Stock Code: 6547

Annual report: **http://www.medigenvac.com**

http://mops.twse.com.tw

高端疫苗生物製劑股份有限公司
MEDIGEN VACCINE BIOLOGICS CORP

2022 Annual Report

Printed on April 30, 2023

(This English version Annual report is the translation of the Chinese version and is for reference purposes only. If there is any discrepancy between the English version and the Chinese version, the Chinese version shall prevail.)

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V. Overseas Securities Exchange Where Securities are Listed and Method of Inquiry: None.

VI. Company Website: http://www.medigenvac.com

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Appendix A. 2022 Parent Company Only Financial Statements for the Most Recent Year Certified by CPAs

Appendix B. 2022 Consolidated Financial Statements for the Most Recent Year Certified by CPAs

Chapter 1. Letter to Shareholders

I. 2022 Business Report

(I)Implementation results of the 2022 business plan and profitability analysis

MVC is a biopharmaceutical research and development company, and its main products include the Enterovirus 71 vaccine, Quadrivalent influenza vaccine, and COVID-19 vaccine, all of which have entered the drug certification application stage; it also has Dengue vaccine and Anti-RSV Biosimilars projects in its product line.

MVC's Enterovirus 71 vaccine has obtained the approval letter from the Taiwan Food and Drug Administration for new drug inspection and registration, and the biopharmaceutical plant in Zhubei obtained the pre-marketing PIC/S GMP evaluation permit on June 7, 2022, which confirms that the entire production line (antigen production, preparation, aseptic filling, packaging, release testing, and GDP cold chain storage and transportation) of the Enterovirus 71 vaccine produced by the plant complies with the Good Manufacturing Practice for Western pharmaceuticals. After obtaining the drug certificate, the vaccine will be produced and shipped from this PIC/S GMP-certified vaccine plant for the Taiwan, Southeast Asia, and Mainland China markets. As for the progress of the quadrivalent seasonal influenza vaccine, on January 11, 2022, MVC filed a drug inspection registration for the vaccine with the Taiwan Food and Drug Administration, Ministry of Health and Welfare, and on December 7, 2022, MVC obtained PIC/S GMP approval for the aseptic preparation, filling, packaging, release testing, and GDP cold chain storage operations of the quadrivalent influenza vaccine at our factory. For the COVID-19 vaccine, MVC applied to the Australian Medicines Agency (TGA) for provisional approval for the emergency use of the COVID-19 vaccine on June 6, 2022, after obtaining an emergency use authorization (EUA) in Paraguay.

(II) Analysis of budget performance, financial position and profitability

MVC's operating income for 2022 was NT$365,042 thousand, and operating expenses were NT$1,323,663 thousand. After adding non-operating income, the net loss for the period was NT$1,474,573 thousand.

Item		2022	2021
Income &Expenditure	Interest Income(in thousand)	7,605	2,740
	Interest Expenditure(in thousand)	26,888	6,019
Profitability & Analysis	Return on assets (%)	22.98	32.20
	Return on equity (%)	(30.39)	36.08
	Profit ratio (%)	(403.95)	42.98
	Earnings per share (NT$)	(4.56)	4.42

(III)Research and Development

MVC EV71 vaccine multi-country multi-center phase III clinical trial was conducted simultaneously in Taiwan and Vietnam. This vaccine verification is applicable to young infants and young children aged 2 months to 6 months who are most in demand for vaccines, .MVC is the first development project in the world to obtain clinical trial data for infants aged 2-6 months. On October 1, 2021, MVC applied to the Taiwan Food and Drug Administration (TFDA) of the Ministry of Health and Welfare for the registration of "MVC Enterovirus 71 Vaccine" as a new drug. Currently, MVC has obtained the approval letter from the TFDA for the registration of "MVC Enterovirus 71 Vaccine", and will continue to submit applications for drug certificates in Vietnam and ASEAN countries, aiming to start domestic and international sales in 2023.

We received approval from the Ministry of Health and Welfare for the manufacture of the COVID-19 vaccine on July 19, 2021. MVC was also selected to conduct a WHO-led and funded Phase III clinical trial of the efficacy of a traditional placebo-controlled vaccine in the Philippines, Colombia, and the Republic of Mali under the WHO Solidarity Trial Vaccines program; In addition, MVC COVID-19 vaccine was also sponsored by the international organization "Consortium for Epidemic Preparedness Innovations (CEPI)" to conduct the third booster immunization mixed trial of MVC vaccines, mRNA vaccines, and adenovirus vector vaccines. Internationally, MVC has completed Phase III immune bridging clinical trials in Paraguay and Thailand and has applied for provisional approval from the Australian Medicines Agency (TGA) on June 6, 2022, which has entered the official review stage in Australia.

II. 2023 Business plan

(I) EV71 vaccine is currently the first development project in the world that has obtained multi-country and multi-center data validation and covers the effectiveness of the vaccine for high-risk infants aged 2 months to 6 months. It also has protection against other popular genotypes and will use this as a niche in the future to actively deploy the unmet vaccine market, and actively deploy both self-funded and public-funded markets. MVC is actively promoting the launch of the vaccine in Taiwan and will expand its market share in the Philippines, Vietnam, Thailand, Malaysia, and Singapore as soon as the drug certificates for each country are obtained.

In terms of production, MVC's enterovirus vaccine production capacity is ready, and the PIC/S GMP biologics plant at the MVC Zhubei plant has experience in implementing PIC/S GMP for cell culture vaccines from antigen production to sterile filling and release, and all six systems (quality system, facility, and equipment system, raw/materials system, production system, packaging and labeling system, and laboratory quality control system) have been validated. MVC is fully prepared in two major areas, including antigen production and formulation filling, and aims to continue to expand its annual production capacity to one million doses.

(II) MVC acts as an agent for South Korea's GC Pharma quadrivalent influenza vaccine (QIV) and applies for an import drug license. Based on commercial strategic considerations, MVC adopts its own brand strategy. Vaccine home-made rate, and effectively control product quality, profit and delivery time. MVC quadrivalent influenza vaccine has received approval letter from TFDA for drug inspection and registration. The supply of quadrivalent influenza vaccine in Taiwan will begin this year.

(III) COVID-19 vaccine, MVC has applied to the Australian Medicines Authority (TGA) for provisional approval of the COVID-19 vaccine on June 6, 2022, and will continue its global marketing efforts and evaluate the potential for next-generation vaccine development.

III. Future Development Strategies

(I) EV71 vaccine: Bivalent/multivalent VLP (viral-like particle) enterovirus vaccine
At the same time, MVC is actively deploying Virus-Like Particles (VLP) vaccine production process technology, using the Baculovirus Expression System to produce virus-like particles, and transforming the existing enterovirus 71 vaccine, which is proficient in technology, into other severe enteroviruses such as Keshaqi A16 type, etc., develop bivalent and multivalent VLP vaccine. In the future, MVC will promote the development of clinical trials according to the epidemic situation of the virus, and continue the product life cycle and medical needs.

(II) Quadrivalent influenza vaccine: To creating stable cash flow
Taiwan's quadrivalent influenza vaccine is mainly for the public market, with the annual public influenza vaccine procurement amounting to 6.3 million doses and a total budget of about $1.5 billion, and a self-funded vaccine market of about 500,000 to 1 million doses. MVC cooperates with GC Pharma in Korea, and GC Pharma produces the vaccine stock solution, and then MVC is filled and packaged, released by the Jubei plant, and applied for drug certification under its own brand name.

(III) COVID-19 Vaccine: Obtaining Official Drug Certificates to Supply Routine Vaccines and Develop Next-Generation Vaccines
From the current planning of the second basic dose, the third dose, and the fourth booster immunization, it may be necessary to vaccinate the COVID-19 vaccine once a year in the future to suppress large-scale infection, and the possibility of COVID-19 becoming a routine vaccination is extremely high. After MVC obtains the EUA, the next stage goal will focus on applying for official drug certificates in various countries and to fight against the COVID-19 mutants, MVC independently developed broad-effect vaccines that can effectively neutralize different mutant strains, and screened out the next-generation vaccine candidates based on the Beta

strain with a high degree of immune escape, in order to expand the benefits of the vaccine and prolong the product life cycle.

(IV) Other R&D product lines:

In addition to the main products currently in the preparatory stage for launch, MVC has also continued to enrich the product line layout. For example, in terms of dengue vaccine, MVC has completed the proof-of-concept (POC) and joint phase II clinical trials. In the future, MVC will comprehensively evaluate MVC's resources, epidemic situation and development strategy, and plan three-phase multi-country multi-center trials in Taiwan and Southeast Asia.

IV. Effect of external competition, the legal environment, and the overall business environment

The government policies, authorities, capital markets, and investors are positive and optimistic about the development of the biotechnology industry in Taiwan. With relatively abundant resources, MVC will continue to make use of external resources and favorable regulatory conditions to fulfill its social responsibilities and maximize the interests of its shareholders.

Chairman: Ming-Cheng Chang

Chapter 2. Company Profile

I. Date of Incorporation: October 22, 2012

II. Company History

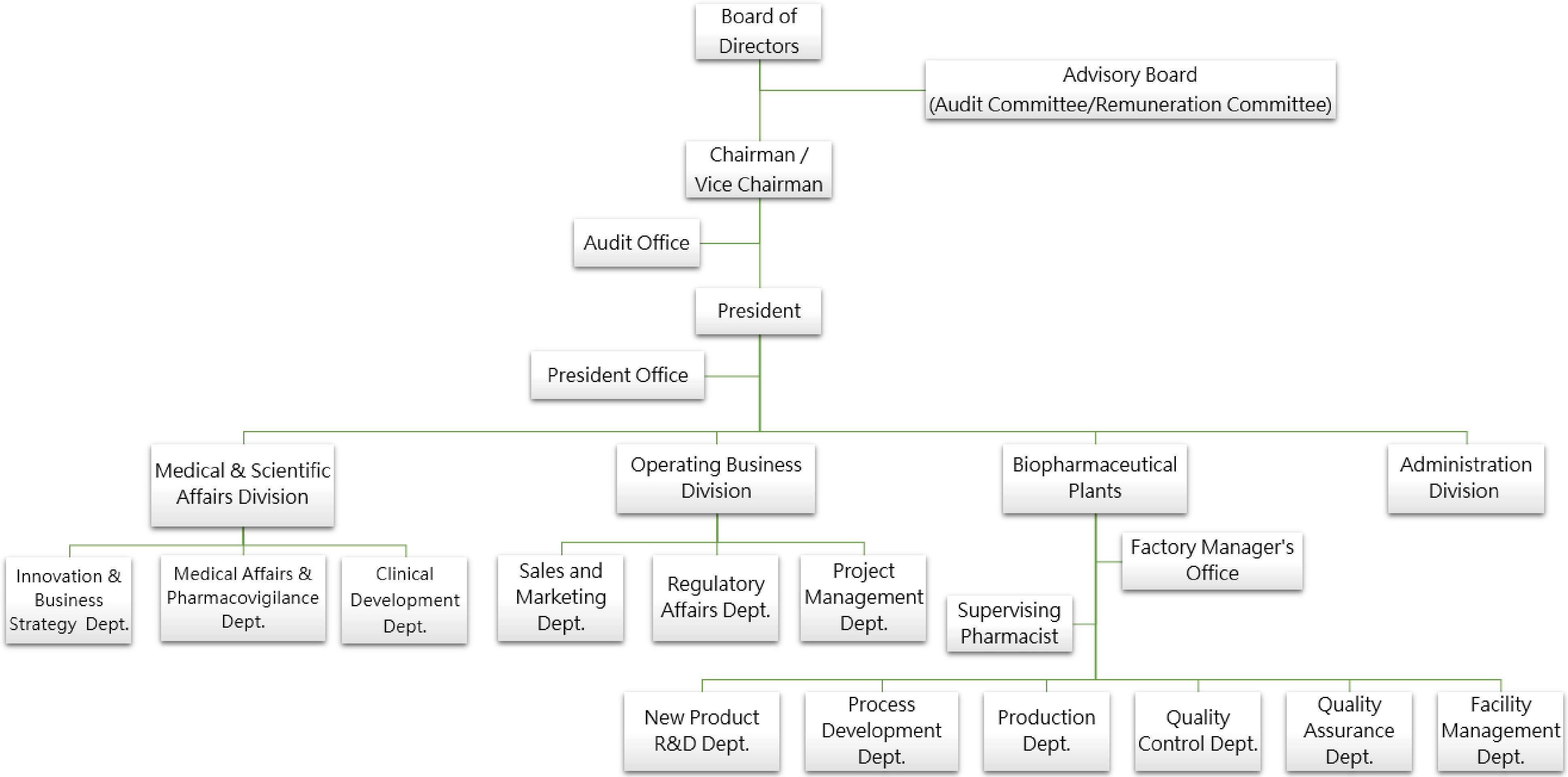
Year/Month	Milestones
2016 March	MVC signed an agreement with UCAB, mAbXience, Libbs, and SPIMACO to form a consortium to co-develop biosimilar palivizumab against the respiratory syncytial virus (RSV) among infants.
2016 October	MVC signed an agreement with US CDC to co-develop the dengue virus-like particles (VLP) vaccine.
	MVC inaugurated the vaccine manufacturing plant in Biomedical Park, Hsinchu County, Taiwan.
2016 November	MVC licensed in US NIH's dengue vaccine and obtained the market rights to develop, manufacture, sell and sublicense in 17 countries.
2016 December	MVC won Taiwan's National Innovation Award for "The first EV71 vaccine protecting 2~6-month-old infants"
2017 April	MVC signed a licensing agreement with Taiwan CDC for the BCG vaccine and snake anti-venom.
2017 June	MVC changed its Chinese name.
2017 July	Cash capital increase and execution of employee share options, amounting to NT$ 142,650 thousand, with paid-in capital of NT$ 1,367,650 thousand.
2017 September	The scope of MVC's market rights to develop, manufacture, sell and sublicense of dengue vaccine license with US NIH has extended 6 South Asian countries, 10 Southeast Asian Counties, and 6 middle east countries totaling 26 countries including Taiwan, S. Korea, Australia, and Papua New Guinea.
2018 April	Issuance of new shares through cash capital increase before IPO for NT$ 182,820 thousand, with paid-in capital totaling NT$ 1,553,095 thousand.
	MVC was officially listed on TPEx.
2018 November	MVC's EV71 vaccine process "from the main virus and master cell bank to the manufacturing stage of vaccine bulk" passed PIC/the S GMP qualification of the Ministry of Health and Welfare, Taiwan.
2019 February	Another MVC product - sterile preparation passed the PIC/S GMP qualification of the Ministry of Health and Welfare, Taiwan. Thereby, MVC obtained qualification for the complete process of EV71 vaccine bulk manufacturing, sterile preparation of solution for injection filling, packaging, and laboratory procedures.
2019 March	MVC entered a strategic alliance agreement with Medigen Biotech Corp. and Taiwan Bio Therapeutics Co., Ltd.
	MVC's EV71 vaccine was approved to conduct a phase III clinical study by the Ministry of Health (Vietnam).
2019 May	MVC applied for a new drug application (NDA) for the quadrivalent influenza vaccine to Taiwan Food and Drug Administration.
	MVC applied its "EV71 vaccine phase III clinical study development plan" at the A+ Industrial Innovative R&D Program, the Ministry of Economic Affairs (Fast Track), and the plan was approved and was granted with subsidy.
2019 December	MVC completed the enrollment of subjects for the multination, multicenter phase III clinical study of the EV71 vaccine.

Year/Month	Milestones
2020 February	Cash capital increase of NT$ 300,000 thousand, with paid-in capital of NT$ 1,860,258 thousand.
	MVC entered a cooperative development contract with the US NIH to cooperate in the development of the COVID-19 vaccine.
2020 April	MVC’s “RT-PCR test kits for COVID-19” are compliant with the CE Certification standards. MVC has completed the self-declaration and application procedure, obtained CE Certification for in vitro diagnostic device (IVD), and the application for manufacture of the medical devices was approved by the Taiwan Food and Drug Administration in April.
2020 May	MVC signed a global commercial license agreement with US NIH for the COVID-19 vaccine.
2020 August	MVC was approved with conditions to carry out phase II clinical study for the COVID-19 vaccine by TFDA.
2020 November	Cash capital increase of NT$ 240,000 thousand, with paid-in capital of NT$ 2,110,988 thousand.
2020 December	MVC sold its cell processing center to Taiwan Bio Therapeutics Co., Ltd.
	MVC was approved with conditions to carry out phase II clinical study for the COVID-19 vaccine by TFDA.
2021 Jun	MVC EV71 vaccine multi-national multi-center Phase III clinical trial was unblinded at the end of the period.
2021 July	MVC has obtained the approval for the manufacture of the COVID-19 vaccine project by TFDA.
2021 October	MVC has applied to TFDA for the New Drug Review (NDA) of EV71 vaccine.
	MVC's COVID-19 vaccine was selected as the WHO solidarity trial vaccine, and the third phase of the global clinical trial was launched.
2021 December	MVC obtained the third-injection mixed trial of COVID-19 vaccine subsidized by the Coalition for Epidemic Prevention and Innovation (CEPI).
2022 January	MVC applied to TFDA for MVC quadrivalent influenza vaccine drug approval (NDA).
2022 February	MVC obtained the emergency use authorization (EUA) approved by Paraguay for the MVC COVID-19 vaccine, the interim analysis of the Phase III clinical trial was unblinded, and the data reached the superiority standard.
2022 July	Cash capital increase of NT$ 70,000 thousand, with paid-in capital of NT$ 2,204,786 thousand.
2022 August	New share issue through capitalization of earnings increase of NT$ 1,067,195 thousand, with paid-in capital of NT$ 3,271,981 thousand.
2022 December	The manufacturing facility of MVC Quadrivalent influenza Vaccine obtained PIC/S GMP certificate from the Ministry of Health and Welfare.
2023 March	MVC received the NDA approval letter of MVC quadrivalent influenza vaccine from Taiwan Food and Drug Administration.
2023 April	MVC received the BLA approval letter of MVC EV71 Vaccine (Envacgen) from Taiwan Food and Drug Administration

Chapter 3. Corporate Governance Report

I. Organization

(I) Organization Chart:



(II) Department Functions

Departments	Functions
Project Management Department	1. Planning, integrating, assessing risks, and implementing project developments, controlling project progress and budget. 2. Managing intellectual property rights and contracts.
Regulatory Affairs Department	1. Applying for domestic and overseas drug licenses. 2. Providing information on laws and regulations regarding pharmaceutical affairs. 3. Applying for drug licenses.
Medical Affairs Pharmacovigilance Department	1. Monitoring and reporting post-marketing drug safety, and conducting relevant risk management. 2. Evaluating the feasibility of clinical trials and relevant research strategies. 3. Planning and supporting medical or public health exchange activities between MVC and external institutions, academic institutions, or medical organizations.
Clinical Development Department	1. Designing and executing various clinical trial phases based on the drugs. 2. Evaluating commissioned trial institutions. 3. Monitoring clinical trial progress and controlling the budget. 4. Establishing guidelines regarding the execution of clinical studies. 5. Ensuring the quality of clinical trials and the compliance with International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) and FDAs of various countries.
Sales and Marketing Department	1. Planning and carrying out relevant government procurement and market expansions. 2. Proposing product marketing strategies and sales plans. 3. Analyzing and predicting product market trends. 4. Communicating and maintaining a good relationship with dealers.
Medical & Scientific Affairs Division	1. Provide technical and market assessment for potential foreign groups or cooperation targets. 2. Implementation control and effectiveness report of various foreign projects. 3. Supporting international cooperation and providing a mode of strategic corporate cooperation. 4. Assist in the application and marketing of foreign drug certificates for products.
Innovation & Business Strategy Department	1. Planning short-, medium-, and long-term strategies and directions based on MVC's goals. 2. Developing domestic and overseas cooperation targets, and evaluating relevant technologies and markets. 3. Managing cooperation projections, coordinating among departments, ensuring project progress, and controlling budgets. 4. Contacting with international institutions, and promoting international cooperation. 5. Seeking opportunities for technology transfer and strategic alliance.
Production Department	1. Implementing trial mass production in line with R&D plans. 2. Designing manufacturing process, and supporting manufacturing facilities. 3. Scheduling upstream, downstream, and filling procedures. 4. Conducting regular maintenance and repair of equipment.

Departments	Functions
Facility Management Department	1. Managing and controlling raw materials and inventories 2. Conducting maintenance and management of factory facilities and equipment 3. Planning, supervising, and executing industrial safety, health, and environmental protection work.
Quality Assurance Department	1. Auditing and evaluating the raw materials manufacturers, material manufacturers, suppliers. 2. Planning, executing, and reviewing the internal GMP self-inspection. 3. Supervising changes in control operations, and evaluating stability and product quality annually.
Quality Control Department	1. Formulating check specifications and standards for raw materials, work in process, and finished goods. 2. Reviewing and revising the tests and sampling methods of specification inspection, and relevant operating procedures of quality control standards. 3. Handling technical problems of quality control inspection items, and designing and executing stability tests.
Process Development Department	1. Maintaining the equipment functionality and environmental cleanliness of the manufacturing zone. 2. Optimizing processes and scheduling relevant tests. 3. Supporting process development projects and other R&D work.
New Product R&D Department	1. Conducting R&D of new products and subsequent applications. 2. Conducing relevant product R&D 3. Planning R&D work plans with external R&D units, and accelerating development progress.
Administration Division	1. Planning short-and medium-term capital utilization and scheduling plans. 2. Planning and carrying out accounting policies and accounting matters. 3. Executing and controlling budgets, and preparing and analyzing financial statements. 4. Formulating and carrying out human resource management policies. 5. Establishing and maintaining MVC’s Internet system, and providing information services. 6. Conducting assets inventory 7. Handling administrative and share affairs
Audit Office	1. Evaluating and supervising the implementation and performance results of internal management regulations. 2. Planning and executing audit tasks. 3. Carrying out audit tasks on projects.

