Ho Chen	11	0	100%	
Director	Tien Chang	10	1	91%	
Director	Pen-Yuan Chen	11	0	100%	
Director	Representative of National Development Fund, Executive Yuan: Lung-Chih Yu	10	1	91%	
Director	Management Committee Representative of Yao Hwa Glass Co. Ltd: Hui-Ping Wang	8	0	100%	
Director	Cheng-Ku Huang	11	0	100%	
Director	Shih-Ying Hsu	10	0	91%	
Independent Director	Yu-Min Yang	11	0	100%	
Independent Director	Chin-Te Chang	11	0	100%	
Independent Director	Chien-Ho Tien	11	0	100%	

Other matters of note:

1. In the event of any of the following in the operations of the Board of Directors, the date, term, and motion content, opinions of all independent directors, and the Company's response shall be recorded:

(1) Items listed in Article 14-3 of the Securities and Exchange Act:

Date of meeting	Motion	Opinion of independent directors	Company response
February 19, 2020	Planning of the reappointment of EY Taiwan for providing the Company with audit services for the 2020 financial statements and tax reports, and assessment of CPA independence	Approved by 3 independent directors	Proposal approved as proposed
	Audit service fees for 2020		
	2020 Plan for capital increase through issuance of new shares		
	Plans for issuing employee stock options to buy company stock at below-market prices		
April 14, 2020	Proposal to compile a report on the actual implementation of carrying out the sponsoring issuance of overseas depositary receipts through cash capital increase and private placement of common shares or private placement in overseas or domestic convertible bonds presented during the 1st Shareholders Interim Meeting of 2019.	Approved by 3 independent directors	Proposal approved as proposed
	Planning of carrying out the sponsoring issuance of overseas depositary receipts through cash capital increase and/or cash capital increase through private placement of common shares and/or private placement in overseas or domestic convertible bonds for 2020		

(2) Other recorded or written board meeting resolutions expressing dissenting opinions or reservations from independent directors apart from the above matters: none

2. In the event of a conflict of interests with any director when reviewing a motion, the director name, motion content, reason behind conflict of interest, and participation status in passing resolution shall be recorded:

Date of Meeting	Content	Director name, reason behind conflict of interest, and participation status in passing resolution
February 19, 2020	Subject: Review of the 2019 manager performance appraisal Description: The Corporation's 2019 decision on manager remuneration adjustment was reviewed and approved in the first remuneration committee meeting of 2020 and has been submitted for resolution by the Board of Directors.	To avoid conflicts of interest, the management team has submitted the remuneration adjustment plan to the Board of Directors for resolution. Resolution: Apart from Directors Chan Ching-liu and Huang Jeng-gu, who did not participate in the resolution due to conflicts of interest, all attending directors agreed on the remuneration adjustment plan.
April 14, 2020	Carrying out sponsoring issuance of overseas depositary receipts through cash capital increase and/or cash capital increase through private placement of common shares and/or private placement in overseas or domestic convertible bonds	The Board of Directors were asked to submit a resolution after eight directors, including Ching-Leou Teng and others avoided conflicts of interests. Resolution: Motion passed by all participating directors without objection. The subscribers of the present case were individually reviewed. Director Chien-Ho Tien served as the Acting Chairman and approved the review for Ching-Leou Teng, an insider with conflicts of interests. Approval for the remaining insiders with conflicts of interests was passed following their avoidance and Chair Ching-Leou Teng's consultation with the participating directors.
June 11, 2020	Subject: Determination of the price and number of shares for the first private placement in 2020, the placees, the period wherein the price of the shares shall be paid up, and the record date for capital increase. Legal basis: Compliance with regulations on persons specified in Article 43-6 of the Securities and Exchange Act and an official letter issued by the former Securities and Futures Commission of the Ministry of Finance on June 13, 2002 .	All attending directors agreed on the resolution. Placees who worked at the Corporation were reviewed individually and, with adherence to the avoidance of conflicts of interest, received unanimous approval following Director Chan Ching-liu's consultation with all attending directors.
109.8.11	Subject: Plan to sign a phase III clinical trial contract aimed at a New Drug Application for P1101 for the indication of ET (hereinafter "P1101-ET") with two CROs, namely EPS International	Apart from Director Yu Jung-chin, who abstained from the resolution, all the attending directors agreed on the plan.

	Holdings Co., Ltd. and US Medpace Inc. Description: Following an evaluation of each CRO's price as well as the advantages and disadvantages of the area where it is located, the Corporation's team planned to commission Medpace Inc. as the CRO for the implementation of clinical trials in the United States and Taiwan and to commission EPS International Holdings Co., Ltd. as the CRO for clinical trials in Japan, China, and South Korea. Considering Hong Kong's potential regarding its input of patients with ET as well as the progress of P1101's PV New Drug Application in Hong Kong, the Corporation included Hong Kong as a clinical trial site and decided to commission Medpace Inc. for the clinical trial there.	

3. Exchange-Listed and OTC-Listed Companies shall disclose information such as evaluation cycle and period, scope and method of evaluation, and evaluation content in the self (or peer) evaluation of the Board of Directors.

Evaluation cycle	Once every year
Evaluation period	Based on the performance of the Board of Directors for the period from January 1, 2020 to December 31, 2020
Evaluation scope	Performance assessment of the Board of Directors, individual board members, Audit Committee, and Remuneration Committee
Evaluation method	Performance assessment based on the internal self-evaluation of the Board of Directors, and the self-assessment of the board members
Evaluation content	(1) Board performance assessment: including level of participation in company operations, quality of board decisions, composition and structure of the board, appointment of the directors and their continuing education, and internal control. (2) Performance assessment of individual board members: including understanding and control of the company goals and tasks, knowledge of director responsibilities, level of participation in company operations, management of internal relationships and communication, director professionalism and continuing education, and internal control. (3) Performance assessment of functional committees: including level of participation in company operations, knowledge of functional committee responsibilities, quality of

	functional committee decisions, composition of the functional committees and the appointment of its members, and internal control.

The self-evaluation results listed above contained no items that required further improvement.

4. Evaluation on the objectives for reinforcing the functions of the Board of Directors in the current and recent years (e.g., establishing an audit committee, improving information transparency) and its implementation:

(1) The Company has appointed a spokesperson and a deputy spokesperson to ensure that all material information is disclosed in a timely and fair manner to shareholders and stakeholders as references on the Company's financial and business-related information.

(2) The operation of the current Board of Directors is governed by relevant rules and regulations such as the "Rules and Procedures of Board of Directors Meetings."

(3) All members of the current Board of Directors have participated in advanced courses on corporate governance topics.

(4) The Company has appointed dedicated personnel responsible for reviewing and updating the Company website to enhance the transparency of financial and business information.

B. Operation of the Audit Committee

The focus of the Audit Committee's work is to assist the Board of Directors in supervising and fulfilling the quality and integrity requirements on the Company's accounting, auditing, financial reporting process, and financial controls. Matters deliberated by the Audit Committee include financial statements, auditing and accounting policies and procedures, internal control systems, major asset or derivative transactions, major capital loans and endorsements or guarantees, placement or issuance of securities, regulatory compliance, and appointment, termination, and service fees of the CPA.

As of the time of publication, the Audit Committee has been convened for 10 times (A) for 2020 and 2021. The attendance of the committee members is as follows:

Title	Name	Attendance in person (B)	Attendance by proxy	Notes
Independent director	Chin-Te Chang	10	-	
Independent director	Yu-Min Yang	10	-	
Independent director	Chien-Ho Tien	10	-	

Other matters of note:

1. In the event of any of the following in the operations of the Audit Committee, the date and term of the Board of Directors meeting, motion content, resolutions of the Audit Committee, and the Company's response to the opinions of the Audit Committee shall be recorded and expounded:

(1) Items listed in Article 14-5 of the Securities and Exchange Act:

Board Meeting	Proposal content and follow up	Items listed in Article 14-5 of the Securities and Exchange Act	Resolutions passed by two-thirds majority of the board of directors but not approved by the audit committee
2020 1st Meeting	1. Examination of the Company's 2019 Financial Statements and Business Report 2. Deficit Compensation Plan for 2019 3. Planning of the reappointment of EY Taiwan for providing the Company with	V	None

	audit services for the 2020 financial statements and tax reports, and assessment of CPA independence 4. Audit service fees for 2020 5. Plans for cash capital increase through issuance of new shares in 2020 6. Business Operation Plan 7. Plans to change fund utilization items of the 1st cash capital increase in 2015 and the 1st cash capital increase in 2016 before being listed over-the-counter 8. Plans for issuing employee stock options to buy company stock at below-market prices 9. Statement of Internal Control for 2019		
	Resolution of the Audit Committee (February 19, 2020): Passed by all Audit Committee members.		
	Company's response to the Audit Committee opinion: passed by all participating directors		
2020 2nd Meeting	1. Modified the equity acquisition agreement between the Company and Panco Healthcare Co. Ltd (hereafter referred to as Panco Healthcare), and the appointment of directors, supervisors, and managers of Panco Healthcare 2. As of April 14, 2020, 29,331,802 shares from the Plan for Cash Capital Increase through Private Placements approved during the 2019 1st Shareholders Interim Meeting (October 1, 2019) remain unsubscribed. Following the shareholders meeting in May 27, 2020, the Company will no longer issue the remaining unsubscribed shares 3. Planning of carrying out the sponsoring issuance of overseas depositary receipts through cash capital increase and/or cash capital increase through private placement	V	None

	of common shares and/or private placement in overseas or domestic convertible bonds for 2020 4. Operation plans, director and manager appointments, and capital increase plans for the South Korean subsidiary company 5. Added content on explaining the Company's plan to increase capital for the US subsidiary company, PharmaEssentia USA Corporation		
	Resolution of the Audit Committee (April 14, 2020): Passed by all Audit Committee members.		
	Company's response to the Audit Committee opinion: passed by all participating directors		

(2) Resolutions passed by two-thirds or more of the board of directors but not approved by the audit committee, apart from the above matters: none

2. In the event of a conflict of interests with any independent director when reviewing a motion, the independent director name, motion content, reason behind conflicts of interest, and participation status in passing resolution shall be recorded: none

3. Communication between independent directors with internal control managerial personnel and the CPA:

(1) Communication between independent directors and the CPA

Date	Focal points of communication
2020.2.19	Communication matters between EY Young with the Audit Committee, independent directors, and Company management
2020.5.15	Communication matters between EY Young with the Audit Committee, independent directors, and Company management
2020.8.11	Communication matters between EY Young with the Audit Committee, independent directors, and Company management
2020.11.13	Communication matters between EY Young with the Audit Committee, independent directors, and Company management
2021.2.26	Communication matters between EY Young with the Audit Committee, independent directors, and Company management

(2) Communication between independent directors and internal control managerial

personnel In addition to submitting an audit report to the independent directors for review every month, the manager of the internal audit department of the Company also reports material findings of audits of the Audit Committee and Board of Directors to individual Board members.

C. Corporate governance practices, its dissimilarity with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies, and reasons

Assessment item	Actual practice			Dissimilarity with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies and reasons
	Y	N	Summary description	
1. Has the Company formulated and disclosed corporate governance practices based on the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies?	✓		The Company has formulated corporate governance practices, which have been approved by the Board of Directors.	None
2. Company ownership structure and shareholder interests (1) Has the Company formulated internal operating procedures to handle shareholder suggestions, concerns, disputes and litigation matters, and implemented them in accordance with the procedures? (2) Does the Company have a list of major shareholders who actually control the Company and the ultimate controlling party of the major shareholders?	✓ ✓		(1) The Company has formulated Internal Material Information Processing Operation Procedures, and has appointed a spokesperson and deputy spokesperson to handle shareholder enquiries. (2) The company has dedicated shareholder service management personnel who manages relevant information and has appointed a dedicated shareholder service agent to assist in handling	None

Assessment item	Actual practice			Dissimilarity with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies and reasons
	Y	N	Summary description	
			shareholder service-related matters. The Company is informed of the major shareholders who actually control the Company and their ultimate controlling party.	
(3) Has the Company established and implemented control risk management and firewall mechanisms between affiliate companies?	✓		(3) The Company has formulated control mechanisms such as the Transaction Operation Procedures for Corporate Group Member, Specified Companies, and Related Parties and the Operational Procedures for Supervising Subsidiary Companies.	
(4) Has the Company formulated internal regulations prohibiting insiders of the company from using undisclosed information to buy or sell securities?	✓		(4) The Company has formulated the Operation Procedures for Processing Internal Material Information and Preventing Insider Trading.	
3. Composition and Responsibilities of the Board of Directors (1) Has the Board of Directors	✓		(1) During the 2018	

Assessment item	Actual practice			Dissimilarity with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies and reasons
	Y	N	Summary description	
formulated and implemented a diversification policy regarding its composition?			Shareholders Meeting, the Company appointed 11 directors (including 3 independent directors) based on the Articles of Incorporation. The composition of the Board is diversified; it has 2 female directors, and the Board members have business, legal, financial and industry-related experience.	
(2) In addition to setting up a Remuneration Committee and an Audit Committee in accordance with the law, has the Company voluntarily established other functional committees?	✓		(2) The Company has set up a Remuneration Committee and established an Audit Committee on June 25, 2018. In the future, other functional committees can be set up as per need.	
(3) Has the Company formulated board performance evaluation regulations and method, conducted regular performance evaluation every year, and reported the performance	✓		(3) The Company has formulated the regulations for the self or peer evaluation of the Board of Directors, which was approved by the Board on	

Assessment item	Actual practice			Dissimilarity with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies and reasons
	Y	N	Summary description	
evaluation results to the Board of Directors, and used it as a reference for individual directors' remuneration and nomination for reappointment?			September 14, 2018. The performance evaluation of the Board will be carried out in 2019 and 2020 and the performance evaluation results will be reported to the Board.	
(4) Does the Company regularly evaluate CPA independence?	✓		(4) The Company evaluates CPA independence from various aspects such as financial benefits, financing and guarantees, business relationships, family and personal relationships, employment relationships, gift and special offers, auditor rotation, and non-audit matters. On February 26, 2021, the Board of Directors reviewed the CPA's Statement of Independence.	
4. Has the Exchange-Listed and OTC-Listed Company appointed qualified and appropriate numbers of personnel as	✓		The New Business Development Division and the General Administration Division are responsible for	None

Assessment item	Actual practice			Dissimilarity with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies and reasons
	Y	N	Summary description	
corporate governance personnel, and appointed a corporate governance manager dedicated toward corporate governance matters (including but not limited to providing information required by the directors and supervisors to carry out their duties, assisting directors and supervisors in complying with the law, handle matters related to board and shareholders meetings in accordance with regulations, and compiling minutes of board and shareholders meeting)?			matters related to corporate governance.	
5. Has the Company established communication channels for stakeholders (including but not limited to shareholders, employees, clients and customers, and suppliers), a stakeholder section in the Company website, and respond appropriately to corporate social responsibilities topics deemed crucial to the stakeholders?	✓		The Company has appointed a spokesperson and deputy spokesperson to serve as the communication channel for stakeholders. The Company has set up a stakeholder interaction section to respond to relevant enquiries.	None
6. Has the Company appointed a professional shareholder service	✓		The Company has appointed CTBC Bank to handle	None

Assessment item	Actual practice			Dissimilarity with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies and reasons
	Y	N	Summary description	
agent to handle shareholder services?			shareholder services	
7. Information disclosure (1) Has the Company set up a website to disclose its financial, business, and corporate governance information? (2) Has the Company adopted other methods of information disclosure (such as setting up an English website, designating a person to be responsible for the collection and disclosure of Company information, implementing a spokesperson system, placing information on	✓ ✓		(1) The Company website serves to provide information of various types such as introduction of the Company, its clinical research and development, products, news, finance and businesses, corporate social responsibility, and corporate governance. The Company also discloses the information on the Market Observation Post System in accordance with the law. (2) The Company has appointed dedicated personnel for collecting and disclosing information, and has appointed a spokesperson and deputy spokesperson.	None

Assessment item	Actual practice			Dissimilarity with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies and reasons
	Y	N	Summary description	
institutional investor conferences on the Company website)? (3) Does the company announce and file the annual report within two months after the end of the fiscal year, and announce and file the Q1–Q3 financial statements and monthly operations within the prescribed deadline?			(3) The Company announced the 2019 consolidated and individual financial statements on February 27, 2020.	
8. Does the Company have other material information that is conducive to understanding the company's corporate governance practices (including but not limited to employee interests, employee care, investor relationships, supplier relationships, stakeholder interests, status of continuing education of directors and supervisors, implementation status of risk management policies and risk measurement standards, implementation status of client/customer policies, purchase of indemnity insurance	✓		(1) Employee interests: established an employee welfare committee, implemented pension plans, purchased employee group insurance plans, and other measures (2) Employee care: regularly convenes labor–management meetings in accordance with the Labor Standards Act and other relevant regulations safeguarding the legal interests of employees (3) Investor relationships: discloses finance and	None

Assessment item	Actual practice			Dissimilarity with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies and reasons
	Y	N	Summary description	
for directors and supervisors)?			business information, and material information on the Market Observation Post System for investors knowledge in accordance with relevant regulations, and appropriately handles investor enquiries and maintains satisfactory investor relationships (4) Supplier relationships: fulfill obligations corresponding to the rights of suppliers according to contracts, ensuring that the delivery date, price, quality, and other details meet the requirements and enabling a satisfactory communication and partnership with each other. (5) Stakeholder interests: disclose finance, business, and material information on the Market Observation Post System for stakeholder knowledge	

Assessment item	Actual practice			Dissimilarity with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies and reasons
	Y	N	Summary description	
			(7) Continuing education of directors: all our Directors have professional backgrounds and have continually engaged in continuing their education in related courses. (7) Implementation status of risk management policies and risk measurement standards: the Company has established appropriate policies, procedures, and internal controls for risk management in accordance with relevant regulations. Major financial activities are subject to review by the Board of Directors in accordance with relevant regulations and internal control measures. (8) Implementation status of client/customer policies: Good communication with customers; the Company has dedicated sales personnel who respond to	

Assessment item	Actual practice			Dissimilarity with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies and reasons
	Y	N	Summary description	
			customer needs in a timely manner. (9) Purchase of indemnity insurance for directors and supervisors: stipulated in the Articles of Incorporation and has purchased indemnity insurance for directors and supervisors.	
9. Please state improvements to the corporate governance evaluation results released by the Corporate Governance Center of the Taiwan Stock Exchange Corporation in the most recent year, and state priorities and measures for those who have not improved. The Corporation's 2020 corporate governance evaluation report won second place (falling in the top 6%–20%), as it did last year. In July 2020, the Corporation established the Executive Center for Corporate Sustainability of PharmaEssentia under the CEO's office; the center is responsible for promoting and coordinating interdepartmental units in actions involving the disclosure of relevant information on the Corporation's website, including corporate social responsibility practices, investor information, corporate governance structure, shareholder meeting data, Chinese and English financial reports, and related regulations. The audit committee established in 2018, comprising only independent directors, has been making progress in corporate performance with respect to maintaining shareholder rights, treating shareholders equally, enhancing the structure and operations of the Board of Directors, and increasing information transparency.				

D. If the Company has a salary and compensation committee, it should disclose its composition, responsibilities, and operations:

The Company has established a Remuneration Committee. The current members are

Independent directors Chin-Te Chang, Yu-Min Yang, and Chien-Ho Tien and Professor Ming-Chuan Hsieh, whose main responsibilities are to formulate and review the policies, systems, standards, and structure concerning the performance evaluation and remuneration of directors and managers.

a. Composition details of the Remuneration Committee

Identity type (Note 1)	Criteria / Name	Has >5 years of work experience and the following professional qualifications			Whether satisfying independence standards (Note 2)										Member of the salary and compensation committee of how many other companies?	Notes
		Lecturer or higher positions in a public or private colleges or university in business, law, finance, accounting or	Judge, prosecutor, lawyer, accountant, or other professional and technical personnel passing national examinations in fields required in company	Work experience in business, legal affairs, finance, accounting or other fields required in company operations	1	2	3	4	5	6	7	8	9	10		
Independent director	Chin-Te Chang	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	2	Satisfying criteria
Independent director	Yu-Min Yang			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	Satisfying criteria
Independent director	Chien-Ho Tien			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	Satisfying criteria
Other	Ming-Chuan Hsieh	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1	Satisfying criteria

Note 1: Please fill in as director, independent director, or others in Identity Type.

Note 2: For members satisfying the following conditions during the two years before and during their tenure of office, please mark "✓" in the space below each condition code.

(1) Not an employee of the company or any of its affiliates.
(2) Not a director or supervisor of the company or any of its affiliates (excluding independent directors appointed in accordance with the Act or the laws and regulations of the local country by, and concurrently serving as such at, a public company and its parent or subsidiary or a subsidiary of the same parent).
(3) Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate of one percent or more of the total number of issued shares of the company or ranking in the top 10 in holdings.
(4) Not a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship, of a managerial officer under (1) or any of the persons in (2) and (3).
(5) Not a director, supervisor, or employee of a corporate shareholder that directly holds five percent or more of the total number of issued shares of the company, or that ranks among the top five in shareholdings, or that designates its representative to serve as a director or supervisor of the company under Article 27, Paragraph 1 or 2 of the Company Act (excluding independent directors appointed in accordance with the Act or the laws and regulations of the local country by, and concurrently serving as such at, a public company and its parent or subsidiary or a subsidiary of the same parent).
(6) Not a director, supervisor, or employee of another company in which a majority of the company's director seats or voting shares and those of any other company are controlled by the same person (excluding independent directors appointed in accordance with the Act or the laws and regulations of the local country by, and concurrently serving as such at, a public company and its parent or subsidiary or a subsidiary of the same parent).
(7) Not a director (or governor), supervisor, or employee of another company or institution in which the chairperson, general manager, or person holding an equivalent position of the company and a person in any of those positions at another company or institution are the same person or are spouses (excluding independent directors appointed in accordance with the Act or the laws and regulations of the local country by, and concurrently serving as such at, a public company and its parent or subsidiary or a subsidiary of the same parent).
(8) Not a director, supervisor, officer, or shareholder holding five percent or more of the shares, of a specified company or institution that has a financial or business relationship with the company (excluding specified companies or institutions holding 20% or more but less than 50% of the total number of issued shares of the company and is an independent director appointed in accordance with the Act or the laws and regulations of the local

country by, and concurrently serving as such at, a public company and its parent or subsidiary or a subsidiary of the same parent).

(9) Not a professional individual who, or an owner, partner, director, supervisor, or officer of a sole proprietorship, partnership, company, or institution that, provides auditing services to the company or any affiliate of the company, or that provides commercial, legal, financial, accounting or related services to the company or any affiliate of the company for which the provider in the past 2 years has received cumulative compensation exceeding NT$500,000, or a spouse thereof; provided, this restriction does not apply to a member of the remuneration committee, public tender offer review committee, or special committee for merger/consolidation and acquisition, who exercises powers pursuant to the Act or to the Business Mergers and Acquisitions Act or related laws or regulations.

(10) None of the circumstances listed in Article 30 of the Company Act.

b. Information on the practices of the Remuneration Committee

i. The Company's Remuneration Committee has 3 committee members.

ii. The yearly focus of the Remuneration Committee is to reinforce corporate governance and strengthen the functions of the Board of Directors, and to improve the remuneration system for directors and managers of the company. Hence, in accordance with Article 14-6 of the Securities and Exchange Act and the Regulations Governing the Appointment and Exercise of Powers by the Remuneration Committee of a Company Whose Stock is Listed on the Taiwan Stock Exchange or the Taipei Exchange promulgated by the Financial Supervisory Commission on March 18, 2011 (Ref. No.: Jin-Guan-Zheng-Fa-Zi-1000009747), the Board of Directors approved to establish a Remuneration Committee, formulate the Company's Remuneration Committee Organizational Rules, and approved the appointment of the first Remuneration Committee members.

iii. Term of office of the present Committee: June 25, 2018–June 24, 2021. As of the time of publication, the Remuneration Committee has convened for 3 times (A) for 2020 and 2021. The qualifications and attendance of the committee members is as follows:

Title	Name	Attendance in person (B)	Attendance by proxy	Actual attendance rate (%) [B/A]	Notes
Chair	Chin-Te Chang	3	0	100%	
Member	Yu-Min Yang	3	0	100%	
Member	Chien-Ho Tien	3	0	100%	
Member	Ming-Chuan Hsieh	3	0	100%	

Other matters of note:

1. In the event the Board of Directors does not adopt or modify the suggestions of the Remuneration Committee, the date and term of the Board of Directors meeting, motion content, resolutions of the Board, and the Board's resolution and Company's response to the opinions of the Remuneration Committee shall be recorded: none.
2. In the event a motion of the Remuneration Committee encounters dissenting opinions or reservations from committee members and is accompanied with records or written statements, the Remuneration Committee Meeting date and term, motion content, opinions of all members and response to the opinions shall be recorded: none.
3. Motions and resolutions of the 2020 Remuneration Committee Meeting

Time	Motion	Resolution
2020 1st Remuneration Committee Meeting	1. Review of the 2019 performance assessment of managers 1. Review of the 2019 remuneration policies for managers and the 2019 promotion and salary increase plans	Passed without objection by all participating committee members.
2019 2nd Remuneration Committee Meeting	1. Employee Stock Ownership Trust of the Company	All participating committee members agreed that the motion shall be proposed again following a revision.
2020 1st Remuneration Committee	1. Review of the 2020 performance assessment of managers 2. Review of the 2021 salary increase plans of managers	Passed without objection by all participating committee members.

E. Fulfilment of Social Responsibility

Assessment item	Actual Practice			Dissimilarity with Corporate Social Responsibility Best Practice Principles and reasons
	Y	N	Summary description	
1. Has the Company conducted risk assessments on environmental, social, and corporate governance issues related to company operations and formulated related risk management policies or strategies based on the concept of materiality?	✓		(1) The Corporation has established the Corporate Social Responsibility Code to ensure the continued implementation of corporate social responsibility. With Sustainable Development Goal 3 of the United Nations as the core, namely good health and wellbeing, the Corporation follows the environmental, science, and corporate governance aspects of sustainable development to incorporate the standards for the biotechnology and pharmaceutical manufacturing industry specified by the Sustainability Accounting Standards Board, Global Reporting Initiative Standards, the United Nations Global Compact, and Access to Medicine Index into its business operations and strategies. (2) Environmental issues The Corporation incorporates ISO 14064-1: The Corporation completed a greenhouse gas inspection in 2018 and has since been working on the establishment of energy-	None

Assessment item	Actual Practice			Dissimilarity with Corporate Social Responsibility Best Practice Principles and reasons
	Y	N	Summary description	
			saving and carbon-reduction goals, which are expected to be completed in 2021. The aim is to promote environmentally friendly actions among colleagues. (3)Risk management policy The Board of Directors, being the highest supervisory and decision-making body of the Corporation, is responsible for the approval and implementation of the overall corporate risk management goals and policy and performs continuous monitoring of the risk management mechanism to ensure its effective operation. The Board of Directors holds the ultimate responsibility for the Corporation's risk management. An audit committee has been established to assist the Board of Directors in the control and management of existing and potential corporate risks, with the aim of enhancing the Corporation's internal monitoring mechanism. For major financial activities, a second review by the Board of Directors is required as	

Assessment item	Actual Practice			Dissimilarity with Corporate Social Responsibility Best Practice Principles and reasons
	Y	N	Summary description	
			per the relevant regulations and internal control system. The audit office shall conduct regular and irregular inspections and report the results thereof to the Board of Directors. (5) Social contributions The Corporation has long sponsored the International Symposium on Myeloproliferative Neoplasms Asia, which gathers experts, scholars, and clinical physicians from various countries to participate in in-depth interactions and academic exchange on the research and treatment of blood disorders. The Corporation is also a sponsor of the Taiwan New Year Concert and the 17th International Symposium on Viral Hepatitis and Liver Diseases in 2021.	
2. Has the company set up a full-time (part-time) unit that promotes corporate social responsibility, which is authorized by the Board of Directors to senior management to deal with and	✓		To enhance the management of corporate social responsibility, the Corporation has established the Executive Center for	None

Assessment item	Actual Practice			Dissimilarity with Corporate Social Responsibility Best Practice Principles and reasons
	Y	N	Summary description	
reports to the Board of Directors?			Corporate Sustainability of PharmaEssentia under the CEO and appointed the Operation Planning Unit of the General Management Division to promote the practice of corporate social responsibility and report the progress regularly to the Board of Directors.	
3. Environmental issues (1) Has the Company established an appropriate environmental management system according to the characteristics of its industry? (2) Has the company committed to improving the utilization efficiency of various resources and used recycled materials with low impact on the environment? (3) Has the company assessed the	✓ ✓ ✓		(1) The Corporation has been promoting environmentally friendly actions among staff members and requiring them to comply with such actions. (2) The Corporation has disposed of and recycled waste according to its industrial waste disposal plan and has complied with all environmental regulations stipulated by the competent authorities in managing public affairs. (3) Being attentive to climate change and working toward greenhouse gas reduction are responsibilities shared by all countries. To continuously reduce greenhouse gas emissions, as part of its corporate	None

Assessment item	Actual Practice			Dissimilarity with Corporate Social Responsibility Best Practice Principles and reasons
	Y	N	Summary description	
current and future potential risks and opportunities of climate change for the Company, and taken measures to address climate-related issues?			social responsibility efforts, the Corporation conducted a greenhouse gas inspection in accordance with ISO 14064-1; set carbon reduction goals according to the emission inspection results; and established a disclosure framework for climate change risks and opportunities according to the Task Force on Climate-related Financial Disclosures.	
(4) Has the company compiled statistics on greenhouse gas emissions, water consumption and total amount of waste in the past two years, and formulated policies for energy conservation and carbon reduction, greenhouse gas reduction, water use reduction, or other waste management?	✓		(4) Paying close attention to issues related to energy saving, carbon reduction, and greenhouse gas reduction, the Corporation controlled the air-conditioning temperature over the summer to make efficient use of energy, thus achieving its energy-saving and carbon-reduction goals. The 2020 Sustainability Report reveals the amount of greenhouse gases emitted, amount of water used, and total weight of waste generated by the Corporation.	