II. Directors, Supervisors and Management Team

(I) Information on the Directors and Supervisors

May1, 2023

Position	Name	Gender Age	Nationality/Place of registration	Date first elected	Date elected	Term (years)	Shareholding when elected		Current shareholding		Spouse & minor shareholding		Shareholding by nominees		Major Education and work Experience	Other positions concurrently held at the Company and other companies	Executives, Directors or Supervisors who are spouses or within the second degree of kinship			Remark (Note1)
							Shares	%	Shares	%	Shares	%	Shares	%			Position	Name	Relationship	
Chairman	Medigen Biotech Corp.	Male 61-70	R.O.C.	2012.12.12	2021.8.17	3	45,511,640	33.21	64,058,844	19.51	-	-	-	-	-	-	-	-	-	None
	Rep.: Shi-Chung Chang (Note2)						-	-	Note2	Note2	Note2	Note2	Note2	Note2	Doctor of Medicine, National Taiwan University College of Medicine Ph.D. in Laser Medicine, University of London Chair, School of Medicine, Tzu Chi University Director, Department of Urology, Tzu Chi Hospital Attending Physician, National Taiwan University Hospital President, Medigen Biotech Corp.	Director, TBG Inc. Director, TBG Diagnostics Ltd. Chairman, TBG Diagnostics Ltd. Chairman, Medigen Biotech Corp. Chairman, Winston Medical Supply Co., Ltd. Chairman, Winston Medical Supply Co., Ltd. Director, Medigen Cell Technology Co., Ltd. Chairman, Medigen Biotech (Beijing) Co. Ltd. Executive Director, Medigen Biotech (Xiamen) Co. Ltd. Director, TBG Diagnostics (Xiamen) Ltd. Chairman, Shiny Lily Co., Ltd. Director, MVC BioPharma Ltd. Director, TDL HOLDING CO.	None	None	None	
	Rep.: Ming-Cheng Chang (Note2)	Male 61-70		2023.3.8	2023.3.8	1	-	-	-	-	-	-	-	-	Master of Business Administration, The University of Michigan BS in Mechanical Engineering, Natioanl Taiwan University Deloitte Touche Tohmatsu Limited Partner & Reputation and Risk Leader, Deloitte & Touche Taiwan Chairman, Auditing Standards Committee of Taiwan	Independent Director, Ocean Alexander Independent Director, United Alloy-Tech. Company	None	None	None	None
Director	Medigen Biotech Corp.	Male 71-80	R.O.C.	2012.12.12	2021.8.17	3	45,511,640	33.21	64,058,844	19.51	-	-	-	-	-	-	-	-	-	None
	Rep.: Ken-Hu Chang						-	-	10,456	0.003	-	-	-	-	Graduated from School of Medicine, China Medical University Completed Administrative Leadership Research Course, NTU School of Professional Education and Continuing Studies Director of Division of Hematology & Oncology and Director of Division of Clinical Pathology, Taipei City Hospital Zhongxing Branch Director of Division of Hematology & Oncology and Director of Cancer Center Tungs' Taichung MetroHarbor Hospital Attending Physician of Division of Hematology & Oncology and Vice Director of Cancer Center, Shaung Ho Hospital, Ministry of Health and Welfare	Attending Physician, Division of Hematology & Oncology, En Chu Kong Hospital	None	None	None	
Vice Chairman	Schweitzer Biotech Co., Ltd.	Male 71-80	R.O.C.	2012.12.12	2021.8.17	3	5,940,000	4.33	10,949,756	3.33	-	-	-	-	-	-	-	-	-	None
	Rep.: Tsan-Jian Chen						-	-	518,982	0.16	-	-	-	-	Department of Psychology, National Taiwan University Founding President of Taipei Mingde Rotary Club Founder, Schweitzer Biotech Co., Ltd. Akzo Nobel Taiwan Influenza Vaccine Program BOO Partner/Moderator SBC Virbac Limited, Chairman National Yangming University Industry-University Lecture	Overseas Director of Temple University and Distinguished Visiting Professor of Biotechnology Innovation Director ,MVC BioPharma Ltd. MVC Capital Corporation	None	None	None	
Director	Wei-Jen Chen	Male 61-70	R.O.C.	2020.6.30	2021.8.17	3	6,075	0.003	10,191	0.003					Ph.D. in Management, Chang Jung Christian University President, Taiwan Pharmaceutical Manufacturer's Association Director, Chinese National Federation of Industries	Chairman, Syngen Biotech Co., Ltd. President, Jiangsu Standard Biotech Pharmaceutical Co., Ltd. Director, We can Medicines Co., Ltd. Consultant, Executive Yuan Honorary President, Taiwan Pharmaceutical Manufacturer's Association President, Taiwan Functional Food Industry Association	None	None	None	None

Position	Name	Gender Age	Nationality/Place of registration	Date first elected	Date elected	Term (years)	Shareholding when elected		Current shareholding		Spouse & minor shareholding		Shareholding by nominees		Major Education and work Experience	Other positions concurrently held at the Company and other companies	Executives, Directors or Supervisors who are spouses or within the second degree of kinship			Remark (Note1)
							Shares	%	Shares	%	Shares	%	Shares	%			Position	Name	Relationship	
																President, Taiwan Biotechnology Industry Alliance Supervisor, Taiwan Drug Relief Foundation				
Independent Director	Ming-Cheng Chang (Note3)	Male 61-70	R.O.C.	2015.9.30	2021.8.17	3	-	-	Note3	Note3	Note3	Note3	Note3	Note3	Master of Business Administration, The University of Michigan BS in Mechanical Engineering, Natioanl Taiwan University Deloitte Touche Tohmatsu Limited Partner & Reputation and Risk Leader, Deloitte & Touche Taiwan Chairman, Auditing Standards Committee of Taiwan	Independent Director, Ocean Alexander Independent Director, United Alloy-Tech. Company	None	None	None	None
Independent Director	Chia-Hsiu Lin	Male 61-70	R.O.C.	2015.9.30	2021.8.17	3	-	-	-	-	-	-	-	-	Master, Institute of Plant Biology, National Taiwan University President, Production Business Department, VIRBAC (TAIWAN) CO., LTD. Independent Director, Standard Chem & Pharm Co., Ltd. Chairman and President, Gaosheng Pharmaceutical Co., Ltd. Chief Operating Officer, Lytone Enterprise, Inc.	None	None	None	None	None
Independent Director	Yao-Chi Li	Male 70-80	R.O.C.	2018.6.5	2021.8.17	3	-	-	-	-	-	-	-	-	Postdoctoral Researcher, Yale School of Medicine Ph.D. in Genetics, North Carolina State University Bachelor, Institute of Plant Biology, National Taiwan University Chair, Department of Life Science, National Tsing Hua University Chair, Institute of Biotechnology, National Tsing Hua University Dean, College of Biotechnology and Bioresources, Da-Yeh University	Founder and Director, Fortune Anti-aging Nutraceuticals, Co. Ltd. Consultant, Cross-strait Tsinghua Research Institute Technology Consultant, Yunnan Alphy Biotech Co., Ltd.	None	None	None	None

Note1: MVC has no occurrence where the Chairman, President, or personnel with equivalent position (chief manager) are the same person, spouse, or relatives within one degree of kinship.
Note2: Mr. Ming-Cheng Chang was appointed as the representative of Medigen Biotech Corp. on March 8, 2023, and was elected as the chairman of MVC on that day, while Mr. Shih-Chung Chang stepped down as the chairman of MVC on the same day.
Note3: Mr. Ming-Cheng Chang resigned as an independent director of MVC on March 8, 2023.

Table 1: Major Shareholders of Institutional Shareholders

May 1, 2023

Name of institutional shareholders	Major shareholders of institutional shareholders
Medigen Biotech Corp.	Everspring Industry Co., Ltd. (10.11%) Tzu-Liang Huang (4.56%, Daqing Construction Co., Ltd. (3.14%), A-Liang Zhuang-Huang (2.39%), WorldTrend Co., Ltd. (1.74%), Shi-Chung Chang (1.29%), JP Morgan Chase Bank N.A., Taipei Branch in custody for Vanguard Emerging Markets Stock Index Fund, a Series of Vanguard International Equity Index Funds (1.05), JP Morgan Chase Bank N.A., Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds (0.93%), Chin-Hsia Hou (0.82%)Shang-Yi Tsai (0.79%)
Schweitzer Biotech Co., Ltd.	Hsu-Wen Chen (46.19%), Hsu-Chung Chen (31.56%), Mao-Lin Wu (8.33%), Kuo-Hui Chang (7.03%), Cheng-Ming Lu (6.89%),

Table 2: Major shareholders of the major shareholders in Table 1 that are institutional shareholders

May 1, 2023

Name of institutional shareholders	Major shareholders of institutional shareholders
Everspring Industry Co., Ltd.	Tzu-Ling Chang (15.16%), Tzu-Liang Huang (7.39%), Yung-Hua Kao (6.28%), Chiu-Lan Li (1.29%), Li-Ching Li (0.54%), Bangde Liu (0.45%), Morgan Stanley & Co. International Plc (0.43%), Unitech Investment Holdings Co. (0.33%), Yongqing Shi (0.31%),Ronglong Liu (0.30%)。
Daqing Construction Co., Ltd.	Qianqing Investment Co., Ltd. (29.41%), Gaoqing Investment Co., Ltd. (29.41%), Longqing Investment Co., Ltd. (29.41%), Hejing Investment (stock) Company (4.71%), Jiaqing Xingye (stock) Company (4.12%), First State Investment (stock) Company (2.94%).
WorldTrend Co., Ltd.	Everspring Industry Co., Ltd. (100%).
JP Morgan Chase Bank N.A., Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds	N/A
JP Morgan Chase Bank N.A., Taipei Branch in custody for Vanguard Emerging Markets Stock Index Fund, a Series of Vanguard International Equity Index Funds	N/A

Disclosure of Professional Qualifications of Directors and Supervisors and Independence of Independent Directors.

May 1, 2023

Name	Professional qualifications and experience	Independence situation	Number of other Public Companies in which the individual is concurrently serving as an Independent Director
Medigen Biotech Corp. Rep.: Ming-Cheng Chang Chairman	Major Education and work Experience: Master of Business Administration, The University of Michigan BS in Mechanical Engineering, National Taiwan University Deloitte Touche Tohmatsu Limited Partner & Reputation and Risk Leader, Deloitte & Touche Taiwan Chairman, Auditing Standards Committee of Taiwan Other positions concurrently held at MVC and other companies: Independent Director, Ocean Alexander Independent Director, United Alloy-Tech. Company	N/A	2
Medigen Biotech Corp. Rep.: Ken-Hu Chang Director	Major Education and work Experience: Graduated from School of Medicine, China Medical University Completed Administrative Leadership Research Course, NTU School of Professional Education and Continuing Studies Director of Division of Hematology & Oncology and Director of Division of Clinical Pathology, Taipei City Hospital Zhongxing Branch Director of Division of Hematology & Oncology and Director of Cancer Center Tungs' Taichung MetroHarbor Hospital Attending Physician of Division of Hematology & Oncology and Vice Director of Cancer Center, Shaung Ho Hospital, Ministry of Health and Welfare Other positions concurrently held at MVC and other companies: Attending Physician, Division of Hematology & Oncology, En Chu Kong Hospital	N/A	-

Name	Professional qualifications and experience	Independence situation	Number of other Public Companies in which the individual is concurrently serving as an Independent Director
Schweitzer Biotech Co., Ltd.Rep. Tsan-Jian Chen Vice Chairman	Major Education and work Experience: Department of Psychology, National Taiwan University Founding President of Taipei Mingde Rotary Club Founder, Schweitzer Biotech Co., Ltd. Akzo Nobel Taiwan Influenza Vaccine Program BOO Partner/Moderator SBC Virbac Limited, Chairman National Yangming University Industry-University Lecture Other positions concurrently held at MVC and other companies: Overseas Director of Temple University and Distinguished Visiting Professor of Biotechnology Innovation Director, MVC BioPharma Ltd. Chairman, MVC Capital Corporation.	N/A	-
Wei-Jen Chen Director	Major Education and work Experience: Ph.D. in Management, Chang Jung Christian University President, Taiwan Pharmaceutical Manufacturer's Association Director, Chinese National Federation of Industries Other positions concurrently held at MVC and other companies: Chairman, Syngen Biotech Co., Ltd. President, Jiangsu Standard Biotech Pharmaceutical Co., Ltd. Director, We can Medicines Co., Ltd. Consultant, Executive Yuan Honorary President, Taiwan Pharmaceutical Manufacturer's Association President, Taiwan Functional Food Industry Association President, Taiwan Biotechnology Industry Alliance Supervisor, Taiwan Drug Relief Foundation	N/A	-
Chia-Hsiu Lin Independent Director	Major Education and work Experience: Master, Institute of Plant Biology, National Taiwan University President, Production Business Department, VIRBAC (TAIWAN) CO., LTD. Independent Director, Standard Chem & Pharm Co., Ltd. Chairman and President, Gaosheng Pharmaceutical Co., Ltd. Chief Operating Officer, Lytone Enterprise, Inc. Other positions concurrently held at MVC and other companies: He is a member of the audit committee and chairman of the remuneration committee of MVC and has many years of experience in biotechnology-related industries.	MVC has obtained a written statement from each independent director confirming the independence of himself and his immediate family relative to MVC. The independent directors of MVC are members of the Board of Directors, the Audit Committee	-

Name	Professional qualifications and experience	Independence situation	Number of other Public Companies in which the individual is concurrently serving as an Independent Director
Yao-Chi Li Independent Director	Major Education and work Experience: Postdoctoral Researcher, Yale School of Medicine Ph.D. in Genetics, North Carolina State University Bachelor, Institute of Plant Biology, National Taiwan University Chair, Department of Life Science, National Tsing Hua University Chair, Institute of Biotechnology, National Tsing Hua University Dean, College of Biotechnology and Bioresources, Da-Yeh University Other positions concurrently held at MVC and other companies: Founder and Director, Fortune Anti-aging Nutraceuticals, Co. Ltd. Consultant, Cross-strait Tsinghua Research Institute Technology Consultant, Yunnan Alphy Biotech Co., Ltd. He is a member of the audit committee and remuneration committee of MVC and has many years of experience in biotechnology-related colleges.	and the Remuneration Committee. The independent directors themselves, their spouses, second relatives (or in the name of others) do not hold any shares of MVC. They have neither held positions in MVC nor related companies, nor have they served as remunerations for the business, legal, financial, accounting and other services of MVC's other related companies.	-

Note: All directors of MVC are not subject to Article 30 of the Company Law.

Director Diversity and Independence

1. Board Diversity：

Article 20 of MVC's "Corporate Governance Best Practice Principles" stipulates that the composition of the board of directors should consider diversity, and formulate an appropriate diversity policy based on its own operation, operation type and development needs, and disclose it on MVC's corporate website

The board of directors elected by MVC consists of four directors and three independent directors. The board of directors of MVC composed of experts in the fields of industry, academic institutions, biotechnology and medical care, and financial accounting. To achieve the ideal goals of corporate governance, the overall capabilities of the board of directors are as follows:：

(1) Operational judgment ability.
(2) Accounting and financial analysis ability.
(3) Operation and management ability.
(4) Crisis handling capability.
(5) Industrial knowledge.
(6) The international market view.
(7) Leadership.
(8) Decision-making ability.

2. Specific management objectives and implementation of the diversity policy:

(1) Diverse professional background: The board of directors of MVC are composed of

experts in the fields of industry, academic institutions, biotechnology and medical care, and financial accounting.

(2) Quality of executive duties: There are one doctor and one CPA on the board of directors.

It can be seen from the above that the Board of Directors of MVC has implemented a policy of diversity in the composition of members with different professional backgrounds.

(3) Future goal: Increase the number of female directors by at least one.

3. Board Independence

The proportion of independent directors of MVC to all directors is 43% and there is no relationship between the directors of spouses and relatives within the second degree of kinship that meets the requirements for independence.

Item	Name		Chairman Ming-Cheng Chang	Director Ken-Hu Chang	Vice Chairman Tsan-Jian Chen	Director Wei-Jen Chen	Independent Director Chia-Hsiu Lin	Independent Director Yao-Chi Li
Information	Nationality		R.O.C.	R.O.C.	R.O.C.	R.O.C.	R.O.C.	R.O.C.
	Gender		Male	Male	Male	Male	Male	Male
	Employee		-	-	V	-	-	-
	Age	51-60	-	-	-	-	-	-
		61-70	V	-	-	V	V	-
		71-80	-	V	V	-	-	V
	Tenure and seniority of Independent Director	0-3 years	-	-	-	-	-	-
		4-6 years	-	-	-	-	-	-
		6-9 years	V	-	-	-	V	V
Professional and background	Medical and pharmaceutical related experience		-	V	-	-	-	-
	Biomedical experience		-	-	V	V	V	V
	Professional Services and Marketing		-	-	V	-	V	V
	Finance		V	-	-	-	-	-
	Mechanical and Engineering		V	-	-	-	-	-
	Management		V	-	V	V	V	-
Professional Ability	Professor		-	-	-	-	-	V
	CPA		V	-	-	-	-	-
	Doctor		-	V	-	-	-	-

Note: Mr. Ming-Cheng Chang resigned as an independent director and was appointed as the representative of Medigen Biotech Corp. on March 8, 2023, and was elected as the chairman of MVC on that day.

(II) Information regarding president, vice presidents, assistant vice president, and the supervisors of all the company's divisions and branch units

May 1, 2023

Position	Name	Gender	Nationality	Date taking office	Shareholding		Spouse & minor shareholding		Shareholding by nominees		Major experience (education)	Other positions concurrently held at the Company and other companies	Managerial officers in a spousal relationship or within the second degree of kinship			Remarks (Note1)
					Shares	%	Shares	%	Shares	%			Position	Name	Relationship	
President	Tsan-Jian Chen	Male	R.O.C.	2016.11.17	518,982	0.16	-	-	-	-	Department of Psychology, National Taiwan University President, SBC Virbac Founder and President, Schweitzer Biotech Co., Ltd. Taiwan Rep. of Akzo Nobel N.V. for BOO Project for Influenza Vaccine Self-Manufacturing National Yangming University Industry-Academia Lecture	Overseas Director of Temple University and Distinguished Visiting Professor of Biotechnology Innovation Director, MVC BioPharma Ltd. Chairman, MVC Capital Corporation.	None	None	None	None
Plant Operation Director	Wei-Cheng Lien	Male	R.O.C.	2020.01.02	104,766	0.032	87,144	0.027	-	-	Ph.D., School of Veterinary Medicine, National Taiwan University Director and CEO, Quality Office, Bioproduction Plants, National Institution of Infectious Diseases and Vaccinology, National Health Research Institutes Director, Manufacturing Sector, Vaccine Center, Taiwan Centers for Disease Control	-	None	None	None	None

Position	Name	Gender	Nationality	Date taking office	Shareholding		Spouse & minor shareholding		Shareholding by nominees		Major experience (education)	Other positions concurrently held at the Company and other companies	Managerial officers in a spousal relationship or within the second degree of kinship			Remarks (Note1)
					Shares	%	Shares	%	Shares	%			Position	Name	Relationship	
Executive Vice President of Operating Business Division	Ssu-Hsien Li	Male	R.O.C.	2018.11.05	200,834	0.06	-	-	-	-	Master, Department and Graduate Institute of Pharmacology, National Taiwan University Taiwan and HK region President, Vaccine Department, Sanofi Co., Ltd. Director, Governmental Affairs Department and Eli Lilly and Company (Taiwan), Inc.	-	None	None	None	None
Vice President of Medical & Scientific Affairs Division	Ji-aen Lien	Male	R.O.C.	111.01.01	62,277	0.02	8,896	0.003			Assistant Professor at National Yang Ming Chiao Tung University PhD, Harvard School of Public Health (Dr.PH) Head of Office of Luke International South Africa Office Representative of the Ministry of Health and Welfare in Africa Epidemic Prevention Physician, CDC, Ministry of Health and Welfare National Yang Ming University of Medicine	Independent Director, Acer Gaming Inc.	None	None	None	None

Position	Name	Gender	Nationality	Date taking office	Shareholding		Spouse & minor shareholding		Shareholding by nominees		Major experience (education)	Other positions concurrently held at the Company and other companies	Managerial officers in a spousal relationship or within the second degree of kinship			Remarks (Note1)
					Shares	%	Shares	%	Shares	%			Position	Name	Relationship	
Chief of Regulatory Affairs Department	Tsai-Hua Hung	Female	R.O.C.	2019.07.01	None2	None2	None2	None2	None2	None2	Master, Therapy & Medication Management, The University of Utah Vice President, Research & Development Center, TSH Biopharm Co., Ltd. Director, Public Affairs Department and Law Compliance Department, Sanofi Co., Ltd. Associate Technical Specialist, Taiwan Food and Drug Administration	-	None	None	None	None
Assistant Vice President and Chief Financial Officer of Administration Division	Yu-Ping Yang	Female	R.O.C.	2014.08.15	591,499	0.18	-	-	-	-	Professional Master's program in Biotechnology Management, National Taiwan University Master, Dept. of Business Administration, National Taipei University Assistant Vice President, Deloitte Touche Tohmatsu Limited Manager, Financial & Administrative Department, Eon Silicon Solution Inc.	-	None	None	None	None

Note1: MVC has no occurrence where the Chairman, President, or personnel with equivalent position (chief manager) are the same person, spouse, or relatives within one degree of kinship.

Note2: Ms. Tsai-Hua Hung, Chief of Regulatory Affairs, resigned on March 31, 2023.

III. Remuneration Paid to Directors, Supervisors, President, and Vice Presidents for the Most Recent Year

(I) 2022 Transportation allowance and remuneration paid to Directors and Independent Directors

1. Remuneration of Directors (including Independent Directors)

Dec. 31, 2022; Unit: NT$ thousand

Position	Name	Remuneration of Directors								The total amount of A, B, C and D and ratio to net income (%)		Relevant remuneration received by Directors who are also employees								The total amount of A, B, C and D and ratio to net income (%)		Remuneration from invested companies other than subsidiaries or the parent company
		Base compensation (A)		Severance pay and pension (B)		Bonus of Directors (C)		Business execution expenses (D)				Salary, bonus, and allowance (E)		Severance pay and pension (F)		Employee compensation (G)						
		The Company	All companies in the consolidated financial report	The Company	All companies in the consolidated financial report	The Company	All companies in the consolidated financial report	The Company	All companies in the consolidated financial report	The Company	All companies in the consolidated financial report	The Company	All companies in the consolidated financial report	The Company	All companies in the consolidated financial report	The Company		All companies in the consolidated financial report		The Company	All companies in the consolidated financial report	
																Cash	Stock	Cash	Stock			
Chairman	Medigen Biotech Corp. Rep.: Shi-Chung Chang(Note4)	3,680	3,680	-	-	-	-	-	-	3,680 (0.25%	3,680 (0.25%)	-	-	-	-	-	-	-	-	3,680 (0.25%)	3,680 (0.25%)	None
Vice Chairman	Schweitzer Biotech Co., Ltd. Rep.: Tsan-Jian Chen	-	-	-	-	-	-	1,423 (Note1)	1,423 (Note1)	(1,423 (0.10%)	1,423 (0.10%)	12,841	12,841	-	-	14,341	-	14,341	-	28,605 (1.94%)	28,605 (1.94%)	None
Director	Medigen Biotech Corp. Rep.: Ken-Hu Chang	-	-	-	-	-	-	52	52	52 (0.01%)	52 (0.01%)	-	-	-	-	-	-	-	-	52 (0.01%)	52 (0.01%)	None
Director	Wei-Jen Chen	-	-	-	-	-	-	52	52	52 (0.01%)	52 (0.01%)	-	-	-	-	-	-	-	-	52 (0.01%)	52 (0.01%	None
Independent Director	Ming-Cheng Chang(Note4)	240	240	-	-	-	-	82	82	322 (0.02%)	322 (0.02%)	-	-	-	-	-	-	-	-	322 (0.02%)	322 (0.02%)	None
Independent Director	Chia-Hsiu Lin	240	240	-	-	-	-	82	82	322 (0.02%)	322 0.02%)	-	-	-	-	-	-	-	-	322 (0.02%)	322 (0.02%)	None
Independent Director	Yao-Chi Li	240	240	-	-	-	-	72	72	312 (0.02%)	312 (0.02%)	-	-	-	-	-	-	-	-	312 (0.02%)	312 (0.02%)	None

Note 1: Company car dispatch expenses.

Note 2: Please state the policy, system, standards, and structure of independent directors' remuneration payment, and describe the relevance between the amount of remuneration and the factors including responsibilities, risks, the time spent by the individual, etc.: The remuneration of MVC's Independent Directors shall be distributed reasonably in accordance with the overall business performance, taking into account their involvement in and contribution to MVC's operation.

Note 3 : Other than disclosures in the above table, remuneration paid to directors for providing services (e.g., such as serving as a consultant to non-employees of the parent company/financial report of all companies/reinvested enterprises, etc.) for all companies in consolidated financial statements in the most recent year: None.

Note 4 : Mr. Ming-Cheng Chang resigned as an independent director and was appointed as the representative of Medigen Biotech Corp. on March 8, 2023, and was elected as the chairman of MVC on that day, while Mr. Shih-Chung Chang stepped down as the chairman of MVC on the same day.

2. Remuneration of Supervisors: N/A

(II) 2021 Remuneration paid to President and Vice Presidents

1. Remuneration paid to President and Vice Presidents

Dec. 31, 2022; Unit: NT$ thousand

Position	Name	Salary (A)		Severance pay and pension (B)		Bonus and allowance (C)		Employee compensation (D)				The total amount of A, B, C and D and ratio to net income (%)		Remuneration from invested companies other than subsidiaries or the parent company
		The Company	All companies in the consolidated financial report	The Company	All companies in the consolidated financial report	The Company (Note)	All companies in the consolidated financial report	The Company		All companies in the consolidated financial report		The Company	All companies in the consolidated financial report	
								Cash	Stock	Cash	Stock			
President	Tsan-Jian Chen	-	-	-	-	12,841	12,841	14,341	-	14,341	-	27,182 (1.84%)	27,182 (1.84%)	None
Executive Vice President of Operating Business Division	Ssu-Hsien Li	5,370	5,370	108	108	3,729	3,729	1,000	-	1,000	-	10,207 (0.69%)	10,207 (0.69%)	None
Vice President of Medical & Scientific Affairs Division	Ji-aen Lien	5,840	5,840	108	108	4,825	4,825	800	-	800	-	11,573 (0.78%)	11,573 (0.78%)	None

Note: Employee stock options granted and issuance of shares for cash capital increase.

2. Remuneration for the top 5 executives

Dec. 31, 2022; Unit: NT$ thousand

Position	Name	Salary (A)		Severance pay and pension (B)		Bonus and allowance (C)		Employee compensation (D)				The total amount of A, B, C and D and ratio to net income (%)		Remuneration from invested companies other than subsidiaries or the parent company
		The Company	All companies in the consolidated financial report	The Company	All companies in the consolidated financial report	The Company (Note 2)	All companies in the consolidated financial report	The Company		All companies in the consolidated financial report		The Company	All companies in the consolidated financial report	
								Cash	Stock	Cash	Stock			
President	Tsan-Chien Chen	-	-	-	-	12,841	12,841	14,341	-	14,341	-	27,182 (1.84%)	27,182 (1.84%)	None
Vice President of Medical & Scientific Affairs Division	Ji-aen Lien	5,840	5,840	108	108	4,825	4,825	800	-	800	-	11,573 (0.78%)	11,573 (0.78%)	None
Executive Vice President of Operating Business Division	Ssu-Hsien Li	5,370	5,370	108	108	3,729	3,729	1,000	-	1,000	-	10,207 (0.69%)	10,207 (0.69%)	None
Plant Operation Director	Wei-Cheng Lien	3,158	3,158	108	108	2,942	2,942	1,000	-	1,000	-	7,208 (0.49%)	7,208 (0.49%)	None
Assistant Vice President and Chief Financial Officer of Administration Division	Yu-Ping Yang	3,150	3,150	108	108	1,251	1,251	1,000	-	1,000	-	5,509 (0.37%)	5,509 (0.37%)	None

Note: Employee stock options granted and issuance of shares for cash capital increase.

3. Employee bonus amount paid to managerial officers: MVC intends to pay the employees' remuneration to the managers, subject to the approval of the latest remuneration committee and the board of directors.

(III) Separate comparisons and descriptions of total remuneration, as a percentage of net income stated in the parent company-only financial reports or individual financial reports, as paid by the company and all other companies Included in the consolidated financial statements during the past two years to Directors, Supervisors, the President, and Vice Presidents, with analysis and description of remuneration policies, standards, packages, and procedures for determining remuneration, and link:

1. Remuneration paid by MVC and all entities in the consolidated financial report during the most recent two years to Directors, Supervisors, President, and Vice Presidents as a percentage of net income:

Position	Ratio of total 2022 remuneration to net income (%)		Ratio of total 2021 remuneration to net income (%)	
	The Company	Entities in the consolidated financial report	The Company	Entities in the consolidated financial report
Director	(2.27)	(2.27)	1.16	1.16
Supervisor	-	-	-	-
President and Vice Presidents	(3.31)	(3.31)	1.47	1.47

2. The policies, standards, packages, and procedures for determining remuneration, and the correlation with risks and business performance:

The remuneration of MVC's Directors, Supervisors, President, and Vice Presidents is distributed reasonably in accordance with the overall business performance of MVC, taking into account the involvement in and contribution to MVC's operation. Thus, there exists no significant risk. Earnings distribution is determined in accordance with the Articles of Incorporation and upon the resolution of shareholders' meeting.

If MVC has earnings, it shall set aside no less than 1% of the balance as remuneration to the employees and no more than 1% of the balance as remuneration to directors. When there are accumulated losses, MVC shall offset the loss before remuneration distribution.

MVC's dividends are distributed in form of cash or stocks (incl. stock dividends from earnings and additional paid-in capital). The earnings distribution proposal is proposed by the Board of Directors based on the operating performance, capital needs, and the earnings level of the year (less statutory deductions), and the earnings are distributed upon approval by the shareholders' meetings. Cash dividends shall account for more than 50% of the total dividends distributed. However, in circumstances of major capital expenditure or working capital requirement, dividends may be distributed in the form of stock only upon the approval of shareholders' meetings.

IV. Implementation of Corporate Governance

(I)Operation of the Board meetings:

There were 8 (A) meetings held in the2022. The attendance of the Directors is as follows:

Position	Name	Attendance in person (B)	Attendance by proxy	Attendance rate (%) 【B/A】	Remarks
Chairman	Medigen Biotech Corp. Rep.: Shi-Chung Chang	8	0	100%	
Director	Medigen Biotech Corp. Rep.: Ken-Hu Chang	7	1	88%	
Vice Chairman	Schweitzer Biotech Co., Ltd.Rep.: Tsan-Jian Chen	8	0	100%	
Director	Wei-Jen Chen	7	1	88%	
Independent Director	Ming-Cheng Chang	8	0	100%	
Independent Director	Chia-Hsiu Lin	8	0	88%	
Independent Director	Yao-Chi Li	7	1	88%	

Other matters to be recorded:

I .With regard to the implementation of the Board of Directors, if any of the following circumstances occurs, the dates, terms of the meetings, contents of motions, all independent directors' opinions, and MVC's handling of such opinions shall be specified:

(I)Matters stated in Article 14-3 of the Securities and Exchange Act

Date	Session	Contents of motions	All independent directors' opinions	MVC's response
2022/03/01	5th meeting of the 4th Board	Proposal for a new share issue through capitalization of earnings. MVC plans to issue domestic unsecured convertible corporate bonds and cash capital increase in 2022.	Agree	Approved as proposed
2023/03/08	13th meeting of the 4rd Board	Approved the motion of the ratification of the assessment of the independence and competence of the CPAs retained as external Auditors. Amend MVC's "Accounting System".	Agree	Approved as proposed

(II)Other resolutions of the Board, which the Independent Director(s) voiced objection or reservation that are documented or issued through a written statement in addition to the above: No such occurrences.

II .Regarding recusals of directors from voting due to conflicts of interests, the names of the directors, contents of motions, reasons for recusal, and results of the voting shall be specified：No such occurrences.

III .TWSE/TPEx listed companies shall disclose the information of self-evaluation (or peer evaluation) of the Board of Directors, such as evaluation cycle, period, scope, method, and contents:

Frequency	Period	Scope	Method	Content
Once a year	2022/01~ 2022/12	Board performance evaluation	Self-evaluation by the Board	The evaluation includes participation in the operation of MVC, the quality of the Board of Directors' decision making, composition and structure of the

				Board of Directors, election and continuing education of the directors, and internal control, etc. Evaluation result: excellent.
Once a year	2022/01~ 2022/12	Board member performance evaluation	Self-evaluation by the Board members	The evaluation includes alignment of the goals and missions of MVC, awareness of the duties of a director participation in the operation of MVC, management of internal relationship and communication, the director’s professionalism and continuing education and internal control, etc. Evaluation result: excellent.
Once a year	2022/01~ 2022/12	Functional committee performance evaluation	Self-evaluation by the functional committee	The evaluation includes participation in the operation of MVC, awareness of the duties of the functional committee, improvement in the quality of decisions made by the functional committee, composition of the functional committee and election of the members and internal control, etc. Evaluation result: excellent.

IV. Measures undertaken during the current year and the most recent year to strengthen the functions of the board of directors (such as the establishment of an audit committee and improvement of information transparency, etc.) and assessment of their implementation:

(I)The operation, functions, and powers of the Board are exercised in accordance with the “Articles of Incorporation” and “Rules of Procedure for Board of Directors Meetings.”

(II)The attendance of Directors and Supervisors, continuing education, operation of the functional committees, material information, and other announcements required by law are disclosed on the MOPS.

(III)The Independent Directors have a good attendance rate and give good suggestions to matters regarding internal control, business, and finance to the Board with their industry knowledge, accounting, and financial analysis ability.

(IV)MVC's financial statements are audited and certified by PwC on a regular basis. All information required to be disclosed by the regulations and laws was disclosed correctly on time. In addition, MVC appointed specialists to be responsible for the collection and disclosure of the information and established the spokesperson system to ensure that all significant information can be disclosed properly and timely. MVC's website can link to the website of MOPS so that shareholders and stakeholders can refer to the website to understand relevant information about MVC's financial business.

(II) Operation of Audit Committee or attendance of supervisors at Board Meetings

Operation of the Audit Committee meetings: There were 4 (A) meetings held in the most recent year.

The attendance of the Independent Directors is as follows:

Position	Name	Attendance in person (B)	Attendance by proxy	Attendance rate (%) [B/A]	Remarks
Independent Director	Ming-Cheng Chang	4	0	100%	
Independent Director	Chia-Hsiu Lin	4	0	100%	
Independent Director	Yao-Chi Li	4	0	100%	

Other matters to be recorded:

I. With regard to the implementation of the Audit Committee, if any of the following circumstances occurs, Audit Committee meeting dates, terms of the meetings, contents of motions, contents of independent directors' objections, reservations or major proposals, all Audit Committee resolutions, and MVC's handling of such resolutions shall be specified:

(I) Matters stated in Article 14-5 of the Securities and Exchange Act:

Date	Session	Contents of motions	Audit committee's resolution	MVC's response to audit committee's opinions
2022/3/1	2nd meeting of the 3rd Board	MVC's 2021 business report and financial statements. Proposal for a new share issue through capitalization of earnings. MVC plans to issue domestic unsecured convertible corporate bonds and cash capital increase in 2022.	Agree	Approved as proposed
2023/3/8	5th meeting of the 3rd Board	MVC's 2022 business report and financial statements. Approved the motion of the ratification of the assessment of the independence and competence of the CPAs retained as external Auditors. Amend MVC's "Accounting System".	Agree	Approved as proposed

(II) Other matters not approved by the Audit Committee but approved by two-thirds or more of all directors: No such occurrences.

II. Regarding recusals of directors from voting due to conflicts of interests, the names of the independent directors, contents of motions, reasons for recusal, and results of the voting shall be specified: None.

III. Communication between the independent directors, chief internal auditor, and CPAs (including the key items, methods, and results of the audit of finances and operations)

(I)Communication with chief internal auditors:

1. In accordance with the regulations of the competent authority, the internal auditing officer shall carry out the audit tasks every month, and report the implementation status of the internal audit to the Audit Committee every quarter. The Audit Committee members did not voice any objection, and the Independent Directors provide professional suggestions and instructions to the content of the audit report.
2. Chief internal auditors are present at all audit committee meetings which are held at least 4 times a year and discuss and exchange opinions with independent directors regarding MVC's operation, and implementation status, and effectiveness of internal control.

(II)Communication with CPAs: The committee communicates with CPAs at least once a year regarding the financial statements, implementation of corporate governance, and latest financial and taxation information.

2. Operation of the Supervisors: None.

(III) Implementation status of corporate governance and deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
I. Does the company establish and disclose its corporate governance best-practice principles based on the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies?	✓		MVC has formulated the “Corporate Governance Best-Practice Principles” and disclosed it on MVC’s website.	No significant difference
II. Shareholding structure & shareholders' rights (I) Does the company establish and implement internal operating procedures to deal with shareholders’ suggestions, doubts, disputes, and litigation?	✓		(I) During a shareholders' meeting, participating shareholders will be given an appropriate amount of time for discussion. MVC will accept and work on incontrovertible and feasible recommendations. However, controvertible suggestions will be voted upon in accordance with meeting regulations. MVC has appointed a Spokesperson, Acting Spokesperson, and shareholder service personnel to resolve related issues. MVC will formulate internal operating procedures based on needs and the actual situation.	(I) No significant difference
(II) Does the company possess a list of its major shareholders with controlling power as well as the ultimate owners of those major shareholders?	✓		(II) MVC pays attention to the changes in equity and pledged shares of shareholders holding more than 10% of the shares, Directors, and Supervisors at any time, and uploads the information every month to the information disclosure website specified by the FSC for public disclosure.	(II) No significant difference
(III) Does the company establish and execute a risk management and firewall system within its affiliates?	✓		(III) The asset management and financial management between MVC and its affiliates are clearly defined and handled in accordance with the “Procedures for Management of Group Enterprises, Specific Companies and Related Party Transactions,” to reduce risks.	(III) No significant difference
(IV) Does the Company establish internal rules against insiders using undisclosed information to trade in securities?	✓		(IV) MVC has formulated the “Procedures for Handling Material Inside Information and Preventing Insider Trading.”	(IV) No significant difference

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
III. Composition and responsibilities of the Board of Directors				
(I) Does the board of directors formulate a diversity policy, specific management objectives and guidelines and implement them??	✓		(I) Three seats of Independent Directors are elected based on the Board's diversity guideline, to diversify the composition of its board members.	(I) No significant difference
(II) Does the Company voluntarily establish other functional committees in addition to the legally required Remuneration Committee and Audit Committee?		✓	(II) MVC has set up a Remuneration Committee on June 22, 2015, formulated the "Charter of Remuneration Committee of MVC", and review the remuneration to Directors, Supervisors, and managerial officers accordingly. In the future, MVC will set up other functional committees based on MVC's operating development.	(II) No significant difference
(III) Does the Company establish standards and methods to evaluate the performance of the Board of Directors, conduct the evaluation annually and regularly, report the results of evaluations to the Board of Directors, and use them as a reference for individual directors' remuneration and nomination and renewal?	✓		(III) MVC's Remuneration Committee's organizational rules clearly define the responsibilities of the Remuneration Committee. The Remuneration Committee establishes the relevant policies and regularly evaluates the performance of the Board of Directors.	(III) No significant difference
(IV) Does the Company regularly evaluate the independence of the CPAs?	✓		(IV) The Audit Committee periodically (at least once a year) evaluates the independence and suitability of the appointed accountants by referring to the Audit Quality Indicators (AQIs) and submits them to the Board of Directors for approval on March 8, 2023. The Audit Quality Indicators (AQIs) report and the independent statement issued by the CPA firm are evaluated in terms of their professionalism and independence, and no possible influence on the independence or inappropriateness of the certified public accountants has been identified to ensure the reliability of MVC's financial reports.	(IV) No significant difference

<table>
<tr><th rowspan="2">Evaluation Item</th><th colspan="3">Implementation Status</th><th rowspan="2">Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof</th></tr>
<tr><th>Yes</th><th>No</th><th>Description</th></tr>
<tr><td>IV. Does the company appoint adequate persons and a chief governance officer to be in charge of corporate governance matters (including but not limited to providing directors and supervisors required information for business execution, assisting directors and supervisors in following laws and regulations, handling matters in relation to the Board meetings and shareholders' meetings and keeping minutes at the Board meetings and shareholders' meetings according to law)?</td><td>✓</td><td></td><td>MVC has set up a chief governance officer to handle corporate governance-related matters.
1. Terms of Reference:
Including handling matters related to the meetings of the board of directors and shareholders' meetings according to the law, making minutes of the board of directors and shareholders' meetings, assisting directors in their appointment and continuing education, providing directors with information required for business execution, and assisting directors in complying with laws and regulations, etc.
2. Training of chief governance officer:
<table>
<tr><th>Date</th><th>Hour</th><th>Name of Course</th></tr>
<tr><td>2022/10/11</td><td>3</td><td>M&A integration issues in the process of corporate mergers and acquisitions.</td></tr>
<tr><td>2022/10/05</td><td>3</td><td>The Future of Metaverse and Cryptocurrency Blockchain.</td></tr>
<tr><td>2022/10/04</td><td>3</td><td>Information Disclosure and Prevention of Insider Trading.</td></tr>
<tr><td>2022/03/21</td><td>3</td><td>Corporate Governance and Securities Laws.</td></tr>
</table></td><td>No significant difference</td></tr>
<tr><td>V. Does the company establish communication channels and a dedicated section on the company website for stakeholders (including but not limited to shareholders, employees, customers, and suppliers) to respond to material corporate social responsibility issues in a proper manner?</td><td>✓</td><td></td><td>MVC provides sufficient information for financial institutions and creditors and has established a means of communication with employees; in addition, information on the acquisition or disposal of assets and endorsements/guarantees is disclosed on the MOPS to maintain the rights and interests of stakeholders. Furthermore, MVC has set up communication channels including a Spokesperson and Acting Spokespersons to ensure their rights and benefits. MVC has contact information disclosed on the website.</td><td>No significant difference</td></tr>
<tr><td>VI. Does the company appoint a professional shareholder service agency to deal with shareholder affairs?</td><td>✓</td><td></td><td>MVC has appointed SinoPac Securities, Stock Registration Division to process affairs related to deal with shareholder affairs.</td><td>No significant difference</td></tr>
<tr><td>VII. Information disclosure
(I) Does the company have a website to disclose the financial operations and corporate governance status?</td><td>✓</td><td></td><td>(I) MVC discloses material information on the website and discloses financial information and material information on the MOPS.</td><td>(I) No significant difference</td></tr>
</table>