Assessment item	Actual Practice			Dissimilarity with Corporate Social Responsibility Best Practice Principles and reasons
	Y	N	Summary description	
4. Safeguarding social welfare (1) Has the company formulated relevant management policies and procedures in accordance with relevant regulations and international human rights conventions? (2) Has the company formulated and implemented reasonable employee welfare measures (including remuneration, leaves, and other benefits), and appropriately reflected operating performance or results in employee remuneration?	✓ ✓		(1) The Corporation complies with all labor regulations in its establishment of operating procedures for work involving physical labor and human rights policy to prevent any events where workers' basic rights are threatened. (2) Following regulations stipulated in the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies, the Corporation has clarified the authorities and responsibilities of the Board of Directors to enhance operation transparency and safeguard shareholder rights. Staff symposiums are held regularly to promote the corporate culture policy, and the Work Code has been established to clearly define the reward and punishment systems. (3) Valuing the health and	None

Assessment item	Actual Practice			Dissimilarity with Corporate Social Responsibility Best Practice Principles and reasons
	Y	N	Summary description	
(3) Does the Company provide a safe and healthy working environment for employees, and regularly implement safety and health education for employees? (4) Has the Company established an effective career development training program for employees?	✓ ✓		safety of staff members, the Corporation arranges regular health checkups for them. (4) To achieve organizational goals and human resource development, the Corporation improves the service quality, competence, and work efficiency of its staff members. Specifically, all current staff members can, upon permission, participate in all types of professional skill training and pursue further studies according to their competencies and for business purposes. Staff members are encouraged to share and exchange knowledge for the purpose of enhancing their work and academic skills, which can aid the completion of tasks. Oriented toward cultivating professional and technical talent, the Corporation offers diverse learning	

Assessment item	Actual Practice			Dissimilarity with Corporate Social Responsibility Best Practice Principles and reasons
	Y	N	Summary description	
(5) With regard to customer health and safety, customer privacy, marketing and labeling of products and services, does the Company follow relevant regulations and international standards, and formulate relevant protection policies and appeal procedures for safeguarding consumer rights? (6) Has the Company formulated supplier management policies that require suppliers to follow relevant regulations on environmental protection, occupational safety and health or labor human rights, and implemented them?	✓ ✓		channels and opportunities to its staff members and provides training in the required skills. (5) Regulations applicable to each stage of the lifecycle value chain of all business actions and products of the Corporation shall conform to the legal regulations of the countries where its offices are located. The corporation must establish an appropriate law-compliance policy, consolidate documentation procedures for the management system, as well as communicate relevant policy and offer educational training to staff members. These actions are to ensure that all operational activities before and after the launch of products are conducted in compliance with legal regulations and the corporate policy and present no threat to the health, safety, and privacy	

Assessment item	Actual Practice			Dissimilarity with Corporate Social Responsibility Best Practice Principles and reasons
	Y	N	Summary description	
			of customers or to the marketing and labelling of these products. (6) The Corporation has proposed three major points for supplier management and communicated the idea of sustainable corporate social responsibility to its suppliers to ensure stable procurement and supply, thereby safeguarding patients' right to medication. The Corporation has maintained smooth communication with its suppliers and, on the basis of mutual trust, ensured reasonable benefits on both sides to boost mutual growth.	
5. Does the Company reference international report preparation standards or guidelines to prepare corporate social responsibility reports and other reports for disclosing the Company's non-financial information? Are the aforementioned reports supported by the trust or guaranteed opinions of	✓		Following international reporting standards, the Corporation took the initiative to release the 2020 Corporate Social Responsibility Report, wherein the Corporation's nonfinancial data and performance are disclosed.	None

Assessment item	Actual Practice			Dissimilarity with Corporate Social Responsibility Best Practice Principles and reasons
	Y	N	Summary description	
third-party verification units?			On September 28, 2020, the report was uploaded to the Market Observation Post System. Said report will be subjected to verification by a third party, whose assurance opinion will enhance the report's credibility.	
6. If the company has formulated corporate social responsibility practice principles in accordance with the Corporate Social Responsibility Best Practice Principles, please state the differences between the two in their operations, if any: The Corporate Social Responsibility Practice Principles formulated by the Company are consistent in its spirit and practical implementation and have no significant dissimilarities.				
7. Other material information that may aid in understanding the operations on corporate social responsibility: (1) Environmental protection: The Company implements environmental protection in accordance with relevant laws and regulations, and fulfills the responsibilities of an environmentally friendly citizen. (2) Social welfare: The Company is committed to outside its industry and donates to research institutions as appropriate. (3) Human rights and employee interests: 1. The Company maintains a favorable working environment in accordance with the "Act of Gender Equality in Employment" and "Sexual Harassment Prevention Act" and other laws to protect employee work rights. 2. To improve the quality and work skills of employees and enhance their efficiency and quality of work, the Company has formulated Learning and Training Management Regulations aimed at training outstanding professionals, thereby improving operational performance and enabling the effective development and use of human resources. (4) Safety and health: 1. The Company attaches great importance to the management of employees' occupational				

Assessment item	Actual Practice			Dissimilarity with Corporate Social Responsibility Best Practice Principles and reasons
	Y	N	Summary description	
safety and health, and department managers pay attention at all times to control occupational safety and health risks and improve performance. 2. The company has formulated laboratory-related operating specifications to standardize basic procedures for employees to operate equipment, and organizes on-the-job labor safety and health education training at random to ensure a safe working environment.				
8. Please state details if the Company corporate social responsibility report has satisfied the verification standard of a relevant verification agency: none				

F. Ethical Corporate Management Practices and Adopted Measures

Assessment item	Actual practice			Dissimilarity with Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies and reasons
	Y	N	Summary description	
1. Formulated of ethical corporate management policies and plans (1) Has the Company formulated the ethical corporate management policies approved by the Board of Directors, and expressed its commitment to the policies and practices of ethical corporate management in the regulations and external documents, as well as the Board and management's commitment to actively implement	✓		(1) The company has formulated Ethical Corporate Management Practice Principles and established satisfactory corporate governance and risk control mechanisms in order to achieve the sustainable development of the	None

Assessment item	Actual practice			Dissimilarity with Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies and reasons
	Y	N	Summary description	
the operating policy? (2) Has the Company established an assessment mechanism for the risks of unethical behavior, regularly analyzed and evaluated business activities with a high risk of unethical behavior, and formulated plans to prevent such behaviors that encompass the prevention measures stipulated in Article 7, Subparagraph 2 of the Ethical Corporate Management Best Practice Principles for TWSE / GTSM Listed Companies? (3) Has the company adopted preventive measures and regularly reviewed plans concerning items listed in Article 7, Subparagraph 2 of the Ethical Corporate Management Best Practice Principles for TWSE / GTSM Listed Companies or other business activities with a high risk of unethical behavior?	✓ ✓		Company. (2) The Company's directors, managers, employees, or persons with substantial control are strictly prohibited from directly or indirectly providing, promising, requesting or accepting any improper favors, or other acts of unethical behavior that violate integrity, lawfulness, or fiduciary duty. (3) The Company has established a code of conduct for employees, based on the principles of self-discipline, integrity, honesty towards customers, investors, colleagues, suppliers and everyone we come into contact with. Employees are also strictly prohibited from accepting any	

Assessment item	Actual practice			Dissimilarity with Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies and reasons
	Y	N	Summary description	
			inappropriate favors and hospitality.	
2. Implementing ethical corporate management				None
(1) Does the Company evaluate the integrity records of the counterparties and clearly stipulate terms of ethical behavior in the contract signed with counterparties?	✓		(1) The Company's business activities do not involve illegal matters or purposes. For those who have a record of unethical behavior, the person may be demoted, suspended, or removed from the list of qualified suppliers.	
(2) Has the Company set up a special unit for promoting ethical corporate management under the Board of Directors, which regularly reports to the Board (at least once a year) on its ethical corporate management policies and plans aimed at preventing unethical behavior and supervises the implementation?	✓		(2) The Company established an organizational hierarchy to achieve division of labor and mutual supervision. At present, the audit office conducts regular and random audits and reports regularly to the Board of Directors.	
(3) Has the Company formulated policies to prevent conflicts of interest, provided appropriate	✓		(3) The directors of the Company maintain a high degree of self-	

Assessment item	Actual practice			Dissimilarity with Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies and reasons
	Y	N	Summary description	
reporting channels, and implemented them?			discipline and disclose vital details of their conflicts of interests in motions listed by the Board when the motions present a conflict of interest with the director or their proxy. Such directors abstain from discussion and passing resolutions and do not exercise the proxy voting right authorized by another director when their conflicts of interests are against the interests of the Company.	
(4) Has the Company established an effective accounting system and internal control for the implementation of ethical corporate management, and drafted internal audit units based on the assessment results for risks of unethical behavior, and complied with the plan to prevent such behavior, or entrust	✓		(4) The Company established an effective accounting and internal control system. The Company has been promoting the digitization of operations, which connects various management functions	

Assessment item	Actual practice			Dissimilarity with Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies and reasons
	Y	N	Summary description	
an accounting firm to perform the audit?			from one computer to another other, laying interconnecting checks at each layer to execute the management of anomalies.	
(5) Does the Company regularly hold internal and external ethical corporate management training?	✓		(5) The Company will continue to hold internal and external ethical corporate management training.	
3. Offence-reporting practices (1) Has the Company formulated a clear reporting and reward system, established convenient reporting channels, and assigned appropriate personnel to handle subjects being reported? (2) Has the company established standard operating procedures for accepting offence-reporting investigations, follow-up measures to be taken after the investigation is completed, and related confidentiality mechanisms? (3) Has the company taken measures to protect whistleblowers from improper treatment due to their	✓ ✓ ✓		The Company accepts all notifications of unlawful or unethical matters, and has an independent special unit responsible for related investigation. Confidentiality of the identity of the informants and the content of the report are ensured. The results of the investigation are regularly announced to all employees and reported to the members of the Board of Directors.	None

Assessment item	Actual practice			Dissimilarity with Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies and reasons
	Y	N	Summary description	
reporting of others' offences?				
4. Reinforcing information disclosure (1) Does the Company disclose the content of its ethical corporate management principles and promote its effectiveness on the Company website and the Market Observation Post System?	✓		The Company website discloses the status of the Company and complies with relevant laws concerning posting timely information on the Market Observation Post System.	None
5. If the company has formulated ethical corporate management practice principles in accordance with the Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies, please state the differences between the two in their operations, if any: none				
6. Other material information conducive to understanding the ethical corporate management practices of the Company (e.g., amendments to existent practice principles following reviews): none				

G. If the company has formulated corporate governance practice principles and related regulations, the company should state where the information can be found:
The Company has formulated Corporate Governance Practice Principles and relevant information can be found under the corporate governance section of the Company website.

H. Other material information that may assist in understanding the operations of corporate governance must be disclosed:
The Board of Directors convene at least once every quarter. Managers and accounting supervisors attend the meeting to face enquiries from directors, and audit managers attend the meeting to report audit findings to the Board of Directors and Audit Committee.

I. Implementation of an Internal Control System

a. Statement of the Internal Control System

Statement of Internal Control System Date:February 26, 2021

The internal control system from January 1 to December 31, 2020, according to the result of self-assessment is thus stated as follows：

1.The Company acknowledges that the implementation and maintenance of internal control system is the responsibility of Board of Directors and management, and the Company has established such system. The internal capital system is aimed to reasonably assure that the goals such as the effectiveness and the efficiency of operations (including profitability, performance and protection of assets), the reliability of financial reporting and the compliance of applicable law and regulations are achieved.

2.The internal control system has its innate restriction. An effective internal control system can only ensure the foregoing three goals are achieved; nevertheless, due to the change of environment and conditions, the effectiveness of internal control system will be changed accordingly. However, the internal control system of the Company has self-monitoring function and the Company will take corrective action once any defect is identified.

3.According to the effective judgment items for the internal control system specified in "Highlights for Implementation of Establishing Internal control System by Listed Companies" (hereinafter referred to as "Highlights") promulgated by Securities and Futures Commission, Ministry of Finance R.O.C., the Company has made judgment whether or not the design and execution of internal control system is effective. The judgment items for internal control adopted by “Highlights” are, based on the process of management control, for classifying the internal control into five elements: 1.Control environment; 2.Risk assessments; 3.Control activities; 4.Information and communication; and 5.Monitoring. Each element also includes a certain number of items. For the foregoing items, refer to "Highlights".

4.The Company has adopted the aforesaid judgment items for internal control to evaluate the effectiveness of design and execution of internal control system.

5.Based on the above-mentioned result of evaluation, the Company suggests that the internal control system, including the design and execution of internal control relating to the effectiveness and efficiency of operation, the reliability of financial

reporting, the compliance of applicable law and regulations has been effective and they can reasonably assure the aforesaid goals have been achieved.

6. This statement will be the main content for annual report and prospectus and will be disclosed publicly. If the above contents have any falsehood and concealment, it will involve in the liability as mentioned in Article20, 32, 171 and 174 of Securities and Exchange Law.

7. This statement has been approved by the meeting of Board of Directors on February 26, 2021, and those 11 directors in presence all agree at the contents of this statement.

PharmaEssentia Corp.

Corporation Chairman：Ching-Leou Teng

President：Jack Hwang

b. If a CPA was engaged to conduct a special audit of the internal control system, provide its audit report: None

J. For the most recent fiscal year or during the current fiscal year up to the date of publication of the annual report, disclose any sanctions imposed in accordance with the law upon the company or its internal personnel, any sanctions imposed by the company upon its internal personnel for violations of internal control system provisions, principal deficiencies, and the state of any efforts to make improvements:
None.

K. Material resolutions of a shareholder meeting or board of directors meeting during the most recent fiscal year or during the current fiscal year up to the date of publication of the annual report:

1. Review of the Implementation of Shareholders Meeting Resolutions
The 2020 Annual Shareholders Meeting of the Company was held on May 27, 2020 at Taipei Nangang Exhibition Hall. The following resolutions were passed and a review of their implementation statuses are as follows:

Report Items
1. 2019 Business Report
All attending shareholders have been informed
2. 2019 Audit Committee's Review Report
All attending shareholders have been informed
3. Business Operation Plan Progress Report
All attending shareholders have been informed
4.Progress Report of the Private Placement Implementation
All attending shareholders have been informed
5.Report of Amendments to the Ethical Corporate Management Best Practice Principles
All attending shareholders have been informed

Proposed Adoptions
1. Adoption of the 2019 Business Report and Financial Statements
Resolution: Acknowledgment item was voted based on its original description. Among 167,999,280 of the voting share/unit (including those in the electronic voting system), 165,173,697 approved;357,677 rejected; 0 voided; 3,580,776 abstained/voided. The approving votes concluded at 98.31%, which passed the statutory laws and regulations. The case is approved as proposed.
2. Adoption of the 2019 Deficit Compensation Statement
Resolution: Acknowledgment item was voted based on its original description. Among 167,999,280 of the voting share/unit (including those in the electronic voting system), 161,948,978 approved; 519,868 rejected; 5,530,434 abstained/voided. The approving votes concluded at 96.39%, which passed the statutory laws and regulations. The case is approved as proposed.

Discussions

1. Issuance of employee stock warrants at an exercise price lower than the spot price

Resolution: Acknowledgment item was voted based on its original description. Among 168,146,180 of the voting share/unit (including those in the electronic voting system), 155,467,705 approved; 2,915,419 rejected; 9,763,056 abstained/ voided. The approving votes concluded at 92.45%, which passed the statutory laws and regulations. The case is approved as proposed.

2. Sponsoring the issuance of overseas depositary receipts through issuing new shares for capital increases by cash and/or facilitating the private placement of common shares for cash and/or issuing private convertible or Euro-convertible bonds.

Resolution: Acknowledgment item was voted based on its original description. Among 168,146,180 of the voting share/unit (including those in the electronic voting system), 157,794,620 approved; 4,627,988 rejected; 5,723,572 abstained/ voided. The approving votes concluded at 93.84%, which passed the statutory laws and regulations. The case is approved as proposed.

2. Board of Director Meetings

Date	Major motions	Resolution
February 19, 2020	1. Examination of the Company's 2019 Financial Statements and Business Report	Passed without objection by all participating directors
	2. Deficit Compensation Plan for 2019	Passed without objection by all participating directors
	3. Planning of the reappointment of EY Taiwan for providing the Company with audit services for the 2020 financial statements and tax reports, and assessment of CPA independence	Passed without objection by all participating directors
	4. Audit service fees for 2020	Passed without objection by all participating directors
	5. Plans for cash capital increase through issuance of new shares in 2020	Passed without objection by all participating directors
	6. Business Operation Plan	Passed without objection by all participating directors
	7. Plans to change fund utilization items of the 1st cash capital increase in 2015 and the 1st cash capital increase in 2016 before being listed	Passed without objection by all participating directors

Date	Major motions	Resolution
	over-the-counter	
	8. Plans for issuing employee stock options to buy company stock at below-market prices	Passed without objection by all participating directors
	9. Capital increase for the US subsidiary company, PharmaEssentia USA Corp.	Passed without objection by all participating directors
	10. Capital increase for PharmaEssentia Biotechnology (Beijing) Co., Ltd.	Passed without objection by all participating directors
	11. Establishment of the South Korean subsidiary company	Passed without objection by all participating directors
	12. Plans to sign a marketing and advertisement service agreement with RevHealth for the US newly launched drug, Besremi	Passed without objection by all participating directors
	13. Plans to cancel 740,741 shares awarded in a final ruling.	Passed without objection by all participating directors
	14. Statement of Internal Control for 2019	Passed without objection by all participating directors
	15. Drafting matters related to the 2020 Annual Shareholders Meeting	Passed without objection by all participating directors
	16. Exercising the 2019 Q4 employee stock options and stipulating the effective date of capital increase	Passed without objection by all participating directors
	17. Modifications to the Company's organizational structure	Passed without objection by all participating directors
	18. Review of the 2019 performance assessment of managers	Passed without objection by all participating directors
	19. Review of the 2019 salary increase of managers	Passed without objection by all participating directors
April 14, 2020	1. Operation plans, director and manager appointments, and capital increase plans for the South Korean subsidiary company	Passed without objection by all participating directors
	2. Modified the equity acquisition agreement between the Company	Passed without objection by all participating directors

Date	Major motions	Resolution
	and Panco Healthcare Co. Ltd (hereafter referred to as Panco Healthcare), and the appointment of directors, supervisors, and managers of Panco Healthcare	
	3. Proposal to compile a report on the actual implementation of carrying out the sponsoring issuance of overseas depositary receipts through cash capital increase and private placement of common shares or private placement in overseas or domestic convertible bonds presented during the 1st Shareholders Interim Meeting of 2019.	Passed without objection by all participating directors
	4. Planning of carrying out the sponsoring issuance of overseas depositary receipts through cash capital increase and/or cash capital increase through private placement of common shares and/or private placement in overseas or domestic convertible bonds for 2020	Motion passed by all participating directors without objection. The subscribers of the present case were individually reviewed. Director Chien-Ho Tien served as the Acting Chairman and approved the review for Ching-Leou Teng, an insider with conflicts of interests. Approval for the remaining insiders with conflicts of interests was passed following their avoidance and Chair Ching-Leou Teng's consultation with the participating directors.
	5. Added content on explaining the Company's plan to increase capital for the US subsidiary company, PharmaEssentia USA Corporation	Passed without objection by all participating directors
	6. Revise matters related to the 2020 Shareholders Meeting	Passed without objection by all participating directors
May 15, 2020	1.Validation of the Corporation's consolidated financial statement for Q1 of 2020.	Passed without objection by all participating directors
	2.Amendments to the Corporate	Passed without objection by all participating

Date	Major motions	Resolution
	Governance Code, Guidelines on the Operating Procedures and Actions for Ethical Corporate Management, and Corporate Social Responsibility Code.	directors
	3.Issuance of new employee stock options in Q1 of 2020 and determination of the record date of the capital increase.	Passed without objection by all participating directors
109.6.11	1.Determination of the price and number of shares for the first private placement in 2020, the placees, the period wherein the price of the shares shall be paid up, and the record date of the capital increase.	Passed without objection by all participating directors
	2.Increase of investment in the Corporation's subsidiary, Panco Healthcare Co. Ltd.	Passed without objection by all participating directors
109.08.11	1.Validation of the consolidated financial statements for Q2 of 2020.	Passed without objection by all participating directors
	2.Amendments to the Corporation's Regulations for the Management of Financial Statement Preparation Procedures.	Passed without objection by all participating directors
	3. Plan to sign a phase III clinical trial contract aimed at a New Drug Application for P1101-ET with EPS International Holdings Co., Ltd.	The Board, except for Director Lung-Chih Yu who could not express opinions without National Development Fund's authorization, unanimously passed the resolution.
	4. Decision to cancel 740,741 treasury shares it obtained through the court's final ruling and determination of the record date of the capital reduction.	Passed without objection by all participating directors
	5. Issuance of new employee stock options in Q2 of 2020 and determination of the record date of the capital increase.	Passed without objection by all participating directors

Date	Major motions	Resolution
109.10.28	1. Plan, according to the German attorney's analysis and recommendations on the ICC International Court of Arbitration's verdict made on October 21, 2020, to (1) reach a settlement and enhance collaboration with the other party, (2) request the Court of Frankfurt to set aside the arbitration award, and (3) file a lawsuit against AOP Orphan Pharmaceuticals AG (AOP) to request compensation for damages caused by its deliberate contract violation, which delayed the Corporation's BLA submission in the United States. 2. Plan to repurchase treasury shares.	The Board unanimously passed proposal (1) and (2) of this discussion item. Proposal (3) is reserved for discussion at the next BOD meeting. Passed without objection by all participating directors
109.11.13	1. Validation of the Corporation's consolidated financial statements for Q3 of 2020. 2. Plan to request for arbitration regarding compensation for damages caused by AOP's failure to complete clinical trials for idiopathic myelofibrosis, chronic myelogenous leukemia, and ET, in turn delaying the Corporation's submission of a BLA for PV. 3. Amendments to provisions in the Corporation's Management Regulations. 4. Issuance of new employee stock options in Q3 of 2020 and determination of the record date of the capital increase.	Passed without objection by all participating directors The Board, except for Director Lung-Chih Yu who could not express opinions without National Development Fund's authorization, unanimously passed the resolution. Passed without objection by all participating directors Passed without objection by all participating directors

Date	Major motions	Resolution
109.12.16	1. Validation of the Corporation's consolidated financial statements for Q3 of 2020.	Passed without objection by all participating directors
	2. Increase of investment in PharmaEssentia Japan KK.	Passed without objection by all participating directors
	3. Increase of investment in PharmaEssentia Asia (Hong Kong) Limited.	Passed without objection by all participating directors
	4. Plan to acquire exclusive authorization from Athenex to sell Tirbanibulin (KX01) in additional countries and with additional indications, specifically with the indications of actinic keratosis, psoriasis, and skin cancer in Japan and South Korea as well as the indication of skin cancer in Taiwan, Malaysia, and Singapore.	Passed without objection by all participating directors
	5. Audit plan for 2021.	Passed without objection by all participating directors
110.1.6	1. Plan for the first repurchase of treasury shares in 2021.	Passed without objection by all participating directors
	2. Plan to amend its phase III clinical trial contracts for P1101-ET with the two CROs, namely Medpace Inc. and EPS International Holdings Co., Ltd.	Passed without objection by all participating directors
110.2.26	1. Contracting of the Corporation's U.S. subsidiary, PharmaEssentia USA Corporation, for pharmaceutical development services.	Passed without objection by all participating directors
	2. Review of the Corporation's 2020 annual financial report and business report.	Passed without objection by all participating directors
	3. Use of capital surplus to offset the Corporation's deficit in 2020.	Passed without objection by all participating directors

Date	Major motions	Resolution
	4. Plan to continue hiring Ernst & Young to attest the financial and tax reports of 2021 and evaluate the independence of the certified public accountants appointed.	Passed without objection by all participating directors
	5. Certified public accountant's attestation fee for 2021.	Passed without objection by all participating directors
	6. Increase of investment in the Corporation's Korean subsidiary, PharmaEssentia Korea Corporation.	Passed without objection by all participating directors
	7. Review of the bank line of credit.	Passed without objection by all participating directors
	8. Plan to sign a contract with the US Besremi in 2021 for the new drug launch and marketing services.	Passed without objection by all participating directors
	9. Amendments to the Corporation's Management Procedures for the Acquisition or Disposal of Assets, Regulations for the Management of Business and Financial Interactions Among Stakeholders, Regulations for Securities Investment, and Rules for Board Meetings.	Passed without objection by all participating directors
	10. Declaration of the internal control system for 2020.	Passed without objection by all participating directors
	11. Election of a new Board of Directors.	Passed without objection by all participating directors
	12. Relevant matters for board elections.	Passed without objection by all participating directors
	13. Establishment of relevant matters for regular shareholder meetings in 2021.	Passed without objection by all participating directors
	14. Issuance of new employee stock options in Q3 of 2020 and determination of the record date of the capital increase.	Passed without objection by all participating directors
	15. Amendments to the Regulations	Passed without objection by all participating

Date	Major motions	Resolution
	for Manager Performance Appraisal.	directors
	16. Review of the 2020 performance appraisal for managers.	Passed without objection by all participating directors
	17. Review of the 2020 pay adjustment for managers.	Passed without objection by all participating directors
110.3.26	1. List of director candidates proposed by the current Board of Directors.	Passed without objection by all participating directors
	2. Plan to lift the ban on directors engaging in business operations against the Corporation.	Passed without objection by all participating directors
	3. Following the resolution in the 2020 regular shareholder meeting, the Corporation's status quo in its capital increase by cash through the issuance of global depositary receipts based on the issuance of common stock, capital increase by cash through private placement of common stock, or private placement of overseas or domestic convertible bonds.	Passed without objection by all participating directors
	4. Plan to increase capital by cash through the issuance of global depositary receipts based on the issuance of common stock, cash capital increase through private placement of common stock, and/or private placement of overseas or domestic convertible bonds.	Passed without objection by all participating directors
	5. Establishment of relevant matters for regular shareholder meetings in 2021.	Passed without objection by all participating directors
	6. Establishment of the Corporation's 2021 Regulations for the Issuance and Use of Employee Stock Options.	Passed without objection by all participating directors

Date	Major motions	Resolution
	7. Enhancement of the operational plan.	Passed without objection by all participating directors
	8. Replacement of one board director in the U.S. and Japanese subsidiaries.	Passed without objection by all participating directors
	9. Changes to the Corporation's accounting system.	Passed without objection by all participating directors

L. Content in which a major motion of the Board of Directors encountered dissenting opinions from a director or supervisor and is accompanied with records or written statements in the most recent year and up till the time of publication of the Annual Report:

On November 14, 2019, during the 2019 7th Board Meeting convened by the Seventh Term Board of Directors, when the motions "Adoption of the Company's 2019 Q3 Consolidated Financial Statements" and "Capital increase for PharmaEssentia Japan KK" was put to vote, 9 participating directors (including those attending by proxy) voted in favor, whereas 1 director, Director Tsui-Ling Lo, voted against. The motions were thus passed.

A summary of the written opinion of Director Tsui-Ling Lo is as follows:

(1) What is the reason behind the Accounts Receivables in the Consolidated Balance Sheet? To what company products do the Accounts Receivables correspond? Why have not the suppliers paid? What is the reason behind the current inventory balance of NT$180 million, which is 6 times that of the 2018 closing balance? What is the reason behind the one-fold increase in Other prepaid items? What matters required prepayments? The operating revenue between January and September 2019 increased drastically (an increase of NT$100 million) compared with the same period the previous year; please explain from which product is the revenue attributable to; what is the equivalent quantity of the product; and on how many patients was the product used?

(2) In the Operation Plans submitted for establishing the subsidiary company, the schedule of various planned items were all delayed. Take the case of PV treatment for example; it was originally planned that the program will enter Phase III clinical trial this year, obtain the drug permit license by 2020, and launch the drug onto the market by 2021. According to the present capital increase information, this program of the subsidiary is currently in Phase I clinical trial, expects to complete participant

recruitment in 2020, and obtain the drug permit license in 2021. I demand that a review report on the delays of the various programs in the Japanese market be presented to the Board of Directors first, and propose concrete methods for improvement.

The Company replied to each of the questions in detail during the Meeting, and subsequently provided the various responses in writing. The details have been recorded in the Board Meeting minutes.

M. Summary of the resignation of the company's chairman of the board, general manager, accounting supervisor, finance supervisor, internal audit supervisor, and R&D supervisor during the most recent fiscal year up to the printing of the annual report: None

5. Information on CPA Professional Fees

Accounting Firm	Name of CPA		CPA's Audit Period	Remark
Ernst & Young	Chien-Ju Yu	Li-Feng Lin	2020.1.1–2020.12.31	

Unit: NT$1,000

Fee Range \ Fee Items		Audit Fee	Nonaudit Fee	Total
1	< NT$2,000,000		V	
2	NT$2,000,000–NT$4,000,000	V		V
3	NT$4,000,000–NT$6,000,000			
4	NT$6,000,000–NT$8,000,000			
5	NT$8,000,000–NT$10,000,000			
6	>NT$10,000,000			

A. When nonaudit fees paid to the CPA, to the accounting firm of the CPA, and/or to any affiliated enterprise of such accounting firm are one quarter or more of the audit fees paid thereto, the amounts of both audit and nonaudit fees as well as details of nonaudit services shall be disclosed.

Unit: NT$1,000

Accounting Firm	Name of CPA	Audit Fee	Non-Audit Fee					CPA's Audit Period	Remarks
			System Design	Company Registration	Human Resource	Others	Subtotal		
Ernst & Young	Chien-Ju Yu Li-Feng Lin	3,000	-	-	-	395	395	2020.1.1~ 12.31	

B. When the company changes its accounting firm and the audit fees paid for the fiscal year of such change are lower than those for the previous fiscal year, the amounts of the audit fees before and after the change and the reasons shall be disclosed: N/A

C. When the audit fees paid for the current fiscal year are lower than those for the previous fiscal year by 15% or more, the reduction in the amount of audit fees, reduction percentage, and reason(s) therefore shall be disclosed: N/A

6. Information on Replacement of the CPA

A. Regarding the Former CPA: N/A

B. Regarding the Successor CPA: N/A

C. The company shall mail to the former CPA a copy of disclosures it is making pursuant to item A and B of the here preceding item, and advise the accountant of the need to respond by mail within 10 days should he/she disagree. The company shall disclose the content of the response letter from the former CPA:N/A

7. Where the Company's Chairperson, General Manager, or Any Managerial Officer in Charge of Finance or Accounting Matters Has in the Most Recent Year Held a Position at the Accounting Firm of its CPA or at an Affiliated Enterprise of Such Accounting Firm, the Name and Position of the Person, and the Period During Which the Position was Held, Shall be Disclosed

None.

8. Any Transfer of Equity Interests and/or Pledge of or Change in Equity Interests by a Director, Supervisor, Managerial Officer, and Shareholder With a Stake of More than 10% During the Most Recent Fiscal Year or During the Current Fiscal Year up to the Date of Publication of the Annual Report. Where the Counterparty in any Such Transfer or Pledge of Equity Interests is a Related Party, Disclose the Counterparty's Name, its Relationship Between That Party and the Company as Well as the Company's Directors, Supervisors, and 10% Shareholders, and the Number of Shares Transferred or Pledged

A. Changes in Shareholding of Directors, Supervisors, Managers, and Major Shareholders

As of March 28, 2021; shares

Title	Name	2020		2021 (as of March 28)	
		Shares Holding +(−)	Shares Pledged +(−)	Shares Holding +(−)	Shares Pledged +(−)
Chairman	Ching-Leou Teng	100,000	1,020,000	-	-
Director	National Development Fund Executive Yuan	-	-	-	-
Director	Chao-Ho Chen	495,809	-	-	-
Director	Tian Chang		-	-	-
Director General Manager	Jack Hwang	90,452	680,000	-	-
Independent Director	Jinn-Der Chang	91,511	-	-	-
Independent Director	Patrick Y. Yang			-	-
Independent Director	Jien-Heh Tien	-	-	-	-
Director	Ben-Yuan Chen	254,110	-	-	-
Director	Yao-Hwa Co., Ltd. Management Commission	-	-	-	-
Director	Shi-Ying Hsu	209,569	-	-	-
CEO	Ko-Chung Lin		540,000	-	-
Chief Medical Officer	Albert Qin	10,000	-	10,000	-
Chief Operating Officer, Taichung Plant	Yen-Tung Luan	20,000	-	5,000	-
Senior Manager of Finance	Snow Chang	4,212	-	-	-

B. Relationship information, if the counterparty in any such transfer of equity interests by directors, supervisors, managers, and major

shareholders is a related party: None.