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
(II) Does the company have other information disclosure channels (e.g. building an English website, appointing designated people to handle information collection and disclosure, creating a spokesman system, and making the process of investor conferences available on the corporate website)?	✓		(II) MVC appoints a person who is familiar with various financial and business matters and is able to coordinate resources of various departments to serve as the Spokesperson, to represent MVC externally, to ensure timely disclosure of information that may influence the decision making of the shareholders and stakeholders. In the future, when MVC holds institutional investor conferences, relevant documents will also be uploaded to the MOPS for the inquiry of investors.	(II) No significant difference
(III) Does the company publicly announce and file the annual financial reports within two months after the close of the given fiscal year and publicly announce and file the first, second, and third quarterly financial reports and the operation of each month ahead of the required deadline?	✓		(III) MVC publicly announces and files the annual financial reports within three months after the close of the given fiscal year, which is compliant with the laws and regulations. Also, MVC publicly announces and files the first, second, and third quarterly financial reports and the operation of each month before the required deadline.	(III) No significant difference
VIII. Is there any other important information to facilitate a better understanding of the Company's corporate governance practices (including but not limited to employee rights, employee wellness, investor relations, supplier relations, stakeholder rights, Directors' and Supervisors' training records, implementation of risk management policies and risk evaluation measures, implementation of customer policies, and participation in liability insurance by Directors and Supervisors)?	✓		(I) Employee rights: MVC has always treated employees honorably and provides protection of their legal rights in accordance with the Labor Standards Act. (II) Employee care: MVC establishes good relationships with employees through employee welfare measures, and education and training. (III) Investor relations: MVC discloses financial and business information, and material information on the MOPS in accordance with the laws and regulations, for the investors' inquiry. MVC also handles inquiries from the investors appropriately and maintains a good relationship with the investors. (IV) Supplier relations: MVC fulfills its corresponding contractual rights and obligations to the suppliers to ensure that matters including the delivery dates, prices, and quality are in line with the contracts so that there is good communication with the suppliers. (V) Rights of stakeholders: Disclosure of information, such as financial operations and material information, on the Market Observation Post System for stakeholders' understanding. (VI) Training of Directors and Supervisors: All Directors and Supervisors of MVC have practical experiences in their professional fields, and participate in relevant continuing training courses.	No significant difference

<table>
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<tr><th>Yes</th><th>No</th><th>Description</th></tr>
<tr><td></td><td></td><td></td><td>(VII) Risk management policy and implementation of risk measurement: MVC has set up the appropriate policy, procedures, and internal control in regards to the aforementioned financial risk management based on relevant standards. Material financing activities need to be reviewed by the Board of Directors in regard to relevant standards and internal control systems.
(VII) Implementation of customer policies: MVC is currently under the R&D stage, and its products are not yet launched in the market.
(IX) Purchase of liability insurance for the Directors and Supervisors by MVC and has purchased liability insurance for the Directors and other important personnel in accordance with the Articles of Incorporation, and has reported such matter to the Board Meetings.</td><td></td></tr>
<tr><td colspan="5">IX. Improvements made in the most recent fiscal year in response to the results of corporate governance evaluation conducted by the Corporate Governance Center of the Taiwan Stock Exchange Corporation, and improvement measures and plans for items yet to be improved. (Companies not listed for evaluation do not need to fill in this section):
Improved:
The English version of the meeting handbook, annual report and financial report has been uploaded in advance within the prescribed time limit.
Prioritized matters and measures:
The annual financial report shall be announced within two months after the end of the fiscal year.
The number of female directors shall be increased by at least one.</td></tr>
</table>

(IV) Composition, functions, and operations of the Remuneration Committee, if any:

MVC has set up a Remuneration Committee on June 22, 2015, formulated the "Charter of Remuneration Committee." The responsibility of the Remuneration Committee is to set and regularly review the performance of Directors, Supervisors, and managerial officers, and the remuneration policies, systems, standards, structure, and the level of remuneration to be distributed. The Remuneration Committee shall also propose suggestions to the Board to serve as references for decision making of Directors, to ensure a smooth operation.

1. Information on the remuneration committee members:

Title and Name	Professional qualifications and experience	Independence situation	Number of other Public Companies in which the individual is concurrently serving as an Independent Director
Independent Director Ming-Cheng Chang (Note)	Major Education and work Experience: Master, Industrial & Operations Engineering, University of Michigan Bachelor, Department of Mechanical Engineering, National Taiwan University Deloitte Touche Tohmatsu Limited Other positions concurrently held at MVC and other companies: Independent Director, Ocean Alexander Independent Director, United Alloy-Tech. Company Chairman of the Audit Committee and member of the Remuneration Committee of MVC. He has worked in an accounting firm for many years and is qualified as an accountant.	MVC has obtained a written statement from each independent director confirming the independence of himself and his immediate family relative to MVC. The independent directors of MVC are members of the Board of Directors, the Audit Committee and the Remuneration Committee. The independent directors themselves, their spouses, second relatives (or in the name of others) do not hold any shares of MVC. They have neither held positions in MVC nor related companies, nor have they served as remunerations for the business, legal,	2
Independent Director Chia-Hsiu Lin	Major Education and work Experience: Master, Institute of Plant Biology, National Taiwan University President, Production Business Department, VIRBAC (TAIWAN) CO., LTD. Independent Director, Standard Chem & Pharm Co., Ltd. Chairman and President, Gaosheng Pharmaceutical Co., Ltd. Chief Operating Officer, Lytone Enterprise, Inc. Other positions concurrently held at MVC and other companies: He is a member of the audit committee and chairman of the remuneration committee of MVC and has many years of experience in biotechnology-related industries.		-

Title and Name	Professional qualifications and experience	Independence situation	Number of other Public Companies in which the individual is concurrently serving as an Independent Director
Independent Director Yao-Chi Li	Major Education and work Experience: Postdoctoral Researcher, Yale School of Medicine Ph.D. in Genetics, North Carolina State University Bachelor, Institute of Plant Biology, National Taiwan University Chair, Department of Life Science, National Tsing Hua University Chair, Institute of Biotechnology, National Tsing Hua University Dean, College of Biotechnology and Bioresources, Da-Yeh University Other positions concurrently held at MVC and other companies: Founder and Director, Fortune Anti-aging Nutraceuticals, Co. Ltd. Consultant, Cross-strait Tsinghua Research Institute Technology Consultant, Yunnan Alphy Biotech Co., Ltd. He is a member of the audit committee and remuneration committee of He is a member of the audit committee and remuneration committee of MVC, and has many years of experience in biotechnology-related colleges and has many years of experience in biotechnology-related colleges.	financial, accounting and other services of MVC's other related companies.	-

Note: Mr. Ming-Cheng Chang, an independent director, resigned on March 8, 2023.

2. Operational status of the Remuneration Committee

(1) There are a total of 3 members in the Remuneration Committee.

(2) The office term of the current Committee: From Aug. 17, 2021to Aug. 16, 2024. The Remuneration Committee held 2 meetings (A) in the most recent fiscal year. The qualification and attendance of the committee members are as follows:

Position	Name	Attendance in person (B)	Attendance by proxy	Attendance rate (%) [B/A]	Remarks
Convener	Chia-Hsiu Lin	2	0	100%	
Committee member	Ming-Cheng Chang	2	0	100%	
Committee member	Yao-Chi Li	2	0	100%	

Other matters to be recorded:

I. If the Board of Directors refuses to adopt or amends a recommendation of the Remuneration Committee, the date of the meeting, session, the content of the motion, resolution by the Board of Directors, and MVC's response to the Remuneration Committee's opinion (e.g., if the remuneration passed by the Board of Directors exceeds the recommendation of the Remuneration Committee, the circumstances and cause for the difference shall be specified) shall be specified: None.

II. If there are resolutions of the Remuneration Committee to which members object or express reservations, and for which there is a record or declaration in writing, the date of the meeting, session, the content of the motion, all members' opinions, and the response to members' opinion shall be specified: None.

Date	Session	Contents of motions	Remuneration committee's resolution	MVC's response to remuneration committee's opinions.
2022/06/30	2th meeting of the 4rd Committee	Review of the 2021 director's remuneration and manager bonus distribution case.	Agree	Approved as proposed
2022/12/22	3th meeting of the 4rd Committee	Review of the 2023 remuneration of managers, and 2022 year-end bonus.	Agree	Approved as proposed

Note:

(1) Where a committee member may be relieved from duties before the end of the fiscal year, please specify the date of his/her discharge in the "Remarks" Section. His/her actual attendance rate (%) to the committee meeting shall be calculated based on the number of meetings called and the actual number of meetings he/she attended, during his/her term of office.

(2) If a Remuneration Committee member is re-elected before the end of the accounting year, the names of current and previous members shall be listed and their appointment status and re-election date shall be noted in the "Remarks" column. His/her actual attendance rate (%) to the committee meeting shall be calculated based on the number of meetings called and the actual number of meetings he/she attended, during his/her term of office.

(V) Implementation status of sustainable development promotion and deviations from the Sustainable Development Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof:

Evaluation Item	Implementation Status			Deviations from the Sustainable Development Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
I. Dose the company established a governance structure to promote sustainable development, and set up a dedicated (part-time) unit to promote sustainable development, and the board of directors authorize senior management to handle and supervise the situation to the board of directors??	✓		Following the vision and mission of MVC's ESG policy, we planned to establish an "ESG Committee" to serve as MVC's highest-level sustainable development decision-making center, and to review core operational capabilities with a number of senior executives in different fields. Make a medium- and long-term sustainable development plan. The "ESG Committee" serves as a cross-departmental communication platform integrating top and bottom and horizontally connecting. Through meetings and task groups set up according to issues, identify sustainable issues related to company operations and stakeholders, formulate corresponding strategies and work guidelines, compile budgets related to sustainable development of each organization, plan and implement annual plans, At the same time, track the implementation results to ensure that the sustainable development strategy is fully implemented in MVC's daily operations. The "ESG Committee" will report to the Board of Directors on the implementation results of sustainable development and future work plans at least once a year.	No significant difference
II. Does the company assess ESG risks associated with its operations based on the principle of materiality, and establish related risk management policies or strategies?	✓		The disclosed risk assessment boundaries cover the operation and sustainability performance of MVC and its subsidiaries' major bases. To establish a sound corporate social responsibility management, MVC formulates relevant risk management policies or strategies related to MVC's operations in accordance with the principle of materiality, including the following issues. (I) Environmental issues: MVC has formulated the “Workplace Regulations” to stipulate the energy conservation and carbon reduction	No significant difference

Evaluation Item	Implementation Status			Deviations from the Sustainable Development Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
			policies, promote environmental protection-related matters, and work with our employees. (II) Social issues: MVC has formulated and implemented reasonable employee welfare measures in line with MVC's objectives and HR development. MVC has also formulated the "Human Resources Management Regulations" which defines a clear and effective reward and punishment system with the aim of nurturing professional and technical talents and encouraging knowledge sharing and exchange among employees, to enhance their academic and technical skills to achieve the required tasks. (III) Corporate governance issues MVC has established and disclosed its corporate governance best-practice principles based on the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies. Board evaluation is carried out every year and is disclosed accordingly.	
III. Environmental issues (I) Has the company set an environmental management system designed for industry characteristics? (II) Does the company endeavor to utilize energy efficiently and use renewable materials that have low impacts on the environment? (III) Does the Company evaluate the current and future potential risks and opportunities of climate change, and adopt countermeasures related to climate issues?	✓ ✓ ✓		(I) MVC clears and recycles industrial wastes in accordance with its industrial waste clearance plan, and handles public matters in compliance with the environmental regulations provided by the competent authority. (II) Waste recycling, and reduction of paper use (III) MVC takes a proactive approach toward matters regarding energy conservation and reduction of greenhouse gases and undertakes temperature control of air conditioners to effectively utilize energy to achieve the goal of energy conservation and carbon reduction.	(I) No significant difference (II) No significant difference (III) No significant difference (IV) No significant difference

Evaluation Item	Implementation Status			Deviations from the Sustainable Development Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
(IV) Does the company collect data for greenhouse gas emissions, water usage, and waste quantity in the past two years, and set energy conservation, greenhouse gas emissions reduction, water usage reduction, and other waste management policies?	✓		(IV) The annual greenhouse gas emissions, water consumption and total waste weight for the most recent year are as follows: Total greenhouse gas CO2 emissions: Direct emissions: 0 tons; Inirect emissions: 3,966 tons in 2021/3,799 tons in 2022 Water consumption: 52,708 degrees in 2021/60,179 degrees in 2022 Total waste: 6.16 tons in 2021 / 10.01 tons in 2022 The above information is obtained by referring to the external verification data of Taiwan Power Company, Taiwan Water Corporation and waste removal and transportation manufacturers. MVC has formulated the “Workplace Regulations” to stipulate the energy conservation and carbon reduction policies. The regulations require that energy-saving light fixtures be installed, employees turn off the light when leaving the offices, MVC carries out air pollution, water pollution, environmental pollution, and noise level monitoring at least 1-2 times a year according to regulations, and MVC appoints qualified recycling institute for waste clearance and reuse.	
IV. Social issues (I) Does the company formulate appropriate management policies and procedures according to relevant regulations and the International Bill of Human Rights?	✓		(I) MVC abides by relevant labor laws and regulations to protect the employees’ rights and benefits. MVC adopts a non-discrimination employment policy and establishes pension funds. MVC has also established the Employee Welfare Committee, consisting of members elected among the employees to handle matters related to employee welfare.to fulfill corporate social responsibility and protect the basic human rights of all colleagues, customers and stakeholders, MVC follows the "United	(I) No significant difference

Evaluation Item	Implementation Status			Deviations from the Sustainable Development Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
			Nations Universal Declaration of Human Rights", "United Nations Guiding Principles on Business and Human Rights", "United Nations Global Compact" and "United Nations International Labor Organization"" and other principles proclaimed in international human rights conventions, respect internationally recognized basic human rights, including freedom of association, caring for disadvantaged groups, prohibition of child labor, elimination of all forms of forced labor, elimination of employment and employment discrimination, etc., and abide by the labor-related laws and regulations of MVC's location , MVC pays attention to human rights and enjoys the same right to work regardless of race, gender or age.	
(II) Has the Company formulated and implemented reasonable employee welfare measures (including remuneration, rest and annual leave, and other benefits), and appropriately reflected the operating performance or achievements in the employee remuneration?	✓		(II) MVC has provided a number of welfare policies for employees. In addition to labor insurance, health insurance, pension and parental leave regulated by laws and regulations, it also conducts annual health inspections for employees, issues three festival gifts and gift certificates, weddings and funerals and condolences, and employee group insurance. Other welfare measures, in addition, according to MVC's profit, no less than 1% is allocated as employee compensation to promote labor-capital harmony.	(II) No significant difference
(III) Does the company provide a healthy and safe work environment and organize health and safety training for its employees on a regular basis?	✓		(III) MVC provides a safe and healthy working environment, and conducts employee health checks on a regular basis every year. For employee education and training, both new employees and current employees are required to conduct safety and health related training in accordance with the law and purchase group insurance for each employee. 1. MVC has stationed security guards at all office sites to ensure the safety of the workplace.	(III) No significant difference

Evaluation Item	Implementation Status			Deviations from the Sustainable Development Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
			2. Workplace health: MVC sanitizes the work environment on a yearly basis to ensure the cleanliness of the workplace. 3. MVC installs all required fire equipment and carries out annual fire safety inspections required by the government. In 2022, the number of employees was 141, and there was no occupational disaster in that year.	
(IV) Does the company establish effective career development and training plans for its employees?	✓		(IV) To improve the quality, professionalism, and work efficiency of the employees, the employees may participate in various professional skill and academic training based on their functions and business needs after receiving approval from supervisors, to improve their professional skills. MVC formulates and plans an annual education and training plan for employees every year.	(IV) No significant difference
(V) Does the company's product and service comply with related regulations and international rules for customers' health and safety, privacy, sales, labeling, etc. and set policies to protect consumer or customer's rights and consumer appeal procedures?	✓		(V) MVC attaches great importance to trademark maintenance and corporate image, and cooperates with professional law firms for consultation. The marketing and labeling of products and services comply with and follow relevant regulations and international standards, and have formulated customer sales, return and discount procedures to protect customer rights and interests.	(V) No significant difference
(VI) Does the company formulate and implement supplier management policies that require suppliers to follow relevant regulations on environmental protection, occupational safety, and health or labor human rights?	✓		(VI) MVC has established a supplier evaluation system. All new suppliers will be evaluated, in addition to those who are required to comply with Good Manufacturing Practice (GMP), Good Transportation Practice (GDP), ISO quality standards or other industry standards, they will be listed as the preferred objects for selection. , employee quality, corporate value and fulfillment of social responsibilities and relevant regulations on environmental protection, occupational safety, and health or labor human rights, etc., will be considered and evaluated before signing a contract for cooperation.	(VI) No significant difference

Evaluation Item	Implementation Status			Deviations from the Sustainable Development Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
V. Does the company refer to internationally-used standards or guidelines for the preparation of sustainability reports such as CSR reports to disclose non-financial information? Are the reports certified or assured by a third-party accreditation body?	✓		MVC's implementation of sustainable development is handled in accordance with the competent authorities and relevant laws and regulations. MVC has set up a special area on the website, and will disclose relevant information on MVC's website and public information observatory according to the actual operation situation.	No significant difference
VI. If the Company has established corporate social responsibility principles based on the Sustainable Development Best Practice Principles for TWSE/TEPx Listed Companies, please describe the implementation and any deviations from the Principles: MVC has formulated the corporate social responsibility principles in accordance with the Corporate Social Responsibility Best Practice Principles for TWSE/GTSM Listed Companies, and MVC has operated in accordance with relevant laws and regulations without significant difference				
VII. Other important information to help understand the implementation of the promotion of Sustainable Development: MVC recognizes the impact of companies on social responsibilities and works hard in its business operations to provide employees with a stable and high-quality work environment and maximize benefits for shareholders and related stakeholders. In the future, in addition to professional training for our employees, we shall actively demonstrate our commitment to corporate social responsibilities and strengthen MVC’s core values.				

(VI) Implementation status of ethical business practices and deviation from the Ethical Corporate Management Best-Practice Principles for the TWSE/TEPx Listed Companies and reasons thereof:

Evaluation Item	Implementation Status			Deviations from the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies and Reasons Thereof
	Yes	No	Description	
I. Establishment of ethical corporate management policies and programs (I) Does the company establish the ethical corporate management policies approved by the Board of Directors and declare its ethical corporate management policies and procedures in its guidelines and external documents, as well as the commitment from its Board to implement the policies?	✓		(I) MVC has established its "Principles of Ethical Corporate Management" and "Procedures for Ethical Management and Guidelines for Conduct" to stipulate that all employees shall uphold the ethical corporate management policies and comply with the laws and regulations when handling MVC's businesses. The Board and the management also uphold the principle of integrity and actively implement relevant policies.	(I) No significant difference
(II) Does the company establish a risk assessment mechanism against unethical conduct, analyze and assess on a regular basis business activities within its business scope which are at a higher risk of being involved in unethical conduct, and establish prevention programs accordingly, which shall at least include those specified in Paragraph 2, Article 7 of the "Ethical Corporate Management Best Practice Principles for TWSE/TEPx Listed Companies"?	✓		(II) MVC has established its Principles of Ethical Corporate Management for implementation. MVC strictly prohibits Directors, managerial officers, employees, and substantial controllers of MVC from directly or indirectly offering, promising to offer, requesting, or accepting any form of inappropriate benefits in MVC's operations and business or providing illegal political donations.	(II) No significant difference
(III) Does the company specify in its prevention programs the operating procedures, guidelines, punishments for violations, and a grievance system and implement them and review the prevention programs on a regular basis?	✓		(III) MVC has established its "Principles of Ethical Corporate Management" and "Procedures for Ethical Management and Guidelines for Conduct" to regulate the employees, and impose punishments for violations.	(III) No significant difference
II. Fulfillment of ethical corporate management (I) Does the company evaluate business partners' ethical records and include ethics-related clauses in the business contracts signed with the counterparties?	✓		(I) For potential suppliers, MVC evaluates their legality and ascertains whether they have a record of involvement in unethical conduct to ensure that they conduct business in a fair and transparent manner and do not request, offer, or take bribes.	(I) No significant difference

Evaluation Item	Implementation Status			Deviations from the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies and Reasons Thereof
	Yes	No	Description	
(II) Does the company establish an exclusively dedicated unit supervised by the Board of Directors to be in charge of ethical corporate management and report to the Board of Directors the implementation of ethical corporate management policies and prevention programs on a regular basis (at least once a year)?	✓		(II) MVC has established a full-time (or part-time) unit directly under the Board for promoting the ethical corporate management of MVC, and the unit distributes responsibilities and duties to all departments. All personnel of t MVC is committed to fulfilling their corporate responsibilities.	(II) No significant difference
(III) Does the company establish policies to prevent conflicts of interest, provide appropriate communication channels, and implement them accordingly?	✓		(III) The Directors maintain a high degree of self-discipline. They may not participate in the discussion or voting and shall recuse themselves from the discussion or vote if the motion has interests in the Directors themselves or the legal representatives they represent, where there is a likelihood that the interests of MVC would be prejudiced.	(III) No significant difference
(IV) Does the company establish effective accounting systems and internal control systems to implement ethical corporate management, with the internal audit unit being responsible for devising relevant audit plans based on the results of assessments of any unethical conduct risk, examining accordingly the compliance with the prevention programs, or engaging a certified public accountant to carry out the audit?	✓		(IV) MVC has established and put into practice an effective internal control system, related management regulations, and accounting system. MVC has also set up an internal audit unit to regularly audit the compliance of all departments with related rules and regulations. MVC then prepares audit reports and submits them to the Board of Directors.	(IV) No significant difference
(V) Does the company regularly hold internal and external training on ethical corporate management?	✓		(V) MVC educates all employees on the corporate ideals of ethical corporate management in training for new employees and courses on regulations.	(V) No significant difference
III. Operation of the whistle-blowing system (I) Does the company establish both a reward/whistle-blowing system and convenient whistle-blowing channels? Are appropriate personnel assigned to the accused party?	✓		(I) MVC has set up a suggestion mailbox, to receive reports and suggestions from employees. In cases of violation of regulations regarding ethical conducts, MVC imposes corresponding punishments.	(I) No significant difference
(II) Has the company established standard operating procedures and confidentiality measures for the investigation of reported incidents?	✓		(II) Relevant rules are set forth in the Principles of Ethical Corporate Management, and such matters shall be kept in confidentiality.	(II) No significant difference
(III) Does the company provide protection for whistle-blowers against receiving improper treatment?	✓		(III) MVC appoints designated personnel to handle reports regarding illegal and unethical conducts submitted by employees, shareholders, and stakeholders. The identity of	(III) No significant difference

Evaluation Item	Implementation Status			Deviations from the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies and Reasons Thereof
	Yes	No	Description	
			informers and the content of the reports are required to be kept in confidentiality.	
IV. Enhanced disclosure of ethical corporate management information Does the company disclose the ethical corporate management policies and the results of its implementation on the company website and MOPS?	✓		MVC has formulated the "Principles of Ethical Corporate Management" and disclosed it on MVC's website.	No significant difference
V. If the Company has established ethical corporate management best practice principles based on the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies, please describe the implementation and any deviations from the Principles: None				
VI. Other important information to facilitate a better understanding of the Company's ethical corporate management: (e.g., review of and amendments to ethical corporate management policies) MVC adheres to the Company Act, the Securities and Exchange Act, and relevant regulations in relation to the TWSE/TPEx listed companies and other related business law, and regulations, as the foundation for ethical corporate management. The Board of Directors shall exercise the due care of a good administrator in supervising MVC's prevention of unethical conducts. The Audit Office is responsible for the formulation, supervision, and implementation of the ethical management policy and unethical conduct prevention plans. Also, it is responsible to review the relevant standards of integrity operation at all times. If any violation is found, the Audit Office will report such matters to the Board of Directors.				

(VII) Please disclose the Company's Corporate Governance Best Practice Principles and related rules and regulations, if any:

MVC has formulated the Corporate Governance Best-Practice Principles, Principles of Ethical Corporate Management, Codes of Ethical Conduct for Directors, Rules Governing the Scope of Responsibilities of Independent Directors, Rules of Procedure for Shareholders' Meetings, Rules Governing Board Meetings, Audit Committee Charter, and Regulations Governing Elections of Directors. In addition, MVC upholds its philosophy of corporate governance when implementing relevant rules and regulations of corporate governance. Relevant rules and charters regarding corporate governance are disclosed on MVC's website.

(VIII) Other important information to facilitate a better understanding of the Company's corporate governance: Please refer to Item 8 of "Implementation status of corporate governance and deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof."

(IX) Internal control system execution status

Medigen Vaccine Biologics Corp.
Statement on Internal Control

Date: Mar. 8, 2023

MVC hereby states the results of the self-evaluation of the internal control system for 2022 as follows:

I. The Company acknowledges that the establishment, implementation and maintenance of an internal control system is the responsibility of the Board of Directors and managers, and the Company has established an internal control system. The internal control system is designed to provide reasonable assurance for the effectiveness and efficiency of the operations (including profitability, performance and protection of assets), reliability, timeliness, and transparency of reporting, and compliance with applicable laws and regulations.

II. The internal control system has innate limitations. No matter how robust and effective the internal control system, it can only provide reasonable assurance of the achievement of the foregoing three goals; in addition, the effectiveness of the internal control system may vary due to changes in the environment and conditions. However, the internal control system of the Company has self-monitoring mechanisms in place, and the Company will take corrective action against any defects identified.

III. The Company uses the assessment items specified in the Regulations Governing Establishment of Internal Control Systems by Public Companies (hereinafter referred to as the "Regulations") to determine whether the design and implementation of the internal control system are effective. Based on the process of control, the assessment items specified in the Regulations divide the internal control system into five constituent elements: 1. control environment; 2. risk assessment; 3. control activities; 4. information and communications; and 5. monitoring activities. Each constituent element includes a certain number of items. For more information on such items, refer to the Regulations.

IV. The Company has adopted the aforesaid assessment items for the internal control system to determine whether the design and implementation of the internal control system are effective.

V. Based on the results of the determination in the preceding paragraph, the Company is of the opinion that, as of December 31, 2022, the internal control system (including the supervision and management of subsidiaries), including the design and implementation of the internal control system relating to the effectiveness and efficiency of the operations, reliability, timeliness, and transparency of reporting, and compliance with applicable laws and regulations, is effective and can reasonably assure the achievement of the foregoing goals.

VI. This statement will constitute the main content of the Company's annual report and the prospectus and will be disclosed to the public. Any falsehood or concealment with regard to the above contents will entail legal liability under Articles 20, 32, 171 and 174 of the Securities and Exchange Act.

VII. This statement was approved by the Board of Directors on March 8, 2023, and out of the 7 directors in attendance (including attendance by proxy), none objected to it and all consented to the content expressed in this statement.

Medigen Vaccine Biologics Corp.

Chairman: Shi-Chung Chang

President: Tsan-Jian Chen

(X) Penalties imposed on the Company or its personnel in accordance with the laws, or disciplinary actions taken by the Company against its personnel for any violation of internal control rules within the current fiscal year and as of the date of publication of the annual report, as well as details of the penalties, major deficiencies and subsequent improvements: None.

(XI) Major resolutions of shareholders' meetings and board meetings during the most recent Fiscal year and during the current fiscal year up to the date of publication of the annual report.

Category	Date	Motions	Resolutions
Shareholders' Meeting	2022/6/30	Recognition of MVC's 2021 business report and financial statements	Approved as proposed.
		Adoption of the Proposal for 2021 Earnings Distribution table	Approved as proposed.
		Amendment to "Articles of Incorporation"	Approved as proposed.
		Proposal for a new share issue through capitalization of earnings	Approved as proposed.

NO	Category	Date	Motions	Resolutions
1	Board Meeting	2022/03/01	Proposal for a new share issue through capitalization of earnings. MVC plans to issue domestic unsecured convertible corporate bonds and cash capital increase in 2022.	Approved by the unanimous decision of the directors present
2	Board Meeting	2023/03/08	Approved the motion of the ratification of the assessment of the independence and competence of the CPAs retained as external Auditors. Amend MVC's "Accounting System".	Approved by the unanimous decision of the directors present

(XII) Recorded or written statements made by any director or supervisor which specified dissent to important resolutions passed by the board of directors during the most recent year and up to the date of publication of this annual report: None.

(XIII) A summary of resignations and dismissals of the Company's Chairman, President, accounting manager, financial manager, chief internal auditor, Corporate Governance Officer, and R&D manager during the most recent year and up to the date of publication of the Annual Report:

Position	Name	Date of Election	Date of Termination	Reasons for resignation or termination
Chairman	Shi-Chung Chang	2021.8.17	2023.3.8	Institutional director reassigned representative.

V. Audit Fees for CPA

Unit: NT$ thousand

Name of accounting firm	Name of CPA	Audit period	Audit fee	Non-Audit fee	Total	Remark
PwC Taiwan	Juanlu, Man-Yu	2022/01/01 - 2022/12/31	1,345	415	1,760	The non-audit fees：Tax Visa $255. Review of corporate bonds $50. Review of capital increase from surplus $110.
	Lin, Ya-Hui					

(I) When the company changes its accounting firm, the audit fees paid for the fiscal year in which such change took place 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: None.

(II) When the audit fees paid for the current fiscal year are lower than those for the previous fiscal year by 10% or more, the reduction in the amount of audit fees, reduction percentage, and reason(s) thereof shall be disclosed: None.

VI. Replacement of CPAs: None.

VII. The Positions Held by the Company's Chairman, Presidents, or Accounting Officers in the Company's Independent Accounting Firm or its Affiliates during the Most Recent Year: None.

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

(1) Share changes by a Director, Supervisor, managerial officer, or major shareholders

Unit: shares

Position	Name	2022		As of May 1 of the current year	
		Shareholding increase (decrease)	Pledged share increase (decrease)	Shareholding increase (decrease)	Pledged share increase (decrease)
Institutional directors and major shareholders holding more than 10% of the Company’s shares	Medigen Biotech Corp.	20,112,033	-	(530,000)	-
	Rep.: Ming-Cheng Chang	Note2		-	-
	Rep.: Shi-Chung Chang	-	-	Note2	
Institutional directors and major shareholders holding more than 10% of the Company’s shares	Medigen Biotech Corp.	20,112,033	-	(530,000)	-
	Rep.: Ken-Hu Chang	8,456	-	-	-
Institutional director	Schweitzer Biotech Co., Ltd.	3,900,196	-	-	-
	Rep.: Tsan-Jian Chen	518,982	-	-	-
Director	Wei-Jen Chen	3,493	-	-	-
Independent Director	Ming-Cheng Chang	-	-	-	-
Independent Director	Chia-Hsiu Lin	-	-	-	-
Independent Director	Yao-Chi Li	-	-	-	-
Managerial officer	Wei-Cheng Lien	45,662	-	-	-
Managerial officer	Ssu-Hsien Li	(55,166)	-	-	-
Managerial officer	Ji-aen Lien	20,277	-	-	-
Managerial officer	Tsai-Hua Hung	36,855	-	Note3	
Managerial officer	Yu-Ping Yang	94,499	-	112,500	-

Note 1: The shareholders who hold more than 10% of MVC's shares shall be identified as major shareholders and stated separately.

Note 2: Mr. Ming-Cheng Chang resigned as an independent director and was appointed as the representative of Medigen Biotech Corp. on March 8, 2023, and was elected as the chairman of MVC on that day, while Mr. Shih-Chung Chang stepped down as the chairman of MVC on the same day.

Note 3: .Tsai-Hua Hung resigned in March, 2023.

(2) Information on the counterparties of the change in equity interests by a Director, Supervisor, managerial officer, or major shareholders: None.

(3) Information on the counterparties of the change in pledged shares by a Director, Supervisor, managerial officer, or major shareholders: None.

IX. Relationship among the Top Ten Shareholders

May 1, 2023

Name	Current shareholding		Spouse & minor shareholding		Shareholding by nominees		Among the ten largest shareholders, name and relationship with anyone who is a related party or a relative within the second degree of kinship		Remark
	Shares	(%)	Shares	(%)	Shares	(%)	Name of company	Relationship	
Medigen Biotech Corp. Rep.: Shi-Chung Chang	64,058,844	19.51%	-	-	-	-	Everspring Industry Co., Ltd. Rep.: Tzu-Ling Chang	Second-degree relative	
Schweitzer Biotech Co., Ltd. Rep.: Hsu-Wen Chen	10,949,756	3.33%	-	-	-	-	-	-	
Everspring Industry Co., Ltd. Rep.: Tzu-Ling Chang	4,880,337	1.49%	-	-	-	-	Medigen Biotech Corp. Rep.: Shi-Chung Chang	Second-degree relative	
JP Morgan Chase Bank N.A., Taipei Branch in custody for Vanguard Emerging Markets Stock Index Fund, a Series of Vanguard International Equity Index Funds	3,248,930	0.99%	-	-	-	-	-	-	
JP Morgan Chase Bank N.A., Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds	3,077,336	0.94%	-	-	-	-	-	-	
Tzu-Heng Huang	2,247,000	0.68%	-	-	-	-	Everspring Industry Co., Ltd. Rep.: Tzu-Ling Chang	Second-degree relative	
Jin-chuan Sun	1,829,376	0.56%							
Jinzhun International Investment Development Co., Ltd. Rep.: Huang Xu Zhi	1,718,653	0.52%							

Name	Current shareholding		Spouse & minor shareholding		Shareholding by nominees		Among the ten largest shareholders, name and relationship with anyone who is a related party or a relative within the second degree of kinship		Remark
	Shares	(%)	Shares	(%)	Shares	(%)	Name of company	Relationship	
Xuchai Investment Co., Ltd. Rep.: Huang Xu Zhi	1,655,624	0.50%	-	-	-	-			
Hsiu-Chuan Chang	1,667,920	0.51%	-	-	-	-	-	-	

Note: The top ten shareholders' names shall be identified separately (in the case of corporate shareholders, the corporate shareholders' names and representatives' names shall be identified separately).

X. Ownership of Shares in Affiliated Enterprises:

Unit: share

Affiliated Enterprises	Ownership by the Company		Direct or Indirect Ownership by Directors, Supervisors, Managers		Total Ownership	
	Shares	%	Shares	%	Shares	%
MVC BioPharma Ltd.	50,000	100%	-	-	50,000	100%
MVC Capital Corporation	30,000,000	100%	-	-	30,000,000	100%

Note: The capital increase to $300 million was approved by the Taipei City Government on May 3, 2023.

Chapter 4. Capital Overview

I. Capital and Shares

(I) Source of capital

1. Historical information of capitalization

May 1, 2023; Unit: NT$ thousand / thousand shares

Year /Month	Par value (NT$)	Authorized capital		Paid-in capital		Remarks		
		Shares	Amount	Shares	Amount	Source of capital	Capital increase by assets other than cash	Others
2012/10	10	50,000	500,000	50	500	Registered share capital	None	Fu-Chan-Ye-Shang-Zi No. 10189011200 dated 2012.10.22
2012/12	10	50,000	500,000	11,000	110,000	Cash capital increase NT$ 109,500 thousand.	None	Fu-Chan-Ye-Shang-Zi No. 10190271500 dated 2012.12.03
2012/12	10	50,000	500,000	15,000	150,000	Cash capital increase NT$ 40,000 thousand.	None	Fu-Chan-Ye-Shang-Zi No. 10191168300 dated 2012.12.28
2013/05	10	50,000	500,000	23,000	230,000	Cash capital increase NT$ 80,000 thousand.	None	Fu-Chan-Ye-Shang-Zi No. 10284246410 dated 2013.05.24
2014/01	12	100,000	1,000,000	50,000	500,000	Cash capital increase NT$ 270,000 thousand.	None	Jing-Shou-Shang-Zi No. 10301008910 dated 2014.01.20
2014/09	18	100,000	1,000,000	90,000	900,000	Cash capital increase NT$ 400,000 thousand.	None	Jing-Shou-Shang-Zi No. 10301199820 dated 2014.09.24
2015/12	22	200,000	2,000,000	110,000	1,100,000	Cash capital increase NT$ 200,000 thousand.	None	Zhu-Shang-Zi No. 1040036379 dated 2015.12.15
2016/09	26	200,000	2,000,000	122,500	1,225,000	Cash capital increase NT$ 125,000 thousand.	None	Zhu-Shang-Zi No. 1050024873 dated 2016.09.05
2017/07	12 27	200,000	2,000,000	136,765	1,367,650	Cash capital increase NT$ 140,000 thousand, and employee stock option NT$ 2,650 thousand.	None	Zhu-Shang-Zi No. 1060020542 dated 2017.07.28
2017/11	12	200,000	2,000,000	136,815	1,368,150	Employee stock option NT$ 500 thousand.	None	Zhu-Shang-Zi No. 1060031466 dated 2017.11.20
2018/02	12	200,000	2,000,000	136,933	1,369,325	Employee stock option NT$ 1,175 thousand.	None	Zhu-Shang-Zi No. 1070004741 dated 2018.02.07

Year /Month	Par value (NT$)	Authorized capital		Paid-in capital		Remarks		
		Shares	Amount	Shares	Amount	Source of capital	Capital increase by assets other than cash	Others
2018/05	12 28	200,000	2,000,000	155,310	1,553,095	Cash capital increase NT$ 182,820 thousand, and employee stock option NT$ 950 thousand.	None	Zhu-Shang-Zi No. 1070012730 dated 2018.05.02
2018/08	12	200,000	2,000,000	155,487	1,554,865	Employee stock option NT$ 1,770 thousand.	None	Zhu-Shang-Zi No. 1070023456 dated 2018.08.10
2018/11	12	200,000	2,000,000	155,525	1,555,240	Employee stock option NT$ 375 thousand.	None	Zhu-Shang-Zi No. 1070033914 dated 2018.11.20
2019/03	12	200,000	2,000,000	155,542	1,555,415	Employee stock option NT$ 175 thousand.	None	Zhu-Shang-Zi No. 1080008382 dated 2019.03.26
2019/05	12	200,000	2,000,000	155,668	1,556,678	Employee stock option NT$ 1,263 thousand.	None	Zhu-Shang-Zi No. 1080013703 dated 2019.05.16
2019/08	12	300,000	3,000,000	155,846	1,558,458	Employee stock option NT$ 1,780 thousand.	None	Zhu-Shang-Zi No. 1080025214 dated 2019.08.29
2019/11	12 29.5	300,000	3,000,000	156,026	1,560,258	Employee stock option NT$ 1,800 thousand.	None	Zhu-Shang-Zi No. 1080034465 dated 2019.11.29
2020/02	26	300,000	3,000,000	186,026	1,860,258	Cash capital increase NT$ 300,000 thousand.	None	Zhu-Shang-Zi No. 1090004056 dated 2020.02.15
2020/05	12 29.5	300,000	3,000,000	186,602	1,866,023	Employee stock option NT$ 5,765 thousand.	None	Zhu-Shang-Zi No. 1090014284 dated 2020.05.28
2020/08	12 29.5 39.5	300,000	3,000,000	186,717	1,867,168	Employee stock option NT$ 1,145 thousand.	None	Zhu-Shang-Zi No. 1090023930 dated 2020.08.21
2020/11	29.5 80	300,000	3,000,000	211,099	2,110,988	Employee stock option NT$ 3,820 thousand. Cash capital increase NT$ 240,000 thousand.	None	Zhu-Shang-Zi No. 1090034341 dated 2020.12.04
2021/03	12 29.5 36.75	300,000	3,000,000	211,461	2,114,608	Employee stock option NT$ 3,620 thousand.	None	Zhu-Shang-Zi No. 1100007592 dated 2021.03.19
2021/05	29.5 36.75 39.5	300,000	3,000,000	212,322	2,123,220	Employee stock option NT $8,613 thousand	None	Zhu-Shang-Zi No. 1100014382 dated 2021.05.21
2021/08	12 29.5 36.75	300,000	3,000,000	212,492	2,124,920	Employee stock option NT$1,700 thousand	None	Zhu-Shang-Zi No. 1100007592 dated 2021.03.19
2021/11	27.65 29.5 36.75	300,000	3,000,000	212,887	2,128,865	Employee stock option NT$ 3,945 thousand	None	Zhu-Shang-Zi No. 1100034627 dated 2021.11.25

Year /Month	Par value (NT$)	Authorized capital		Paid-in capital		Remarks		
		Shares	Amount	Shares	Amount	Source of capital	Capital increase by assets other than cash	Others
2022/03	27.65 29.5 36.75 27.65	300,000	3,000,000	213,125	2,131,248	Employee stock option NT $2,383 thousand	None	Zhu-Shang-Zi No. 1110008075 dated 2022.03.17
2022/05	29.5 36.75	300,000	3,000,000	213,478	2,134,786	Employee stock option NT$3,538 thousand	None	Zhu-Shang-Zi No. 1110015728 dated 2022.05.24
2022/07	220	500,000	5,000,000	220,478	2,204,786	Cash capital increase NT$70,000 thousand	None	Zhu-Shang-Zi No. 1110021079 dated 2022.7.8
2022/08	10	500,000	5,000,000	327,198	3.271.981	Capital increase from earnings NT$1,067,195 thousan	None	Zhu-Shang-Zi No. 1110025739dated 2022.08.11
2022/11	29.5 39.5 36.75 18.6 24.8	500,000	5,000,000	327,839	3,278,399	Employee stock option NT$6,418 thousand	None	Zhu-Shang-Zi No. 1110037315 dated 2022.11.21
2023/03	24.8	500,000	5,000,000	328,031	3,280,312	Employee stock option NT$1,913 thousand	None	Zhu-Shang-Zi No. 1120008044 dated 2023.03.15
2023/05	19.9 26.6 24.8	500,000	5,000,000	328,356	3,283,568	Employee stock option NT$3,256 thousand	None	Not yet changed the registration.