C. Relationship information, if the counterparty in any such pledge of equity interests is a related party: None

9. Relationship Information, If Among the Company's 10 Largest Shareholders Any One is a Related Party or a Spouse and Relative Within the Second Degree of Kinship of Another

As of March 29, 2020; Shares; %

Name	Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Top 10 Shareholders Who are Spouses or Within Two Degrees of Kinship, Title or Name and Relationship		Remarks
	Shares	%	Shares	%	Shares	%	Name	Relationship	
National Development Fund Executive Yuan	22,066,296	8.37	-	-	-	-	-	-	-
Hong Tai Investment Co., Ltd.	10,311,569	3.91	-	-	-	-	Chao-Ho Chen	Chairman of the company	-
Rep: Chao-Ho Chen	4,155,401	1.58	814,028	0.31	-	-	Han-Cheng Chen Yu-Ching Chen Hong Tai Investment	Relative within two degrees of kinship Relative within two degrees of kinship Chairman of the company	-
Yao-Hwa Co., Ltd. Management Commission	9,666,000	3.67	-	-	-	-	-	-	-
Han-Cheng Chen	9,305,790	3.53	-	-	-	-	Yu-Ching Chen Chao-Ho Chen	Relative within two degrees of kinship Relative within two degrees of kinship	-
Eon Capital investment account, entrusted to Yuanta Commercial Bank	6,663,152	2.53	-	-	-	-	-	-	-
Jui-Yu Yu	6,647,722	2.52	-	-	-	-	-	-	-
Chao-Ho Chen	3,659,592	1.63	758,670	0.34	-	-	Han-Cheng Chen Yu-Ching Chen Hong Tai Investment	Relative within two degrees of kinship Relative within two degrees of kinship Chairman of the company	
Ko-Chung Lin	3,553,964	1.35	1,300,000	0.49	-	-	-	-	-

As of March 29, 2020; Shares; %

Name	Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Top 10 Shareholders Who are Spouses or Within Two Degrees of Kinship, Title or Name and Relationship		Remarks
	Shares	%	Shares	%	Shares	%	Name	Relationship	
JPMorgan Chase Bank in Custody for Franklin Templeton Emerging Market Smaller Companies Fund	3,233,832	1.23	-	-	-	-	-	-	-
HUNYA FOODS	3,083,453	1.17	-	-	-	-	-	-	-

10. The Total Number of Shares and Total Equity Stake Held in Any Single Enterprise by the Company, its Directors and Supervisors, Managers, and Any Companies Controlled Either Directly or Indirectly by the Company

As of DEC 31, 2019; Unit: 1,000 shares; %

Investment	Investment of the Company		Investments From Directors, Supervisors, Managers, and Any Companies Controlled Either Directly or Indirectly by the Company		Total Investment	
	Shares	%	Shares	%	Shares	%
PharmEssentia Asia (Hong Kong) Co., Ltd.	5,200	100%	-	-	5,200	100%
PharmEssentia (Hong Kong) Co., Ltd. (Note 1)	-	-	-	-	-	-
PharmaEssentia Japan KK	16,440	100%	-	-	16,440	100%
PharmaEssentia USA corpotation	2,900	100%	-	-	2,900	100%
PharmaEssentia Korea Corporation	235	100%	-	-	235	100%
Panco Healthcare co.,Ltd.	10,000	100%	-	-	10,000	100%

Note 1: To expand the mainland Chinese market, the Company established the wholly owned PharmaEssentia (Hong Kong) Co., Ltd. in October 2013 to manage the Company's patents. As of March 31, 2021, PharmaEssentia (Hong Kong) had only completed the registration process. The Company has not yet issued shares

IV. Information on Capital Raising Activities

1. Capital and Shares

A. Source of Share Capital

As of March 29, 2020; Unit: NT$1,000; 1,000 shares

Year/Month	Issue Price (NT$)	Authorized Share Capital		Capital Stock		Remark		
		Shares	Amount	Shares	Amount	Sources of Capital	Capital Increase by Assets Other Than Cash	Other
2016/3	150	200,100	2,001,000	195,283	1,952,832	NT$50,000,000 cash	-	Shou-Shang-Tzu No. 10501062410 dated 2016.3.31.
2016/4	10	200,100	2,001,000	195,458	1,954,583	-	NT$1,751,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10501073000 dated 2016.4.25.
2016/4	10	200,100	2,001,000	195,662	1,956,621	-	NT$2,038,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10501084170 dated 2016.4.28.
2016/6	10	200,100	2,001,000	198,130	1,981,301	-	NT$24,680,000 from restricted stock awards.	Shou-Shang-Tzu No. 10501122570 dated 2016.6.15.
2016/8	159	400,000	4,000,000	218,130	2,181,301	NT$200,000,000 cash	-	Shou-Shang-Tzu No. 105011860600 dated 2016.8.12.
2016/8	10	400,000	4,000,000	218,348	2,183,486	-	NT$2,185,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10501206390 dated 2016.8.23.
2016/12	10	400,000	4,000,000	218,460	2,184,601	-	NT$2,086,000 from conversion of stock warrants; (NT$972,000) restricted stock awards recovered.	Shou-Shang-Tzu No. 10501272390 dated 2016.12.1.
2017/1	10	400,000	4,000,000	218,538	2,185,389	-	NT$876,000 from conversion of stock warrants; (NT$88,000) restricted stock awards recovered.	Shou-Shang-Tzu No. 10601009870 dated 2017.1.26.
2017/5	10	400,000	4,000,000	218,812	2,188,128	-	NT$2,827,000 from conversion of stock warrants; (NT$88,000) restricted stock awards recovered.	Shou-Shang-Tzu No. 10601064650 dated 2017.5.19.
2017/8	10	400,000	4,000,000	218,885	2,188,850	-	NT$723,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10601121590 dated 2017.8.25.
2017/11	10	400,000	4,000,000	218,721	2,187,208	-	NT$1,223,000 from conversion of stock warrants; (NT$2,866,000) restricted stock awards recovered.	Shou-Shang-Tzu No. 10601161720 dated 2017.11.29.

2018/4	10	400,000	4,000,000	218,969	2,189,686	-	NT$2,478,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10701038950 dated 2018.4.12.
2018/5	10	400,000	4,000,000	219,008	2,190,088	-	NT$402,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10701058900 dated 2018.5.30.
2018/9	10	400,000	4,000,000	219,126	2,191,260	-	NT$1,206,000 from conversion of stock warrants; (NT$34,000) restricted stock awards recovered.	Shou-Shang-Tzu No. 10701106890 dated 2018.9.5.
2018/11	10	400,000	4,000,000	219,085	2,190,849	-	NT$1,664,000 from conversion of stock warrants; (NT$2,075,000) restricted stock awards recovered.	Shou-Shang-Tzu No. 10701146730 dated 2018.11.27.
2019/4	10	400,000	4,000,000	219,230	2,192,297	-	NT$1,478,000 from conversion of stock warrants; (NT$30,000) restricted stock awards recovered.	Shou-Shang-Tzu No. 10801041280 dated 2019.4.23.
2019/6	10	400,000	4,000,000	219,105	2,191,048	-	NT$726,000 from conversion of stock warrants; (NT$1,975,000) restricted stock awards recovered.	Shou-Shang-Tzu No. 10801041280 dated 2019.6.3.
2019/9	10	400,000	4,000,000	219,276	2 ,192,766	-	NT$1,718,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10801118240 dated 2019.9.3.
2019/12	10	400,000	4,000,000	219,375	2 ,193,756	-	NT$990,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10801173720 dated 2019.12.3.
2020/1	10	400,000	4,000,000	225,043	2 ,250,438	-	NT$56,682,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10801041280 dated 2020.1.13.
2020/3	10	400,000	4,000,000	225,053	2,250,538	-	NT$100,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10901032270 dated 2020.3.3.
2020/5	10	400,000	4,000,000	225,161	2,251,619	-	NT$1,080,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10901032270 dated 2020.5.29.
2020/7	10	400,000	4,000,000	241,887	2,418,869	-	NT$167,249,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10901032270 dated 2020.7.8.
2020/8	10	400,000	4,000,000	263,887	2,638,869	NT$220,000,000 cash		Shou-Shang-Tzu No. 10901032270 dated 2020.8.25.
2020/9	10	400,000	4,000,000	263,203	2,632,031		NT$570,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10901032270 dated 2020.11.25.
2020/11	10	400,000	4,000,000	263,418	2,634,183		NT$2,152,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10901032270 dated 2020.9.24.

2021/3	10	400,000	4,000,000	263,447	2,634,478		NT$295,000 from conversion of stock warrants.	Shou-Shang-Tzu No. 10901032270 dated 2021.3.9.

As of March 28, 2021; Shares

Type of Stock	Authorized Share Capital			Remark
	Issued Shares	Unissued Shares	Total	
Common Stock	263,539,341	134,460,659	400,000,000	Listed

Note: This includes 91,500 employee stock options that were converted into common stocks but not yet registered.

B. Composition of Shareholders

As of March 28, 2021

Shareholder Composition / No. of Shareholders	Government Agencies	Financial Institutions	Other Juridical Persons	Individuals	Foreign Institutions and Individuals	Treasury Stock	Total
Number of Shareholders	1	5	93	14,604	115	1	14,819
Shareholding	22,066,296	823,095	31,653,367	167,221,608	37,935,975	3,839,000	263,539,341
Holding Percentage (%)	8.37%	0.31%	12.01%	63.46%	14.39%	1.46%	100.00%

C. Distribution Profile of Share Ownership

a. Common share – NT$10/share

As of March 28, 2021

Shareholder Ownership			Number of Shareholders	Shareholding	Holding Percentage (%)
1	–	999	3,615	227,786	0.09
1,000	–	5,000	7,897	15,334,131	5.82
5,001	–	10,000	1,278	9,452,814	3.59
10,001	–	15,000	498	6,174,036	2.34
15,001	–	20,000	329	5,805,560	2.20
20,001	–	30,000	372	9,052,252	3.43
30,001	–	50,000	310	11,984,862	4.55
50,001	–	100,000	263	18,173,318	6.90
100,001	–	200,000	119	16,467,371	6.25
200,001	–	400,000	66	18,565,041	7.04
400,001	–	600,000	23	11,202,080	4.25
600,001	–	800,000	10	7,096,475	2.69
800,001	–	1,000,000	6	5,183,807	1.97

As of March 28, 2021

Shareholder Ownership	Number of Shareholders	Shareholding	Holding Percentage (%)
1,000,001 or over	31	109,619,281	33
Total	11,235	219,469,992	14,819

b. Preferred share: None

D. Major Shareholders

As of March 28, 2021

Name of Major Shareholder \ Share	Shareholding	Holding Percentage (%)
National Development Fund Executive Yuan	22,066,296	8.37
Hong Tai Investment Co., Ltd.	10,311,569	3.91
Yao-Hwa Co., Ltd. Management Commission	9,666,000	3.67
Han-Cheng Chen	9,305,790	3.53
Eon Capital investment account, entrusted to Yuanta Commercial Bank	6,663,152	2.53
Jui-Yu Yu	6,647,722	2.52
Chao-Ho Chen	4,155,401	1.58
Ko-Chung Lin	3,553,964	1.35
J JPMorgan Chase Bank in Custody for Franklin Templeton Emerging Market Smaller Companies Fund	3,233,832	1.23
HO YEN	3,083,453	1.17

E. The Company's Net Worth Per Share, Earnings Per Share, Dividends Per Share, and Related Information

1. Unit: 1,000 shares; NT$

Item \ Year			2019	2020	As of March 31, 2021
Market Price Per Share	Highest Market Price		186	145.5	125.0
	Lowest Market Price		96	53.6	89.3
	Average Market Price		134.86	107.40	105.34
Net Worth Per Share	Before Distribution (Note 1)		10.02	14.88	-
	After Distribution (Note 1)		10.02	14.88	-
Earnings Per Share	Weighted Average Shares (Note 1)		219,137	242,254	-
	Earnings Per Share (Note 1)		(3.85)	(8.04)	-
Dividends Per Share	Cash Dividends (Note 1)		-	-	-
	Stock Dividends	Dividends from Earnings	-	-	-
		Dividends from Capital Surplus	-	-	-
	Accumulated Undistributed Dividend		-	-	-
Return on Investment	Price/Earnings Ratio		-	-	-
	Price/Dividend Ratio		-	-	-
	Cash Dividend Yield		-	-	-

*If shares are distributed in connection with a capital increase out of earnings or capital reserve, further disclose information on market prices and cash dividends retroactively adjusted based on the number of shares after distribution.
Note 1: Calculated using NT$10 par value per share.

F. The Company's Dividend Policy and Implementation

a. Dividend Policy in the Articles of Incorporation

Article 20: If the Company sustains profit for the year (i.e., the profit before employee and director remunerations are deducted from profit before tax and after cumulative losses are reimbursed), not less than 1% of the profit shall be set aside as employee remuneration and not more than 5% of the profit shall be set aside as director remunerations.

The distribution ratio of employee and director remuneration and the distribution method of employee remuneration in the form of shares or cash shall be resolved by a majority vote at a meeting attended by more than two-thirds of the directors and shall be reported at the shareholder meeting.

Employees receiving remuneration in the form of shares or cash must include employees of subordinate companies meeting certain criteria.

Matters related to stock ownership plans for the Company's employees shall be handled in accordance with the Company's regulations on dividend distribution for employees.

Article 20-1: The Company's earnings at the end of the accounting year shall be first subject to taxation and reimbursement of previous losses, followed by a 10% provision for statutory earnings reserve. A special capital reserve shall be set aside or reversed in accordance with relevant laws or as requested by the authorities in charge. The remainder plus undistributed earnings carried over from previous years shall be distributed according to the distribution plan proposed by the Board of Directors and submitted to the shareholders' meeting for approval.

Considering the current environment and growth phase of the company, the Company will facilitate future business development and expansion by distributing earnings according to its capital expenditure and fund requirement. At least 10% of earnings may be distributed to shareholders by way of cash dividends or stock dividends, provided, however, that the ratio for cash dividends does not exceed 10% of the total distribution.

b. Proposal to Distribute Dividend for the Year

The Board of Directors of the Company approved the resolution on February 26, 2021 to not distribute dividends for the year 2020.

c. Effect of Stock Dividend on the Company's Business Performance and Earnings Per Share:

None.

d. Compensations to Employees, Directors, and Supervisors

G. Effect of Stock Dividend on the Company's Business Performance and Earnings Per Share:

None.

H. Compensations to Employees, Directors, and Supervisors

a. The percentages or ranges with respect to employee, director, and supervisor compensation, as set forth in the company's articles of incorporation:
If the Company sustains profit for the year (i.e., the profit before employee and director remunerations are deducted from the profit before tax and after cumulative losses are reimbursed), not less than 1% of the profit shall be set aside as employee remuneration and not more than 5% as director remuneration.
The distribution ratio of employee and director remuneration and the method of distribution of employee remuneration in the form of shares or cash shall be resolved by a majority vote at a meeting attended by more than two-thirds of the directors and shall be reported at the shareholder meeting.
Employees receiving remuneration in the form of shares or cash must include employees of subordinate companies meeting certain criteria.
Matters related to stock ownership plans for the Company's employees shall be handled in accordance with the Company's regulations on dividend distribution for employees.

b. The basis for estimating the amount of employee, director, and supervisor compensation, for calculating the number of shares to be distributed as employee compensation, and the accounting treatment of the discrepancy, if any, between the actual distributed amount and the estimated figure, for the current period:

Not applicable given the Company's state of deficit in 2020.

c. Information on any approval by the board of directors for distribution of compensation:

i. The amount of any employee compensation distributed in cash or stocks and compensation for directors and supervisors; if any discrepancy exists between that amount and the estimated figure for the fiscal year these expenses are recognized, the discrepancy, its cause, and the status of treatment shall be disclosed: None

ii. The amount of any employee compensation distributed in stocks, and the size of that amount as a percentage of the sum of the after-tax net income stated in the parent company's financial reports or individual financial reports for the

current period and total employee compensation: None

d. The actual distribution of employee, director, and supervisor compensation for the previous fiscal year: None

I. Repurchase of the Company's Shares:

J. Treasury Stock Execution Report

Phase of repurchase	First repurchase in 2020	First repurchase in 2021
Date of resolution of the board of directors	109/10/28	110/1/6
Purpose of repurchase	**Transfer to employees**	**Transfer to employees**
Scheduled buyback period	109/10/29~109/12/27	110/1/7~110/3/5
Type and quantity of shares scheduled for repurchase	3,200,000 common stock	1,500,000 common stock
Scheduled buyback interval price	NT$57 – NT$126	NT$64 – NT$112
Actual repurchase period	109/10/29~109/12/25	110/1/8~110/3/5
Type and quantity of repurchased shares	2,935,000 common stock	904,000 common stock
Amount of shares repurchased	NT$257,384,659	NT$87,501,582
Average repurchase price per share	NT$87.69	NT$96.79
Quantity of shares canceled	None	None
Cumulative number of shares held by the Company	2,935,000 shares	3,839,000 shares
Proportion of cumulative number of shares held by the Company to the total outstanding shares (%)	1.12%	1.46%
Reason for the implementation being incomplete	Due to the Company's strategy of repurchasing in batches depending on stock price changes and trading volume, implementation is incomplete	Due to the Company's strategy of repurchasing in batches depending on stock price changes and trading volume, implementation is incomplete

2. Issuance of Corporate Bonds

None.

3. Issuance of Preferred Shares

None.

4. Issuance of Global Depository Receipts

None.

5. Status of Employee Stock Option Plan

A. Issuance of Employee Stock Option Plan

a. Compensation Plans for Unexpired Employee Stock Options Issued by the Company

As of March 28, 2021

Type of Employee Stock Option	2013 1st Issuance of Employee Stock Options	2017 1st Issuance of Employee Stock Options
Date of Effective Registration	N/A (Note)	2017.9.18
Issue Date	2013, 1st issuance, 1st period 2013, 1st issuance, 2nd period 2013, 1st issuance, 3rd period	2017, 1st issuance, 1st period 2017, 1st issuance, 2nd period
Number of Units Issued	7,745,000 units (2013, 1st issuance, 1st period) 631,000 units (2013, 1st issuance, 2nd period) 24,000 units (2013, 1st issuance, 3rd period)	2,166,000 units (2017, 1st issuance, 1st period) 2,234,000 units (2017, 1st issuance, 2nd period)
Ratio of Shares That Can be Subscribed to Total Issued Shares	4.29%	2.01%
Subscription Period	7 years	7 years
Contract Execution Method	Issuance of new common stocks	Issuance of new common stocks
Period and Ratio in Which Subscription is Restricted (%)	The cumulative proportion of shares that can be subscribed 3 months after expiration: 25% The cumulative proportion of shares that can be subscribed 1 year and 3 months after expiration: 50% The cumulative proportion of shares that can be subscribed 2 years and 3 months after expiration: 75% The cumulative proportion of shares that can be subscribed 3 years and 3 months after expiration: 100% The maximum cumulative proportion of shares that can be subscribed for every	The cumulative proportion of shares that can be subscribed 2 years after the expiration of the subscription period: 50% The cumulative proportion of shares that can be subscribed 3 years after the expiration of the subscription period: 75% The cumulative proportion of shares that can be subscribed 4 years after the expiration of the subscription period: 100%

	month after 3 years and 3 months increases proportionally.	
Number of Shares Obtained	7,712,000 shares	420,000 shares
NT$ Amount of the Shares Subscribed	NT$77,116,000	NT$32,943,000
Number of Unsubscribed Shares	688,000 shares	3,980,000 shares
Subscription Price Per Share of the Unsubscribed Shares	NT$10	NT$74 NT$88
Ratio of the Number of Unsubscribed Shares to the Number of Issued and Outstanding Shares	0.3%	1.51%
Effect on Shareholders' Equity	The current employee stock options were aimed at retaining talent and encouraging employees to increase their solidarity with the hope of creating benefits for the company and shareholders. The ratio of the number of unsubscribed shares to the number of issued and outstanding shares was 0.4%, posing no significant effect on the degree of dilution of shareholder equity.	The current employee stock options were aimed at retaining talent and encouraging employees to increase their solidarity with the hope of creating benefits for the company and shareholders. The ratio of the number of unsubscribed shares to the number of issued and outstanding shares was 2.01%, posing no significant effect on the degree of dilution of shareholder equity.

Note: The Company was not publicly listed when the current employee stock options were issued. The stock options were issued pursuant to Article 167-2 of the Company Act following the resolution and approval of the Board of Directors.

b. Names and subscription status of managerial officers who have obtained employee stock options and of employees who rank among the top 10 in terms of the number of shares to which they have subscription rights through employee stock options acquired

As of March 29, 2020; Unit: Shares; NT$

	Title	Name	Number of Shares Obtained	Ratio of Number of Shares Obtained to Total Issued Shares (Note 9)	Exercised				Not Exercised			
					Number of Shares Subscribed	Subscription Price (NT$)	NT$ Amount of the Shares Subscribed	Ratio of Number of Shares Subscribed to Total Issued Shares	Number of Shares Subscribed	Subscription Price (NT$)	NT$ Amount of the Shares Subscribed	Ratio of Number of Shares Subscribed to Total Issued Shares
Management	CEO	Ko-Chung Lin	3,511,000	1.60%	2,110,564	10、74、88	21,845,640	0.97%	1,380,436	10、74、88	94,276,000	0.63%
	Chief Pharmaceutical Officer	Ching-Leou Teng										
	General Manager	Jack Hwang										
	Senior Director, Bioprocess Development	Shu-Yuan Wang (Note 1)										
	Senior Director, Cell Culture Engineering	Chi-Chang Li (Note 2)										
	Chief Financial Officer	Hui-Ming Chang (Note 3)										
	Director, New Drug Research and Development	Yu Ho (Note 4)										
	Senior Director, U.S. Operations	Shu-Feng Li (Note 5)										
	Director, Medical Research	Joe K. Tseng (Note 6)										
	General Manager Office	Hsu Hsu (Note 7)										
	Chief Medical Officer	Albert Qin										
	Chief Operating Officer, Taichung Branch	Yen-Tung Luan										
	Senior Manager of Finance	Snow Chang										
Employee	Chief of Taichung Plant	Kuo-Hsiung Wu (Note 8)	1,798,000	0.82%	1,592,764	10、88	16,952,240	0.76%	129,176	10、88	4,752,000	0.06%
	Pharmaceutical Scientist	Hui-Hua Lin										
	Small Molecule Engineering	Kuo-Hsi Kao										
	Administration	Kuo-Lung Lin										
	Small Molecule Engineering	Chung-Hsun Chien										
	Small Molecule Engineering	Wei-Te Li										
	Taichung Branch	Kuo-Tsang Lin										
	Small Molecule Engineering	Kang-Ting Fan										
	Protein Engineering	Ming-Bing Hsu										
	New Drug Analysis	Hsin-Chieh Li										

B. Status of Any Private Placement of Employee Stock Options During the 3 Most Recent Fiscal Years: None

6. Status of Employee Restricted Stock

A. Issuance of Employee Restricted Stock

As of March 29, 2020

Type of Employee Restricted Stock	**Procedures for the First Issuance of Restricted Stock to Employees in 2015**
Date of Effective Registration	Resolved and approved at the shareholder meeting on May 29, 2015 and approved as per FSC No. 1040025786 dated July 8, 2015.
Issue Date	July 4, 2016
Number Of Shares Issued	2,468,000 common stocks
Issue Price	NT$10/share
Ratio of the Number of Shares Issued to Total Issued Shares	1.13%
Vesting Conditions of Restricted Employee Shares	**1. Indicator A: The listing of the Company's negotiable securities is completed (10%)** (1) Who can receive: Employees who are the main contributors in trading the Company's negotiable securities. (2) Vesting time point: On the day the Company's common stocks are listed on the Taipei Exchange within 1.5 years of the issuance of these restricted employee shares. (3) Percentage of vesting: 100% of restricted employee shares can be vested on the day of occurrence. After the issuance of restricted employee shares meeting this indicator, the vesting conditions are considered unmet if they are not achieved by the specified time point, and the Company will buy back and cancel the shares at the original issue price. **2. Indicator B: MAA for P1101 for PV is submitted to the EMA (20%)** (1) Who can receive: Employees who are the main contributors in submitting an MAA for the Company's P1101 for PV to the EMA. (2) Vesting time point: Time point I: When recruitment for the Phase III clinical trial is completed within 1 year of the issuance of these restricted employee shares. Time point II: When the MAA is submitted to the EMA within 2 years of the issuance of these shares. (3) Percentage of vesting: 50% of restricted employee shares can be vested at Time Points I and II, respectively. After the issuance of restricted employee shares meeting this indicator, the vesting conditions are considered unmet if they are not achieved by the specified time point, and the Company will buy back and cancel the shares at the original issue price. **3. Indicator C: BLA for P1101 for PV is submitted to the US FDA (20%)** (1) Who can receive: Employees who are the main contributors in submitting a BLA for the Company's P1101 for PV to the US FDA. (2) Vesting time point: Time point I: When recruitment for the Phase III clinical trial is completed within 1 year of the issuance of these restricted employee shares. Time point II: When the BLA is submitted to the US FDA within 2.5 years of the issuance of these shares. (3) Percentage of vesting: 50% of restricted employee shares can be vested at Time Points I and II, respectively. After the issuance of restricted employee shares meeting this indicator, the vesting conditions are considered unmet if they are not achieved by the specified time point, and the Company will buy back and cancel the shares at the original issue price. **4. Indicator D: Documents for Phase III clinical study application for P1101 for HCV GT2 are submitted and recruitment is completed (20%)** (1) Who can receive: Employees who are the main contributors in applying for and recruiting subjects for Phase III clinical trials in Taiwan and South Korea for the Company's P1101 for HCV GT2. (2) Vesting time point: Time point I: When the applications for the Phase III clinical trials are submitted to the TFDA within 1 year of the issuance of these restricted employee shares. Time point II: When the applications for the Phase III clinical trials are submitted to KFDA within 1 year of the issuance of these shares. Time point III: When recruitment for the Phase III clinical trials is completed within 2 years of the issuance of these shares. (3) Percentage of vesting: 25%, 25%, and 50% of restricted employee shares can be vested at Time Points I, II, and III, respectively. After the issuance of restricted employee shares meeting this indicator, the vesting conditions are considered unmet if the conditions are not achieved by the specified time point, and the Company will buy back and cancel the shares at the original issue price. **5. Indicator E: Documents for Phase III clinical study application for P1101 for ET are submitted (10%)** (1) Who can receive: Employees who are the main contributors in applying for a Phase III clinical trial in Taiwan and any other country for the Company's P1101 for ET. (2) Vesting time point:

	Time point I: When the application for the Phase III clinical trial is submitted to the US FDA within 1 year of the issuance of these restricted employee shares. Time point II: When the application for the Phase III clinical trial is submitted to the authorities of any other country within 1 year of the issuance of these shares. (3) Percentage of vesting: 50% of restricted employee shares can be vested at Time Points I and II, respectively. After the issuance of restricted employee shares meeting this indicator, the vesting conditions are considered unmet if they are not achieved by the specified time point, and the Company will buy back and cancel the shares at the original issue price. **6. Indicator F: CTA for P1101 for the first indication is submitted to the CFDA by the sub-subsidiary in Beijing (5%)** (1) Who can receive: Employees who are the main contributors in assisting with the establishment of the sub-subsidiary in Beijing and assisting the CTA for P1101 in China. (2) Vesting time point: Time point I: When the sub-subsidiary in Beijing is established. Time point II: When the Company's sub-subsidiary in Beijing has submitted a CTA to the CFDA. (3) Percentage of vesting: 50% of restricted employee shares can be vested at Time Points I and II, respectively. After the issuance of restricted employee shares meeting this indicator, the vesting conditions are considered unmet if they are not achieved by the specified time point, and the Company will buy back and cancel the shares at the original issue price. **7. Indicator G: New employees (10%)** (1) Who can receive: Newly hired employees who have not yet obtained employee stock options. (2) Vesting time point: Time point I: When employees are still on the job within 1 year of the issuance of these restricted employee shares. Time point II: When employees are still on the job within 2 years of the issuance of these shares. (3) Percentage of vesting: 50% of restricted employee shares can be vested at Time Point I, and 100% can be cumulatively vested at Time Point II. After the issuance of restricted employee shares meeting this indicator, the vesting conditions are considered unmet if the employees set forth in Indicator G are not working for the company by the vesting time point, and the Company will buy back and cancel the shares at the original issue price. **8. Indicator H: Seniority (5%)** (1) Who can receive: Employees who are the main contributors in the Company's operational business development. (2) Vesting time point: Time point I: 1 year after the issuance of these restricted employee shares. Time point II: 2 years after the issuance of these shares. (3) Percentage of vesting: 50% of restricted employee shares can be vested at Time Point I, and 100% of restricted employee shares can be cumulatively vested at Time Point II. After the issuance of restricted employee shares meeting this indicator, the vesting conditions are considered unmet if the employees set forth in Indicator H are not working for the company by the vesting time point, and the Company will buy back and cancel the shares at the original issue price.
Restrictions on the Rights of New Restricted Employee Shares	1. The employee shall not sell, pledge, transfer, endow, set as guarantee, or dispose of (by other means) the new restricted employee shares. 2. Voting rights at shareholder meetings: Same as other common shares issued by the Company. 3. Shareholders' rights to distribute (subscribe) stocks and dividends: Same as other common shares issued by the Company, provided that stocks and dividends distributed are commissioned through trust.
Custody Status of Restricted Employee Shares	Prior to meeting vesting conditions, restricted employee shares shall be placed in the custody of stock trust. When new shares are allocated, the Company is deemed to have the authorization to sign and amend trust-related contracts on behalf of the employee receiving the new shares.
Measures To Be Taken When Vesting Conditions Are Not Met	1. Voluntary resignation: For restricted employee shares that do not meet the vesting conditions, the conditions are considered unmet on the day of an employee's resignation, and the Company will recover and cancel the shares at the original issue price. 2. Other types of termination of employment relationships (including termination of labor contracts, dismissal, and severance without notice): If for other reasons, except those mentioned above, the Company terminates the labor contract with an employee, the Company will recover and cancel, at the original issue price, the restricted employee shares that do not meet the vesting conditions. 3. Retirement: On the day of an employee's retirement, the vesting conditions shall be considered unmet, and the Company will recover and cancel (at the original issue price) the restricted employee shares that do not meet the vesting conditions. However, the Board of Directors may issue a portion or all of the restricted employee shares that do not meet the vesting conditions after considering the employee's performance and overall contribution. 4. Unpaid leave and parental leave: For employees approved by the Company to receive unpaid leave or parental leave, the rights of the restricted employee shares that do not meet the vesting conditions are restored as of the day of employee's reinstatement, provided that the vesting period is pushed back according to the period of unpaid leave taken. 5. General death: General death refers to death other than the occupational death set forth in Paragraph 7, Item 4 of Article 5. The vesting conditions are considered unmet on the day of an employee's death, and the Company will recover and cancel (at the original issue price) the restricted employee shares that do not meet the vesting conditions.

	6. Employees who are physically disabled in occupational accidents and are unable to continue working for the company: For employees who are physically disabled in an occupational accident and are unable to continue working for the company, the restricted employee shares that do not meet the vesting conditions still meet the vesting conditions according to the schedule set forth in the vesting conditions of this article. 7. Employees who die from occupational accidents: As of the day of the employee's death, for restricted employee shares that do not meet the vesting conditions, the successor still meets the conditions according to the schedule set forth in the vesting conditions of this article. 8. Transfer: If an employee is transferred to an affiliate or other company, the restricted employee shares that do not meet the vesting conditions shall be handled according to the procedure for voluntary resignation. However, as required for the operation of the Company, the restricted employee shares obtained by employees who are transferred by the Company to an affiliate or another company are not affected by such a transfer. 9. For restricted employee shares that do not meet the vesting conditions (including for the reasons listed in the preceding paragraphs), the Company will recover and cancel these shares at the original issue price, provided that the employee is not required to return or pay back the dividends received thereof. 10. If employees terminate or cancel the authorization granted to the Company in violation of Item 1 of Article 6 before meeting the vesting conditions, the Company has the right to recover and cancel the restricted employee shares that do not meet the vesting conditions from the employee at the original issue price. 11. For issued shares that are recovered or bought back in accordance with the aforementioned regulation, an application for registration of change in capital shall be submitted to the competent authority at least once every quarter.
Number of Shares Recovered or Bought Back	812,911 shares
Number of Shares Without Restricted Rights	1,655,089 shares
Number of Shares With Restricted Rights	0 share
Ratio of the Number of Shares With Restricted Rights to the Number of Total Issued Shares (%)	-
Effect on Shareholders' Equity	No effect on the degree of dilution of shareholders' equity.

B. Names and acquisition status of managerial officers who have acquired new restricted employee shares and of employees who rank among the top 10 in the number of new restricted employee shares acquired

	Title	Name	Number of Shares Obtained	Ratio of Number of Shares Obtained to Total Issued Shares (Note 7)	Without Restricted Rights				Without Restricted Rights			
					Number of Shares Without Restricted Rights	Issue Price (NT$)	NT$ Amount of Issue	Ratio Of Total Issued Shares (%)	Number of Shares With Restricted Rights	Issue Price (NT$)	NT$ Amount of Issue	Ratio Of Total Issued Shares (%)
Management	Chairman and Chief Pharmaceutical Officer	Ching-Leou Teng	762,000	0.35%	762,000	10	7,620,000	0.35%	-	-	-	-
	General Manager	Jack Hwang										
	Chief Strategy Officer	Ko-Chung Lin										
	Senior Director, US Operations	Shu-Feng Li (Note 1)										
	Chief Operating Officer, Taichung Branch	Yen-Tung Luan										
	General Manager Office	Hsu Hsu (Note 2)										
	Director, New Drug Research and Development	Yu Ho (Note 3)										
	Director, Medical Research	Joe K. Tseng (Note 4)										
	Senior Manager of Finance	Snow Chang										
Employee	Assistant General Manager, Quality System, Taichung Branch	Chien-Chao Chu	404,000	0.18%	404,000	10	4,040,000	0.18%	-	-	-	-
	Director, Production and Manufacturing, Taichung Branch	Chao-Sheng Cheng										
	Deputy Director, New Business Development	Hao-Lun Yuan (Note 5)										
	Director, Drug Science	Che Hsu										
	Manager, Audit Office	Ming-Chuan Liang (Note 6)										
	Assistant Manager, Audit Office	Ming-Shan Lu										
	Director, Marketing Planning	Craig N Zimmerman										
	Director, Marketing Planning	Samuel S Lin										
	Manager, Marketing Planning	Ting-Fang Wang										
	Special Assistant, General Manager Office	Chia-Yen Su										

7. Issuance of New Shares in Connection with Mergers or Acquisitions or With Acquisitions of Shares of Other Companies

None.

8. Financial Plans and Implementation

Among the Company's previous public offerings, issuances, and private placements of securities, plans with the time of completion within 3 years of the registration date were as follows: a 2015 plan for issuing new shares for cash capital increase, a 2016 plan for issuing new shares for cash capital increase prior to entering the OTC market, and a 2019 plan for private placement of common shares. Among these, the 2016 pre-OTC cash capital increase and 2019 private placement of common shares plans were still in process. The content and implementation of issuance plans are hereby explained as follows:

2019 Private Placement of Common Shares

1. Plan Content
   (1) Total capital required for plan: NT$501,000,000.
   (2) Source of funds: Private placement of 5,668,198 common shares at NT$10 par value per share and an issue price of NT$86 to raise a total of NT$487,465,000. The remaining amount of NT$13,535,000 will be handled using the Company's own funds.
   (3) Delivery date of private placement shares: December 30, 2019.
   (4) Plan items, status of capital use, and expected benefits:
      a. Plan items and status of capital use

         On October 1, 2019, the Company's extraordinary general meeting approved the issuance of new stocks by private placement. The plan items comprised the replenishment of working capital, strengthening of financial structure, execution of new drug R&D, reinvestment, and the support of other funding needs to satisfy the Company's long-term development. On December 24, 2019, the Company's provisional meeting of the Board of Directors passed a resolution of an actual 5,668,198 private placement stock shares with paid-in capital totaling NT$487,465,028. This was used for a capital increase in the Japan subsidiary, PharmaEssentia Japan KK, and for indirect investment in sub-subsidiary PharmaEssentia Biotechnology (Beijing) Ltd. (hereinafter referred to as "PharmaEssentia Beijing") by means of a capital increase in the Hong Kong subsidiary, PharmaEssentia Asia (Hong Kong) Ltd. (hereinafter referred to as "PharmaEssentia Hong Kong").

Unit: NT$1,000

Item	Expected	Total	Status of Planned Capital Use

		Completion Date	Capital Required	2020				2021			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Reinvestment	PharmaEssentia Japan	Q4 of 2021	321,000	30,000	0	30,000	21,000	30,000	60,000	60,000	90,000
	PharmaEssentia Biotechnology (Beijing)	Q4 of 2021	180,000	15,000	0	15,000	0	30,000	30,000	30,000	60,000
Total			501,000	45,000	0	45,000	21,000	60,000	90,000	90,000	150,000

b. Expected benefits

The total amount of the Company's private placement cash capital increase is NT$487,465,000; the primary purpose is to increase the capital of PharmaEssentia Japan to manage operations such as clinical trials of P1101 in the Japan region, communication with the Japan PMDA and drug licensing applications, and subsequent new drug marketing. Furthermore, capital of PharmaEssentia Hong Kong is increased to indirectly invest in PharmaEssentia Beijing, and thereby manage operations such as clinical trials of P1101 in the Mainland China region, communication with the China NMPA and drug licensing applications, and subsequent new drug marketing.

To treat PV, in October 2019 the Company applied for a phase II clinical trial from the PMDA through the Japan subsidiary. The Company anticipates receiving a Japanese drug license in 2022, beginning sales by the end of 2022, and beginning profits from 2023 onwards. Additionally, to treat PV, in October 2018 the Company applied for a phase I clinical trial from the Mainland China CFDA (now renamed NMPA). The Company anticipates receiving a Mainland China drug license in 2022, beginning sales in 2022, and beginning profits from 2022 onwards.

(5) Changes to plan content, reasons for changes, and benefits preceding and following changes:

The Company's plan for the private placement of common shares has not changed

2. Implementation Status

In 2019, the Company issued new shares for cash capital increase using private placement. The amount raised was NT$487,465,000 and its primary purpose was reinvestment in the Japan subsidiary and the Beijing sub-subsidiary. The Company began to deliver stock shares on December 30, 2019. Upon review of meeting minutes for the November 14, 2019 Board of Directors meeting, the Company has approved the capital increase of PharmaEssentia Japan by US$3,000,000, which is approximately NT$90,000,000. As of the publication date of the evaluation report, the Company has increased the capital of PharmaEssentia Japan by US$1,000,000, which

is approximately NT$30,000,000. Furthermore, upon review of meeting minutes for the February 19, 2020 Board of Directors meeting, the Company also approved capital increase of PharmaEssentia Hong Kong by US$1,000,000, thereby increasing the capital of PharmaEssentia Beijing by US$1,000,000 (approximately NT$30,000,000) through PharmaEssentia Hong Kong. Therefore, the Company should be able to reinvest in the Japan subsidiary and in the Mainland China sub-subsidiary according to this private placement plan.

3. Benefits Analysis

   The Company's execution of the 2019 private placement of common shares plan is primarily for reinvestment in the Japan subsidiary, PharmaEssentia Japan, and in the Mainland China sub-subsidiary, PharmaEssentia Beijing. PharmaEssentia Japan is expected to begin generating revenue in 2022, with a payback period of approximately 4.75 years. PharmaEssentia Beijing is expected to begin generating revenue in 2022, with a payback period of approximately 3.04 years.

Private placement of common stock in 2020

(1) Content of the plan:

1. Total amount of capital required for the plan: NT$1,568,800,000.
2. Source of capital: private placement of 16,724,947 shares of common stock, with a par value of NT$10 per share and an offering price of NT$93.8 per share; a total of NT$1,568,800,000 was raised.
3. Date when the price of private placement was paid up: June 24, 2020
4. Plan items, use of capital, and expected benefits

   (1) Plan items and use of capital

   In the Corporation's regular shareholder meeting on May 27, 2020, a resolution was made in support of a plan to issue new stock through private placement for cash capital increase. Items involved in the plan were an increase of working capital, enhancement of the financial structure, R&D of new drugs, investment in other companies, purchase of fixed assets, and meeting of other capital needs concerning the Corporation's long-term development. In an extraordinary board meeting on June 11, 2020, a resolution was made to put NT$1,568,800,029, the amount of money raised through the private placement of 16,724,947 shares, into working capital and the purchase of R&D and manufacturing equipment.

Plan	Expected Completion Date	Total Capital Required	Status of Planned Capital Use					
			2020		2021			
			Q3	Q4	Q1	Q2	Q3	Q4
Increase of working capital	2021 Q4	1,403,300	180,000	210,000	260,000	230,000	230,000	293,300
Purchase of R&D and manufacturing equipment	2021Q4	165,500	16,500	39,000	20,000	25,000	30,000	35,000
total		1,568,800	196,500	249,000	280,000	255,000	260,000	328,300

(2) Expected benefits:

Of the total amount raised through the private placement in 2020, NT$1,403,300 was put into working capital, which is expected to enhance the financial structure, increase the proportion of equity capital, and improve the Corporation's debt-paying ability. The remaining NT$165,500,000 was used to purchase R&D equipment as well as active pharmaceutical ingredient manufacturing equipment at the Taichung Plant and the preproduction laboratory in Taipei for manufacturing active pharmaceutical ingredients required for P1101, and also to construct a biopharmaceutical manufacturing plant that satisfies Good Manufacturing Practice.

5. Changes to the plan, reasons for the changes, and benefits before and after the changes

No change was made to the Corporation's plan for the private placement of common stock.

(二)執行情形：

Project	Implementation in the third quarter of 2020		Description of progress (ahead or behind schedule)
Addition of working capital	Expected use of capital	NT$180,000 thousand	• Increase in working capital required for the execution of business • Unspent funds of NT$1,056,647 thousand have been deposited
	Actual amount of utilization	NT$346,653 thousand	
	Percentage of cumulative actual expenditure	24.70%	

Purchase of machinery and equipment	Expected use of capital	NT$16,500 thousand	• Part of the equipment is still under planning • Unspent funds of NT$164,801 thousand have been deposited
	Actual amount of utilization	NT$699 thousand	
	Percentage of cumulative actual expenditure	0.42%	

2020 cash capital increase through the issuance of new stock

(1) Source of capital

1. Total amount of capital required for the plan: NT$2,013,000,000

2. Source of capital:

(1) For the cash capital increase, the Corporation issued 22,000,000 shares of common stock; the par value was NT$10 per share, and the shares were issued at a premium, with an offering price of NT$102. A total of NT$2,244,000,000 was raised.

(2) The actual amount of capital raised, NT$2,244,000,000, was higher than the required amount required for the plan, namely NT$2,013,000,000. The excess attributable to the change of offering price, NT$231,000,000, will be put into working capital.

3. Plan items for capital use and expected progress:

Plan	Expected Completion Date	Total Capital Required	Status of Planned Capital Use					
			2020		2021			
			Q3	Q4	Q1	Q2	Q3	Q4
P1101-ET	2021 Q4	593,000	96,708	113,458	103,365	95,709	95,709	88,051
PharmaEssentia USA	2021 Q4	1,420,000	270,000	250,000	180,000	180,000	270,000	270,000
合計		2,013,000	366,708	363,458	283,365	275,709	365,709	358,051

4. Expected benefits

The raised capital, NT$2,013,000,000, was mainly used to increase the Corporation’s investment in its subsidiary, PharmaEssentia USA, particularly in

expanding the local staff, operational activities, and marketing of future products, and for supporting financial needs for the conduct of multinational and multicenter phase III clinicals for P1101-ET in countries including the United States, Taiwan, Japan, China, and South Korea. The Corporation's P1101 for PV (hereinafter "P1101-PV") was authorized by the European Medicines Agency in February 2019 for marketing (name of product: Besremi) with the help of its Austrian partner AOP. After discussions with the U.S. FDA, China's National Medical Products Administration, and Taiwan's Food and Drug Administration, the Corporation submitted a direct application to the aforementioned competent authorities for a phase III clinical trial for P1101-ET on the basis of data derived from the European phase III clinical trial for P1101-PV. The data collection is expected to be completed by the end of 2020, and the phase III clinical trial for P1101-ET by the end of 2022. Starting from 2023, the Corporation will start to work on gaining approval of new drug applications for P1101-ET in different countries; overall, the conduct of the phase III clinical trial for P1101-ET will be of great benefit to the future operations and development of the Corporation.

Following continuous discussion with the U.S. FDA, the Corporation received permission to use data and documents from the European phase III human clinical trial for P1101-PV to make a direct BLA for P1101-PV to the U.S. FDA. Given the standard review period of 10 months by the U.S. FDA, the BLA for P1101-PV is expected to be approved in Q1 of 2021, in which case the sale of P1101-PV will start in Q2 of the same year, with P1101-PV expected to start making a profit from the beginning of 2022. The income statement of PharmaEssentia USA is expected to be as follows, and the capital should be recovered in approximately 4.53 years.

V. Overview of Business Operations

1. Descriptions of Business

A. Business Scope

a. Main Business Activities

The Company's major lines of business are as follows:

i. Wholesale of Chemistry Raw Materials
ii. Wholesale of Drugs and Medicines
iii. Wholesale of Drugs, Medical Goods
iv. Wholesale of Cosmetics
v. Retail sale of Chemistry Raw Materials
vi. Retail sale of Drugs and Medicines
vii. Retail sale of Drugs and Medical Goods
viii. Retail sale of Cosmetics
ix. Retail Sale of Second-Type Patent Medicine
x. International Trade
xi. Intellectual Property
xii. Pharmaceuticals Examining Services
xiii. Biotechnology Services
xiv. Research Development Service
xv. Beverage Manufacturing
xvi. Other Food Manufacturing Not Elsewhere Classified
xvii. Basic Industrial Chemical Manufacturing
xviii. Drugs and Medicines Manufacturing
xix. Cosmetics Manufacturing
xx. Other Chemical Products Manufacturing
xxi. All business items that are not prohibited or restricted by law, except those that are subject to special approval.

b. Relative Weight of Primary Products

The Company mainly engages in the research, development, production, and sales of new drugs. Its operating revenues are primarily generated from licensing income, royalty payments after a drug is introduced to the market, and sales of goods. The revenue and weight for 2019 are as follows:

Unit: NT$1,000; %

Revenue Item	2020	
	Revenue	Weight (%)

Sale of goods	547,439	98.24
Provision of labor services	9,818	1.76
Total	557,257	100.00

Revenue from P1101/Ropeginterferon alfa/Besremi from clinical trials for myeloproliferative neoplasms (MPNs) and treatment for PV and rare diseases as a percentage of total revenue, annual growth rate, and country are described as follows:

The Company's new drug Besremi (Ropeginterferon alfa-2b, hereafter P1101) was officially granted marketing authorization by the EMA in February 2019. This drug is mainly used in the treatment of rare diseases such as PV. In 2020, the sale of this new drug to European markets totaled approximately NT$268,876,000, accounting for 48% of the Company's total sales for the year.

c. Current Products (Services)

Product	Category	Indication
P1101 (Ropeginterferon alfa-2b)	Developed by the Company	Polycythemia vera (PV)
		Essential thrombocythemia (ET)
		Hepatitis B
		Hepatitis C
Anti-PD-1 antibody (immune checkpoint inhibitor)	Developed by the Company	Cancer
Oraxol (Oral paclitaxel)	Licensed to Develop	Breast cancer, advanced gastric cancer, and esophageal cancer
KX01 (Kinase inhibitor)	Licensed to Develop	Psoriasis, actinic keratosis (AK)

d. New Products (Services) Planned for Development

The Company will use the established R&D platform for new drugs and continue to develop other profitable long-acting biopharmaceutical drugs, such as pegylated erythropoietin (PEG-EPO, long-acting EPO), long-acting pegylated granulocyte colony stimulating factor (PEG-GCSF), and long-acting β-interferon (PEG-INFβ)

B. Overview of Industry

a. Status and Development of the Industry

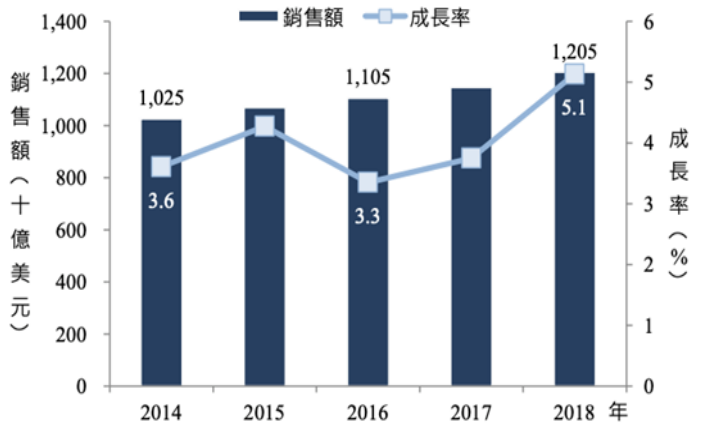
Biotechnology (biotech) and pharmaceutical industries are added-value industries characterized by both innovative R&D and value creation. Biotech and pharmaceutical industries are thriving globally under the influence of factors such as medical advancements, reduced mortality rates, biotech breakthroughs, population aging, and increased demand for health care. Because biotech and

pharmaceutical industries are closely related to the safety and health of people, rigorous control over quality, safety, efficacy, and laws are required throughout drug development from new discoveries, feasibility studies, preclinical trials, and clinical trials to new drug approval for sale and marketing. Nevertheless, biotech and pharmaceutical industries are technology intensive and necessitate large amounts of investments, R&D technologies, time resources, and high-risk exposure. Multiple countries are committed to the development of the biotech and pharmaceutical industries, which are a new indicator of a country's competitiveness in scientific and technological industry. Taiwan has experienced how its pharmaceutical industries have transformed their drug development processes for the past 30 years. The enforcement of the Act For The Development Of Biotech And New Pharmaceuticals Industry in 2008 has provided manufacturers with technological, capital, and labor support in the form of tax incentives to promote the industrial development of new drugs. In recent years, Taiwan's government has responded to the emerging development of biotech and pharmaceutical industries, breakthroughs in technological innovation, and future health care demands by increasing the production value and competitiveness of biotech and pharmaceutical industries. In 2016, the government included biotech and pharmaceutical industries in its 5+2 innovative industries plan, which proposes to transform Taiwan into an Asia-Pacific biotech and pharmaceutical R&D industrial center. In 2017, the Act For The Development Of Biotech And New Pharmaceuticals Industry was amended to expand the scope of applications for the biotech and pharmaceutical industries, relax rules regarding high-risk medical instruments, and incorporate new biotech and pharmaceutical products.

With the support of government policies and government funds, manufacturers are invested in the development of innovative drugs. R&D outcomes for new drugs in Taiwan have been published over the past 10 years. New drug products have obtained marketing authorization not only in Taiwan but also overseas through strategic international alliances. This achievement is a testament to Taiwan's international competitiveness in new drug R&D. By increasing Taiwan's international visibility and recognition, the government hopes to create more opportunities to form strategic alliances overseas, thereby enhancing the development of biotech and pharmaceutical industries in Taiwan. PharmaEssentia is a new drug developer and manufacturer of biologics. In the next section, the status of pharmaceutical markets and new drug R&D in Taiwan and globally are described to provide an overview of the industry to which the Company belongs.

(A) Overview of the Global Pharmaceutical Market

Size of the Global Pharmaceutical Market, 2014–2018



Source: IQVIA; organized by the ITIS Research Team of the Property Asset Division, Development Center for Biotechnology (DCB, July 2019); 2019 Yearbook of the Pharmaceutical Industry

The global pharmaceutical market will continue to develop as more new drugs enter the market. According to IQVIA statistics, the global pharmaceutical market was valued at approximately US$1.2 trillion in 2018 and grew at a rate of 5.1% relative to the market size in 2017. Since the United States launched a trade war with China at the beginning of 2018, the global economic outlook has been uncertain. According to the International Monetary Fund, global growth was projected to slow from 4% in 2017 to 3.6% in 2018 and 3.2% in 2019. Although the development of the world economy continues to slow, the increase in health care demand and diseases of affluence in emerging markets coupled with population aging have driven the demand for geriatric treatments and increased healthcare costs. As a result, the global pharmaceutical market grew steadily in 2018 at a rate higher than the compound annual growth rate (CAGR) over the past 5 years. IQVIA estimates that the global pharmaceutical market will reach US$1.5 trillion by 2023 at a CAGR of 3%–6% between 2019 and 2023.

Overview of the World's 10 Largest Pharmaceutical Markets and Future Growth in 2018

單位：億美元；%

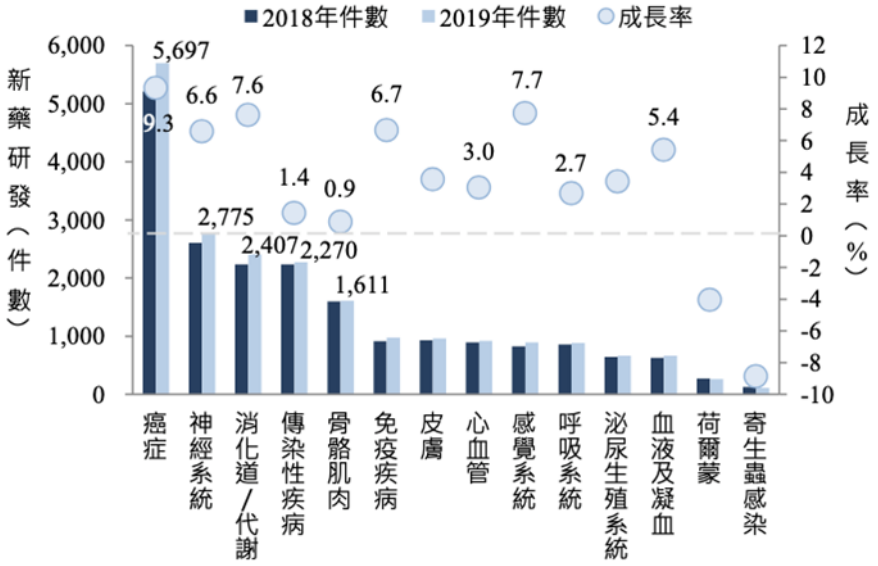
排名	國家	2018 年		占全球藥品市場比率	2014～2018 年 CAGR	2019～2023 年 CAGR
		銷售額	成長率			
1	美國	4,849	3.9	40.2	7.2	4～7
2	中國大陸	1,323	7.9	11.0	7.6	3～6
3	日本	864	1.9	7.2	1.0	-3～0
4	德國	535	18.6	4.4	5.0	3～6
5	法國	368	11.2	3.1	1.5	-1～2
6	義大利	344	18.6	2.9	6.3	2～5
7	巴西	318	-3.9	2.6	10.8	5～8
8	英國	284	10.5	2.4	6.2	2～5
9	西班牙	246	14.4	2.0	5.4	1～4
10	加拿大	222	7.2	1.8	5.0	2～5

Source: IQVIA; organized by the ITIS Research Team of the Property Asset Division, DCB (July 2019); 2019 Yearbook of the Pharmaceutical Industry

According to statistical data published by IQVIA, the United States is the world's largest pharmaceutical market, with a size reaching US$484.9 billion in 2018, which accounted for 40.2% of the global market. Specifically, sales in the US and Chinese drug markets exceeded US$100 billion, accounting for 51.2% of the entire pharmaceutical market, primarily because the growth of the global pharmaceutical market was driven by the expiration of drug patents, the continual increase of new drugs introduced to the market, and the increased demand of the US pharmaceutical market. Mainland China, which is the second largest market, accounted for 11.0% of the global market in 2018. Because of uncertainties in the US–China trade war and government-imposed control over drug prices, the CAGR of China's pharmaceutical market is projected to slow to 3%–6%.

(B) Overview of Global New Drug R&D

Growth and Number of New Drug R&D Projects for Various Disease Treatments Globally, 2018 and 2019



Note: Number of cases in 2018 as of January 2018; number of cases in 2019 as of January 2019.

New drug R&D projects were categorized by the diseases they treat. Most of the projects (n = 5,697) involved new drugs for cancer treatment; the growth rate of these projects was 9.3% in 2019, which was double that of the second highest number of projects, which involved new drugs for the nervous system. Cancer drug projects still had the highest growth rate among all project categories, suggesting that cancer treatment is the main focus of the market. The development and market size of anticancer drugs are also projected to continue growing, prompting numerous companies to invest in cancer drug development. The new drug P1101, developed by PharmaEssentia, can be used in the treatment of blood disorders, bleeding disorders, and cancer and in cancer immunotherapy. Therefore, the R&D of this new drug provides economic benefits.

(C) Overview of the Global Biopharmaceutical Market

The rapid development of biochemical technologies has slowly turned biologics into mainstream products in the global pharmaceutical market. The main difference between biologics and traditional chemical drugs lies in the method with which they are researched, developed, and manufactured. Biologics are developed and manufactured using bioengineering technologies, such as genetic, cellular, and protein engineering. Biologics are used to treat or prevent human diseases, including anemia, cancer, and autoimmune diseases. Conventional chemical drugs are produced by using various chemicals in different mixtures. Because chemical drugs are produced using only single-chemical engineering technologies, these drugs are easy to manufacture and mass produce. By

contrast, biologics are produced using several bioengineering technologies in different disciplines; therefore, they require more time to research and develop than do chemical drugs. The development of biotech has catalyzed the development and launching of biologics. Because biologics have excellent therapeutic efficacy and minimal side effects, they have become the best-selling drugs since their launch in the market. PharmaEssentia specializes in the research, development, and manufacturing of biologics, particularly focusing on new protein drugs.

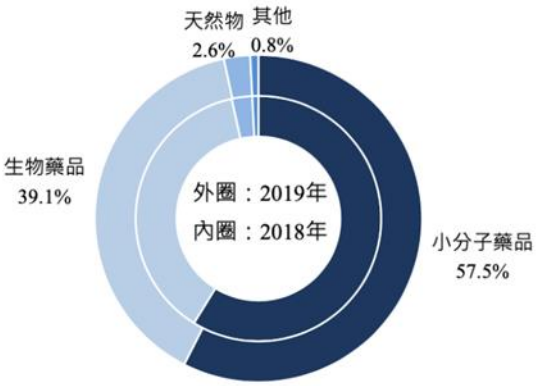


Figure 1 Types of Drugs Developed Globally, 2018 and 2019

Note: Number of cases in 2018 as of January 2018; number of cases in 2019 as of January 2019.
Source organized by the ITIS Research Team of the Property Asset Division, DCB; 2019 Yearbook of the Pharmaceutical Industry

Statistics of the types of drugs developed globally as of 2019 (**Figure 1**) indicate that new drug R&D projects mostly involved small-molecule drugs (chemical drugs; n = 9,164), accounting for 57.5% of all new drug projects, which was a 3.8% increase from that in 2018. R&D projects involving biologics were the second largest category comprising 6,241 projects, which was 39.1% of all new drug R&D projects and represented a 10.3% increase from 2018. Notably, the number of biologics projects increased faster than the number of small-molecule drug projects, and the number of biologic projects as a percentage of all R&D projects increased from 37.7% in 2018 to 39.1% in 2019.

(D) Overview of the Pharmaceutical Market in Taiwan

Pharmaceutical industries in Taiwan have experienced 30 years of development. At the end of June 2019, 143 pharmaceutical manufacturers were approved as new biopharmaceutical companies, and 346 new biopharmaceutical drugs were approved. More than 10 pharmaceutical products have obtained marketing authorization at home and abroad, enabling a complete pharmaceutical system

comprising processes that range from API development, drug synthesis, dosage form development, formula design, biologic processing, and other conventional API and generic drug development to the research and development of niche-based APIs, me-too drugs, biologics, and new drugs developed using innovative technologies and innovation capacity. However, because of the small internal market demand and pressure on the National Health Insurance (NHI) system, Taiwan's government hopes that by increasing the country's international visibility and recognition, it can create more opportunities to form strategic alliances overseas to disperse development risks globally, thereby driving pharmaceutical industrial development in Taiwan to enable these industries to compete with world-class pharmaceutical companies.

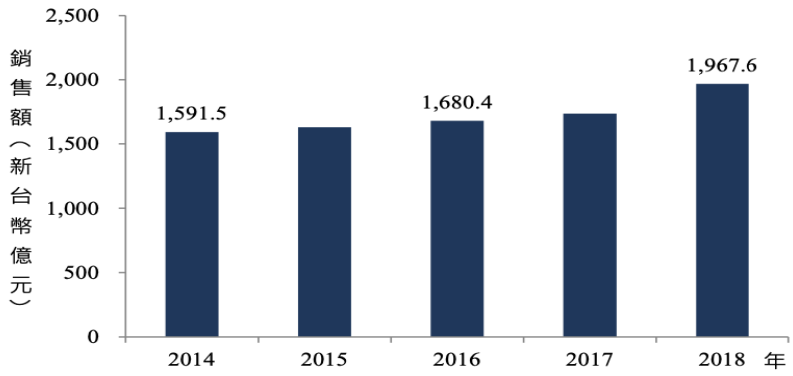
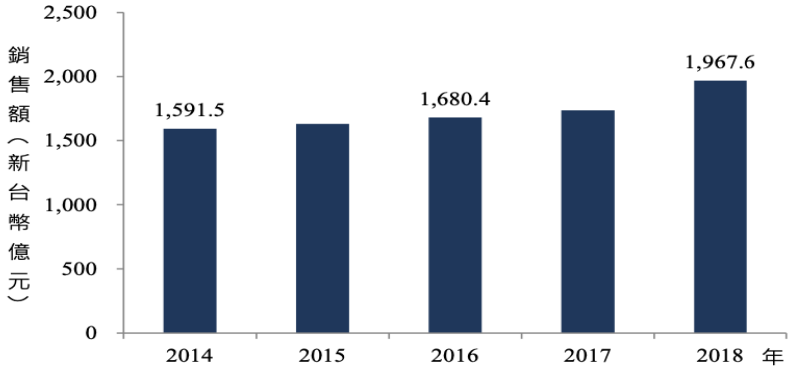


Figure 2 Size of the Pharmaceutical Market in Taiwan, 2014–2018

Source: IQVIA; organized by the ITIS Research Team of the Property Asset Division, DCB (July 2019); 2019 Yearbook of the Pharmaceutical Industry

The pharmaceutical market in Taiwan has maintained years of steady growth. However, the Taiwanese government has attempted to control and reduce growing medical expenditures through measures such as adjusting insurance premiums, introducing partial reimbursement policies, and controlling the prices of NHI-reimbursed drugs. These measures have influenced the magnitude of growth in Taiwan's pharmaceutical market. According to data published by IQVIA



(

Figure 2), domestic sales of pharmaceutical products in 2018 amounted to NT$196.76 billion, which was an increase of 13.4% from NT$173.54 billion in 2017. The domestic pharmaceutical market is projected to continue growing as the population ages and demand for drugs for treating cancer and chronic diseases increases in Taiwan.

(E) Overview of New Drug R&D in Taiwan

The number of new drug clinical trials by Taiwanese manufacturers has continued to increase, and the number of products entering the postclinical and marketing phases is increasing. The 2019 Yearbook of the Pharmaceutical Industry reported that as of May 31, 2019, 18 clinically tested products developed by Taiwanese manufacturers have been approved for market introduction. Nine of these products were small-molecule drugs and five were biologics. These manufacturers were approved to market 15 new drug products in Taiwan and three products overseas. PharmaEssentia was granted marketing authorization by the EMA for its new drug Besremi (P1101) in February 2019 and obtained a drug permit license directly from overseas. At present, the Company has applied for a drug permit license in Taiwan; the application is under review.

(F) Overview of the Biopharmaceutical Market in Taiwan

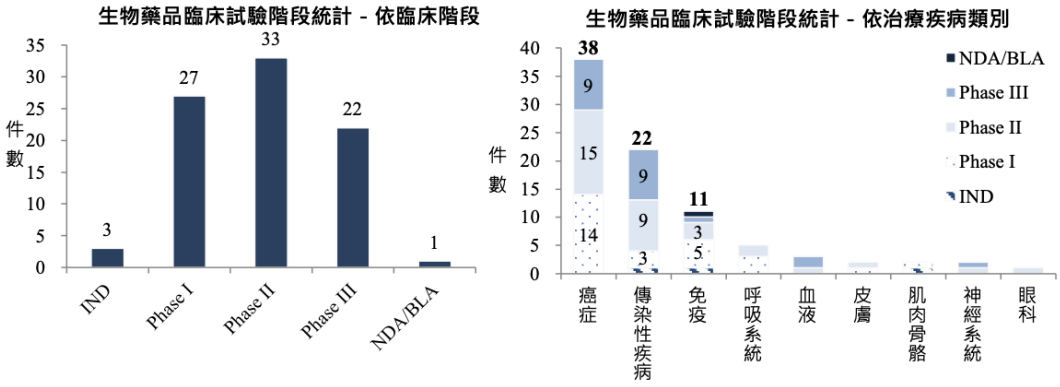
Taiwan is implementing policies to develop biologics. These policies and laws are focused on expanding the scope of applications and refining the review, performance, and development of clinical trials. For example, the Act For The Development Of Biotech And New Pharmaceuticals Industry was amended in 2017 to include emerging technologies (e.g., gene therapy, precision medicine, and cell therapy) in the scope of R&D subsidies, which will facilitate the strengthening of biologics innovation and development in Taiwan. After a series of meetings, the Bio Taiwan Committee under the Executive Yuan concluded that focus should be placed on developing the niche of new protein drugs and biosimilars. Most biopharmaceutical industry chains has been established. A complete industry chain helps Taiwan’s biopharmaceutical industries to undertake R&D initiatives, accelerate product introduction, and strengthen international competitiveness.

Table 1　Major Taiwanese Biologics Manufacturers up to July 2019

主要開發產品類別	國內主要廠商
血液製劑	台灣血液基金會、寶血純化等
重組蛋白質藥品	藥華、醣基、聯亞藥、全福、北極星、新源、雅祥、友華、潤雅、北極星、順藥等
抗體藥品	中裕新藥、台醫、聯生藥、泉盛、台灣醣聯、醣基、台灣浩鼎、漢霖等
生物相似性藥品	泰福、聯生藥、聯亞藥、台康、永昕生物、喜康、興盟、東生華、泉盛等
新型疫苗	台灣浩鼎、生控基因、創祐、聯腦科學、佳揚等
預防性疫苗	國光、高端疫苗、安特羅、遠東生技等

資料來源：DCB 產資組 ITIS 研究團隊整理(2019.07)；2019 年製藥產業年鑑

Because experienced Taiwanese companies have returned to Taiwan, approximately 50 manufacturers in Taiwan are currently involved in developing biologics (see **Table 1**), and most of them specialize in the development of protein drugs (including recombinant protein drugs and antibody biosimilars). The global biopharmaceutical market has grown considerably faster than the overall pharmaceutical market has. In response, the Taiwan government included biologics as a focus of development for biotech and pharmaceutical industries. Therefore, biologics still have potential for future development.