2. Type of shares

May1, 2023; unit: share

Share type	Authorized capital			Remarks
	Issued shares	Unissued shares	Total shares	
Common shares	328,356,800	171,643,200	500,000,000	

3. Information for shelf registration: None.

(II) Status of shareholders

May 1, 2023; unit: share

Structure / Item	Government agencies	Financial Institutions	Other Juridical Persons	Domestic Natural Persons	Foreign Institutions & Natural Persons	Total
Number of shareholders	-	4	98	48,051	132	48,285
Shareholding (shares)	-	129,644	89,773,999	218,148,028	20,305,129	328,356,800
Percentage	-	0.04%	27.34%	66.44%	6.18%	100%

(III) Distribution of shares

May 1, 2023; Unit: share

Class of shareholding	Number of shareholders	Shareholding	Percentage
1~999	16,867	3,224,018	0.98
1,000~5,000	24,129	50,177,284	15.28
5,001~10,000	3,580	26,410,571	8.04
10,001~15,000	1,268	16,035,497	4.88
15,001~20,000	692	12,322,650	3.75
20,001~30,000	667	16,608,707	5.06
30,001~40,000	313	10,884,898	3.31
40,001~50,000	202	9,152,578	2.79
50,001~100,000	315	21,620,634	6.58
100,001~200,000	145	20,144,741	6.14
200,001~400,000	54	14,779,539	4.5
400,001~600,000	24	12,006,552	3.66
600,001~800,000	7	4,858,450	1.48
800,001~1,000,000	2	1,748,791	0.53
Over 1,000,001	20	108,381,890	33.02
Total	48,285	328,356,800	100

Distribution of preferred shares: MVC did not issue preferred shares.

(IV) List of major shareholder

May 1, 2023; Unit: share

Shareholder's name	Shares	Percentage
Medigen Biotech Corp.	64,058,844	19.51%
Schweitzer Biotech Co., Ltd.	10,949,756	3.33%
Everspring Industry Co., Ltd.	4,880,337	1.49%
JP Morgan Chase Bank N.A., Taipei Branch in custody for Vanguard Emerging Markets Stock Index Fund, a Series of Vanguard International Equity Index Funds	3,248,930	0.99%
JP Morgan Chase Bank N.A., Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds	3,077,336	0.94%
Tzu-Heng Huang	2,247,000	0.68%
Jin-chuan Sun	1,829,376	0.56%
Jinzhun International Investment Development Co., Ltd.	1,718,653	0.52%
Xuchai Investment Co., Ltd.	1,655,624	0.50%
Hsiu-Chuan Chang	1,667,920	0.51%

(V) Share prices for the past two years, with company net worth per share, earnings per share, dividends per share, and related information

Unit: NT$

Item			2021	2022	As of Apr. 30, 2023(Note 8)
Market price per share (Note 1)	Highest		417.00	295.50	79.90
	Lowest		95.10	60.10	55.40
	Average		262.17	151.58	65.89
Net worth per share (Note 2)	Before distribution		21.94	15.34	14.49
	After distribution		21.94	(Note9)	(Note9)
Earnings per share	Weighted average shares (thousand shares)		212,020	323,477	327,876
	Before adjustment		6.65	(4.56)	(0.84)
	After adjustment (Note 3)		4.42	(4.56)	(0.84)
Dividends per share	Cash dividends		-	-	-
	Stock dividends	Stock dividends appropriated from earnings	5.00	-	-
		Stock dividends appropriated from capital surplus	-	-	-
	Accumulated unpaid dividends(Note 4)		-	-	-
Return on investment	Price/Earnings ratio (Note 5)		39.42	-	-
	Price/Dividend ratio (Note 6)		-	-	-
	Cash dividend yield(Note 7)		-	-	-

Note 1: Please identify the highest and the lowest market value of the common stock in various years, and calculate the average market price for each year based on the trading value and turnover for each year.

Note 2: Please fill in the information based on the number of issued shares at the end of the year and the distribution according to the resolution of the board of directors or the shareholders' meeting of the following year.

Note 3: If it is necessary to make retroactive adjustments due to the distribution of stock dividends, please identify the EPS before and after adjustment.

Note 4: If the terms and conditions under which the equity securities are issued provided that the stock dividend retained in the year may be accumulated until the year in which there are allocable earnings available, please disclose the retained stock dividend accumulated until the then year.

Note 5: Price/Earnings ratio = Average market price / Earnings per share

Note 6: Price/Dividend yield = Average market price / Cash dividend per share

Note 7: Cash dividend yields = Cash dividend per share / Average market price

Note 8: Please identify the net value per share and EPS available in the latest quarterly financial information audited (reviewed) by the independent auditor before the date of publication of the annual report. The financial information for the first quarter of 2023 was assessed by MVC. The information available until the date of publication of the annual report in the other sections shall also be identified.

Note 9: As of April 30, 2023, the distribution of 2022 earnings has not yet been approved by a resolution of the shareholders’ meeting.

(VI) Dividend policy and implementation status:

1. Dividend policy:

   MVC's dividends are distributed in form of cash or stocks (incl. stock dividends from earnings and additional paid-in capital). The earnings distribution proposal is proposed by the Board of Directors based on the operating performance, capital needs, and the earnings level of the year (less statutory deductions), and the earnings are distributed upon approval by the shareholders' meetings. Cash dividends shall account for more than 50% of the total dividends distributed. However, in circumstances of major capital expenditure or working capital requirement, dividends may be distributed in the form of stock only upon the approval of shareholders' meetings.

2. Implementation status: MVC did not distribute any dividends.

(VII) Effect on the operating performance and earnings per share of the distribution of stock dividends proposed or adopted in the most recent shareholders' meeting: MVC did not distribute any stock dividends in this year.

(VIII) Remuneration of Employees, Directors, and Supervisors:

1. Percentage or range of the remuneration of employees, Directors, and Supervisors as set forth in the Articles of Incorporation:

   MVC's Articles of Incorporation stipulated that if it has earnings, it shall set aside no less than 1% of the balance as remuneration to the employees and no more than 1% of the balance as remuneration to directors. When there are accumulated losses, MVC shall offset the loss before remuneration distribution.

2. The basis for estimating the amount of employee and director remunerations, for calculating the number of shares to be distributed as employee remuneration, and the accounting treatment of the discrepancy, if any, between the actual distributed amount and the estimated figure, for the current period: If MVC makes a profit in the year, it shall allocate no less than 1% as employee remuneration and no more than 1% as director's remuneration. If the estimated number of accounts is different from the resolution of the board of directors, it will be handled according to the changes in accounting estimates, and the profit and loss of the following year will be adjusted.
3. Remuneration distribution proposals adopted in Board of Directors Meeting: None.
4. If there is any discrepancy between the actual and recognized distribution of employee, director, and supervisor remuneration for the previous year (incl. the number of shares, monetary amount, and stock price, of the shares distributed), please provide the difference, cause, and treatment: None.

(IX) Buy-back of treasury stock: None.

II. Corporate Bonds (Incl. Overseas Corporate Bonds):

(I) Status of Corporate bond：

Type of Bond	1st Domestic Unsecured Convertible Bond
Issuing Date	May 9,2022
Denomination	NT100,000
Place of Issuing and Trading Domestic	Domestic
Offering Price	Issued at 100.3% of par value
Total Amount	NT$1,750,000,000

Type of Bond		1st Domestic Unsecured Convertible Bond
Coupon rate		0%
Tenor and Maturity Date		3 Years; Expiry date: May 9,2025
Guarantor		Not Applicable
Trustee		Taishin International Bank Co., Ltd.
Underwriter		Fubon Financial Holding Co., Ltd.
Legal Counsel		Far East Law Offices Mr. Qiu Ya-wen Lawyer
CPA		PricewaterhouseCoopers Taiwan Ms. Lin, Ya-Hui ,CPA and Ms. Juanlu, Man-Yu, CPA
Repayment		According to Article 5 of these Regulations, the rate of this convertible bond is 0%, so there is no need to determine the date and method of interest payment. Unless the holders of the convertible bonds (hereinafter referred to as "creditors") convert into ordinary shares of MVC in accordance with Article 10 of these Regulations or exercise the right to sell back in accordance with Article 19 of these Regulations, or MVC has withdrawn it in advance in accordance with Article 18 of these Regulations, and it has been bought back and cancelled by the business office of the securities firm. Within 10 business days after the expiry date of the convertible bond, MVC will repay the convertible bond held by the holders in cash at one time according to the denomination of the bonds. If the aforesaid date falls on the day that the Taipei Stock Exchange Market is closed for business, it will be postponed to the next business day.
Outstanding Loan		NT$1,750,000,000
Redemption or Early Repayment Clause		Please refer to the Procedures for Issuance and Conversion of 1st Domestic Unsecured Convertible Bond in 2022.
Covenants		Not Applicable.
Credit Rating		Not Applicable.
Other Rights of Bondholders	Amount of Converted or Exchanged Common Shares, ADRs, or Other Securities	As of the date of publication of the annual report, there are no ordinary shares that have been converted.
	Conversion Right	Please refer to the Procedures for Issuance and Conversion of 1st Domestic Unsecured Convertible Bond in 2022.
Dilution Effect and Other Adverse Effects on Existing Shareholders		As of April 30,2023, the outstanding balance was $1,750,000 thousand, calculated at the current conversion price of $187.1, if all converted into common shares, it must be issued 9,353,287 shares, accounting for 2.85% of the total issued shares (9,353,287/328,356,800=2.85%)shall have no

Type of Bond	1st Domestic Unsecured Convertible Bond
	significant impact on shareholders' equity.
Custodian	Not Applicable.

(II) Corporate bonds due within one year：None.

(III) Convertible Bonds：

Type of Bond		1st Domestic Unsecured Convertible Corporate Bond	
Item		2022	As of April 30,2023
Market price of the convertible bond (Note2)	High	100.45	93.95
	Low	86.75	90.00
	Average	92.97	92.20
Conversion Price		187.10	
Issuing Date and Conversion Price		May 9,2022 NT$278	
Conversion methods		Issuing of new stocks	

(IV) Exchangeable Bonds：None.

(V) Shelf Registration for Issuing Bonds：None.

(VI) Corporate Bonds with Warrants：None.

(VII) Status of any private placement of corporate bonds during the 3 most recent fiscal years up to the prospectus publication date：None.

III. Preferred Shares: None.

IV. Global Depository Receipts (GDRs): None.

V. Employee Stock Options

(I) Unexpired employee stock option issued by MVC

April 30, 2023

<table>
<tr><td rowspan="2">Type of stock option</td><td colspan="2">2017</td><td colspan="2">2018</td><td rowspan="2">2021</td></tr>
<tr><td>1st</td><td>2nd</td><td>1st</td><td>2nd</td></tr>
<tr><td>Approval date</td><td colspan="2">2017.05.18
(2,500,000 units in total)</td><td colspan="2">2018.08.21
(3,500,000 units in total)</td><td>110.03.22</td></tr>
<tr><td>Issue date</td><td>106.07.19</td><td>107.04.18</td><td>107.11.5</td><td>108.8.13</td><td>110.03.23</td></tr>
<tr><td>Duration</td><td colspan="5">6 years</td></tr>
<tr><td>Units issued</td><td>2,135,000</td><td>365,000</td><td>3,035,000</td><td>465,000</td><td>2,500,000</td></tr>
<tr><td>Shares of stock options to be issued as a percentage of outstanding shares</td><td>0.65%</td><td>0.11%</td><td>0.92%</td><td>0.14%</td><td>0.76%</td></tr>
<tr><td>Conversion measures</td><td colspan="5">Subscribers may exercise their rights to subscription, as per the following schedule, in accordance with regulations, two years after they obtained the stock options. Subscription period is 6 years, and the options may not be transferred.</td></tr>
<tr><td></td><td colspan="5">Issuance of new shares</td></tr>
<tr><td rowspan="4">Conditional conversion periods and percentage</td><td colspan="2">Schedule</td><td colspan="3">Cumulative maximum exercisable stock option percentage</td></tr>
<tr><td colspan="2">After 2 full years
(or starting of the third year)</td><td colspan="3">50%</td></tr>
<tr><td colspan="2">After 3 years</td><td colspan="3">75%</td></tr>
<tr><td colspan="2">After 4 years</td><td colspan="3">100%</td></tr>
<tr><td>Converted shares</td><td>1,580,000</td><td>365,000</td><td>2,279,000</td><td>195,000</td><td>-</td></tr>
<tr><td>Exercised amount</td><td>46,422,000</td><td>13,450,000</td><td>78,502,420</td><td>4,803,500</td><td>-</td></tr>
<tr><td>Number of shares yet to be converted</td><td>-</td><td>-</td><td>236,000</td><td>166,250</td><td>2,293,000</td></tr>
<tr><td>Exercise price</td><td>-</td><td>-</td><td>24.8</td><td>18.6</td><td>152.8</td></tr>
<tr><td>Unexercised shares as a percentage of total issued shares</td><td>-</td><td>-</td><td>0.07%</td><td>0.05%</td><td>0.70%</td></tr>
<tr><td>Impact on shareholder equity</td><td colspan="5">It is to motivate employees’ long-term service willingness and enhance team cohesion, so as to create benefits for MVC and shareholders, and benefit shareholders’ equity.</td></tr>
</table>

(II) List of executives receiving employee stock options and the top ten employees with stock options:

April 30, 2023 unit: share

<table>
<tr><th colspan="2" rowspan="2">Title</th><th rowspan="2">Name</th><th rowspan="2">No. of stock option</th><th rowspan="2">Stock options as a percentage of shares issued</th><th colspan="4">Exercised</th><th colspan="4">Unexercised</th></tr>
<tr><th>No. of shares converted</th><th>Exercised price</th><th>Amount</th><th>Converted shares as a percentage of shares issued (%)</th><th>No. of stock option</th><th>Exercised price</th><th>Amount</th><th>Converted shares as a percentage of shares issued (%)</th></tr>
<tr><td rowspan="5">Managerial officer</td><td>President</td><td>Tsan-Jian Chen</td><td rowspan="5">1,790,000</td><td rowspan="5">0.55%</td><td rowspan="5">750,000</td><td rowspan="5">12.00
29.50
39.50
36.75
19.90
24.80
26.60</td><td rowspan="5">24,301,250</td><td rowspan="5">0.23%</td><td rowspan="5">1,040,000</td><td rowspan="5">18.60
24.80
152.80</td><td rowspan="5">130,008,000</td><td rowspan="5">0.32%</td></tr>
<tr><td>Executive Vice President</td><td>Ssu-Hsien Li</td></tr>
<tr><td>Vice President</td><td>Ji-aen Lien</td></tr>
<tr><td>Plant Operation Director</td><td>Wei-Cheng Lien</td></tr>
<tr><td>Assistant Vice President</td><td>Yu-Ping Yang</td></tr>
<tr><td rowspan="10">Employee</td><td>Senior Manager</td><td>Hao-Yuan Cheng</td><td rowspan="10">1,575,000</td><td rowspan="10">0.48%</td><td rowspan="10">1,295,000</td><td rowspan="10">12.00
29.50
39.50
36.75
27.65
18.60
24.80</td><td rowspan="10">32,336,215</td><td rowspan="10">0.39%</td><td rowspan="10">280,000</td><td rowspan="10">18.60
24.80
152.80</td><td rowspan="10">38,211,000</td><td rowspan="10">0.09%</td></tr>
<tr><td>Senior Manager</td><td>Qing-An Wu</td></tr>
<tr><td>Senior Manager</td><td>Cheng-Yang Chen</td></tr>
<tr><td>Manager</td><td>Chung-Nan Sun</td></tr>
<tr><td>Manager</td><td>Hsiang-Chi Li</td></tr>
<tr><td>Manager</td><td>Mei-yun Lin</td></tr>
<tr><td>Manager</td><td>He-Ru Hsieh</td></tr>
<tr><td>Project Manager</td><td>Erh-Fang Hsieh</td></tr>
<tr><td>Deputy Manager</td><td>Chien-Lung Wu</td></tr>
<tr><td>Deputy Manager</td><td>Fen-Lan Lin</td></tr>
</table>

VI. Employee Restricted Stock: None.

VII. Status of New Shares Issuance in Connection with Mergers and Acquisitions: None.

VIII. Financing Plans and Implementation:

The 2022 cash capital increase and 1st Domestic Unsecured Convertible Corporate Bond capital increase plan is described as follows.

1. Content of the plan

(1) The competent authority's approval date and the document number: Jin-Guan-Zheng-Fa-Zi No. 1110335738 and 11103357381 dated 2022.4.12

(2) Total capital required for the plan: NT$3,295,250 thousand.

(3) Source of capital:

a. Cash capital increase 7,000 thousand shares, issued at NT$ 220 per share, with a total of NT$ 1,540,000 thousand.

b. Issued 1st Domestic Unsecured Convertible Bond. The issuance period is three years. The denomination of each piece is NT$100 thousand and the coupon rate 0%. The total number of issuances is 17,500, and the total denomination is $1,750,000 thousand，issued at 100.3% of par value, with total issued amount $1,755,250 thousand.

(4) Progress of the plan and capital utilization:

Unit: NT$ thousand

Plan	Proposed Completion date	Total funds required	Proposed progress of capital utilization	
			2022	
			Q2	Q3
Enhancement of working capital	2022Q3	3,295,250	1,755,250	1,540,000
Total		3,295,250	1,755,250	1,540,000

2. Implementation status and benefit analysis:

(1)Status of Implementation：

Plan		Implementation status		Reasons and improvement plans for ahead or behind the project schedule	
Enhancement of working capital	Development of COVID-19 vaccine	Amount used	Budget	3,295,250	The implementation progress has been delayed mainly due to the impact of the unblinding results of the vaccine trial in conjunction with the World Health Organization (WHO) and the progress of the subsequent vaccine procurement.
			Actual	917,251	
		Achievement rate (%)	Budget	100	
			Actual	28	

(2) Benefit Analysis：

Item		Before Capital increase	After Capital increase	
		Dec.31,2021	CB not Converted	CB fully Converted
Financial structure (%)	Debt ratio	11.76	27.04	7.07
	Ratio of long-term capital to property, plant and equipment	393.85	678.20	678.20
Solvency (%)	Current ratio	608.07	1,407.18	1,407.18
	Quick ratio	807.58	1,606.68	1,606.68

As shown in the table above, after the completion of the fundraising plan, MVC will be able to increase the proportion of its capital and reduce its dependence on financial institutions, and will have more flexibility in the use of capital. After the completion of the capital raising, MVC's current ratio, quick ratio, and long-term capital to property, plant, and equipment ratio will be significantly increased; and the debt ratio will be significantly reduced to 7.07% after the conversion of the bonds with the right of the bondholders to convert the bonds into common shares of MVC. This will have a positive impact on MVC's overall operational development and financial structure, enhance its overall competitiveness in the market and contribute to MVC's long-term development.

3. Changes in the content of plans, source of capital, utilization, and benefits, reasons for change, and report to the shareholders' meeting:

(1) Changes in the content of plans: Unit: NT$ thousand

Item	Before the change	After the change	The difference
Enhancement of working capital	3,295,250	3,295,250	Note

Note：This change in plan is due to the reallocation of a portion of the funds previously reserved for the purchase of materials for the production of COVID-19 Vaccine to the purchase of EV71 and QIV and the production of plant working capital under the enhancement working capital.

(2) Source of capital and utilization:

a. Cash capital increase 7,000 thousand shares, issued at NT$ 220 per share, with a total of NT$ 1,540,000 thousand.

b. Issued 1st Domestic Unsecured Convertible Bond. The issuance period is three years. The denomination of each piece is NT$100 thousand and the coupon rate 0%. The total number of issuances is 17,500, and the total denomination is $1,750,000 thousand，issued at 100.3% of par value, with total issued amount $1,755,250 thousand.

Unit: NT$ thousand

Item	Scheduled completion date	Total funds required	Proposed progress of capital utilization								
			2022			2023				2024	
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Enhancement of working capital	Q2,2024	3,295,250	311,109	432,146	57,572	116,424	250,443	100,392	93,872	96,402	1,836,890
Total		3,295,250	311,109	432,146	57,572	116,424	250,443	100,392	93,872	96,402	1,836,890

(3) Reasons for change:

MVC's original plan to issue new shares and the first domestic unsecured convertible bonds in 2022 was to use the working capital for the production of the vaccine material for the COVID-19 Vaccine. In order to make proper use of the unused funds, we intend to use $622,749 thousand of the unused funds for the purchase and production of enterovirus 71 vaccine (EV71) and quadrivalent influenza vaccine (QIV), which are necessary for the working capital of the plant.

(4) Benefits after change:

MVC received approval from the Taiwan Food and Drug Administration of the Ministry of Health and Welfare for the registration of quadrivalent influenza vaccine and enterovirus 71 vaccine on March 8, 2023 and April 12, 2023, respectively, and is expected to start sales in Q3 2023. This should have a positive impact on MVC's overall operational development in the future; the increase in working capital will strengthen MVC's financial structure.

(5) The date of the shareholders' meeting for the change of plan: Expected to be submitted to the shareholders' meeting for recognition on June 29, 2023.

4. The Date of the Entry of the Market Observation Post System:

MVC's Board of Directors resolved on May 5, 2023, and released significant information on that date; in addition, MVC shall enter the use of capital funds in the specified MOPS information reporting website within 10 days after the end of each quarter under regulations.