註：資料統計至 2019 年 5 月 31 日

Figure 3 Number of Clinical Trials for Biologics Developed by Taiwanese Manufacturers

Source: Organized by the ITIS Research Team of the Property Asset Division, DCB (July 2019); 2019 Yearbook of the Pharmaceutical Industry

Taiwanese industries are committed to the research and development of

biologics. As of May 31, 2019, a total of 86 INDs and biologics were in clinical trials and new drug application/biologic license application (NDA/BLA) review. Of these drugs, 27, 33, and 22 were in phase-I, phase-II, and phase-III clinical trials, respectively. An analysis of the distribution of biopharmaceutical development in Taiwan by disease treatment indicates that 33 biologics developed by manufacturers are used mainly for cancer treatment (**Figure 3**).

b. Links Among the Upstream, Midstream, and Downstream Industry Segments

The links among the upstream, midstream, and downstream segments of the industry involved in the Company's new drug development are presented as follows:

The Company is an R&D-oriented biopharmaceutical company specializing mainly in the development of new drugs. The Company is based in Taiwan, where it invents new drugs, develops clinical trials, and produces and manufactures pharmaceutical products for global distribution. Because pharmaceutical products are used in the human body, their safety and efficacy must be strictly controlled by governmental institutions globally through a series of mechanisms, including premarket reviews and postmarket monitoring. Hence, biopharmaceutical industries are unlike general industries. Generally, the R&D, production, and market distribution of new drug products must undergo the following processes:

(A) Basic laboratory and applied research: This phase primarily involves the exploration of pharmaceutical products by industrial and academic institutions and research units in Taiwan and overseas.

(B) Technological and pharmaceutical pilot development: In this phase, pilot plants first confirm the feasibility of commercializing lab-made products and subsequently develop specifications and manuals for batch production. In addition, they must define methods for product analysis and equipment cleaning to ensure compliance with regulatory requirements.

(C) Preclinical study: Nonclinical animal testing is performed on current Good Manufacturing Practice (cGMP)-conforming pharmaceutical products and include pharmacokinetic, toxicological, and pharmacological tests to ensure that products are effective and safe in animal bodies.

(D) Application for human clinical trial: This phase involves submitting an IND application to pharmaceutical and health authorities and commencing a three-

phase human clinical trial. The phase-I trial verifies drug safety in healthy participants. In phase II, a small number of participants is enrolled for purposes of obtaining the basis of drug efficacy and exploring possible effective doses. After study efficacy reaches a level of reproducibility, the phase-III trial is conducted on a larger number of patients to establish therapeutic efficacy and perform long-term response monitoring. If the expected result is obtained after the phase-III trial, an NDA or BLA can be submitted to pharmaceutical and health authorities. After the drug permit license is obtained, the new pharmaceutical product can be distributed to the market for sale.

(E) Pharmaceutical manufacturing and registration trial (plant inspection): The aforementioned phases are part of the pharmaceutical R&D process. A pharmaceutical product that passes all three phases of clinical trial is proven to be safe and effective in patients. However, potential manufacturers of this product must be inspected and verified by pharmaceutical and health authorities before the product can be commercialized for production and sale.

c. Product Development Trends

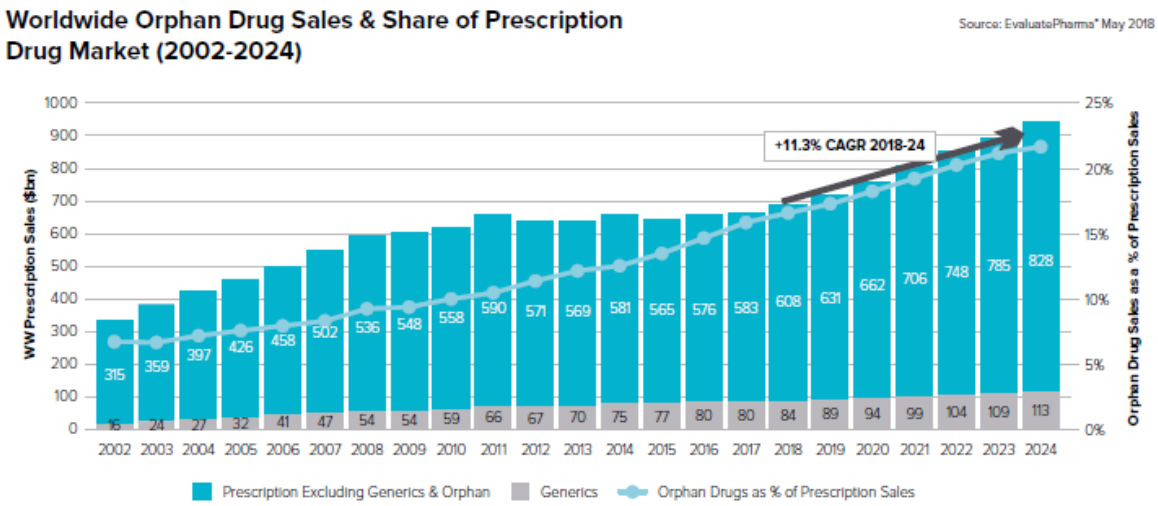
(A) P1101 for the treatment of rare blood disorders

P1101 is used to treat myeloproliferative disorders, including PV, essential thrombocythemia (ET), and primary myeloid fibrosis (PMF). PV and ET are rare blood disorders. Rare diseases are those with low prevalence rates, are uncommon, and affect few patients. Individual countries define rare diseases differently. In Taiwan, the Rare Disease and Orphan Drug Act defines rare diseases as those with prevalence rate less than 1 in 10,000, and they are identified through considerations for genetic disease counseling or disease prevention, difficulty of diagnosis and treatment and disease severity, and coverage in the current NHI program. In Europe, a rare disease is considered to be one that affects less than 5 out of 10,000 patients, whereas in the United States, a disease is classified as rare if it affects fewer than 200,000 patients. Japan's Orphan Drug Law defines a rare disease as one that affects fewer than 50,000 patients. The World Health Organization (WHO) defines a rare disease as a disease or pathological change affecting 0.65‰–1‰ patients of the total population. Globally, 7000–8000 types of rare diseases have been confirmed. They account for 10% of human diseases, and only approximately 1% of these rare diseases can be treated effectively.

Rare diseases have different onset and disease characteristics, and they are generally severe or life-threatening. MPNs are a type of disease caused by abnormal changes in myeloid stem cells that result in the excessive proliferation of differentiated blood cells. Typical MPNs can be classified into PV, ET,

chronic myelogenous leukemia, and PMF, none of which have cures or effective treatment methods, and they are treated with medication to control symptoms only.

Estimated Size of the Global Orphan Drug Market



According to EvaluatePharma forecasts, the global orphan drug market will grow at 11.3% CAGR between 2018 and 2024, reaching US$262 billion by 2024. This trend demonstrates that orphan drugs remain the focus of new drug development. The use of P1101 in the treatment of PV and ET is described as follows:

(a) PV

PV symptoms develop slowly and occasionally, and PV may remain asymptomatic for many years. PV typically develops in elderly people. In PV, blood thickens because of excess red blood cells and circulates slowly around certain tissues, limiting oxygen supply and causing symptoms such as headache, dizziness, weakness, and shortness of breath. In severe cases, symptoms include an enlarged spleen, blood clotting, and an increased risk of stroke.

Current treatments for PV include phlebotomy, low-dose aspirin, medication using hydroxyurea (HU, a chemotherapeutic agent), off-label use of the conventional interferon Pegasys, and bone marrow transplant. However, these treatment methods remain inapplicable for one-fourth of patients with PV and can cause other complications and increase the risk of blood cancer. Currently, the only US Food and Drug Administration (FDA)-approved medication for PV is Jakafi, which is developed by Incyte Corporation, a company listed on the Nasdaq stock market. Jakafi was approved in the United States in December 2014. However, it is limited to

use as a second-line drug when all of the aforementioned treatment options are ineffective.

The Company's P1101 product (product name: Besremi) for the treatment of PV was granted marketing authorization by the EMA through our partner in Austria, AOP Orphan Pharmaceuticals (AOP), in February 2019. After a series of communications with the US FDA, we obtained their approval to use the data and documents of the European phase-III clinical trial to submit a BLA to the FDA. P1101 was subsequently established as a first-line drug for use before Jakafi.

(b) ET

ET is a rare blood disorder that causes bone marrow to produce excess platelets. Similar to PV, ET is related to the mutation of the JAK2 gene. ET is mainly treated using concurrent low-dose aspirin and HU; however, 20%–40% of patients become intolerant or nonresponsive to HU treatment. Consequently, these patients are exposed to an increased risk of disease progression and lower survivability. Anagrelide (Agrylin/Xagrid, Shire and Thromboreductin, AOP Orphan Pharmaceuticals AG) is a medication that was approved by the European Union (EU) in February 2018 for the treatment of ET. Anagrelide is also the standard treatment medication; however, it is associated with several side effects, such as edema and diarrhea and the possibility of vasodilation, palpitation, and heart failure. Patients with a history of abnormal cardiovascular function must carefully monitor changes in their disease condition after using anagrelide. Without proper treatment, patients with ET are exposed to increased risks of blood clotting and hemorrhage. The Company expects to complete the phase-III clinical trial and submit a BLA to the FDAs of various countries in 2022.

(A) P1101 for chronic hepatitis treatment

Hepatitis B is among the most prevalent infectious diseases globally. According to the WHO, approximately 400 million people are carriers of the hepatitis B virus (HBV), and approximately 1 million people die from hepatitis B and associated diseases annually. Each year, 10–30 million people in the world develop hepatitis B, and 5%–10% of them become carriers.

The development of oral antiviral drugs for hepatitis B is focused on inhibiting virus replication and reducing drug resistance. Infected patients are prone to virus mutation and drug resistance if they continue to use medicine despite having persistently high levels of HBV. At this point, physicians assess patients' conditions and adjust their treatment methods and medications accordingly. Most patients with hepatitis B prefer oral administration of antiviral drugs

because interferon therapy is associated with greater restrictions and side effects. Therefore, oral administration remains a common clinical practice. Current oral drugs include lamivudine, adefovir, entecavir, and telbivudine.

According to the 2017 Global Hepatitis Report published by the WHO in April 2017, more than 325 million people globally are carriers of the HBV or hepatitis C virus (HCV), and few of them know that they are carriers. The number of deaths increases as the number of infected people increases. In 2015, 1.34 million people died from hepatitis infection; this number is roughly equal to the number of deaths due to the human immunodeficiency virus and tuberculosis. Patients with chronic hepatitis B and C must receive treatments frequently to prevent complications of cirrhosis and liver cancer for 10 to 20 years. Patients with hepatitis are asymptomatic in the early stages of infection. Patients develop symptoms such as headache, nausea, and dizziness as side effects of interferon therapy. Currently, PEG-Intron (Merck) and Pegasys (Roche) are long-acting pegylated interferons available on the market. These drugs are administered by injection once per week. Side effects persist for 2 to 3 days after injection, but by the time patients feel slightly improved, they must receive the next treatment. This cycle psychologically and physiologically affects patients' everyday lives, making patients reluctant to receive treatment. Therefore, patients with hepatitis urgently require a new-generation long-acting interferon that causes minimal side effects and is administered over a longer interval (e.g., once every 2 weeks). The WHO estimates that 71 million people globally have chronic hepatitis C. The actual number of infected patients may be underestimated because patients are asymptomatic in the first few weeks of infection, contributing to the low detection rate. Although hepatitis C can be completely cured using small-molecule drugs, approximately one-tenth of patients with hepatitis C are also carriers of HBV. During treatment for hepatitis C, the reduction of HCV levels triggers the onset of hepatitis B; the surface antigen levels for HBV in these patients are relatively low, which increases the success of interferon treatments. This type of patient is the best candidate for receiving interferon therapy. The Company is also prepared to invest in this direction. Patients coinfected with HBV/HCV are included in the scope of interferon therapy. This type of coinfection may be classified as a rare disease.

The Company currently uses P1101 to treat genotype-2 chronic HCV infections. In 2012, we obtained approval from the Taiwan FDA (TFDA) to conduct a phase-II clinical trial in Taiwan. In 2014, we completed patient enrollment for this phase-II trial. In May 2015, we obtained a letter of approval from the TFDA for the phase-III human clinical trial. In January 2016, we began enrolling

patients for the phase-III trial. In March 2016, the Company obtained approval from the Ministry of Food and Drug Safety of South Korea to conduct a phase-III clinical trial in South Korea designed to provide 24 weeks of treatment. In total, 276 patients will be enrolled for the phase-III trials in Taiwan and South Korea. To accelerate enrollment, approval for a phase-III clinical trial was obtained from the China FDA (CFDA) in December 2017, and patient enrollment was completed in August 2019. This phase-III trial is expected to be completed in 2020.

(B) Cancer Medicine

According to the latest report by the WHO's International Agency for Research on Cancer, in 2018, 18.1 million new cancer cases were diagnosed worldwide, and 9.6 million deaths were reported. The global cancer burden will increase incrementally by 3%–5% per year, and by 2020, the world will have 20 million new cancer cases and approximately 12 million cancer-related deaths. Cancer medications will make up 10% of the global pharmaceutical market, and this percentage will continue to increase. In fact, the IQVIA Global Oncology Trends 2018 indicated that the global cancer drug market will reach US$200 billion by 2020 and grow by 10%–13% on average over the next 5 years. The United States will remain the fastest-growing market in the world, growing at 12%–15%. The subsequent section describes two medications used in cancer treatment: anti-PD-1 antibody and oral paclitaxel (Oraxol).

(a) Immune checkpoint inhibitor: Anti-PD-1 antibody

Cancer immunotherapy increases autoimmune cell activity and stimulates the autoimmune system to detect and eliminate cancer cells and maintain normal bodily functions. Because PD-1/PD-L1 monoclonal antibodies are highly effective and safe, major pharmaceutical manufacturers globally are committed to their research and development. According to Progressive Markets Research, the cancer immunotherapy market was valued at US$57.26 billion in 2017 and is projected to reach US$166.71 billion by 2025 at 14.42% CAGR during 2018–2025, and this market will continue to grow.

The Company's P1101 is a new-generation long-acting interferon with short-term side effects. Its dosage can be flexibly adjusted, providing physicians with a greater scope of applications according to indications or disease severity. The development of cancer immunotherapy has provided numerous tools for the treatment of cancer and has gradually influenced the cancer treatment market. The Company will leverage the production

efficiency and quality control strengths of its manufacturing sites to engage in the research and development of PD-1/PDL-1 monoclonal antibodies. We hope that the combined use of PD-1/PDL-1 antibodies and P1101 can strengthen patients' immune responses to different cancers. By leveraging this major strength, the Company will further expand the scope of applications for P1101 to include malignant melanoma, T cell lymphoma, hairy cell leukemia, and liver cancer, among other indications.

(b) Oral Paclitaxel (Oraxol)

According to meeting minutes of the Center for Drug Evaluation (CDE) on October 30, 2015, the CDE has in principle accepted the Company's application for a drug permit license. In the application, the Company used (a) data from clinical trials conducted in South Korea and South America by Athenex (formerly Kinex Pharmaceuticals; data comprised 200 patients in phases I, II, and III), (b) data from a pharmacokinetics study conducted in Taiwan by PharmaEssentia, and (c) treatment response data (24 patients examined over a trial period of one year). In the second quarter of 2016, the Company submitted an application for the development of drugs with a new route of administration to the TFDA. In July 2016, we received approval from the Taiwan Ministry of Health and Welfare to use Oraxol in a breast cancer clinical trial. In the first quarter of 2017, we initiated the pharmacokinetics study and response trial, which were designed to span a treatment period of 4 months. In 2019, the Company completed the safety bridging study in Taiwan. In the future, the Company will combine these results with the South American three-phase interim analysis data generated by Athenex and submit them for review in accordance with the laws and regulations of the United States, United Kingdom, Australia, and New Zealand. Athenex plans to apply for a drug permit license with the US FDA in the first quarter of 2020, after which the Company will apply for a drug permit license in Taiwan in the second quarter of 2020. In April 2017, the Company received TFDA approval to conduct a registration trial on the concurrent use of Oraxol and ramucirumab solution in the treatment of advanced gastric and esophageal cancer. Phase I of this trial will be completed by the second quarter of 2020.

(C) KX01 for psoriasis

KX01 is a new compound molecule developed by the American biotech company Athenex (formerly Kinex Pharmaceuticals). KX01 has been proven to have a substantial inhibitory effect on cancer cell proliferation and has entered

a phase-II trial in the United States. The Company believes that the mechanism of action by which KX01 inhibits cell proliferation is applicable to nonmalignant proliferative intractable psoriasis. Therefore, the Company has in-licensed KX01 from Athenex to develop a topical psoriasis ointment in Taiwan, mainland China, Hong Kong, Macau, Singapore, and Malaysia. KX01 is a new drug with new APIs. The Company's KX01 product entered a phase-I clinical trial in October 2015. We completed the third stage of the phase-I trial in 2019 and will conduct the fourth stage in 2020. This trial will be completed by 2020. The optimal treatment duration at the maximum dose of KX01 in the treatment of psoriasis must be determined. The Company will determine the three-phase clinical trial plans on the basis of this result. The licensing company, Athenex, has completed the phase-III clinical trial of actinic keratosis (AK) in the United States and has begun an NDA in the United States. The Company also plans to apply for a drug permit license in Taiwan in the first half of next year.

d. Product Competition

Ropeginterferon alfa-2b (P1101) is a pharmaceutical product invented by PharmaEssentia. In February 2019, the EU issued a drug permit license for P1101 in the treatment of PV. The Company signed a licensing contract with AOP in September 2009 to license out P1101 to AOP for its sale and clinical trials in the treatment of proliferative blood disorders. Licensed countries include countries in Europe and the Middle East as well as Turkey and Russia. After obtaining the license and selling the product in the market, AOP will pay us the agreed amount of tiered royalties in proportion to the amount of sales made in the licensed countries. As agreed, the Company must provide P1101 products to AOP for sale and collect income, in addition to the licensing fees and royalties, from AOP.

The Company plans to submit a BLA to the US FDA by using data reports and data from the EU-based phase-III clinical trial. We also held a pre-BLA meeting with the FDA in September 2019. We expect to submit the BLA by the first quarter of 2020 and simultaneously apply for priority review, enabling us to reduce the review period from 10 months to 6 months. We expect to obtain a US PV drug permit license by the end of 2020. The Company will expand PV clinical studies to other Asian countries. We obtained approval from the PMDA in Japan and the CFDA in China to conduct a phase-I clinical trial. Currently, the PMDA requires us to complete 1 year of treatment for 30 Japanese patients and prove the safety and efficacy of P1101 in Japanese patients before we can apply for a drug permit license. The CFDA imposed similar requirements. Pursuant to regulatory requirements, if P1101 obtains drug permit licenses from the world's 10 most advanced countries,

an application for a drug permit license can be submitted directly to the TFDA. The Company submitted this application on July 31, 2019 and obtained priority review. We expect to obtain a drug permit license for P1101 in April 2020.

ET and PV are rare blood disorders. The Company's P1101 drug for the treatment of ET has received orphan drug designation in the United States. We plan to conduct a multinational, multicenter phase-III clinical trial in the United States, Taiwan, Japan, China, and South Korea to verify and observe the efficacy of P1101 in HU-experienced patients with ET for which treatment did not achieve the expected efficacy or failed. In 2019, the Company obtained approval to conduct a clinical trial in the United States and China. In February 2020, the Company obtained approval to conduct a clinical trial in Taiwan. We expect to initiate a phase-III trial in 2020. These trials will enroll patients from the United States, Japan, China, Taiwan, and South Korea; therefore, the trial period will span 2 to 3 years, and the phase-III trial will be completed in 2022.

C. Technologies and R&D Overview

a. Technological Arrangement in Business Operations and R&D

The Company's core technologies:

(A) A method for improving the amalgamation of long-acting polyethylene glycol (PEG) polymer.

(B) The selection of 40K PEG molecules (40K PEG is generally considered to be the optimal limit in the human body).

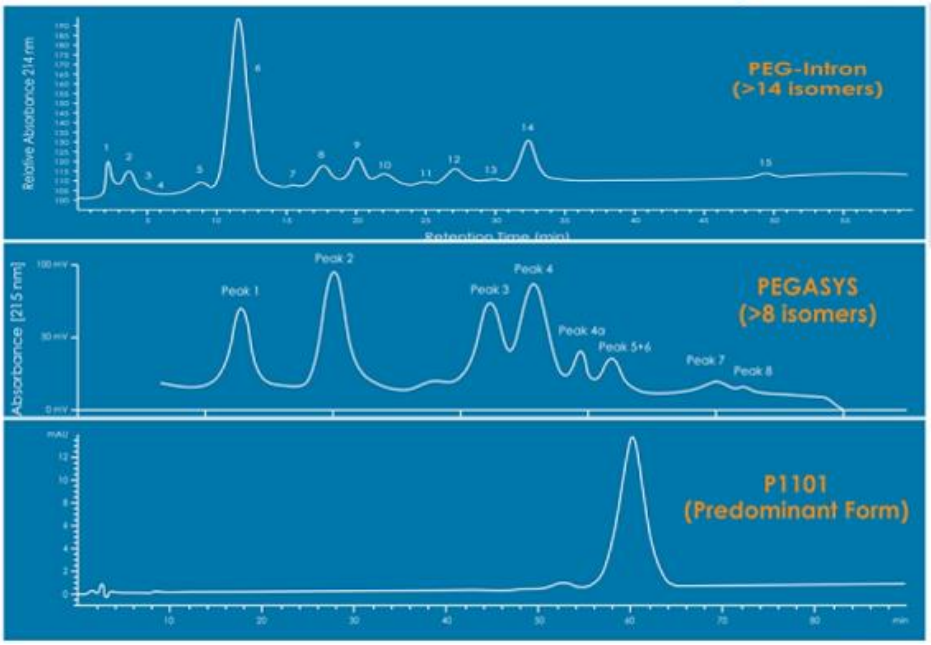
(C) The attachment of PEG polymer to a specifically designed position on interferon-α-2b to yield the compound of a single active ingredient.

(D) Proline interferon-α-2b, which was innovated and invented by the Company for the treatment of new disease indications.

Currently, the patents obtained by the Company include the four aforementioned techniques.

PEG-P-IFN α-2b single molecule was produced using the Company's unique polymerization technique, which not only reduces the purification procedures and duration but also greatly increases the production yield. A considerable amount of P1101 can be produced using liters of fermenting tanks in our pharmaceutical manufacturing facility (hereinafter referred to as "pharma facility"), a single process operation, and subsequent processing procedures. The entire manufacturing process from start to finish only takes a few weeks. The pharma facility is highly efficient in manufacturing products and can provide economic benefits for the Company.

HPLC results of PEG-Intron. PEGASYS. and P1101:



b. R&D Personnel and Their Educational Background

As of the end of April 2020, the educational background distribution of the Company's R&D personnel were as follows:

Education	Number of People	Percentage
PhD	21	33%
Master's Degree	41	64%
Bachelor's Degree	2	3%
Total	64	100%

As of the end of May 2019, the educational backgrounds of the Company's main R&D personnel were as follows:

c. R&D Expenses Invested in the Past 5 Years and Up to the Date of Publication of the Annual Report

Unit: NT$1,000

Item	2016	2017	2018	2019	2020
R&D Expenses	685,835	683,318	785,713	639,575	922,380
Net Operating Revenue	5,473	4,035	26,236	305,692	557,257
As a Percentage of Net Revenue	12,531%	16,935%	2,995%	209%	166%

Our Company is an investigational new drug company in the biotech industry. Besides the ET international multi-center Phase III clinical trial protocol to be

added in 2020, the Company will continue to invest in the research and development of respective projects. It is estimated that the overall R&D expenditure throughout the year will account for at least 80% of the annual revenue.

d. Technologies or Products Successfully Developed in the Past 5 Years and Up to the Date of Publication of the Annual Report

Type	Product	Indication	Current Development Stage
Hematology	P1101 (New-generation long-acting Ropeginterferon alfa-2b) Developed by PharmaEssentia	Polycythemia vera (PV)	Europe: Granting marketing authorization was recommended by the CHMP in December 2018 US: Preparing data documents for a Phase III clinical trial and submitting a biologics license application (BLA) Taiwan: Preparing for a bridging study (or exempted) Japan: Phase I clinical trial in progress China: Phase I clinical trial in progress
		Essential thrombocythemia (ET)	Worldwide: Applying for a Phase III clinical trial review of INDs
	PEG-EPO (Long-acting EPO) Developed by PharmaEssentia	Anemia in patients with kidney disease, anemia caused by chemotherapy for cancer	Phase I Production expected in Q3
	PEG-GCSF (Long-acting pegylated granulocyte colony stimulating factor) Developed by PharmaEssentia	Neutropenia caused by chemotherapy and AIDS	Phase I Production expected next year
Chronic Hepatitis	P1101 (New-generation long-acting Ropeginterferon alfa-2b) Developed by PharmaEssentia	Hepatitis B	Applying for a Phase III clinical trial review (common technical document; CTD); reply from China was received in mid-June and a consultation meeting was held in Japan; review approved by the TFDA
		Hepatitis C	Phase III clinical trial in progress
		HBV/HCV co-infection	Converting to investigator-initiated trial (IIT)
Oncology	Anti-PD-1 antibody (immune checkpoint inhibitor) Developed by PharmaEssentia	Cancer	Phase I Production expected in Q4
	Oraxol® (Oral Paclitaxel) Developed Through Licensing	Breast cancer	Taiwan: Completed a safety bridging study South America: Partner Athenex is conducting a Phase III clinical trial in South America; data analysis is expected to be completed in Q3 of 2019
		Gastric and esophageal cancer	Phase I clinical trial in progress
	Oradoxel® (Oral form of docetaxel and novel P-glycoprotein inhibitor HM30181A)	Prostate cancer	TFDA approved a Phase I clinical trial

Type	Product	Indication	Current Development Stage
Dermatology	KX01 (Kinase inhibitor) Developed Through Licensing	Psoriasis	Taiwan: Phase I clinical trial in progress; preliminary and positive outcomes were obtained.

e. Preclinical Animal Study

All of the pre-clinical animal studies of the Company that are meant to understand the safety or effectiveness of a drug are outsourced to an outside CRO to facilitate the research and development of new drugs. The Company at the moment prioritizes suppliers with AAALAC or IACUC qualifications. Getting to know that the collaborative CRO is AAALAC (Association for Assessment and Accreditation for Laboratory Animal Care) or IACUC (Institutional Animal Care and Use Committee) certified helps us believe that the said suppliers will respect and abide by laboratory standards in terms of protecting the welfare of lab animals as we blieve in the judgment of the said international organizations.

D. Long- and Short-Term Business Development Plans

a. Short-Term Business Development Strategy and Plan

In terms of the short-term development strategy and planning, due to the fact that the Company's P1101 (a long-acting interferon of the new generation) was already officially approved by the EU EMA to be marketed on February 19, 2019. In the future, efforts will continue to apply for its permits in countries around the world for use in PV. The Company is conducting a Phase III global clinical trial of P1101 concurrently in the US, Taiwan, Japan, Korea, and Mainland China for treating throbocythemia (ET). Clinical trials of P1101 in other indications, including chronic Hepatitis B and other rare blood proliferative disorders are ongoing, too. In addition, clinical trials will be continued for licensed new drugs, including oral cancer drug Oraxol®/Oratecan®/Oradoxel® and psorirasis medication KX01.

b. Mid-/Long-Term Development Strategy and Plan

For the mid-to-long-term development strategy and plan, the Company will expand its technical platform. Starting with PEGylated new protein-based drug, we will expand to take advantage of what we are good at, that is, chemical synthesis, in the research and development of small molecular new drugs and develop protein-based new drugs as cancer immunotherapy so that the cure rate of cancer can be significantly enhanced to benefit the patients. Moreover, the Company will develop new compound new drugs and become a first-rate professional pharmaceutical company in the world with complete vertical integration. It will help enhance the visibility of the Company in the international medicinal R&D industry and secure

the Company's position in world medicinal research and development.

2. Overview of Markets, Production, and Sales

A. Market Analysis

a. Origins and Destinations of Primary Products (Services)

The global drug market is growing as the impacts from expiring patents of brand drugs drop, the quantity of drugs approved to be marketed continues to increase, and the demand on the drug market of the US climbs. According to the statistics of IQVIA, the sales on the global drug market in 2018 totaled around US$1.20 trillion in value, a growth of around 6.1% from 2017 and stopped the sliding trends in the growth rate over the past few years (See Figure 4).

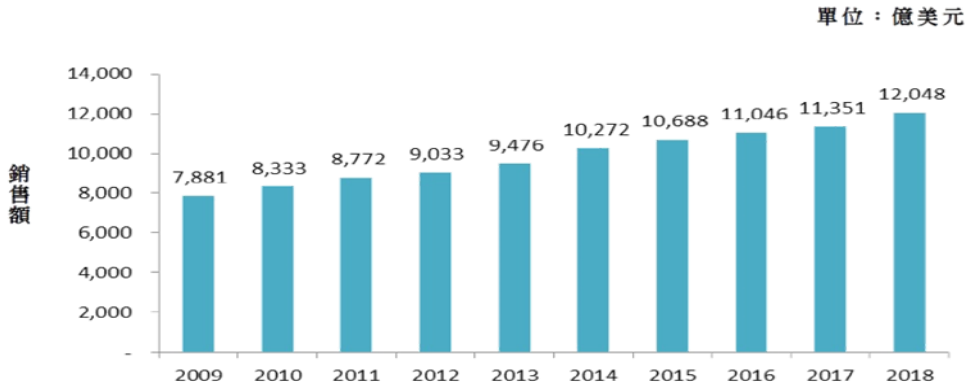


Figure 4　Global drug market development update

Source: The Global Use Of Medicine in 2019 and outlook to 2023, IQVIA, 2019 Biotechnology Industry White Paper

TABLE 3　2018 Global drug sales distribution

單位：億美元，%

地區別	2018 年銷售額	2014~2018 年 CAGR	2019~2023 年 CAGR
先進國家	8,000	5.7	3~6
-美國	4,849	7.2	4~7
-歐洲五國	1,775	4.7	1~4
-日本	864	1.0	(-3)~0
新興醫藥國家	2,859	9.3	5~8
其他	1,189	3.2	2~5
合計	12,048	6.3	3~6

附註：CAGR：複合年成長率(Compound Annual Growth Rate)。

資料來源：The Global Use of Medicine in 2019 and Outlook to 2023, IQVIA, 2019 年 1 月。

The drug market scale in 2018 of advanced countries such as the US, the five countries in Europe (Germany, France, the United Kingdom, Italy, and Spain), Japan, Canada, Australia, and South Korea) was worth around US$800 billion, accounting for 66.40% of the overall global drug market; they remain to be the primary markets at present. Emerging markets such as the Mainland China, Brazil, India, and Russia, on the other hand, had a combined market scale worth of US$285.9 billion in 2018, accounting for around 23.73% of the overall global drug market (See Table 3). It is estimated that as far as the CAGR is concerned in the coming five years, the US is 3.2%, Mainland China around 9.3%, and Japan 2.6%. Among the five countries in West Europe, the United Kingdom is the highest (4.4%) and for the others, it is around 2.1% to 2.8%. In Brazil, it is around 4% and Canada

around 2.6%.

TABLE 4　2018 Scales of Top 10 Categories of Therapeutic Drugs around the World

單位：億美元，%

藥品領域	2018 年銷售額	2023 年銷售額	2019~2023 年 CAGR
Oncologics(癌症用藥)	995	1400~1500	6-9
Diabetics(降血糖用藥)	787	1150~1250	7-10
Respiratory(呼吸疾病用藥)	605	700~800	2-5
Autoimmune(自體免疫用藥)	535	700~850	6-9
Antibiotics and Vaccines(抗生素和疫苗)	406	400~480	0-3
Blood Coagulation(凝血用藥)	398	550~650	7-10
Pain(疼痛疾病用藥)	397	400~480	0-3
Mental Health(精神疾病用藥)	355	320~400	(-2)-1
Immunology(免疫疾病用藥)	342	450~550	6-9
Hypertension(高血壓用藥)	299	270~310	(-2)-1

註：調查統計範圍包含美國、法國、德國、義大利、西班牙、英國、日本、加拿大、中國大陸、巴西、俄羅斯、印度、土耳其及墨西哥等 14 個國家。

資料來源：The Global Use of Medicine in 2019 and Outlook to 2023, IQVIA, 2019 年 1 月。

Meanwhile, according to the statistics of IQVIA (See Table 4), oncologics remained Top 1 among the medications used in 2018, with the sales worth up to US$99.5 billion. The continuous rise in sales is the result of increasing number of people diagnosed with cancer each year and the fact that drugs that can effectively treat cancer are yet to be available at present. It is estimated that the sales will grow at 6% to 9% each year in the coming five years and will exceed US$140 billion in 2023. Diabetics and autoimmune diseases are prioritized in the development of drugs, too. Their growths will be 7% to 10% and 6% to 9% in the coming five years, respectively, too, due to the increasing population with related diseases and the fact that pharmaceutical companies are devoted to the development of drugs in related fields. It is estimated that the market scales will be worth US$125 billion and US$85 billion, respectively, in 2023. In other words, the overall global drug market will be able to keep its growing streak in the future with the growth in the use volume of drugs driven by economic growths in emerging countries and the continuous climbing sales of drugs treating cancer.

Table 5　2018 Top 10 Brand Drugs and Sales Around the World

單位：億美元，%

品牌藥/廠商名稱	主要適應症	2017 年銷售額	2018 年銷售額	2017~2018 年成長率
Humira (AbbVie)	類風濕關節炎、克隆氏症、乾癬、幼年型自發性多關節炎等	184.27	199.36	8.2
Eliquis (Bristol-Myers Squibb/Pfizer)	抗凝血劑	73.95	98.72	33.5
Revlimid (Celgene)	多發性骨髓瘤	81.87	96.85	18.3
Opdivo (Bristol-Myers Squibb/Ono)	黑色素瘤	57.63	75.70	31.4
Keytruda (Merck & Co)	晚期黑色素瘤	38.09	71.71	88.3
Enbrel (Amgen/Pfizer)	類風濕關節炎、牛皮癬、克隆氏症	78.85	71.26	-9.6
Herceptin (Roche)	乳腺癌	70.13	69.81	-0.5
Avastin (Roche)	結直腸癌	66.86	68.47	2.4
Rituxan (Roche/Biogen)	非何杰金氏淋巴瘤	72.98	67.50	-7.5
Xarelto (Bayer/ Johnson & Johnson)	抗凝血劑	62.34	65.89	5.8

資料來源：Genetic Engineering & Biotechnology News, 2019 年 3 月。

Data show (See Table 5) that among the Top 10 brand drugs sold globally in 2018, seven continued to climb in sales. Humira®, the drug treating multiple autoimmune diseases, including rheumatoid arthritis that is developed by AbbVie, in particular, Tops the list. Despite the introduction of biosimilars targeting it during development to the market, as the indications continue to expand and with price adjustment, its sales reached new heights again in 2018 to arrive at US$19.936 billion. Nevertheless, the introduction to the market of Humira® biosimilars by the European Union inhibited the growths in sales outside the US market. As a result, the growth was only 8.2% compared to 2017 yet it secured the first place. The drug of Merck&Co treating advanced melanoma Keytruda obbtained a total of 11 permits as new drug or new indication in the US, the European Union, Japan, and Mainland China in 2018, contributing to the explosion in the growth of its sales that reached US$ 7.171 billion, a growth of 88.3% from 2017 and making it the fastest growing one among the Top 10 brand drugs. According to observations, among the Top 10 brand drugs around the world, biological preparations are gradually gaining prominence. Except for Revlimid®, Eliquis®, and Xarelto®, which are small molecular drugs, all the others are biological preparations, indicating the growing importance of biological preparations to the scale of the global drug market.

b. Market Share

The Company's new drug Beremi, which has been authorized to AOP in Europe, was approved by the EU EMA to be marketed (MAA) in February 2019. The

strategic partner AOP will proactively expand the market share.

c. Supply and Demand and Growth Potential on the Market in the Future

The Company primarily develops long-acting biological preparations. In terms of its R&D strategy, the unique coupling technology is applied to modifying existing long-acting biological preparations. Selected R&D items are consistently products with existing annual sales exceeding US$1 billion on the market. The access threshold for biological preparations is high so the competition is generally less than ordinary small molecular drugs, in addition to facts that the Company owns the exclusive synthesis patented technology and that biological preparation manufacturers that comply with European and American regulations can control the production timeframe on their own. Products that are under research and development cover blood disorders, infections, and cancer drugs; all are fields that continue to grow on the market. They target American and European markets and are hopefully to help the Company maintain a certain market share for its new biological preparations.

d. Competitive Niche

(A) Robust R&D team and multiple patents

The R&D team of the Company has had many years of experience in researching and developing new drugs. The outstanding R&D accomplishments are the biggest assets of the Company. Patents obtained in multiple countries help protect the R&D accomplishments and ensure sustainable operations of the Company. In addition, the team highly keeps track of the latest biological technologies and new drug development trends to be precise in selecting R&D items to accordingly be capable of selecting the most potential development targets after animal studies and begin clinical trials involving human subjects and eventually fulfill the marketing and sale goals.

(B) Familiarity with International New Drug Market

Multiple members on the team have worked for major pharmaceutical companies in the US before, including Biogen, ISIS, Amgen, Abott, and Johnson & Johnson, etc. Some of them were once officials reviewing drugs at the US Food and Drug Administration (FDA). They have an in-depth understanding of the new drug market in the US and can fully keep track of the changes in market demand, R&D activities of the competition, and regulatory requirements and accordingly plan management strategies for the Company’s new drugs in terms of research and development, clinical trials, and international marketing.

(C) Independent Production and Manufacturing

The Company finished setting up a plant for new biological preparations in October 2012 and obtained the TFDA GMP permit in April 2013 and te EMA GMP Certificate in January 2018. During the process, we hired multiple groups of experts specializing in helping international pharmaceutical companies set up plants: Denmark NNE was in charge of planning and design, Australia Synertec provided guidance on how to establish the validation system and the documentation system, and Mr. Jordanov, who had experiences in helping 11 biological preparation manufacturers set up new plants, served as the general counsel. Taiwan I&K Engineering Co., Ltd. on the other hand, was the primary construction contractor. The completion of the plant marked not only the fact that Company had complete international experiences but also that the first biological preparation new plant establishment experience was officially part of the biological technology industry in Taiwan. P1101, whose permit was issued by the European Union in February 2019, is exactly being produced and manufactured at the Company's new biological preparation plant. With this new biological preparation plant that meets international criteria, it helps the Company maximize the R&D results during the laboratory process and transfer them to meet the mass production criteria of international standards. Besides fully keeping track of the quality of new drugs, there are absolute advantages in terms of cost control.

(D) Support from Countries around the World in National Policy

Besides considering the market properties of a drug, the Company continues to devote to the development of drugs treating the rare condition polycythemia vera (PV) because of the relatively little competition and high price range and mainly because of the fact that PV patients require continuous medication, which will contribute to the constantly increase in the accumulative number of PV patients. A rare condition refers to one that has a low prevalence rate, is uncommon, and is associated with a small number of patients. The Company embarks on the development of new drugs from the perspective of rare conditions. Primary target markets for the treatments of rare blood disorders include advanced countries in Europe and America. Unlike other countries, high-price drugs are highly acceptable in Europe and America. In addition, the development of orphan drugs is emphasized in advanced countries and prioritized under local policies. It helps the P1101 of the Company to gain the upper hand in sales in advanced countries in America and Europe. P1101 is also known for its multiple indications. As a result, it can also be used to treat Hepatitis B and Hepatitis C. Hepatitis research in Taiwan is leading the world,

too. Physicians specializing in liver disease are known for their enriched experiences in conducting clinical trials. The fact that the number of patients is greater in Asia also helps with the conduct of clinical trials.

(E) Multiple Products in Varied R&D Stages

Given the extended duration of R&D associated with new drugs, if the Company is devoted to only one product, after it is introduced to the market, there will be no other products close to be marketed to continue generating income and the enormous time and resources required for the research and development of new products will cause difficulties in the continuous operation of the Company. Besides developing the most advanced long-acting interferon P1101, the Company continues to develop other long-acting protein-based drugs, such as the PEG-GCSF long-acting leukocyte growth hormone and the PEG-EPO long-acting erythropoietin, and starts to develop new cancer immunotherapies for the next ten years. Besides independent R&D, the Company is capable of introducing technologies for the development of new products (for the Oraxol oral cancer drug and the KX01 kinase inhibitor). In the future, the current model will be followed, too, to independently research and develop a series of new products on the one hand and to cooperate in the development of potential new drugs with external companies on the other hand so that product diversity may be maximized.

e. Favorable and unfavorable factors for future development and response strategies

I. Favorable Factors:

(A) Primary products may be applied to the treatment of multiple disorders

(a) For P1101 as a primary product, not only polycythemia, other indications can be developed, too; it may be used in multiple rare blood disorders. The use of P1101 in the treatment of PV has been certified by the EMA/FDA (ODD) and will be entitled to monopoly on the market for ten years and seven years, respectively, once introduced to the market. The same model in developing P1101 for the treatment of PV will be followed to continue developing P1101 for treating other rare blood disorders.

(b) In light of the high tolerated dose of P1101 in humans, many clinicians are very interested in applying P1101 to the treatment of other malignancies and cancers for which effective therapies are yet available and physician-initiated clinical trials are proactively planned. These trials will help boost the confidence of physicians in applying P1101 and significantly help reduce the difficulty in recruiting subjects for clinical trials and the marketing and promotion of products once they are available on the market in the future.

(c) Hepatitis research in Taiwan is leading the world. Physicians specializing in liver disease are known for their enriched experiences in conducting clinical trials. The fact that the number of patients is greater in Asia is in favor of conducting clinical trials, too.

(B) Familiarity with International New Drug Market

The Company is an R&D company in nature that primarily develops new drugs. Patents are important assets of the Company. Owning key technologies helps not only with the development of other new products and licensing to others with their use to generate income but also with the avoidance of infringing upon someone else's intellectual properties during development, which can give rise to unnecessary delays and disputes during research and development.

(C) Multiple Products in Varied R&D Stages

(a) Given the extended duration of R&D associated with new drugs, if only one product is being researched and developed, after it is introduced to the market, there will be no other products close to be marketed to continue generating income and the enormous time and resources required for the research and development of new products will cause difficulties in the continuous operation of the Company. Besides developing the most advanced long-acting interferon P1101, PharmaEssentia continues to develop other long-acting protein-based drugs, such as PEG-GCSF and PEG-EPO, etc. starts to develop new cancer immunotherapies for the next ten years.

(b) Besides independent R&D, the Company is capable of introducing technologies for the development of new products (for the KX01 kinase inhibitor). In the future, the current model will be followed, too, to independently research and develop a series of new products on the one hand and to cooperate in the development of potential new drugs with external companies on the other hand so that product diversity may be maximized.

II. Unfavorable factors and countermeasures

Unfavorable factor	Countermeasure
Protein-based new drugs involve a relatively long R&D duration and higher manufacturing difficulty	Efforts are made to primarily modify long-acting protein-based drugs that are already available on the market in order to reduce the uncertainty of drugs in terms of safety and to shorten the R&D duration and minimize the investment risk.
Biosimilars are faced with increasing competition on the market each day.	For the development of biosimilars with a high technical threshold and high access barriers, there should be a careful evaluation procedure while products to be researched and developed are being selected that covers technology, market, patent, and regulatory requirements to ensure that the development of products may be completed and the drug registration permit may be obtained within the shortest period of time possible.
Biotech talent is seriously wanted in Taiwan, particularly that with professional practical experiences in proteion chemistry.	The Company works proactively with the Phd On-the-job Training Program introduced by the government in finding suitable talent to receive complete training and later devote to practical tasks in the Company, creating a win-win situation for the industry and the academic circle.

B. Important Purposes and Production/Manufacturing Process of Currently Marketed Products

The Company is one that researches and develops and manufactures protein-based new drugs on the basis of the PEG technical platform for the independent research and development of long-acting protein-based drugs and the small molecular synthesized drugs technology. For the time being, it primarily focuses on the fields covering blood, infection, and tumor-related diseases. Its primary product, P1101, has completed Phase III clinical trials in Europe for treating PV and the official report on the treatment with P1101 of PharmaEssentia was provided by the EU Committee for Medicinal Products for Human Use (CHMP) on December 13, 2018 and was officially granted the marketing authorization (MAA) by the EU EMA in February 2019. As for the US market, the Company was approved by the US FDA to apply the Phase III clinical trial data and documentation in Europe to apply for a drug permit with the US FDA. The Company plans to submit the BLA drug permit application to the FDA in the first quarter of 2020 and applies for prioritized review concurrently to hopefully reduce the duration of review from ten months to six months and to obtain the PV drug permit by

the end of 2020 in the US. Meanwhile, as scheduled, the global international multi-center ET Phase III clinical trial will be activated to maximize product efficacy and clinical and marketing deployments will be proactively promoted for rare conditions such as PV and ET in Japan and in China.

C. Supply of Primary Raw Materials

The Company is a R&D-oriented new biotech company that is devoted to the innovation and invention, trials, and development of new drugs. While developing new drugs, researchers professionally determine and select primarily raw materials with optimal quality and purity by referring to publications and R&D results. In order to maintain quality of drugs and keep consistent the sources of raw materials for the data of experiments conducted during respective stages, suppliers of materials used in the development of new drugs will not be easily replaced. As such, raw materials selected to support respective stages of new drug development by the Company are mainly from international well-known heavyweights; this ensures the quality and stability of raw materials supplied.

D. Description of Major Gross Profit Margin Changes by Each Department Classification or Major Product Classification for the Most Recent 2 Years:

The Company's new pharmaceutical product has been approved for market distribution. There were no major changes in the gross profit of each department classification or major product classification.

E. List of Principal Suppliers and Clients

a. The names of any suppliers accounting for 10% or more of the Company's total procurement amount in either of the 2 most recent fiscal years, the amounts bought from each, and the percentage of total procurement accounted for by each:

Unit: NT$1,000

Year	2019				2020			
No.	Name	Amount	As a Percentage of Net Revenue (%)	Relationship with the Company	Name	Amount	As a Percentage of Net Revenue (%)	Relationship with the Company
1	Ypsomed AG	27,806	34.70	None	Akso	187,498	59.31	None
2	Merck Taiwan	8,454	10.55	None	CHUGAI Pharma Taiwan	31,872	10.08	None
	Other	43,877	54.75		Other	96,755	30.61	
	total	80,137	100.00		total	316,125	100.00	

The discrepancy can be attributed to the acquisition of Panco Healthcare Co., Ltd. in Q2, 2020, which resulted in a change in the top 10 suppliers. In 2020, the greatest supplier was the primary supplier of Panco Healthcare Co., Ltd., and transactions with this supplier accounted for a high percentage of PharmaEssentia's goods purchasing expenses. None of

the other suppliers accounted for more than 25% of PharmaEssentia's goods purchasing expenses.

b. The names of any clients accounting for 10% or more of the Company's total sales amount in either of the 2 most recent fiscal years, the amounts sold to each, and the percentage of total sales accounted for by each:

Year	2019				2020			
Item	Name	Amount	As a Percentage of Net Revenue (%)	Relationship with the Company	Name	Amount	As a Percentage of Net Revenue (%)	Relationship with the Company
1	AOP Orphan Pharmaceuticals AG	293,464	96.00	無	AOP Orphan Pharmaceuticals AG	268,876	48.25	無
	Other	3,695	14.08		Other	288,381	51.75	
	Total	26,236	100.00		Total	557,257	100.00	

PharmaEssentia primarily engages in the development and production of new drugs. A major product of the company, P1101, is a new drug for PV and hepatitis. Its use on PV won a CHMP recommendation in December 2018, and its MAA was approved by the EMA in February 2019. Because PharmaEssentia has granted AOP exclusive marketing rights in Europe, sales of P1101 in Europe can be foreseen to come solely from AOP's channels. Nevertheless, PharmaEssentia's policy is to keep the marketing rights of all P1101-based products to itself. For the American market, PharmaEssentia has submitted a BLA to the FDA in March 2020. According to schedule, PharmaEssentia will start multinational and multicenter phase III clinical trials for ET to enhance product benefits, and it is actively making plans for the clinical trial and marketing of products against PV and ET in Japan and China. Moreover, multinational phase II and phase III human clinical trials for the use of P1101 on hepatitis B virus and hepatitis C virus genotype 2 are also underway. Therefore, with the increasing number of marketing licenses from other markets and the expansion in indications, P1101 can be expected to attract a diverse clientele. In the table, the second and third clients listed under 2020 were major clients of Panco Healthcare Co., Ltd.

F. Production Volume for the Most Recent 2 Years:

Unit: NT$1,000; 1,000 tablets

Year	2019			2020		
Volume / Product	Capacity	Quantity	Amount (Note)	Capacity	Quantity	Amount (Note)
P1101	-	34,524,200	230,592	-	19,268,500	171,718
PharmaQ10	-	332	2,014	-	533	3,390

G. Sales Volume for the Most Recent 2 Years:

Unit: NT$1,000; 1,000 tablets

Year	2019				2020			
Volume	Domestic Sale		Export		Domestic Sale		Export	
Product	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount

Sale of goods	465	3,335	33	293,464	437	278,563	30	268,876
Research Income	-	8,893	-		-	3,589	-	6,229
Total	465	12,228	33	293,464	437	282,152	30	275,105

3. Number of Employees in the Last 2 Years and Up to the Date of Publication of the Annual Report

Unit: Person; Year

Year		2019	2020	As of April 30, 2021
Number of Employees	Manager or above	43	79	87
	General employee	171	200	224
	Total	214	279	311
Average Age		39	44	44
Average Years of Service		4.5	4.9	3.9
Education Level Percentage (%)	PhD	13	13	13
	Master's Degree	56	55	52
	Bachelor's Degree	29	31	33
	High School or below	2	2	2

4. Environmental Protection Expenditures

Total losses (including compensation for damages) and fines for environmental pollution for the 2 most recent fiscal years, and during the current fiscal year up to the date of publication of the annual report, and an explanation of the measures (including corrective measures) and possible disbursements to be made in the future (including estimates of losses, fines, and compensation resulting from any failure to adopt responsive measures, or if it is not possible to provide such an estimate, an explanation of the reason why it is not possible):

1. The Company's acquisition of a permit for pollution emissions:
   A. Stationary pollution source: Permit no. for installing an antistationary pollution facility: CTSPESD No. BC063-02; Permit no. for emitting stationary pollution: CTSPESD No. BC061-07
   B. Water pollution prevention: Permit no. for water pollution prevention: CTSPEWP No. BD017-09
   C. Waste removal and disposal: Proposal for the Disposal of Industrial Waste: Approval No. 1080012377
2. Pollution prevention fees payable:

A. Air pollution control fee

No air pollution control fee was incurred because the raw materials and pollution emitted by the manufacturing activities at the Taichung Plant were below the thresholds for charging.

B. Wastewater treatment fee

2019	2020
NT$138,000	NT$134,000

3. Pursuant to Article 28 of the Waste Disposal Act, which states that enterprises shall employ professional technical personnel, the Taichung Plant is part of the manufacturing industry and should submit a waste disposal proposal, and has a registered capital of NT$2 billion or more. Hence, the Taichung Plant is required to employ professional technical personnel, which the Company has ensured.

Institution	Company Name	Permit	Approval No.
Clearance	1. Shin Shin Environmental Protection Engineering Co., Ltd.	Waste Clearance Permit	2017 Taichung City Fei-Yi-Qing No. 0006
	2. How-Well Enterprise Co., Ltd.		2018Taichung City Fei-Qing No. 0012
	3. Skylark Technology Enterprise Co., Ltd.		2019 Taichung City Fei-Qing No. 0074
	4. Nanke Environmental Technology Co., Ltd.		2015 Tainan City Fei-Qing-A No. 081-1090531-00
Disposal	1. Taichung City Refuse Incineration Plant	Waste Disposal Permit	-
	2. How-Well Enterprise Co., Ltd.		Fu-Shou-Huan-Fei No. 1070079036
	3. How-Well Medical Waste Disposal Enterprise Co., Ltd.		Fu-Shou-Huan-Fei No. 1080285481
	4. Resource Recycling Facility, Environmental Resource Research Center, National Cheng Kung University		Tai-Jiao-Zi(6) No. 1040033509A

4. List the company’s investments in major antipollution facilities, the use purpose of such facilities, and the possible effects to be produced: None.
5. Describe the processes undertaken by the company for environmental pollution improvements in the most recent 2 fiscal years and up to the publication date of the prospectus. If there have been any pollution disputes, their handling processes should also be described: None.
6. Describe the loss (including damage compensation paid) suffered by the company because of environmental pollution incidents in the most recent 2 fiscal years and up to the publication date of the prospectus, the total penalty/fine amount, as well as a

disclosure of its future preventive policies (including improvement measures) and possible expenses to be incurred (including possible losses if no preventive measures are taken, and the penalties and estimated damage compensation amount; if reasonable estimations cannot be made, please present the facts that explain why not): No losses and penalties were incurred in 2018 and 2019.

7. Explain the current pollution conditions and the impact of its improvement to profits, competitive position, and capital expenditures of the company, as well as the projected major environment-related capital expenses to be made for the upcoming 2 fiscal years: To discharge wastewater in accordance with the control standards of the Central Taiwan Science Park, the Company plans to build a wastewater treatment facility that controls the chemical oxygen demand level and water acidity/alkalinity.
8. Workplace and Employee Safety and Protection Measures

   Our Taichung branch has established the Work Rules for Labor Safety and Health for employees to regulate safety and management matters. Matters implemented to ensure the health and safety of our Taichung branch are as follows:

   (1) Health and safety management unit and personnel

   The Company has established a health and safety management unit in accordance with the Occupational Safety and Health Act. The unit is headed by the supervisor of the Administrative Management Department. The Administrative Management Department has established an “Environmental Safety Group” that performs tasks related to safety, health, and environmental protection and is composed of a safety and health administrator and designated environmental personnel. The health and safety administrator is appointed as the head of health and safety operations.

   (2) Facility safety

   The Company’s production facility is equipped with safety protection measures such as emergency stop buttons on autoclave machines and safeguards on cutting machines. Detectors are installed at sites where hydrogen and liquid nitrogen are used to prevent leakage. Dangerous equipment (e.g., Category A pressure vessels) is serviced and maintained on a monthly basis. Annual/quarterly/monthly/daily automatic inspection is performed as required by law (Category A pressure vessels, power generators, small furnace, centrifuge, and vehicles/cars). When signing a contract with contractors, the Company requires contractors to comply with the health and safety requirements in its Contractor Management Rules.

   (3) Environment and health

   To create a risk-free work area, localized ventilation facilities are installed in work areas were chemical are used. Monthly/daily automatic inspection is

performed as required by law (activities involving organic solvents and specific chemical substances). Work environment measurements are performed every 6 months. Drinking water facilities are serviced and maintained on a monthly basis. Water quality is checked by certified laboratories every 3 months to ensure the cleanliness of drinking water for employees.

(4) Fire control and safety

The Company has installed a complete fire service system in accordance with the Fire Services Act. The system comprises a fire alarm system, water supply system, evacuation system, and fire extinguishers. Fire drills are held every 6 months to better equip employees with knowledge on the use of fire control and evacuation systems. Firefighting equipment is checked regularly to ensure that the equipment is functional whenever required. Certified organizations or technicians specializing in firefighting equipment are hired every year to check, repair, and provide reports on firefighting equipment.

(5) Education and training

New employees must receive general education and training on health and safety. Existing employees must also receive such general education. Pursuant to the law, the Company has appointed a supervisor of organic solvent operation, supervisor of specific chemical operation, first aider, Category A pressure vessel operator, boiler operator, and high-pressure gas vessel operator.

(6) Employees' right to know

In training new employees, information regarding preventive and precautionary measures for hazardous and dangerous substances is provided to reduce the occurrence of workplace safety incidents. Safety data sheets (SDSs) are provided at chemical work stations and in storage areas, and employees are taught to interpret their contents.

(7) Health examination and health promotion

New employees are required to submit a physical examination sheet. Every year, employees involved in special operations must receive a health examination. Every year, all employees must undergo a health examination (in accordance with GMP laws and regulations). Health promotion activities are held every year (including weight loss, aerobic exercise, ball games, and stress relief talks).

(8) Recurrence prevention

Every occupational injury incident is investigated to enforce preventive measures. Workplace incident improvement measures are proposed by the Environmental

Safety Group, IT Department, and Production Department within 48 hours of an incident. Disaster statistics are calculated every month and reported to the Central Taiwan Science Park.

(9) Group insurance

The Company purchases group insurance for all its employees so they can receive reasonable labor or group insurance claims and take time off without worrying when they sustain occupational injury.

(10) Healthy workplace certification

The Company is committed to safety, health, and environmental management. In addition to caring for the safety of employees at work, the Company is concerned about their physical health status. The Health Promotion Administration of the Ministry of Health and Welfare awarded a badge to the Company as a form of encouragement for committing further to the cause. In 2017, the Company received the Badge of Accredited Healthy Workplace for its efforts in health promotion.

5. Labor Relations

1. List all employee benefits, continuing education, training, retirement systems, and the status of their implementation, as well as the status of agreements between labor and management, and all measures aimed at preserving the rights and interests of employees:

(1) Employee benefits

- Labor insurance: In accordance with the Labor Insurance Act.
- National health insurance: In accordance with the National Health Insurance Act.
- Group insurance: All employees are eligible to life insurance, liability insurance, and medical insurance, which cover hospitalization and cancer treatments. All policies are fully covered by the Company.
- Employee bonus: Any earnings concluded in a fiscal year shall be first used to pay the statutory taxes and make up for losses of previous years, and the distribution ratio of employee bonuses for the year shall be proposed and approved by the Board of Directors, after which it shall be presented at the shareholder meeting for ratification.
- Employee stock options: The Company invites professionals to join and be a part of the Company's work team and retains outstanding employees who

demonstrate development potential. The Company cares for its employees and helps them to improve their quality of life, ensuring they are motivated to create benefits for the Company and shareholders. Following approval by the Board of Directors, employee stock options are issued in accordance with the Procedures for Employee Stock Option Issuance and Subscription.

- Year-end bonus/recreational activities: The Company regularly organizes employee trips and provides year-end bonuses. The Company has an Employee Welfare Committee in place that plans, promotes, and implements employee benefits, which include aspects in relation to weddings, funerals, birthdays, celebrations, employee trips, holiday bonuses, and occasional department gatherings. Committee members are elected in accordance with the law by employees through a voting process.

(2) Continuing education and training

New employees: On the first day of work, employees are given an orientation tour around the workplace during which personnel rules, the company profile, work rules, and supervisors and colleagues are introduced to them.

Continuing Education Rules for Existing Employees: All full-time employees are encouraged to participate in on-the-job education and training courses to promote lifelong learning, impart professional knowledge and skills, and improve their humanistic qualities, thereby enhancing employees' service quality, literacy, and job performance.

(3) Retirement systems and their implementation status

Pursuant to the Labor Standards Act, the Company has established the Employee Retirement Rules, which state that for employees who opt for the old pension system, the Company shall make monthly contributions equal to 2% of each employee's monthly salary to their pension account with the Bank of Taiwan set up in the name of the labor pension reserve supervision committee. As of July 1, 2005 following the implementation of the Labor Pension Act (hereinafter referred to as the "new pension system"), a defined contribution plan shall apply to the years of service for employees who were originally applicable to the Rules and opted for the new pension system or employees who report for duty after the implementation of the new pension system. Accordingly, the Company shall make monthly contributions equal to 6% of each employee's monthly salary to their individual pension account at the Bureau of Labor Insurance.

(4) Status of agreements between labor and management and all measures aimed at preserving the rights and interests of employees

The Company adopts communication, incentive, and education mechanisms to fulfill employee needs in a timely manner, which helps to forge a positive relationship in which employees and the Company share and work together toward common goals and interests. Subsequently, employees' loyalty to the Company and job satisfaction are enhanced, increasing their willingness to commit to the Company and contribute more to creating value for it. The Company maintains uninterrupted communication and harmonious relations with its employees; therefore, no major labor disputes have occurred as of late.

2. Describe any losses suffered by the company because of labor disputes occurring in the most recent 2 fiscal years and up to the publication date of the prospectus, and disclose the estimated amount expected to be incurred in the present and future as well as preventive measures; if a reasonable estimate cannot be made, an explanation of why it cannot be made should be provided:
   The Company did not suffer any losses because labor disputes in the past 2 years and up to the publication date of the annual report.

6. Material Contracts

Business partners	Contract type	Contract period	Content
Athenex Inc.	Royalties for new drugs	December 8, 2011– (patent expiration date)	Exclusive rights for the dermatologicals KX01/KX02 in Taiwan, Singapore, Malaysia, China, Hong Kong, Macau, Japan, and South Korea.
Athenex Inc.	Royalties for new drugs	December 16, 2013– (patent expiration date)	Exclusive rights for the orally administered cancer drugs Oraxol and Oratecan in Taiwan, Singapore, and Vietnam.
AA 公司	Clinical trial	December 7, 2010– End of research	Commissioning of the company for Phase III clinical trials of P1101 for hepatitis C virus genotype 2 in Taiwan and South Korea, and Phase I and Phase II clinical trials of KX01 for psoriasis in Taiwan.

Business partners	Contract type	Contract period	Content
BB 公司	Clinical trial	March 15, 2019–completion of the clinical trial	Commissioning of the company for Phase III clinical trials of P1101 for hepatitis C virus genotype 2 in China.
CC 公司	Service provision	2020/2/24~2023/2/23	Commissioning of the company for the provision of human resource management, marketing, and staff training services.
Medpace Inc.	Clinical trial	August 14, 2020–completion of the clinical trial	Commissioning of the company for clinical trials of P1101ET in the United States, Taiwan, and Hong Kong.
EPS International Holdings Co., Ltd. (EPSI)	Clinical trial	September 29, 2020–completion of the clinical trial	Commissioning of the company for clinical trials of P1101ET in Japan, South Korea, and China.