Chapter 5. Operational Highlights

I. Business Activities:

(I) Scope of business

(1) Scope of principle businesses

MVC is a biotech and new pharmaceutical company approved by the Industrial Development Bureau, Ministry of Economic Affair pursuant to the “Act for the Development of Biotech and New Pharmaceuticals Industry.” Its principal businesses include the R&D, manufacturing, and sales of “biological products” for human use (including vaccines and genetically modified protein drugs). The scope of business is as follows:

IG01010 Biotechnology Services
F401010 International Trade
C802041 Manufacture of Drugs and Medicines
F108021 Wholesale of Western Pharmaceutical
F108031 Wholesale of Medical Devices
CF01011 Medical Devices Manufacturing

MVC conducts R&D, designs, develops, manufactures, and sells the following products:

1. Cell-cultured vaccines:
   Influenza vaccines, enterovirus 71 vaccines, dengue vaccines, and other cell-cultured vaccines.
2. Other biological products:
   Biosimilars (anti-RSV monoclonal antibody (Palivizumab), and Fabrazyme injection, etc.) and the development and manufacturing of cell-culture for cell therapy-use.

(2) Major products and their proportion of revenue

Unit: NT$ thousand

Major products	2022	
	Sales revenue	Proportion of revenue (%)
COVID-19 vaccines	365,042	100
Total	365,042	100

(3) Current products (services):

1. "MVC" Enterovirus A71 Vaccine (Envacgen):
   The "MVC" Enterovirus A71 vaccine obtained approval from the Taiwan Food and Drug Administration (TFDA) on April 12th, 2023, through the registration verification process for new drugs. By the end of April, the licensing process was completed, and mass production was initiated. It is expected to be available in the domestic market starting in the third quarter. The Envacgen EV71 vaccine is currently the only Enterovirus vaccine in Taiwan that has been approved through

the regular approval process, rather than the accelerated approval mechanism. In the Phase III clinical trials conducted in multiple countries and centers, the MVC EV71 vaccine achieved a real-world vaccine efficacy of 100% (all confirmed cases occurred in the placebo group, with zero infections among the vaccinated infants and toddlers during the follow-up period). This data has been published in the globally recognized journal, The Lancet. MVC is also currently the only domestic developer with self-owned production capacity for Enterovirus vaccines. After obtaining the domestic regulatory approval, they plan to expand their market presence in Southeast Asia and other target countries through the registration and verification of their vaccine products.

EV71 is prevalent in hot and humid regions, and besides Taiwan, it is also a long-standing endemic disease in Southeast Asia and China. Currently, only three vaccine manufacturers in China have products on the market, and two vaccine manufacturers in Taiwan are preparing to launch their products. Regarding the evaluation of vaccine licenses in Taiwan, one approach is to apply for accelerated approval from the TFDA based on neutralizing antibody titers (which still requires confirmatory tests to demonstrate its clinical efficacy). The other evaluation approach is similar to the one adopted by the MVC vaccine, which involves submitting comprehensive Phase III clinical efficacy data for domestic regulatory approval.

The Envacgen EV71 vaccine is a technology transfer from the National Health Research Institutes in Taiwan. After acquiring the research results from the first phase of clinical trials in adults through the technology transfer, the MVC team immediately began the second phase of clinical validation, focusing on the safety of infants and children, dose exploration, and cross-protection against subtypes. They selected the optimized dosage of 2.5μg and the appropriate interval for administration. MVC also vertically integrated the entire production process, from drug substance to vaccine finished products, and successfully developed commercial-scale production capacity in MVC own factory in Zhubei. The process quality has also obtained the Taiwan Ministry of Health and Welfare's PIC/S GMP certification, making MVC the first domestic vaccine manufacturer capable of full-line production of Enterovirus vaccines, truly implementing local research, production, international clinical validation, and marketing.

Infants and young children are the population with the highest risk of severe outcomes and death from Enterovirus. After completing the second phase of clinical trials in Taiwan, MVC evaluated the global prevalence of Enterovirus, market potential, and the quality of clinical trial execution. MVC ultimately collaborated with the National Institute of Hygiene and Epidemiology (NIHE) in Vietnam for a multi-country, multi-center Phase III clinical trial. The EV71 vaccine developed by MVC is currently the only one globally that has obtained clinical efficacy data for infants aged 2 to 6 months. In the Phase III clinical trial of MVC EV71 involving multiple countries and centers, clinical data from three age groups (2-6 months, 6 months to 2 years, and 2 years to less than 6 years) verified a "vaccine efficacy" of 100% (all confirmed cases occurred in the placebo group, with zero infections among the vaccinated infants during the follow-up period). Statistical Poisson regression analysis showed an efficacy rate as high as 96.8%. Moreover, during the Phase III clinical trial of the MVC EV71 vaccine, confirmed cases covered regional endemic subtypes B5 and C4, demonstrating that the MVC vaccine provides 100% cross-protection against prevalent subtypes in the real world.

The results of the Phase III clinical trial of the MVC EV71 vaccine have been published in The Lancet, one of the highest-impact medical journals globally (Impact Factor: 202.731). It has also received special invited commentaries and recommendations from external experts in The Lancet. The citation from The Lancet specifically emphasizes the importance of the MVC EV71 vaccine for preventing infants aged 2 to 6 months and the long-term immunological benefits of administering the third booster dose.

After obtaining official regulatory approval for the domestic Enterovirus vaccine based on comprehensive data, MVC will continue to expand its presence in overseas markets. With excellent Phase III clinical trial efficacy data and regulatory approval in Taiwan, MVC will submit applications for regulatory approval in countries where EV71 is prevalent (such as Vietnam, Thailand, Malaysia, etc.) and specific target markets.

2. MVC COVID-19 Vaccine:

   The MVC COVID-19 Vaccine is a recombinant subunit vaccine developed by MVC. The trimeric pre-fusion form of the S-2P spike protein antigen, which was designed based on technology transferred from the US National Institutes of Health (US NIH), has been utilized in this vaccine. MVC successfully established stable clone and developed the antigen production process. The formulation of the vaccine was established after evaluating various adjuvant combinations with different mechanisms of action. Ultimately, CpG1018 DNA adjuvant was selected, as it effectively induces Th1 immune responses. The immunogenicity formulation was determined and optimal dosage selection was made through animal testing and Phase 1 clinical trials. Subsequently, pivotal clinical trials were conducted to obtain Emergency Use Authorization (EUA) for Taiwan market approval.

   The MVC COVID-19 Vaccine received approval for Emergency Use Authorization from the Ministry of Health and Welfare on July 19, 2021. And, it was also selected as one of the vaccines for the World Health Organization's Solidarity Trial Vaccines (STV) trial in October 2021. The STV, led and funded by the WHO, conducted Phase 3 clinical trials with a traditional placebo-controlled design in the Philippines, Colombia, and the Republic of Mali to evaluate vaccine efficacy. In addition, the MVC COVID-19 Vaccine received sponsorship from the Coalition for Epidemic Preparedness Innovations (CEPI), an international organization, to conduct a booster immunization study combining the MVC vaccine with mRNA vaccines and adenoviral vector vaccines.

Regarding international regulatory scrutiny and certification, the MVC COVID-19 Vaccine is currently undergoing evaluation for provisional approval by the Therapeutic Goods Administration (TGA) of Australia. The TGA will also serve as a Foundational National Regulatory Authority (NRA) to assist the MVC COVID-19 Vaccine in obtaining World Health Organization Emergency Use Listing (WHO EUL) certification.

3. MVC FLU Quadrivalent:

The MVC quadrivalent influenza vaccine received NDA approval from the Taiwan Food and Drug Administration of the Ministry of Health and Welfare in March of 2023. It is suitable for active immunization of children aged 3 and above, as well as adults, to prevent seasonal influenza caused by two types of influenza A viruses and two types of influenza B viruses covered by this vaccine.

MVC entered into a collaboration with GC Biopharma, a leading vaccine manufacturer in South Korea, for the development of a seasonal influenza vaccine. The collaboration was initiated through a contract signed in April 2018. The MVC FLU Quadrivalent is supplied to the market as a finished product or in bulk packaging through our partnership as the authorized agent of GC Biopharma. GC Biopharma is the largest influenza vaccine supplier in South Korea and currently serves as a major supplier of seasonal influenza vaccines to the Pan American Health Organization (PAHO) and the United Nations Children's Fund (UNICEF). GC Biopharma has supplied influenza vaccines to 63 countries worldwide, with a cumulative sales volume of over 300 million doses. Furthermore, GC Biopharma is the second quadrivalent influenza vaccine manufacturer to be prequalified by the World Health Organization (WHO), making it one of the highest-quality influenza vaccine producers globally.

During the period of regulatory inspection and registration for this development project, the world has been facing the COVID-19 pandemic, which has posed significant challenges to the stable supply of various vaccines and the congestion in international vaccine cold chain transportation. For "seasonal" influenza vaccines, which have high demand and require concentrated supply, the impact has been even more substantial. Therefore, in accordance with the original plan outlined in the contract between the two parties, this development project adopts the mode of packaging the MVC vaccine in our own brand's bulk form to ensure stable supply time and supply quality. The project has successfully completed various procedures, including PIC/S GMP inspection and drug registration, and obtained the drug license in March 2023. This year, we will also participate in the public tender for government-funded vaccines to supply the domestic market.

(4) Future product and services development plans

1. Multivalent Enterovirus Vaccine:

MVC's enterovirus type 71 (EV-A71) vaccine is based on the whole-virus inactivation technology and has demonstrated excellent test results. Currently, in addition to the EV-A71 virus, we have also conducted antigen screening and evaluation for the highly pathogenic D68 type and the highly contagious coxsackievirus A16 (CA16). The antigen platforms used for screening include the whole-virus inactivation platform and the Virus-Like Particle (VLP) platform. In the future, we will evaluate the successful foundation of the existing EV-A71 vaccine and establish a bivalent enterovirus vaccine or a multivalent enterovirus vaccine to further enhance competitiveness and expand the market.

2. COVID-19 vaccine: Next-Generation Vaccine Development

The World Health Organization (WHO) declared the end of the global public health emergency for COVID-19 in May of 2023. However, the end of the emergency does not mean the end of COVID-19 as a global health threat. Variants of the COVID-19 virus continue to emerge, bringing about high infectivity and the risk of severe illness and death. The continuous development of updated variants, the screening of broad-spectrum vaccines, and the evaluation of new immunization approaches are still ongoing directions for the development of COVID-19 vaccines. Our MVC COVID-19 vaccine has established an excellent foundation in prototype strain development and is currently undergoing regulatory review by the Australian Therapeutic Goods Administration (TGA). Subsequently, we will assess and develop next-generation COVID-19 vaccines based on guidance from international organizations such as the WHO.

3. Other Vaccine Product R and D:

In addition to the development of enterovirus and COVID-19 vaccines, MVC is also engaged in research and development projects with the U.S. National Institutes of Health (NIH) for dengue fever chimeric virus vaccines and respiratory syncytial virus (RSV). These projects are among the medium- to long-term options for the development of our product pipeline. The layout and planning of various research and development product lines will be evaluated based on MVC's development stage and resource status.

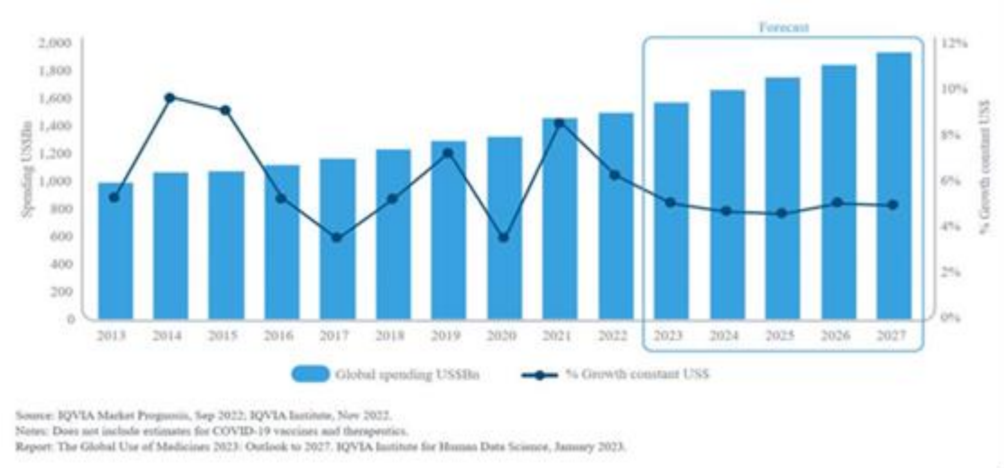
(II) Industry overview

(1) Industry status and development

1. Global Pharmaceutical Market Development

Benefiting from population growth, the aging population trend, and advancements in medical technology, the global pharmaceutical market demand continues to steadily rise. According to a report by IQVIA in January 2023, it is projected that global pharmaceutical spending (excluding COVID-19 vaccine and treatment expenses) will grow at a compound annual growth rate (CAGR) of 3-6% from 2023 to 2027, reaching a scale of nearly $1.9 trillion by 2027.

Global Pharmaceutical Spending, 2023~2027

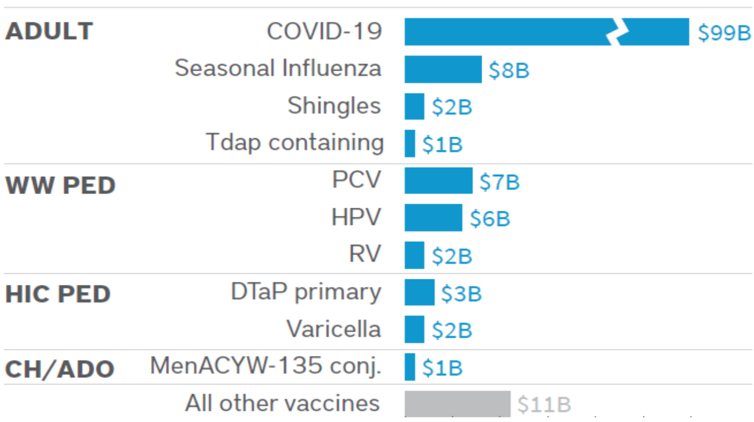


Source: Fortune IQVIA Institute (2023/01).

2. Global vaccine market Trends

Looking at individual products, referring to the WHO 2022 Global Vaccine Market Report, it is estimated that around 10.8 billion doses of COVID-19 vaccines were shipped in 2021, with a market value of approximately $99 billion. As for other key vaccine products such as seasonal influenza, pneumococcal conjugate vaccine (PCV), human papillomavirus (HPV) vaccine, rotavirus vaccine (RV), and others, their market growth continues to outperform the overall pharmaceutical market. In the vaccine market, where products have long life cycles and there are limited new vaccine introductions, the launch of novel vaccines will still be a driving force for market growth.

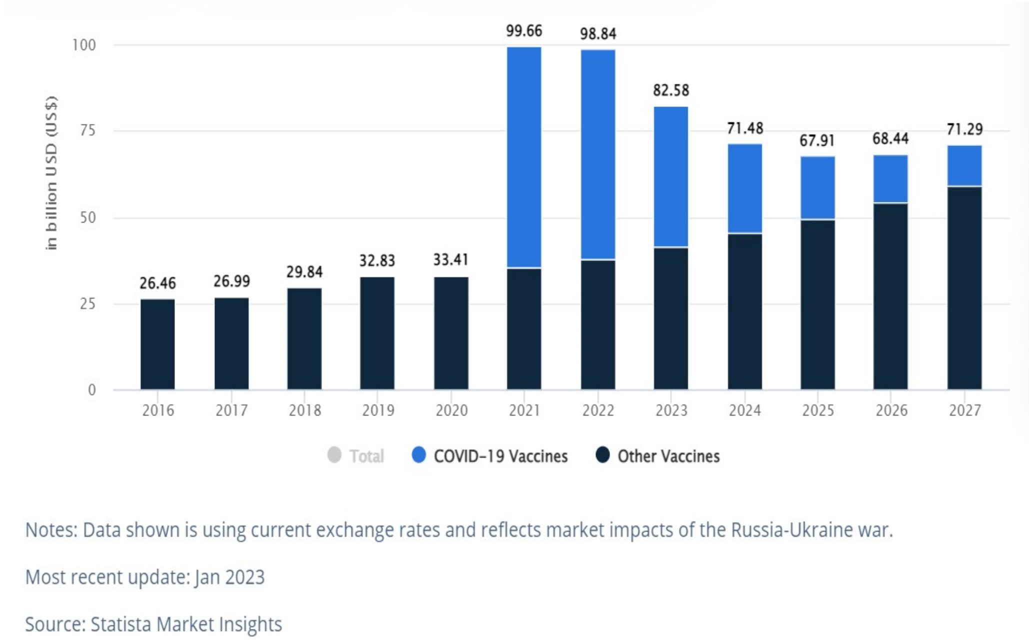
Vaccines by value ($), 2021



Source：WHO 2022 Global Vaccine Market Report, 2022/11

According to estimates from Statista, the global vaccine market was approximately $98.84 billion in 2022. Among that, the sales of COVID-19 vaccines reached $60.99 billion, despite a 4.5% decline compared to 2021. However, the figures are still remarkable. As European and American countries, as well as the WHO, gradually lift the state of emergency for COVID-19, the demand for COVID-19 vaccines will transition from massive government procurement in response to public health emergencies to regular seasonal vaccination needs and private demand. It is projected that the compound annual growth rate (CAGR) of the COVID-19 vaccine market from 2023 to 2027 will be -26.3%.

The global vaccine market size from 2016 to 2027.

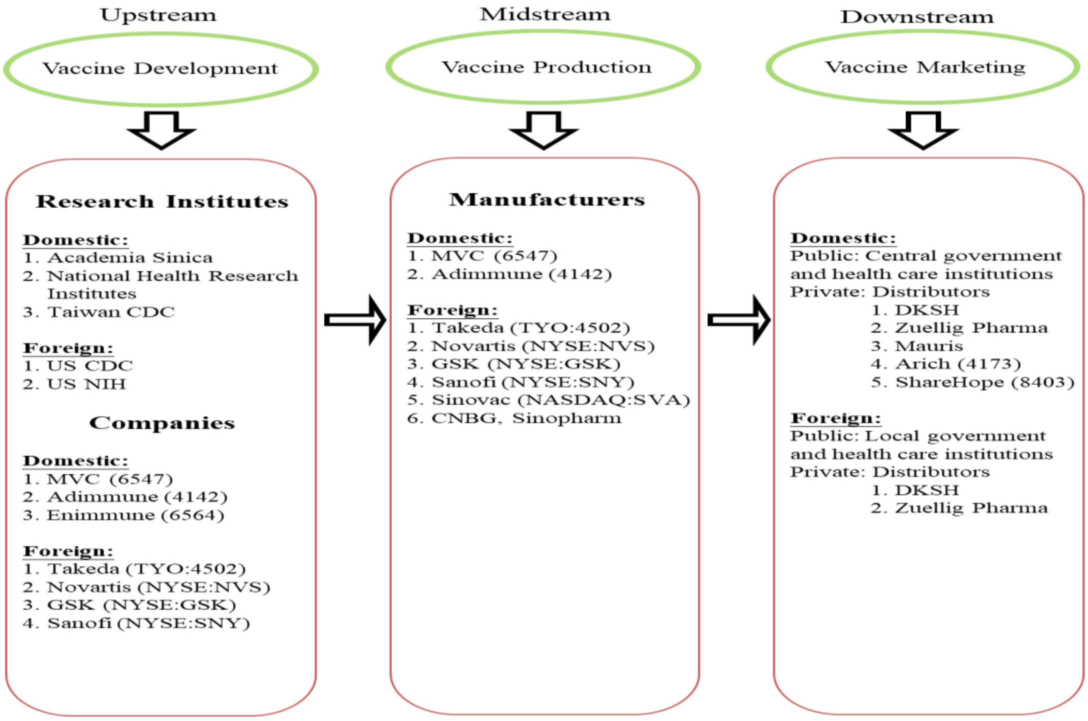


Source：Statista (2023/01)

In contrast to the reduction in the size of the COVID-19 vaccine market, the market size of other vaccine products is expected to continue steady growth. From 2023 to 2027, the compound annual growth rate (CAGR) for vaccine products other than COVID-19 is projected to be 9.33%. The introduction of new vaccine products will serve as a major driver for market growth.

(2) Relationship amongst upstream, midstream, and downstream of the industry

MVC's principal businesses include the R&D, manufacturing, and sales of "biological products" for human use (including vaccines and genetically modified protein drugs). The Relationship amongst upstream, midstream, and downstream of the industry in which it is located is illustrated as follows:



Unlike the general technology industry, the biotech and new pharmaceutical industry has a high threshold and long life cycle. PhRMA Org (U.S.A.) evaluates that the life cycles of new drugs are around 10 to 20 years, and compared to new drugs, vaccines have a longer life cycle as they require higher biosafety level, technology threshold, and product placement cost, the vaccine products tend to have a longer life cycle. Furthermore, unlike other drugs, vaccines target the vast healthy population. Thus, countries around the world impose strict regulations on the production quality, clinical verification, and safety monitoring of the vaccines, extending their R&D cycle to over 10 years.

In terms of business model, MVC vaccines are selected vaccine candidates that have commercial potential from domestic and foreign research institutions, and technology transfers. For example, the co-developed S-2P pike protein vaccine and dengue vaccine with US NIH, and the co-developed EV71 vaccine with National Health

Research Institutes. After taking over the early research results of vaccine studies, MVC carries out the mass production process development of antigen, clinical trial verification, filling and packaging, drug license application, marketing, and sales. The business model adopted by MVC not only decreases the risk of failure in the early R&D stages but also launches the products to the target market in the most efficient way.