VI. Financial Highlights

1. Condensed Balance Sheets and Statements for the Past 5 Fiscal Years

A. Condensed Balance Sheet and Statement of Comprehensive Income

a. Condensed Balance Sheet – IFRS

Unit: NT$1,000

Item \ Year		Consolidated Financial Data for the Past 5 Years				
		2016	2017	2018	2019	2020
Current Assets		4,086,478	3,259,081	2,262,525	1,919,122	4,147,424
Property, Plant, and Equipment		314,611	280,638	372,277	423,190	419,332
Intangible Assets		17,843	16,407	16,488	98,234	220,654
Other Asset		79,602	113,050	153,753	518,864	743,776
Total Assets		4,498,534	3,669,176	2,805,043	2,959,410	5,531,186
Current Liabilities	Before Distribution	127,706	117,762	245,205	336,678	1,086,699
	After Distribution	127,706	117,762	245,205	336,678	1,086,699
Noncurrent Liabilities		100,443	93,929	87,879	367,656	524,777
Total Liabilities	Before Distribution	228,149	211,691	333,084	704,334	1,611,476
	After Distribution	228,149	211,691	333,084	704,334	1,611,476
Equity Attributable to Owner of the Parent Company		4,270,385	3,457,485	2,471,959	2,255,076	3,919,710
Capital Stock		2,184,601	2,187,208	2,190,849	2,250,438	2,634,183
Capital Surplus		4,370,364	2,164,838	1,321,811	875,656	3,727,229
Retained Earnings	Before Distribution	(2,174,956)	(872,851)	(1,011,629)	(843,512)	(2,144,028)
	After Distribution	(2,174,956)	(872,851)	(1,011,629)	(843,512)	(2,144,028)
Other Equity		(109,624)	(21,710)	(29,072)	(27,506)	(40,435)
Treasury Shares		-	-	-	-	(257,239)
Noncontrolling Interests		-	-	-	-	-
Total Equity	Before Distribution	4,270,385	3,457,485	2,471,959	2,255,076	3,919,710
	After Distribution	4,270,385	3,457,485	2,471,959	2,255,076	3,919,710

Note 1: The financial statements for each year have been audited and reviewed by a CPA.
Note 2: The financial data for each year were data from an IFRS-based consolidated financial report.

b. Consolidated Statement of Comprehensive Income – IFRS

Unit: NT$1,000

Item \ Year	Consolidated Financial Data for the Past 5 Years				
	2016	2017	2018	2019	2020
Operating Revenue	5,473	4,035	26,236	305,692	557,257
Gross Profit	4,336	4,297	(2,158)	243,989	183,934
Income (Loss) from Operations	(848,683)	(889,475)	(1,054,890)	(849,223)	(1,715,852)
Nonoperating Income and Expenses	3,765	17,167	15,722	7,079	(232,164)
Profit (Loss) before Income Tax	(844,918)	(872,308)	(1,039,168)	(842,144)	(1,948,016)
Profit (Loss) from Continuing Operations	(844,918)	(872,308)	(1,039,760)	(842,994)	(1,948,142)
Loss from Discontinuing Operations	-	-	-	-	-
Net Income (Loss)	(844,918)	(872,308)	(1,039,760)	(842,994)	(1,948,142)
Other Comprehensive Income (Loss) for the Year (Net After Income Tax)	(2,434)	(1,953)	472	926	(13,089)
Total Comprehensive Income (Loss) for the Year	(847,352)	(874,261)	(1,039,288)	(842,068)	(1,961,231)
Net Income (Loss) Attributable to: Owners of the Parent Company	(844,918)	(872,308)	(1,039,760)	(842,994)	(1,948,142)
Net Income (Loss) Attributable to: Noncontrolling Interests	-	-	-	-	-
Total Comprehensive Income (Loss) Attributable to: Owners of the Parent Company	(847,352)	(874,261)	(1,039,288)	(842,068)	(1,961,231)
Total Comprehensive Income (Loss) Attributable to: Noncontrolling Interests	-	-	-	-	-
Earnings Per Share (NT$)	(4.14)	(4.01)	(4.76)	(3.85)	(8.04)

Note 1: The financial statements for each year have been audited and reviewed by a CPA.
Note 2: The financial data for each year were data from an IFRS-based consolidated financial report.

c. Unconsolidated Condensed Balance Sheet – IFRS

Unit: NT$1,000

Item \ Year		Consolidated Financial Data for the Past 5 Years				
		2016	2017	2018	2019	2020
Current Assets		4,070,154	3,237,878	2,180,603	1,882,742	3,622,211
Investments Accounted for Using the Equity Method		14,703	14,275	93,227	53,300	301,528
Property, Plant, and Equipment		314,611	280,603	371,504	414,218	403,968
Intangible Assets		17,843	16,407	16,488	80,938	199,864
Other Asset		79,602	112,783	129,898	447,432	577,451
Total Assets		4,496,913	3,661,946	2,791,720	2,878,630	5,105,022
Current Liabilities	Before Distribution	126,085	110,532	231,822	314,540	780,100
	After Distribution	126,085	110,532	231,882	314,540	780,100
Noncurrent Liabilities		100,443	93,929	87,879	309,014	405,212
Total Liabilities	Before Distribution	226,528	204,461	319,761	623,554	1,185,312
	After Distribution	226,528	204,461	319,761	623,554	1,185,312
Equity Attributable to Owner of the Parent Company		2,184,601	2,187,208	2,190,849	2,250,438	2,634,183
Capital Stock		4,370,364	2,164,838	1,321,811	875,656	3,727,229
Retained Earnings	Before Distribution	(2,174,956)	(872,851)	(1,011,629)	(843,512)	(2,144,028)
	After Distribution	(2,174,956)	(872,851)	(1,011,629)	(843,512)	(2,144,028)
Other Equity		(109,624)	(21,710)	(29,072)	(27,506)	(40,435)
Treasury Shares		-	-	-	-	-
Noncontrolling Interests	Before Distribution	4,270,385	3,457,485	2,471,959	2,255,076	3,919,710
Total Equity	After Distribution	4,270,385	3,457,485	2,471,959	2,255,076	3,919,710

Note 1: The financial statements for each year have been audited and reviewed by a CPA.
Note 2: The financial data for each year were data from an IFRS-based unconsolidated financial report.

d. Unconsolidated Statement of Comprehensive Income – IFRS

Unit: NT$1,000

Item \ Year	Consolidated Financial Data for the Past 5 Years				
	2016	2017	2018	2019	2020
Operating Revenue	5,473	4,035	26,236	305,692	280,363
Gross Profit	4,336	4,297	(2,158)	243,989	152,939
Income (Loss) from Operations	(847,261)	(858,606)	(910,411)	(640,264)	(1,122,705)
Nonoperating Income and Expenses	2,343	(13,702)	(129,349)	(202,730)	(825,437)
Profit (Loss) before Income Tax	(844,918)	(872,308)	(1,039,760)	(842,994)	(1,948,142)
Profit (Loss) from Continuing Operations	(844,918)	(872,308)	(1,039,760)	(842,994)	(1,948,142)
Loss from Discontinuing Operations	-	-	-	-	-
Net Income (Loss)	(844,918)	(872,308)	(1,039,760)	(842,994)	(1,948,142)
Other Comprehensive Income (Loss) for the Year (Net After Income Tax)	(2,434)	(1,953)	472	926	(13,089)
Total Comprehensive Income (Loss) for the Year	(847,352)	(874,261)	(1,039,288)	(842,068)	(1,951,231)
Earnings Per Share (NT$)	(4.14)	(4.01)	(4.76)	(3.85)	(8.04)

Note 1: The financial statements for each year have been audited and reviewed by a CPA.
Note 2: The financial data for each year were data from an IFRS-based unconsolidated financial report.

B. Name of CPAs and Auditors' Opinions for the Past 5 Fiscal Years

a. Name of CPAs and Auditors' Opinions for the Past 5 Fiscal Years

Year	CPA	Name of Firm	Audit Opinion
2016	Su-Wen Lin, Chien-Che Huang	Ernst & Young	An unqualified opinion
2017	Su-Wen Lin, Li-Feng Lin	Ernst & Young	An unqualified opinion
2018	Chien-Ju Yu, Li-Feng Lin	Ernst & Young	An unqualified opinion
2019	Chien-Ju Yu, Li-Feng Lin	Ernst & Young	An unqualified opinion
2020	Chien-Ju Yu, Li-Feng Lin	Ernst & Young	An unqualified opinion

b. Reason for Change in CPA

Due to internal adjustments within Ernst & Young, the CPAs Su-Wen Lin and Li-Feng Lin were replaced by the CPAs Chien-Ju Yu and Li-Feng Lin as of the financial statement for Q1 of 2017.

2. Financial Analysis

A. Consolidated – IFRS

Analysis Item (Note) \ Year			Consolidated Financial Data for the Past 5 Years				
			2016	2017	2018	2019	2020
Financial Structure	Debt Ratio (%)		5.07	5.77	11.87	23.80	29.13
	Long-Term Fund for Property, Plant, and Equipment (%)		1,387.77	1,264.04	828.57	654.92	1,087.75
Solvency	Current Ratio (%)		3,199.91	2,767.51	922.71	570.02	381.65
	Quick Ratio (%)		3,170.72	2,708.65	893.59	473.86	337.11
	Times Interest Earned (%)		(446.28)	(496.04)	(656.62)	(111.24)	(234.98)
Operating ability	Average Collection Turnover (Times)		7.65	5.56	2.20	2.74	1.71
	Average Collection Days for Receivables		48	66	166	133	213
	Average Inventory Turnover (Times)		0.01	-	0.22	0.27	0.94
	Average Payment Turnover (Times)		0.01	-	1.75	2.50	3.58
	Average Inventory Turnover Days		36,500	-	1,659	1,352	388
	Property, Plant, and Equipment Turnover (Times)		0.02	0.02	0.09	0.86	1.38
	Total Assets Turnover (Times)		0.01	0.00	0.01	0.11	0.13
Profitability	Return on Total Assets (%)		(30.45)	(21.32)	(32.08)	(29.04)	(45.73)
	Return on Equity (%)		(34.07)	(22.58)	(35.07)	(35.67)	(63.10)
	Pre-tax Income to Paid-in Capital Ratio (%)	Income from Operations	(38.78)	(39.26)	(48.15)	(37.74)	(65.14)
		Pre-tax Income	(38.68)	(39.88)	(47.49)	(37.50)	(73.96)
	Net Margin (%)		(15,437.93)	(21,618.54)	(3,963.10)	(275.77)	(349.59)
	Earnings Per Share (NT$)		(4.14)	(4.01)	(4.76)	(3.85)	(8.04)
Cash Flow	Cash Flow Ratio (%)		Note	Note	Note	Note	Note
	Cash Flow Adequacy Ratio (%)		Note	Note	Note	Note	Note
	Cash Flow Reinvestment Ratio (%)		Note	Note	Note	Note	Note
Leverage	Operating Leverage		Note	Note	Note	Note	Note
	Financial Leverage		Note	Note	Note	Note	Note

Analysis of deviation over 20% in financial ratios over the past 2 fiscal years:

1. Management Capability (accounts receivable turnover and average collection days): The marketing authorization given by the European Union in February 2019 to the new drug P1101 of the Company led to the strategic partner AOP increasing its purchase orders placed with the Company and it contributed to a significant increase in the operating income.
2. Management Capability (inventory turnover, accounts payable turnover, and average inventory turnover days): It is the result of the increase in the inventory caused by the initiation of commercial production and stocking to support future sales after the primary product of the Company P1101 was granted the EU drug permit in February 2019.
3. Profitability (return on assets, return on equity, and net profit margin): It is the result of the Company's operating gross profit far smaller than operating expenses caused by the revenue yet to be significant and continuous expenses on research and development of other products despite the drug permit of the primary product P1101 obtained in the EU in February 2019 and gradual market availability ever since.

B. Unconsolidated – IFRS

Analysis Item (Note) \ Year			Consolidated Financial Data for the Past 5 Years				
			2016	2017	2018	2019	2020
Financial Structure	Debt Ratio (%)		5.04	5.58	11.45	21.66	23.22
	Long-Term Fund for Property, Plant, and Equipment (%)		1,387.77	1,264.20	828.80	649.54	1,089.61
Solvency	Current Ratio (%)		3,228.10	2,929.36	940.39	598.57	464.33
	Quick Ratio (%)		3,199.52	2,867.79	910.64	497.37	406.15
	Times Interest Earned (%)		(446.28)	(496.04)	(656.24)	(133.26)	(282.78)
Operating Ability	Average Collection Turnover (Times)		7.65	5.57	2.20	2.74	1.45
	Average Collection Days for Receivables		48	66	166	133	252
	Average Inventory Turnover (Times)		0.01	-	0.22	0.27	0.33
	Average Payment Turnover (Times)		0.01	(0.02)	2.05	2.51	4.66
	Average Inventory Turnover Days		36,500	-	1,659	1,352	1,106
	Property, Plant and Equipment Turnover (Times)		0.02	0.02	0.09	0.87	0.71
	Total Assets Turnover (Times)		-	-	0.01	0.11	0.07
Profitability	Return on Total Assets (%)		(30.47)	(21.35)	(32.18)	(29.56%)	(48.67%)
	Return on Equity (%)		(34.07)	(22.58)	(35.07)	(35.67)	(63.10)
	As a Percentage of Paid-in Capital Ratio (%)	Income from Operations	(38.78)	(39.26)	(41.56)	(28.45)	(42.62)
		Pre-tax Income	(38.68)	(39.88)	(47.46)	(37.46)	(73.96)
	Net Margin (%)		(15,437.93)	(21,618.54)	(3,963.1)	(275.77)	(694.86)
	Earnings Per Share (NT$)		(4.14)	(4.01)	(4.76)	(3.85)	(8.04)
Cash Flow	Cash Flow Ratio (%)		Note	Note	Note	Note	Note
	Cash Flow Adequacy Ratio (%)		Note	Note	Note	Note	Note
	Cash Flow Reinvestment Ratio (%)		Note	Note	Note	Note	Note
Leverage	Operating Leverage		Note	Note	Note	Note	Note
	Financial Leverage		Note	Note	Note	Note	Note

Analysis of deviation over 20% in financial ratios over the past 2 fiscal years:

1.Management Capability (accounts receivable turnover and average collection days): The marketing authorization given by the European Union in February 2019 to the new drug P1101 of the Company led to the strategic partner AOP increasing its purchase orders placed with the Company and it contributed to a significant increase in the operating income.

2. Management Capability (inventory turnover, accounts payable turnover, and average inventory turnover days): It is the result of the increase in the inventory caused by the initiation of commercial production and stocking to support future sales after the primary product of the Company P1101 was granted the EU drug permit in February 2019.

3. Profitability (return on assets, return on equity, and net profit margin): It is the result of the Company's operating gross profit far smaller than operating expenses caused by the revenue yet to be significant and continuous expenses on research and development of other products despite the drug permit of the primary product P1101 obtained in the EU in February 2019 and gradual market availability ever since.

Note 1: The calculation formulas used for the financial analysis are as follows:

1. Financial Structure

(1) Debt ratio = total liabilities / total assets

(2) Long-term fund to property, plant and equipment ratio = (shareholders' equity + noncurrent liabilities) / net property, plant, and equipment

2. Solvency

(1) Current ratio = current assets / current liabilities

(2) Quick ratio = (current assets − inventories − prepaid expenses) / current liabilities

(3) Times interest earned = earnings before interest and taxes / interest expenses

3. Operating Ability

(1) Receivables (including accounts receivable and notes receivable arising from business operations) turnover rate = net sales / average receivables (including accounts receivable and notes receivable arising from business operations) for each period

(2) Average collection days for receivables = 365 / receivables turnover rate

(3) Average inventory turnover = cost of sales / average inventory

(4) Payables (including accounts payable and notes payable arising from business operations) turnover rate = cost of sale / average payables (including accounts payable and notes payable arising from business operations) for each period

(5) Average days of sale = 365 / average inventory turnover

(5) average payment turnover = cost of sales / average trade payables

(6) Property, plant, and equipment turnover = operating revenue / average net property, plant, and equipment

(7) Total assets turnover = operating revenue / average total assets

4. Profitability

(1) Return on total assets = (net income + interest expenses * (1 − effective tax rate)) / average total assets

(2) Return on equity = net income / average equity

(3) Pre-tax income to paid-in capital ratio = income before tax / paid-in capital

(4) Net margin = net income /operating revenue

(5) Earnings per share = (net profit after tax – dividends on preferred shares) / weighted average number of issued shares (Note 2)

5. Cash flow

(1) Cash flow ratio = net cash provided by operating activities / current liabilities

(2) Cash flow adequacy ratio = 5-year sum of cash from operations / 5-year sum of capital expenditures, inventory additions, and cash dividend

(3) Cash flow reinvestment ratio = (cash provided by operating activities − cash dividends) / (gross property, plant, and equipment + long-term investments + other noncurrent assets + working capital) (Note 3)

6. Leverage

(1) Operating leverage = (operating revenue − variable cost) / income from operations (Note 4)

(2) Financial leverage = income from operations / (income from operations − interest expenses)

Note 2: When the above formula for calculating earnings per share is used during measurement, pay attention to the following matters:

1. Measurement should be based on the weighted average number of common shares, not the number of issued shares at year end.

2. In any case where there is a cash capital increase or treasury stock transaction, the period of time in circulation shall be considered when calculating the weighted average number of shares.

3. In the case of capital increase out of earnings or capital surplus, the calculation of earnings per share for the past fiscal year and the fiscal half-year shall be retrospectively adjusted based on the capital increase ratio, without the need to consider the issuance period for the capital increase.

4. If the preferred shares are nonconvertible cumulative preferred shares, the dividend of the current year (whether issued or not) shall be subtracted from the net profit after tax, or added to the net loss after tax. In the case of noncumulative preferred shares, if there is net profit after tax, dividends on preferred shares shall be subtracted from the net profit after tax; if there is loss, then no adjustment must be made.

Note 3: Pay attention to the following matters when performing cash flow analysis:

1. Net cash flow from operating activities means net cash in-flow amounts from operating activities listed in the statement of cash flows.

2. Capital expenditures means the amounts of cash out-flows for annual capital investment.

3. Inventory increase will only be entered when the ending balance is larger than the beginning balance. An inventory decrease at year end will be deemed zero for calculations.

4. Cash dividend includes cash dividends from both common shares and preferred shares.

5. Gross property, plant, and equipment value means the total value of property, plant, and equipment prior to the subtraction of accumulated depreciation.

Note 4: Issuers shall separate operating costs and operating expenses by their nature into fixed and variable categories. When estimations or subjective judgments are involved, pay attention to their reasonableness and to maintaining consistency.

Note 5: In the case of a company whose shares have no par value or have a par value other than NT$10, for the calculation of the abovementioned paid-in capital ratio, the ratio of equity attributable to owners of the parent as stated in the balance sheet shall be substituted.

Note 6: The financial data for Q1 of 2019 have been reviewed by a CPA. Relevant profit (loss) was calculated for the year.

Note 7: The Company was not required to produce an unconsolidated financial statement for Q1 of 2019.

Note 8: Cost of sales for Q1 of 2019 was negative, resulting in a negative financial ratio.

3. Supervisors' or Audit Committee's Report for the Most Recent Year's Financial Statement

Audit Committee's Audit Report

Board of Directors has prepared the 2020 business report, financial statements and deficit compensation table proposals of the Company, among them, the financial statements have been audited by Ernst & Young Taiwan, and audit report has been issued. Proposals regarding the above business report, financial statements and deficit compensation table have been audited by Audit Committee, and those proposals are appropriate, it is hereby proposed for supervision pursuant to relevant provisions of Securities Exchange Act and Company Act.

Sincerely submitted to
2020 General Meeting of the Company PharmaEssentia Corp.

Convener of Audit Committee: JinnDer Chang

February 26, 2021

4. Financial Statement for the Most Recent Fiscal Year, Including an Auditor's Report Prepared by a Certified Public Accountant, as well as a 2-Year Comparative Balance Sheet, Statement of Comprehensive Income, Statement of Changes in Equity, Cash Flow Chart, and Any Related Footnotes or Attached Appendices

Please see of this Annual Report.

5. The Company's Unconsolidated Financial Statement for the Most Recent Fiscal Year Certified by a CPA

Please see of this Annual Report.

6. If the Company and its Affiliates Have Experienced Financial Difficulties in the Most Recent Fiscal Year or During the Current Fiscal Year up to the Date of Publication of the Annual Report, the Annual Report Shall Explain How Said Difficulties Impacted the Company's Financial Situation

None.

VII. Financial Status, Operating Results, and Risk Management

1. Financial Status

A. Consolidated – IFRS

Unit: NT$1,000; %

Item \ Year	2019	2020	Difference	
			Amount	Amount
Current Assets	1,919,122	4,147,424	2,228,302	116.11
Property, Plant, and Equipment	423,190	419,332	(3,858)	(0.91)
Intangible Assets	98,234	220,654	122,420	124.62
Other Assets	518,864	743,776	224,912	43.35
Total Assets	2,959,410	5,531,186	2,571,776	86.9
Current Liabilities	336,678	1,086,699	750,021	222.77
Noncurrent Liabilities	367,656	524,777	157,121	42.74
Total Liabilities	704,334	1,611,476	907,142	128.79
Capital Stock	2,250,438	2,634,183	383,745	17.05
Capital Surplus	875,656	3,727,229	2,851,573	325.65
Retained Earnings (Cumulative Loss)	(843,512)	(2,144,028)	(1,300,516)	154.18
Total Equity	2,255,076	3,919,710	1,664,634	73.82

Analysis of Variation: (10% or more variation in the monetary amounts, and the amount equals 1% of the total assets for the fiscal year)

1. The increases in liquid assets and total assets were attributable to the issuance of common stock for cash in 2020.
2. The increase in intangible assets was primarily attributable to the increase in developing intangible assets.
3. The increases in other assets, noncurrent liabilities, and total liabilities were attributable to the increases in right-of-use assets and lease liabilities.
4. The increase in current liabilities was primarily attributable to the increased outstanding payments associated with PharmaEssentia's business expansion in numerous countries.
5. The increases in the capital stock and capital surplus were primarily attributable to the issuance of common stock for cash in 2020.
6. The increase in the accumulated deficit was attributable to the continual investment in R&D and business expansion at a time when PharmaEssentia was in a pioneering stage with limited revenue.

B. Unconsolidated – IFRS

Unit: NT$1,000; %

Item \ Year	2019	2020	Difference	
			Amount	Amount
Current Assets	1,882,742	3,622,211	1,739,469	92.39
Investment Accounted for Using the Equity Method	53,300	301,528	248,228	465.72
Property, Plant, and Equipment	414,218	403,968	(10,250)	(2.47)
Intangible Assets	80,938	199,864	118,926	146.93
Other Assets	447,432	577,451	130,019	29.06
Total Assets	2,878,630	5,105,022	2,226,392	77.34
Current Liabilities	314,540	780,100	465,560	148.01
Noncurrent Liabilities	309,014	405,212	96,198	31.13
Total Liabilities	623,554	1,185,312	561,758	90.09
Capital Stock	2,250,438	2,634,183	383,745	17.05
Capital Surplus	875,656	3,727,229	2,851,573	325.65
Retained Earnings (Cumulative Loss)	(843,512)	(2,144,028)	(1,300,516)	(154.18)
Total Equity	2,255,076	3,919,710	1,664,634	73.82

Analysis of Variation: (10% or more variation in the monetary amounts, and the amount equals 1% of the total assets for the fiscal year)

1. The increases in liquid assets and total assets were attributable to the issuance of common stock for cash in 2020.
2. The increase in intangible assets was primarily attributable to the increase in developing intangible assets.
3. The increases in other assets, noncurrent liabilities, and total liabilities were attributable to the increases in right-of-use assets and lease liabilities.
4. The increase in current liabilities was primarily attributable to the increased outstanding payments associated with PharmaEssentia's business expansion in numerous countries.
5. The increases in the capital stock and capital surplus were primarily attributable to the issuance of common stock for cash in 2020.
6. The increase in the accumulated deficit was attributable to the continual investment in R&D and business expansion at a time when PharmaEssentia was in a pioneering stage with limited revenue.

2. Financial Performance

A. Analysis of Operating Results in Consolidated Financial Statement – IFRS

Unit: NT$1,000; %

Item \ Year	2019	2020	Increase/Decrease	
			Amount	% Variation
Operating Revenue	305,692	557,257	251,565	82.29
Net Operating Revenue	305,692	557,257	251,565	82.29
Operating Cost	(61,703)	(373,323)	(311,620)	505.03
Gross Profit	243,989	183,934	(60,055)	(24.61)
Operating Expenses	(1,093,212)	(1,899,786)	(806,574)	73.78
Income (Loss) from Operations	(849,223)	(1,715,852)	(866,629)	102.05
Nonoperating Income and Expenses	7,079	(232,164)	(239,243)	(3,379.62)
Income (Loss) Before Income Tax	(842,144)	(1,948,016)	(1,105,872)	131.32
Minus: Income Tax Expense	(850)	(126)	724	(85.18)
Other Comprehensive Income (Loss) for the Year	926	(13,089)	(14,015)	(1,513.50)
Net Profit (Loss) After Tax	(842,068)	(1,961,231)	(1,119,163)	132.91
Analysis of Variation: (10% or more variation in the monetary amounts, and the amount equals 1% of the total assets for the fiscal year) 1.The increases in operating revenues and operating costs, as well as the decrease in the gross profit, were attributable to the acquisition of Panco Healthcare Co., Ltd. in Q2, 2020. The increase in operating expenses was attributable to the start of multinational clinical trials for ET and the continual investment in R&D and business expansion. 2. The increase in nonoperating expenses was attributable to the occurrence of international arbitration events, which were handled through adequate accounting treatment.				

B. Analysis of Operating Results in the Unconsolidated Financial Statement – IFRS

Unit: NT$1,000; %

Item \ Year	2019	2020	Increase/Decrease	
			Amount	% Variation
Operating Revenue	305,692	280,363	(25,329)	(8.29)
Net Operating Revenue	305,692	280,363	(25,329)	(8.29)
Operating Cost	(61,703)	(127,424)	(65,721)	(106.51)
Gross Profit	243,989	152,939	(91,050)	(37.32)
Operating Expenses	(884,253)	(1,275,644)	(391,391)	(44.26)
Income (Loss) from Operations	(640,264)	(1,122,705)	(482,441)	(75.35)
Nonoperating Income and Expenses	(202,730)	(825,437)	(622,707)	(307.16)
Income (Loss) before Income Tax	(842,994)	(1,948,142)	(1,105,148)	(131.10)
Minus: Income Tax Expense	-	-	-	-
Other Comprehensive Income (Loss) for the Year	926	(13,089)	(14,015)	(1,513.50)
Net Profit (Loss) After Tax	(842,068)	(1,961,231)	(1,119,163)	(132.91)

Information on **Major Changes**: (With a change in value of 10% and above and the value reaching 1% of the total assets for the specific year)

1. The increases in operating expenses and operating deficits were attributable to the continual investment in R&D.
2. The increase in nonoperating expenses was attributable to the occurrence of international arbitration events, which were handled through adequate accounting treatment.

C. Sales Volume Forecast and Basis, Potential Impact on the Company's Financial Operations and Measures to be Taken in Response

The assumptions involved in the estimation of a new drug's expected revenue mainly include the number of patients, the number of syringes required for treatment, and

the drug prices in the areas where the drug is to be sold. The number of patients is estimated according to various factors, including the population growth rate based on published official statistics, disease prevalence rate based on the statistics measured by professional hematological disease research institutions, diagnostic rate or cure rate based on the statistics compiled by professional cancer research institutions, and the conservative market share (market penetration rate) estimated by international market research agencies commissioned by PharmaEssentia. The number of syringes required for treatment is estimated according to the administration rate or medical compliance of patients in a country. The drug prices in the areas where the drug is to be sold is estimated by referencing the price range of similar drugs and the drug pricing models and annual drug price variation patterns of the areas in question.

The marketing and distribution plans for P1101 are made in accordance with its primary indication. Targeting rare hematological diseases, P1101 is mainly marketed in advanced countries, such as those in Europe and Northern America. This is because the United States is the largest consumer in the new-drug market and accounts for the consumption of 42% of new drugs worldwide, and when combined with advanced countries in Europe, they consume 80% of new drugs in the market. Compared with other countries, European and Northern American countries exhibit a high level of acceptance for expensive new drugs. Moreover, the attention and benefits that these advanced countries give to orphan drugs will allow P1101 to occupy a vantage position in sales. Among Asian countries, Japan accounts for 20% of the international new drug market and has tremendous demands for orphan drugs. Therefore, other than the European and Northern American markets, PharmaEssentia also has plans to actively promote the clinical trials of P1101 in Japan and South Korea and commercialize it as an orphan drug for PV and ET in these countries.

3. Cash Flow

A. Analysis of Cash Flow Changes During the Most Recent Years

a. Consolidated Financial Statement

Unit: NT$1,000; %

Year / Item	2019	2020	(Increase) Decrease	% (Increase) Decrease
Operating Activities	(945,021)	(1,455,290)	(510,269)	54.00
Investing Activities	(237,863)	(302,198)	(64,335)	27.05
Financing Activities	411,494	3,566,379	3,154,885	766.69
Analysis of Changes: 1. The increase in cash outflow from operating activities was primarily attributable to the increase in operating expenses, inventories, and other current liabilities. 2. The increase in cash outflow from investment activities was attributable to the increase in intangible assets. 3. The increase in cash outflow from financing activities was attributable to the issuance of common stock for cash in 2020.				

b. Unconsolidated Financial Statement

Unit: NT$1,000; %

Year / Item	2019	2020	(Increase) Decrease	% (Increase) Decrease
Operating Activities	(742,917)	(827,467)	(84,550)	(11.38)
Investing Activities	(397,778)	(1,068,272)	(670,494)	(168.56)
Financing Activities	418,060	3,510,354	3,092,294	739.68
Analysis of Changes: 1. The decrease in cash inflow from investment activities was primarily attributable to the decrease in investments accounted for by using the equity method. 2. The increase in cash inflow from financing activities was primarily attributable to the issuance of common stock for cash and the increase in private common stock in this fiscal year.				

B. Liquidity Analysis for the Coming Year and Corrective Measures to be Taken in Response to Liquidity:

Cash – beginning balance (1)	Expected net cash flow from perating activities for the year (2)	Expected cash outflow (3)	Expected cash balance (insufficiency) (1)+(2)-(3)	Countermeasures against cash insufficiency	
				Investment plan	Wealth management plan
2,979,340	1,535,128	3,066,653	1,447,815	-	-

1. Analysis of cash liquidity in the following year:
   (1) Cash used in operating activities: The outflow of cash is expected to be caused primarily by the expenses of clinical trials, R&D, and labor incurred in the process of product development.
   (2) Cash provided by financing activities: The inflow of cash is expected to be caused primarily by the acquisition of NT$1,500,000,000 through fundraising.
2. Contingency plan and liquidity analysis for deficit in cash: Inapplicable.
3. The forecast for cash liquidity is an optimal estimation based on PharmaEssentia's current plans and the most likely future scenarios. A discrepancy between reality and expectations must be expected because plans and the economic environment may not always progress as desired.

4. Effect of Major Capital Expenditures on Financial Operations During the Most Recent Years

None.

5. Investment Policy for the Most Recent Fiscal Year, Main Reasons for Profits/Losses, Improvement Plan, and Investment Plans for the Coming Year

A. The Company's investment policy

Re-investments made by the Company take into consideration factors such as clinical promotion, drug marketing, and market deployment, among others, and are handled by respective departments in accordance with the internal control system after they are submitted to the Board of Directors, where they are discussed and approved.

B. Main Reasons for Profits/Losses

a. PharmaEssentia Biotechnology (Beijing) Ltd.

To open up the Chinese market, PharmaEssentia established PharmaEssentia Asia (Hong Kong) Limited, a wholly owned subsidiary, in October 2013 to manage patent-related affairs in China. Presently, the subsidiary has only completed corporate registration and has not started the outward remittance of payments for shares issued. Additionally, to open up the Chinese market and manage human clinical trials for new products, PharmaEssentia established PharmaEssentia Asia (Hong Kong) Limited in February 2014, a wholly owned subsidiary, and used it as the parent company for a sub-subsidiary, PharmaEssentia Beijing Limited, which

was established in December 2014. Through PharmaEssentia Asia (Hong Kong) Limited, the corporation invested in PharmaEssentia Beijing Limited in the 2020 fiscal year, incurring a loss of NT$10,236,000 from equity method investments.

b. PharmaEssentia Japan KK

To open up the Japanese market, PharmaEssentia established a subsidiary, PharmaEssentia Japan KK, in Tokyo, Japan in February 2017 to manage the R&D and licensing of new drugs. For this subsidiary, PharmaEssentia lost NT$74,811,000 from equity method investments in the 2020 fiscal year .

c. PharmaEssentia USA Corporation.

To open up the U.S. market, PharmaEssentia established a subsidiary, PharmaEssentia USA LLC, in Massachusetts, United States in June 2017. The subsidiary was later renamed PharmaEssentia USA Corporation. For this subsidiary, PharmaEssentia lost NT$476,724,000 from equity method investments in the 2020 fiscal year.

(1) PharmaEssentia Korea Corporation

To open up the South Korean market, PharmaEssentia established a subsidiary, PharmaEssentia Korea Corporation, in Seoul, South Korea in May 2020 to manage the clinical trials, licensing, and marketing of new drugs. For this subsidiary, PharmaEssentia lost NT$15,521,000 from equity method investments in the 2020 fiscal year.

(2) Panco Healthcare Co., Ltd.

To expedite the integration of PharmaEssentia's warehouse and logistics systems for the marketing of new drugs, PharmaEssentia acquired Panco Healthcare Co., Ltd. in May 2020 at the cost of NT$12,500,000. For this subsidiary, PharmaEssentia lost NT$6,838,000 from equity method investments in the 2020 fiscal year.

C. Investment Plans for the Coming Year

Sales of Besremi in the United States will begin after the BLA of P1101-PV is approved, which is scheduled to happen in 2021. Therefore, PharmaEssentia will continue to invest in PharmaEssentia USA to establish a complete sales and marketing team and an integrated supply chain.

6. Risk Management

A. Impact of Recent Interest Rates, Exchange Rate Fluctuations, and Inflation on the Company's Profit and Loss and Future Response Measures

a. Impact of changes in interest rates on the company's profit and loss and future response measures

The Company purchased its Nankang office in 2014 by taking out a collateral loan of NT$105,850,000 with the bank. The nonoperating interest expenses in 2018 and 2019 were NT$1,755,000 and NT$1,582,000, respectively. In general, the changes in interest rate exert no material impact on the Company. The Company remains an active participant in forging and maintaining a strong relationship with its bank, which will guarantee favorable interest rates and efficient fund acquisition in the future should the Company need to apply for loans.

b. Impact of exchange rate fluctuations on the company's profit and loss and future response measures

In the Company's operating activities, relevant expenses required to conduct clinical trials overseas are paid in foreign currencies and potentially affected by exchange rates. The nonoperating net profit (loss) on foreign currency exchange for 2019 and 2020 was NT$ (5,304,000) and NT$9,815,000 , respectively. In general, exchange rate fluctuations have no material impact on the Company's business outcomes. To mitigate the impact of exchange rate fluctuations, the Company collects exchange rate information at all times, pay attention to currency trends and changes in international foreign exchange market, and maintain a positive interactive relationship with the bank to obtain extensive information on foreign exchanges as well as more favorable exchange rates.

c. Impact of inflation on the company's profit and loss and future response measures

Inflation does not impact the Company's technologies and expenses required for the R&D of new drugs as well as new pharmaceutical products that are still being developed. Therefore, inflation has not imposed direct and material impacts on the Company's previous profits and losses. The Company will remain vigilant for market price variations and maintain a positive interactive relationship with its suppliers and clients. The Company will also take appropriate actions in response to reduce impacts on its profits and losses.

B. The company's policy regarding high-risk investments, highly leveraged investments, loans to other parties, endorsements, guarantees, and derivatives transactions, the main reasons for the profits/losses generated thereby, and response measures to be taken in the future.

a. High-risk investments and highly leveraged investments: None.

b. Loans to other parties, endorsements, and guarantees: The Company has formulated the "Procedures for Lending Funds to Other Parties" and "Procedures for Endorsement and Guarantee," which it follows when lending funds to other parties and providing endorsement and guarantees.
c. Derivatives transactions: None.

C. R&D work to be conducted in the future, and further expenditures expected for such work:

Period	R&D Plans
Short-to-Mid Term	New long-acting protein drugs: P1101 for treatment of other indications Small molecule drugs: KX01 (Kinase inhibitor), Oraxol (oral paclitaxel), and Oratecan (oral camptothecin)
Mid-to-Long Term	Continue to research and develop new long-acting protein drugs Continue to develop R&D technologies for small molecule drugs Establish a cell strain development platform and introduce new platform applications Develop new drugs for cancer immunotherapy (PD-1/PD-L-1 monoclonal antibodies) Develop new drug PEG-INF-β (muscle atrophy) for sickle cell anemia and β thalassemias

Every year, the Company allocates budgets for R&D work according to the progress of new drug development projects. For 2017 and 2018, the R&D expenses were NT$683,318,000 and NT$785,713,000, respectively. The Company will continue to invest in R&D work in the future.

D. Effect of important policies adopted and changes in the legal environment at home and abroad on the company's financial operations and measures to be taken in response.

Amendments to policies and laws did not have any material impact on the Company in the most recent fiscal years and up to the publication date of the Annual Report

E. Effect of developments in science and technology as well as industrial change on the company's financial operations and measures to be taken in response.

The Company specializes in new protein drugs. Its latest development was a new generation long-acting interferon drug called P1101. P1101 can be used to treat blood proliferative disorders, chronic hepatitis, skin cancer, and T cell lymphoma among other indications. This new drug has unlimited market potential. The Company's R&D team regularly adjusts its development strategies according to industry R&D trends and discusses possible factors that influence the Company's resource allocation. The team takes immediate actions in response to any progress in biotechnologies that may impact the entire biotech industry and the Company. Hence, recent developments in science

and technology as well as industrial changes have not exerted any immediate material impacts on the Company's operations.

F. Effect of changes in corporate image on crisis management and measures to be taken in response.

The Company upholds the value of ethical and robust management. Since its inception, the Company has actively reinforced its internal management, improved quality and efficiency, and made plans to penetrate the capital market to recruit high-caliber talents, hone the capabilities of management teams, and contribute business achievements to shareholders and members of society, thereby fulfilling its corporate social responsibility. Thanks to the Company's positive corporate image, no corporate crisis has occurred in the Company as a result of changes to corporate image.

G. Expected benefits and possible risks associated with any merger and acquisitions, and mitigation measures being or to be taken.

The Company has had no merger and acquisition plans in the most recent fiscal years and up to the publication date of the annual report.

H. Expected benefits and possible risks associated with any plant expansion and mitigation measures being or to be taken.

The Company completed the construction of a pharma facility in Taichung in October 2012 and obtained a GMP (good manufacturing practice) certificate on April 18, 2013. Per current estimations, the facility has the capacity to meet mass production demands following the acquisition of drug permits and market distribution. The Taichung Plant has received a GMP certificate from the EMA (European Medicines Agency) and the MOHW (Ministry of Health and Welfare).

I. Risks associated with any consolidation of sales or purchasing operations, and mitigation measures being or to be taken.

The Company mainly engages in new drug development. Its operating revenues are primarily generated from licensing income, royalty payments after a drug is introduced to the market, and the sale of goods. The EMA granted an MAA (marketing authorization application) for Besremi®, which was licensed out to AOP in Europe by our subsidiary in Japan, on February 19. Because the Company has granted AOP in Austria the right to sell the product in Europe, the Middle East, and the Commonwealth of Independent States, the Company expects to earn royalty payments and income from the sale of the pharmaceutical product. The Company will ensure the collection of debts.

J. Effect upon and risk to the company in the event a major quantity of shares belonging

to a director, supervisor, or shareholder holding greater than a 10% stake in the company has been transferred or otherwise changed hands, and mitigation measures being or to be taken.

The Company did not transfer or change a major quantity of shares belonging to a director, supervisor, or shareholder holding greater than a 10% stake in the company in the most recent fiscal years and up to the publication date of the annual report.

K. Effect upon and risk to the company associated with any change in governance personnel or top management, and mitigation measures being or to be taken.

The Company has made no changes to top management in the most recent fiscal years and up to the publication date of the annual report.

L. List major litigious, nonlitigious, or administrative disputes that (1) involve the company and/or any company director, company supervisor, the general manager, any person with actual responsibility for the firm, any major shareholder holding a stake greater than 10%, and/or any company or companies controlled by the company; and (2) have been concluded by means of a final and unappealable judgment or are still under litigation. Where such a dispute could materially affect shareholders' equity or the prices of the company's securities, the annual report shall disclose the facts of the dispute, the amount of money at stake in the dispute, the date of litigation commencement, the main parties to the dispute, and the status of the dispute as of the date of publication of the annual report.

The Company's major litigious cases that have been concluded by means of a final judgment or are still under litigation:

Corporation title	Parties	Legal disputes	Start date of litigation	Handling situation as of the publication date of the prospectus
PharmaEssentia Corp.	Black Gold Global Sdn. Bhd (BGG), a Malaysian corporation	BGG's failure to pay for the licensing of Q10 technology, which occurred in 2008.	101.4.18	The payment amounted to 1,108,130 RM (including the last installment of the licensing fee, 990,000 RM) and US$5,500. The noncompliance of BGG despite repeated requests prompted PharmaEssentia to appeal to the Malaysian court for the forced dissolution of BGG on April 18, 2012. The Malaysian court issued a

Corporation title	Parties	Legal disputes	Start date of litigation	Handling situation as of the publication date of the prospectus
				winding-up order on October 18, 2012, authorizing the dissolution of BGG. In July 2013, PharmaEssentia submitted a claim for the estimated amount realized, which is awaiting the decision of a creditors' meeting under the Malaysian court. The account receivable has been listed as full loss in the 2013 and 2014 fiscal years, and it has not caused serious financial damage to PharmaEssentia.
PharmaEssentia Corp.	AOP Orphan Pharmaceuticals AG (AOP), an Austrian corporation	In 2009, PharmaEssentia and AOP entered into a contract for the exchange of product licensing content, territories, and information. As per this contract, PharmaEssentia must provide information on chemical manufacture and control (CMC) processes, and AOP must provide clinical trial data to PharmaEssentia. The contract stipulates that the noncompliance of either party within 30 days would result	107.3.31	PharmaEssentia commissioned Baker & McKenzie, a German law firm for case analysis and arbitration strategies, to file counterclaims for contract termination. PharmaEssentia received the following rulings on October 21, 2020: (1) the licensing and production contract between PharmaEssentia and AOP is still in force; (2) PharmaEssentia must pay AOP 142,221,000 euros plus interest at the base rate plus 5% (starting from August 14, 2019); (3) PharmaEssentia must pay AOP 1,354,000 euros as arbitration expenses, calculated on the basis that AOP and PharmaEssentia must afford 40% and 60% of arbitration expenses, respectively; and (4) all other claims from both parties are rejected. The attorney advised PharmaEssentia to seek a judicial reversal of the rulings of the German Court of

Corporation title	Parties	Legal disputes	Start date of litigation	Handling situation as of the publication date of the prospectus
		in the termination of the contract. Accordingly, the noncompliance of AOP prompted PharmaEssentia to terminate the contract through a law firm in Germany in November 2017 on the premise that AOP made no amends to rectify a serious breach of contract. In March 2018, AOP filed an arbitration request to the International Chamber of Commerce (ICC), claiming that PharmaEssentia's failure to provide CMC with information on time caused AOP to experience a delay in acquiring drug approval, which resulted in AOP's financial loss.		Frankfurt because they contained major errors and were procedurally defective. Accordingly, on October 28, 2020, the Board of Directors resolved that PharmaEssentia must appeal to the High Court of Frankfurt. The appeal was filed on December 17, 2020, and a hearing was held on February 11, 2021. The High Court of Frankfurt rejected the appeal on March 25, 2021, to which PharmaEssentia turned to the Federal Court of Justice on March 30, 2021. At the same time that PharmaEssentia filed to counter the arbitration rulings, AOP appealed, according to the arbitration rulings, to courts in Austria (December 2020) and the United States (January 2021) to restrict PharmaEssentia from transferring the patent to a third party. Upon being notified in January and March 2021, PharmaEssentia commissioned law firms in Austria and the United States, respectively, for corresponding legal actions. Presently, no court decision has been made, and AOP's appeal is yet to have an effect on the right of PharmaEssentia to use the patent. That is, PharmaEssentia is entitled to freely use the patent in product manufacturing and sales, or in patent licensing; the only restriction it faces is in transferring the patent to a third party. Because PharmaEssentia never

Corporation title	Parties	Legal disputes	Start date of litigation	Handling situation as of the publication date of the prospectus
				had a plan to transfer the patent to a third party, the aforementioned legal actions from AOP have little impact on the operations and finances of PharmaEssentia.
PharmaEssentia Corp.	Wei, a former employee	Wei, a former employee who left in 2006, filed a civil claim in 2019 to the Taiwan Shilin District Court against PharmaEssentia for the compensation of 111,111 stock shares.	108.11.27	Wei, a former employee, filed a civil claim in the Taiwan Shilin District Court (case number: 109 年度重勞訴字第 10 號) against PharmaEssentia in November 2019. The claim was that PharmaEssentia must pay Wei 111,000 shares of technology stock (anterior claim), or NT$1,500,000 (posterior claim). On October 16, 2020, the court ruled that PharmaEssentia must pay Wei NT$1,500,000 and interest at the base rate plus 5%, starting from June 19, 2020 until the settlement day. PharmaEssentia objected to the court on November 12, 2020 and presently the case has been transferred to the Taiwan High Court (case number: 109 年勞上易字 145 號). In March 2021, Wei requested a provisional execution from the Taiwan Taipei District Court, and PharmaEssentia was notified by said court on March 16, 2021 of the immediate attachment of PharmaEssentia's bank accounts pursuant to the claim.
PharmaEssentia Corp.	AOP Orphan Pharmaceuticals	AOP's late delivery of clinical trial data, which was a violation of the	109.11.18	Following the decision of the Board of Directors made on November 13, 2020, PharmaEssentia filed an arbitration request to the ICC against

Corporation title	Parties	Legal disputes	Start date of litigation	Handling situation as of the publication date of the prospectus
	AG(AOP), an Austrian corporation	license agreement between AOP and PharmaEssentia, resulted in serious delays in obtaining BLA approval in the United States.		AOP on November 18, 2020, demanding compensation of no less than US$1.78 billion for the loss associated with delayed BLA approval attributable to AOP's late delivery of clinical trial data. The ICC accepted the request and notified PharmaEssentia on February 18, 2021 that this arbitration case was joined with PharmaEssentia's former arbitration request against AOP regarding the violation of the license agreement (henceforth referred to as the "new arbitration case"), and that on March 30, 2021 an arbitration tribunal had been formed under the chief arbitrator of both parties' choice, Professor Dr. Maxi Scherer.
PharmaEssentia Corp.	AOP Orphan Pharmaceuticals AG(AOP), an Austrian corporation	AOP's noncompliance of clinical trials for three indications, which was a violation of the license agreement between AOP and PharmaEssentia, resulted in losses associated with the delays in completing clinical trials and obtaining MAA approval for P1101, a product of PharmaEssentia, in	109.12.22	Following the decision of the Board of Directors on November 13, 2020, PharmaEssentia filed an arbitration request to the ICC against AOP on December 22, 2020, demanding the compensation of no less than 500 million euros. The ICC accepted the request and notified PharmaEssentia on February 18, 2021 that this arbitration case was joined with PharmaEssentia's former arbitration request against AOP for the losses associated with the late delivery of clinical trial data, which resulted in delayed BLA approval in the United States (henceforth referred to as the "new arbitration case"), and that on

Corporation title	Parties	Legal disputes	Start date of litigation	Handling situation as of the publication date of the prospectus
		the agent territory of AOP.		March 30, 2021 an arbitration tribunal had been formed under the chief arbitrator of both parties' choice, Professor Dr. Maxi Scherer.

M. Other important risks and mitigation measures taken

Items	Possible Risks	Response Measures
R&D	• R&D and biocompatibility test results are not as expected. • Competitors overtake the Company in terms of R&D progress. • R&D professionals are difficult to cultivate and retain. • Clinical trial progress or results are not as expected.	• Perform a thorough assessment through animal studies and user experiences and strictly control trial quality using rigorous visual inspection mechanisms. • Simultaneously develop new drugs for different indications to disperse the risk of developing only a single drug. • Recruit professionals with a background in the biotech industry; create and maintain a positive R&D environment in which benefits and opportunities for further education are offered to retain talented employees. • Actively cooperate with relevant academic and educational institutions to establish cooperative education projects and foster high-caliber professionals for the biopharmaceutical industry.
External Cooperation	• The progress or results of sponsored studies are not as expected.	• Select the most cooperative study institutions for long-term cooperation to avoid delays caused by communication problems and technical differences. • The clinical study company sponsored by the Company not only strictly adheres to the Good Clinical Practice (GCP) standards but also hires professional managers with international experience to ensure study quality and comply with clinical trial laws and regulations.

Manufacturing	• The time required to complete process validation is difficult to estimate because the schedule for product distribution is uncertain. If a product is produced too early, it will approach its expiration date by the time it is distributed in the market; however, if a product is produced too late, unexpected problems might arise that affect the review schedule. • To export new drug products, manufacturing plants must be inspected by the EMA (European Medicines Agency) and US FDA. The inspection standards and progress may change at any time.	• Communicate and coordinate with competent authorities at all times and make necessary adjustments in line with regulatory requirements regarding pharm facility specifications. • The Company is committed to new drug development by directing resources to innovations, inventions, clinical trials, and manufacturing plants, and obtaining drug permits for global distribution. With complete vertical integration, we hope to research, develop, and manufacture new drug products in Taiwan that are comparable to and completely in line with products clinically tested and sold worldwide, including European countries and the United States. Ever since the pilot plant of the Taichung Plant was completed in 2012, it has undergone a series of processes, including pilot production, TFDA inspection, and validated production for drug permit applications. Subsequently, at the beginning of 2018, the Taichung Plant received a GMP (good manufacturing practice) certificate from the EMA, making PharmaEssentia the first biopharmaceutical company in Taiwan to be certified by the EMA. After obtaining the drug permit, the Company will be able to structure its supply chain according to global marketing plans and sales demand.
Marketing	• The main markets of new drug products for the treatment of rare blood disorders are based in advanced countries such as European nations and the United States where competitors are major international manufacturers, rendering market penetration difficult.	• Medicine and pharmacy in the United States are clearly distinguished. One of the key strategies for gaining a share of the market is ascertaining sales and distribution channels to forge long-term customer relationships for market expansion. • The Company's P1101 is a long-acting interferon with fewer side effects, high safety, and flexible dosing adjustment. The Company has granted exclusive right of sale in Europe to AOP. The Company's strategic partner AOP presented the

		PROUD-PV pivotal study results of P1101 for PV treatment at the 2016 American Society of Hematology (ASH)'s Annual Meeting and Exposition. P1101 is safer and more well tolerated compared with HU (hydroxyurea). In addition, the primary endpoints in the CONTI-PV trial presented at the 2017 ASH meeting were statistically significant. In February 2017, the EMA confirmed the completeness of AOP's application documents and initiated the procedure for new drug review. Plant inspection results indicated no major deficiencies. At the beginning of 2018, the EMA issued GMP certificates to the Taichung Plant and Taipei Laboratory. • Accompanied by internationally renowned opinion leaders and legal experts, the Company has held multiple meetings with US FDA officials. The participants unanimously agreed that the meeting yielded positive outcomes and could facilitate US market penetration in the future. The Company is actively preparing for premarketing activities, which include building positive relations with medical leaders, the MPN Research Foundation, and patient interest groups, to expedite the application for a drug permit. The Company received US FDA approval for Compassionate Use of P1101 for treating PV patients stably controlled on Pegasys, subsequently seizing market opportunities.
Laws	• It is difficult to keep track of the status of drug permit applications in different countries. Competent authorities of different countries often provide inconsistent opinions regarding clinical trial agreements. The approval times for IND	• First, gain international recognition by obtaining US FDA approval for an IND program, and then communicate with the competent authorities of other countries to expedite the clinical review process. • Prepare review documents by following ICH Guidelines to reduce differences among countries.

	(investigational new drug) applications vary. • Amendments to health insurance and payment policies.	
Finance	• New drugs take a long time and are expensive to develop.	• Keep a well-replenished supply of funds and adhere to a strict budget plan. • Comply with the government's industry policies and apply for project funding. • The Company has obtained a drug permit in Europe for its new drug Besremi® and is slowly selling the product in various European countries. Product sales are expected to generate operating revenue for the company and provide additional funds. • Before generating income from product sales and royalty payments, the Company sources its funds primarily from cash capital increase, with additional support from bank loans.

7. Other Important Matters

Effect of information security risks on the company's financial operations and measures taken in response:

To comprehensively raise awareness on information security and protect business secrets and the interests of its stakeholders, the Company has assessed its information security and Internet risks. Following the assessment, the Company was determined to be at high risk of information leakage (i.e., confidential information regarding clinical studies and drug products produced) and cyberattacks, both of which may incur financial losses to the company. In response, the Company has installed various network security systems (e.g., a firewall) to safeguard the various information functions of department operations and established the following measures for information security control and monitoring:

(1) Applying for and making changes to account access after obtaining permission from the responsible supervisor.

(2) Establishing an appropriate password control principle for critical systems.

(3) Sending regular reminders to users about information security and usage to raise all employees' awareness on information security.

(4) User information and files are a company's crucial assets. Departments should be asked to classify and archive user information and files and grant appropriate document access according to users' level of authority after application and approval.
(5) Users must avoid using the company's email to send or receive emails or files that are unrelated to the Company's business, thereby avoiding occupying the Company's network resources and putting its computers at risk of viruses.
(6) Users must avoid using the Company's network to browse websites or up-/download information that is unrelated to the Company's business, thereby avoiding occupying the Company's network resources and putting its computers at risk of viruses.
(7) Implementing information security management by raising awareness, preventing future problems, recording user behavior, sending automatic warning messages, and performing regular inspection.

VIII. Special Notes

1. Information Related to Affiliates

A. Consolidated Business Report of Affiliates

a. Organizational Chart of Affiliates

Affiliate Name	Shareholding
PharmaEssentia (Hong Kong) Corporation	-
PharmaEssentia Asia (Hong Kong) Corporation	100%
PharmaEssentia Biotechnology (Beijing) Co., Ltd.	100%
PharmaEssentia Japan KK	100%
PharmaEssentia USA Corporation.	100%
PharmaEssentia Korea Corporation.	100%
Panco Healthcare co.,Ltd.	100%

Note 1: To expand the mainland Chinese market, the Company established the wholly owned PharmaEssentia (Hong Kong) Co., Ltd. in October 2013. As of December 31, 2018, PharmaEssentia (Hong Kong) had only completed the registration process. The Company has not yet issued shares.

b. Basic Information of Affiliates

Affiliate Name	Region	Main Business Activity	Shareholding	Amount Invested
PharmaEssentia (Hong Kong) Corporation	Hong Kong	Biotechnology services	-	-
PharmaEssentia Asia (Hong Kong) Corporation	Hong Kong	Biotechnology services	100%	77,337
PharmaEssentia Biotechnology (Beijing) Co., Ltd.	Beijing	Biotechnology services	100%	42,645
PharmaEssentia Japan KK	Japan	Biotechnology services	100%	227,760
PharmaEssentia USA Corporation.	USA	Biotechnology services	100%	856,308
PharmaEssentia Korea Corporation.	Korea	Biotechnology services	100%	30,710
Panco Healthcare co.,Ltd.	Taiwan	Biotechnology services	100%	102,500

Note 1: To expand the mainland Chinese market, the Company established the wholly owned PharmaEssentia (Hong Kong) Co., Ltd. in October 2013. As of December 31, 2018, PharmaEssentia (Hong Kong) had only completed the registration process. The Company has not yet issued shares.

c. Information on Personnel Who Are Presumed to Have a Controlling and Subordinate Relationship with the Company and the Reasons Behind the Presumption: None.

d. Business Scope of Affiliated Companies: Biotechnology services and clinical trials.

e. Rosters of Directors, Supervisors, and General Managers of Affiliates

Affiliate Name	Title	Name or Representative	Shareholding	
			Shares	%
PharmaEssentia (Hong Kong) Corporation	Director	Ching-Leou Teng Chao-Ho Chen	-	-
PharmaEssentia Asia (Hong Kong) Corporation	Director	Ching-Leou Teng Chao-Ho Chen Warren Chen	-	-
PharmaEssentia Biotechnology (Beijing) Co., Ltd.	Executive Director Supervisor	Ko-Chung Lin Jack Hwang	-	-
PharmaEssentia Japan KK	Director	Ko-Chung Lin Ching-Leou Teng	-	-

	Supervisor	Snow Chang Katsuya Yonezu Narihisa Miyachi Chia-Yen Su		
PharmaEssentia USA Corporation.	Director	Ko-Chung Lin Ching-Leou Teng Craig Zimmerman	-	-

f. Operational Highlights of Affiliates (Unconsolidated Financial Information)

As of December 31, 2020; Unit: NT$1,000

Affiliate Name	Capital	Total Assets	Total Liabilities	Net Worth	Operating Revenues	Income from Operations	Income (Loss) for the Year
PharmaEssentia Asia (Hong Kong) Corporation	77,337	29,841	6,877	22 ,964	-	(21,029)	(20,829)
PharmaEssentia Biotechnology (Beijing) Co., Ltd.	42,645	13,872	4,324	9,548	-	(10,476)	(10,236)
PharmaEssentia Japan KK	227,760	55,369	48,894	6,475	138	(73,468)	(74,811)
PharmaEssentia USA Corporation.	856,308	378,067	216,119	161,947	174,273	(474,531)	(476,724)
PharmaEssentia Korea Corporation.	30,710	18,814	4,335	14,480	-	(15,508)	(15,521)
Panco Healthcare co.,Ltd.	102,500	411,041	315,378	98,577	279,891	(8,610)	(6,838)

Note: The company is a limited company and therefore has no earnings per share.

B. Consolidated Financial Statements of Affiliates

Please see this annual report.

C. Affiliation Report

The Company is not a subordinate company prescribed under the Affiliated Enterprise section of the Company Act; therefore, the Company is not required to produce an affiliation report.

2. Private Placement Securities in the Most Recent Year and Up to the Publication Date of This Annual Report

Item	First private placement in 2019 (Note 1) Date issued: December 30, 2019
Type of private placement security (Note 2)	Common stock
Date and quantity/value approved through the shareholder's meeting (Note 3)	As decided through the first special shareholders' meeting of the Company on October 1, 2019, for common stock within the limit of 35,000 thousand shares, global depository receipt, and/or private placement of common stock through capital increase in cash, and/or private placement of global or domestic convertible corporate bonds may be adopted once or in separate efforts (no more than 3) within one year since the date when the decision was made through the shareholders' meeting.

<table>
<tr><td>Basis for and legitimacy of pricing</td><td colspan="5">1. As required by the Directions for Public Companies Conducting Private Placements of Securities, the reference price shall be the higher of the simple average closing price of the common stocks for either the 1, 3, or 5 business days or for the 30 business days before the price determination date, after adjustment for any distribution of stock dividends, cash dividends or capital reduction.
2. Based on the foregoing pricing price determination principle, the price of NT$ 106.8 obtained with the simple average closing price of the common stocks for the 30 business days before the price determination date, that is, December 24, 2019, and after adjustment for any distribution of stock dividends, cash dividends or capital reduction, is the reference price. The current private placement price is set at NT$86, which is 80.5% of the reference price and no below the 80% reference price as decided through the special shareholders' meeting.</td></tr>
<tr><td>Method chosen for specific people (Note 4)</td><td colspan="5">Targets of the current private placement of securities are limited to specific people defined in Article 43-6 of the Securities and Exchange Act and the original (2002) Tai-Cai-Zheng-(I)-Tzi No. 0910003455 letter dated June 13, 2002 from the Securities and Futures Bureau, Ministry of Finance.</td></tr>
<tr><td>Rationale for organizing private placements</td><td colspan="5">In light of the relatively extended time-effectiveness and convenience associated with private placements and the fact that privately placed securities may not be freely assigned within three years, it will better ensure the long-term relationship between the Company and the subscribers. In addition, private placements organized by the authorized Board of Directors reflective of the actual operating demand of the Company helps effectively enhance the mobility and flexibility in fund-raising for the Company. As such, private placements need to be organized.</td></tr>
<tr><td>Number of shares (or number of corporate bonds)</td><td colspan="5">5,668,198 shares of common stock</td></tr>
<tr><td>Date of payment and date of filing</td><td colspan="5">Date of payment: December 30, 2019
Date of filing: January 8, 2020</td></tr>
<tr><td>Date of delivery</td><td colspan="5">January 20, 2020</td></tr>
<tr><td rowspan="4">Information of subscriber</td><td>Target of private placement</td><td>Eligibility (Note 5)</td><td>Quantity subscribed</td><td>Relationship with the company</td><td>Involvement in corporate operation</td></tr>
<tr><td>Jan, Ching-leou</td><td>Article 43-6 Paragraph 1 Sub-paragraph 3 of the Securities and Exchange Act</td><td>116,280</td><td>Chairman of the Company</td><td>Insider or related party of the Company</td></tr>
<tr><td>Chen Chao-He</td><td>Article 43-6 Paragraph 1 Sub-paragraph 3 of the Securities and Exchange Act</td><td>581,396</td><td>Director of the Company</td><td>Insider or related party of the Company</td></tr>
<tr><td>Chen Ben-Yuan</td><td>Article 43-6 Paragraph 1 Sub-paragraph 3 of the</td><td>174,419</td><td>Director of the Company</td><td>Insider or related party of the Company</td></tr>
</table>

	Securities and Exchange Act			
Huang Zheng-Gu	Article 43-6 Paragraph 1 Sub-paragraph 3 of the Securities and Exchange Act	23,256	Director of the Company	Insider or related party of the Company
Xu Shi-Ying	Article 43-6 Paragraph 1 Sub-paragraph 3 of the Securities and Exchange Act	186,047	Director of the Company	Insider or related party of the Company
Lin Guo-Zhong	Article 43-6 Paragraph 1 Sub-paragraph 3 of the Securities and Exchange Act	116,280	CEO of the Company	Insider or related party of the Company
Luan Yan-Dong	Article 43-6 Paragraph 1 Sub-paragraph 3 of the Securities and Exchange Act	34,884	Chief Operation Officer of Taichung Branch	Insider or related party of the Company
Zhang Xue-Ling	Article 43-6 Paragraph 1 Sub-paragraph 3 of the Securities and Exchange Act	11,629	Financial and Accounting Supervisor of the Company	Insider or related party of the Company
Zeng Ming-Kun	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	40,698	Shareholder of the Company	None
Yu Rui-Yu	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	1279,070	Shareholder of the Company	None
Huang Ma-Li	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	174,419	Shareholder of the Company	None
Chen Li-Jin	Article 43-6 Paragraph 1 Sub-paragraph 2 of the	290,698	Shareholder of the Company	None

	Securities and Exchange Act			
Zheng Shu-Yun	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	174,419	Shareholder of the Company	None
Zheng Xian-Zhi	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	174,419	Shareholder of the Company	None
Wang Jian-Ming	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	174,419	Shareholder of the Company	None
Lin Yu-Zhen	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	93,024	Shareholder of the Company	None
Zhan Yi-Ren	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	58,140	Shareholder of the Company	None
You Guei-Zhi	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	290,698	Shareholder of the Company	None
Wu Fu-Yu	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	23,256	Shareholder of the Company	None
SuChiang Chemical & Pharmaceutical Co., Ltd.	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	174,419	Shareholder of the Company	None
KGI Bank Fiduciary Investment Account of	Article 43-6 Paragraph 1 Sub-paragraph 2 of the	174,000	Shareholder of the Company	None

HONGKONG JOYRICH INVESTMENTS LIMITED	Securities and Exchange Act			
Hunya Foods Co., Ltd.	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	465,117	Shareholder of the Company	None
Fan Gang-Ting	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	23,256	Employee of the Company	None
Hsu Zhe	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	29,070	Employee of the Company	None
Su Jing-Xing	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	17,442	Employee of the Company	None
Lin Hui-Hua	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	34,884	Employee of the Company	None
Xu Ming-Bin	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	34,884	Employee of the Company	None
Lu Ming-Shan	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	17,442	Employee of the Company	None
Wu Shi-Guan	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	23,256	Employee of the Company	None
Cai You-Kui	Article 43-6 Paragraph 1 Sub-	17,442	Employee of the Company	None

		paragraph 2 of the Securities and Exchange Act			
	Li Wei-Der	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	11,628	Employee of the Company	None
	Lin Da-Ren	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	11,628	Employee of the Company	None
	Xie Yue	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	23,256	None	None
	Huang Fan-Xiu	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	11,628	None	None
	I&K Engineering Co., Ltd.	Article 43-6 Paragraph 1 Sub-paragraph 2 of the Securities and Exchange Act	581,395	None	None
Actual subscription (or conversion) price	NT$ 86 per share				
Difference between the actual subscription (or conversion) price and the reference price	The actual subscription price is NT$ 86 per share, which is 80.5% of the reference price, NT$ 106.8 per share.				
Impacts on the shareholder's equity of private placement (such as increase in the accumulated deficits...)	Fund-raising by means of private placement of common stock for capital increase in cash does not involve expenditure on the interest associated with liabilities, reduces the financial risk for the Company, and helps immediately improve the Company's financial structure and increase the flexibility for the Company over financial allocation. It is expected to reinforce the competitive advantages of the Company, improve the operating efficacy, and strengthen the financial structure and hence helps with the shareholders' equity positively.				
Utilization of privately raised funds and status of implementation of the plan	Value of required funds for the current plan: NT$501,000 thousand Funding source: 5,668,198 shares of common stock are privately placed, with the denomination per share being NT$10 and each share issued at NT$ 86; that is, NT$ 487,465 thousand is raised. The shortage of NT$ 13,535 thousand will be supported by the self-owned assets of the Company.				

Expressed benefits of private placement	The current private placement for capital increase in cash is meant mainly to increase the capital size of the subsidiary in Japan PharmaEssentia Japan in order for the latter to take charge of clinical trials conducted in Japan of P1101 and to communicate with the Japan PMDA and apply for a drug permit, and to facilitate subsequent marketing of the new drug, among others and also that of the subsidiary in Hong Kong PharmaEssentia Hong Kong to indirectly invest in the sub-subsidiary PharmaEssentia Beijing, to communicate with the China NMPA and apply for a drug permit, and to facilitate subsequent marketing of the new drug, among others The Phase II clinical trial to support the use of the Company's P1101 in treating PV was already applied for by the subsidiary in Japan with the Japan PMDA in October 2019 and the drug permit is expected to be obtained in 2022 and sales will begin at the end of 2022. Profits are expected to show in 2023 onwards. In addition, the Company already applied for the Phase I clinical trial with the China CFDA (now changed to NMPA) in October 2018 and the drug permit is expected to be obtained in 2022 and sales will begin. Profits are expected to show in 2022 onwards.
Certificate of payment of subscribed (converted) shares (bond conversion entitlement certificate), shares, shares from free placement	None

Note 1: The number of fields may be adjusted reflective of the actual number of placements. When private placement of securities occurs in separate efforts, they shall be listed separately.

Note 2: The type of securities involved in the private placement shall be provided, such as common stock, preferred stock, convertible preferred stock, preferred stock with warrants, common corporate bond, convertible corporate bond, corporate bond with warrant, overseas convertible corporate bond, global depository receipt, and employee stock warrant, etc.

Note 3: When the private placement involves corporate bonds, please provide the date and quantity approved by the Board of Directors.

Note 4: For ongoing private placements, if the subscribers are approached, the name(s) of the subscriber(s) as well as the relationship with the Company shall be specified.

Note 5: The information specified in Article 43-6 Paragraph 1 Sub-paragraphs 1, 2, or 3 of the Securities and Exchange Act shall be provided.

3. The Company's Common Shares Acquired, Disposed of, and Held by Subsidiaries in the Most Recent Year and Up to the Publication Date of this Annual Report

None.

4. Other Necessary Supplements

None.

5. Any Situations Listed in Article 36, Paragraph 3, Subparagraph 2 of the Securities and Exchange Act, Which Might Materially Affect Shareholders' Equity or the Price of the Company's Securities, in the Most Recent Year and Up to the Publication Date of This Annual Report

None.

PharmaEssentia Corp.

Chairman: Ching-Leou Teng

General Manager: Jack Hwang