In addition, the "Contract Development and Manufacturing Organization (CDMO)" can quickly meet the large demand for epidemic prevention at home and abroad. Taking the COVID-19 vaccine as an example, to meet the delivery timeline required by the government, we entrusted the vaccine manufacturing process to CDMO in stages. The upstream part entrusted EirGenix Inc. to carry out some antigen production; the downstream part entrusted TTY Biopharm to carry out multi-dose vial filling operations to rapidly expand capacity and increase overall production.

(3) Development trends of products

1. Enterovirus A71 (EV71) Vaccine:

The transmission of Enterovirus 71 (EV71) is global, but it is more common in East Asia and Southeast Asia due to its suitability for survival and transmission in warm and humid environments. According to data from the CDC, children under the age of five are at high risk of severe illness, especially infants under six months old, who are at high risk of severe complications and death. The fatality rate for severe cases ranges from 1.3% to 33.3%, posing a serious threat to the safety of tens of millions of newborns in the region each year.

Currently, there are only five pharmaceutical companies in Taiwan and China that have obtained regulatory approval to market EV71 vaccines. Although three Chinese manufacturers have obtained regulatory approval in China, their EV71 vaccines are only intended for use in children aged 6 months to 6 years, without coverage for the high-risk population of infants under 6 months old. Additionally, Taiwan's regulations prohibit the importation of vaccines from China, creating a void in the domestic supply.

In the Taiwanese market, Adimmune obtained accelerated approval in January of 2023 based on neutralizing antibody indicators (but still requires Phase III clinical trials to demonstrate its clinical efficacy), while MVC obtained regular vaccine formal approval in April of 2023 based on complete Phase III vaccine efficacy data. The two products differ in formulation, dosage, vaccination schedule, and empirical data, but both vaccines are scheduled to be launched in July of 2023. The comparison table of the two manufacturers' product specifications is as follows:

Comparison table of two EV71 vaccine

Product Name	Envacgen	EnVAX-A71
Antigen Contain	Antigen: 2.5 µg, $AlPO_4$	Antigen: 1 µg(1.5U), $Al(OH)_3$
Indications	Indicated for active immunization for the prevention of disease caused by Enterovirus 71 in children aged 2 months to less than 6 years of age.	EnVAX-A71 as the active immunization to prevent disease caused by EV71 in children aged from 2 months to less than 6 years demonstrates a favorable risk benefit profile to recommend accelerated approval. The accelerated approval is based on clinical immunogenicity data and safety data. Further efficacy data in the pivotal EV-BR1701 study is required for regular approval.
Usage	2mo~2yr：2 dose + 1 booster。 2yr~6yr ：2 dose The interval between the first dose and the second dose is 56 days, and the booster dose is inoculated one year after the first dose.	2 doses, 28 days between the first dose and the second doseThe need for booster immunization with this vaccine has not been established.
Vaccine Efficacy sample size	96.8% N=3,061	unknown enrolling
Seroprotection Rate Day 28 after 2nd dose	99.52 % (sample size: 2,087	98.31% (sample size：296 人)
Cross Protection (reaction)	Cross protect to B5、C4 strain	Only serological data, phase III ongoing
Immune Persistence	Over 5 years	Only 1 yr data
Manufacturing Sites	Whole process in MVC plant	Antigen: NHRI, Fill and finish: Adimmune
Estimated Time to Market	Q3 2023 (July)	Q3 2023 (July)

Source: Generic Drug Certificates for both products

< Competitive Advantages of the MVC Enterovirus 71 Vaccine (Envacgen)>

a. The only globally developed vaccine with over 3,000 participants in multinational and multicenter clinical trials, providing evidence of vaccine efficacy and cross-protection against circulating subtypes in the ASEAN region.

b. The results of the Phase III clinical trials of the MVC EV71 vaccine have been peer-reviewed and published in "The Lancet" journal, which is one of the highest-impact medical journals globally (Impact Factor: 202.731). The publication has received special commentary and recommendations from external experts invited by "The Lancet." The citation emphasizes the importance of the MVC EV71 vaccine for the prevention of infants under 2-6 months old and the long-term immune durability of the vaccine with the addition of a third dose.

c. The only vaccine globally that follows a 2+1 dosing schedule (2 primary doses plus 1 booster dose) specifically designed for high-risk infants under 2 years old, extending the long-term protection of the vaccine. This vaccine has a significant market niche in populations with a high severity and fatality rate. Given the higher severity and mortality rate among infants under 6 months old and their significant weight changes during this period, the clinical trials conducted by MVC involved three age groups: 2 months to 6 months, 6 months to 2 years, and 2 years to under 6 years, to evaluate the optimal vaccine dosing and the effectiveness over time.

d. The vaccine is safe. The vaccine group in the Phase III clinical trials showed comparable reactions to the placebo group, indicating good safety and tolerability.

e. The vaccine demonstrates 100% efficacy, estimated to be 96.8% based on statistical modeling. Long-term follow-up of participants in Phase II clinical trials showed that even after 5 years of vaccination, a high level of antibody efficacy was maintained.

f. The vaccine exhibits cross-reactivity against different subtypes of viruses prevalent in China and the ASEAN region, providing a competitive edge for entry into the markets of Hong Kong, Macau, ASEAN countries, and others.

g. International PIC/S GMP production quality and capacity. The MVC Zhubei Biopharmaceutical Plant has passed the PIC/S GMP inspection, making it the first domestically capable PIC/S GMP level cell culture vaccine factory. In addition to providing a stable supply to the domestic market, it can accelerate the simultaneous application for regulatory approvals in various countries through the ASEAN Mutual Recognition Arrangement mechanism. The production capacity is also sufficient to cater to emerging markets with a large population of newborns, such as Southeast Asia.

2. COVID-19 vaccine

Currently, global COVID-19 vaccines can be classified into four major platforms: mRNA vaccines, viral vector vaccines, recombinant protein subunit vaccines, and whole inactivated virus vaccines. Each vaccine platform has its advantages and disadvantages. However, considering the data on vaccine effectiveness and safety, the whole inactivated virus vaccines and adenovirus vector vaccines have gradually diminished. Currently, mRNA vaccines dominate the global market. Although the manufacturing process of recombinant protein subunit vaccines is slower compared to mRNA vaccines, their excellent safety profile, reliable effectiveness, and the requirement for cold chain storage at only 2-8°C have secured their place in the market.

Since major variants of the virus have mutations not only in the receptor binding domain (RBD) but also in other regions outside the RBD, vaccines using the full-length spike protein antigen can better combat viral mutations compared to vaccines that only target the RBD antigen.

Studies have shown that antibody levels in the body decrease over time after receiving two vaccine doses. In addition to promoting complete two-dose vaccination, governments and public health authorities worldwide have initiated third-dose booster immunization to induce a higher immune response and enhance neutralizing antibody levels against various highly mutated variants of COVID-19.

However, not all authorized COVID-19 vaccines are suitable for booster shots. For example, adenovirus vector vaccines are not ideal for use as a third dose due to platform characteristics. The immune boosting effect after receiving three doses of an adenovirus vector vaccine is significantly lower compared to other vaccine platforms. Therefore, heterologous vaccine combinations (mixing vaccines from different platforms) need to be considered. As more countries initiate third and fourth dose booster immunizations in the future, global vaccine shortages will persist, and the administration of vaccines will become more unequal. Consequently, cross-platform heterologous vaccination with different COVID-19 vaccines has become the mainstream strategy internationally to address the current global challenges of unstable vaccine supply and shortages

< Development Highlights of MVC COVID-19 Vaccine >

The MVC COVID-19 vaccine is developed based on the S-2P full-length gene-modified recombinant spike protein technology from the National Institute of Health (NIH) in the United States. The vaccine consists of the genetically modified stable conformation SARS-CoV-2 spike protein (S-2P) antigen, aluminum hydroxide, and CpG 1018 adjuvant. Another mRNA antigen technology encoding the same spike protein has been licensed to Moderna, a US-based company.

Compared to competitors both domestically and internationally, the MVC COVID-19 vaccine possesses five major competitive advantages:

a. Induces a Th1 immune response. Through large-scale animal trials, MVC has optimized the antigen/adjuvant combination and adopted CpG1018 adjuvant, which is approved by the US FDA, to induce the necessary Th1 immune response.
b. Excellent safety profile. In current clinical trials and with more than 3 million doses administered domestically, no vaccine-related severe adverse reactions have been observed.
c. Generates excellent immunogenicity. Clinical trial data in humans indicate that vaccine recipients produce excellent immunogenicity, with neutralizing antibody titers superior to those of adenoviral vector vaccines. The vaccine also demonstrates neutralizing activity against most highly concerning variants, providing protection against moderate to severe disease.
d. Convenient cold chain transportation at 2-8°C. The vaccine can be transported and stored at temperatures between 2 and 8 degrees Celsius. This represents a competitive advantage in terms of convenience in transportation and administration when compared to international vaccine competitors, which often require storage at temperatures ranging from -20°C to -80°C.
e. PIC/S GMP manufacturing quality. The MVC Zhubei plant is the first domestic production-capable PIC/S GMP level cell culture vaccine factory.

The related contract manufacturing plants also possess PIC/S GMP certification.

(III) Research and development achievements and plans

(1) R&D expenditures in recent years:

Unit: NT$ thousand

Item	2022	Q1 2023 (unaudited)
R&D expenses	1,139,989	186,895

(2) Successfully developed technologies or products

MVC's main products ready for market:

1. MVC Enterovirus 71 Vaccine (Envacgen)

The MVC Enterovirus 71 (EV71) vaccine obtained NDA approval from the Taiwan Food and Drug Administration on April 12, 2023, and completed the licensing process at the end of April. It is expected to be available in the domestic market starting in the third quarter. The MVC EV71 vaccine (Ministry of Health Vaccine License No. 000152) is currently the only EV71 vaccine in Taiwan that has been approved through regular registration instead of the accelerated approval mechanism. In a multicenter Phase III clinical trial conducted in multiple countries, the vaccine demonstrated 100% real-world vaccine efficacy (all confirmed cases occurred in the placebo group, with no infections among the vaccinated infants during the follow-up period). These data have been published in the globally renowned journal The Lancet. MVC is also the only domestic developer with independent production capacity for EV71 vaccines and, following the domestic licensing, is expanding its market presence by pursuing regulatory registration in target markets such as Southeast Asia.

2. MVC COVID-19 Vaccine

The MVC COVID-19 vaccine is a recombinant subunit vaccine developed by MVC. The S-2P spike protein antigen in its trimeric pre-fusion form is based on technology transferred from the US National Institutes of Health (NIH) and has been developed by MVC through the establishment of stable clone and antigen production processes. The formulation of the vaccine's composition was evaluated by MVC, considering various adjuvant formulations with different mechanisms of action. Ultimately, the CpG1018 DNA adjuvant, which effectively induces a Th1-biased immune response, was selected for formulation. The composition was further refined and the optimal dosage was determined through animal testing and Phase I clinical trials. Subsequently, pivotal clinical trials were conducted to obtain Emergency Use Authorization (EUA) for market approval.

The MVC COVID-19 vaccine received EUA from the Taiwan Ministry of Health and Welfare on July 19, 2021. It was selected as one of the vaccines for the World

Health Organization Solidarity Trial (STV) in October 2021. The STV, led and funded by the WHO, conducted Phase III clinical trials with traditional placebo controls in the Philippines, Colombia, and the Republic of Mali to evaluate the vaccine's efficacy. Additionally, the MVC COVID-19 vaccine received sponsorship from the Coalition for Epidemic Preparedness Innovations (CEPI), an international organization, to conduct a third-dose booster immunization mixing trial with mRNA and adenoviral vector vaccines.

3. MVC FLU Quadrivalent

The MVC quadrivalent influenza vaccine received approval from the Taiwan Food and Drug Administration in March 2023 for registration and licensing. It is suitable for active immunization in individuals aged 3 and above to prevent seasonal influenza caused by two strains of influenza A virus and two strains of influenza B virus covered by the vaccine. This product is developed in collaboration with GC Biopharma, a leading vaccine manufacturer in South Korea. GC Biopharma is the largest supplier of influenza vaccines in Korea and also the largest supplier of seasonal influenza vaccines to the Pan American Health Organization (PAHO) and the United Nations Children's Fund (UNICEF). GC Biopharma has supplied influenza vaccines to 63 countries worldwide, with a cumulative sales volume exceeding 300 million doses. Furthermore, GC Biopharma is the second quadrivalent influenza vaccine to receive prequalification from the World Health Organization (WHO), making it one of the highest quality influenza vaccine manufacturers globally. In this development project, the MVC brand utilizes the mode of repackaging the bulk vaccine to ensure stable supply time and quality. The project has also completed PIC/S GMP inspections and drug registration procedures, obtaining the drug license in March 2023. This year, it will also participate in the government tender for public-funded vaccines to supply the domestic market.

(IV) Short and long-term business development plan:

(1) Short-term business development plan:

1. EV71 vaccine:

After obtaining the registration and licensing approval from the Taiwan Food and Drug Administration on April 12, 2023, the MVC EV71 vaccine completed the licensing process by the end of April and is expected to supply the domestic market starting in the third quarter. With the official drug license for the domestic EV71 vaccine and the robust data from the Phase III clinical trials, MVC will continue to expand into overseas markets. It will submit applications for drug licenses in EV71-prevalent countries in Southeast Asia (such as Vietnam, Thailand, Malaysia, etc.) and target markets, leveraging the excellent efficacy data from the Phase III clinical trials and the approval from Taiwan.

2. MVC COVID-19 vaccine:

The MVC COVID-19 vaccine received approval from the Taiwan Ministry of Health and Welfare for the Emergency Use Authorization (EUA) on July 19, 2021.

It was also selected for the World Health Organization Solidarity Trial Vaccines (STV) in October 2021, and the unblind of STV trial data is still pending. Additionally, the regulatory registration with the Therapeutic Goods Administration (TGA) in Australia is ongoing. Given the evolving nature of the COVID-19 pandemic, the primary goal is to obtain international certification for the COVID-19 vaccine and evaluate market supply following the transformation into a COVID-19/Influenza combination vaccine.

3. MVC FLU Quadrivalent

   The MVC quadrivalent influenza vaccine has obtained the domestic drug license and secured the government tender for public-funded influenza vaccines in the current year. The total awarded dose for this year is 700,700 doses, and the aim is to gradually increase the domestic supply in the future.

(2) Long- and middle-term business development plan:

1. EV71 Vaccine and Multivalent EV Vaccine Development:

   Our EV71 vaccine is based on the whole inactivated virus technology and has shown excellent testing results. After obtaining the domestic drug license, we will proceed with applying for drug licenses in Southeast Asian countries and other target markets. In addition to the EV-A71 virus, our ongoing development of enterovirus vaccines includes antigen selection and evaluation for highly pathogenic D68 type and highly contagious Coxsackievirus A16 (CA16) type. The antigen platforms being used for selection include the whole inactivated virus platform and Virus Like Particle (VLP) platform. We will evaluate the successful foundation of the existing EV-A71 vaccine and establish a bivalent or multivalent enterovirus vaccine to further enhance competitiveness and expand the market.

2. MVC COVID-19 vaccine: Next Generation Vaccine Development

   While the World Health Organization (WHO) declared the end of the Public Health Emergency of International Concern (PHEIC) for COVID-19 in May 2023, the conclusion of the emergency does not mean the end of COVID-19 as a global health threat. New variants of the COVID-19 virus continue to emerge, bringing high infectivity and the risk of severe illness and death. The ongoing development directions for COVID-19 vaccines include continuous monitoring of new variants, screening for broad-spectrum vaccines, and evaluating new immunization approaches. The MVC COVID-19 vaccine has established a solid foundation in the development of the prototype strain and is still undergoing regulatory review by the Therapeutic Goods Administration (TGA) in Australia. Subsequently, based on guidance from international organizations such as WHO, the evaluation and development of next-generation COVID-19 vaccines will be conducted.

3. Other Vaccine Product Development:

   In addition to the EV71 and COVID-19 vaccine development, MVC also collaborates with the U.S. National Institutes of Health (NIH) on the development of dengue fever chimeric virus vaccines and respiratory syncytial virus (RSV) vaccines. These projects are considered as potential vaccine candidates for our medium to long-term product line development. The layout and planning of various research and development product lines will be evaluated based on MVC's development stage and resource availability.

II. Market and Sales Overview:

(I) Market analysis

(1) Regions where the main products (services) are provided (supplied)

Unit: NT$ thousand

Main products	2022	
	Amount	Proportion (%)
Domestic sales	365,042	100
Foreign sales	-	-
Total	365,042	100

(2) Market share

MVC has obtained drug certificates for the enterovirus 71 vaccine and quadrivalent influenza vaccine, which are expected to be available for sale in the second half of 2023. No sales have been made to date, so no market share information is available.

(3) Future market supply, demand, growth potential

1. Market Supply and Demand of Enterovirus 71 Vaccine.

< Domestic Market for Enterovirus 71 Vaccine >

After experiencing the COVID-19 pandemic from 2020 to 2022, there has been a further increase in the transmission of infectious diseases following the easing of restrictions. According to the surveillance report from the Taiwan Centers for Disease Control, in the 18th week of 2023 (April 30th to May 6th), there were 11,252 visits to emergency departments nationwide due to Enterovirus infections, representing a 10.0% increase compared to the previous week. During that week, the number of Enterovirus-related visits exceeded the epidemic threshold (n=11,000), indicating the onset of the Enterovirus season. Among the surveillance reports for Enterovirus 71, there have been 10 confirmed cases of EV71 positivity in 2023, compared to zero reports in 2022. The detected cases were located in Banqiao District and Zhonghe District of New Taipei City, as well as Pingzhen District, Guanyin District, Guishan District, Taoyuan District, and Longtan District of Taoyuan City. Taoyuan City, which had the highest number of EV71 cases, announced on May 10th that all 13 administrative districts in the city would be included in the area with suspended classes and work from the announcement date until the end of this year to control the spread of the disease. This demonstrates an urgent need for Enterovirus vaccines.

Currently, both domestic Enterovirus 71 vaccines are expected to be shipped in the third quarter (July). They are currently self-paid vaccines, with a terminal price of approximately NT$4,000 per dose for the Adimmune vaccine, which requires two doses of the primary series, and NT$4,300 per dose for the MVC vaccine. For infants and young children under 2 years old, it is recommended to receive a 2+1 dose schedule, while children over 2 years old with a more mature immune system are advised to receive 2 doses of the primary series. Both vaccines are currently approved for use in the population aged 2 months to 6 years, with a target population of approximately 963,000 people in the market.

Number of births in recent years

Year	Number of Birth	Remark
2018	181,601	Dog 5 years old
2019	177,767	Pig 4 years old
2020	165,249	Rat 3 years old
2021	153,820	Qx 2 years old
2022	138,986	Tiger 1 year old
2023	145,903	Rabbit 0 year old
Total：963,326		

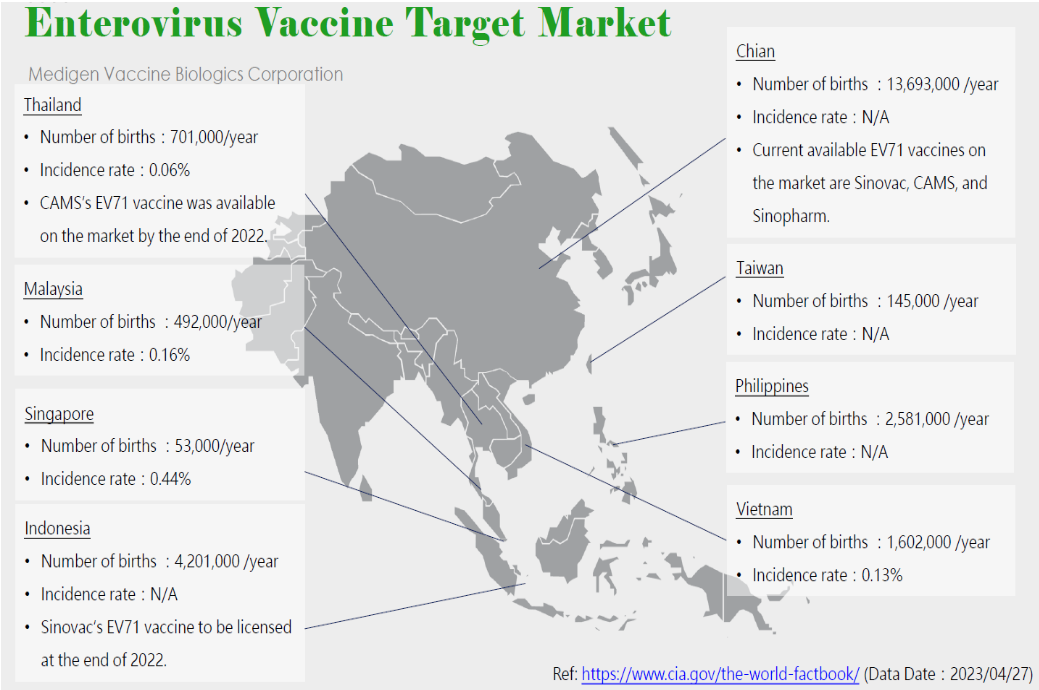
Source：The National Development Council

< Overseas Market for Enterovirus 71 Vaccine >

In terms of price reference in the market, in China, there are currently only three pharmaceutical companies that have entered the Chinese market with the Enterovirus 71 vaccine. They are the Institute of Medical Biology, Chinese Academy of Medical Sciences (CAMS), Sinovac Biotech Ltd., and Wuhan Institute of Biological Products Co., Ltd., which is a subsidiary of Sinopharm. The Enterovirus 71 vaccine is currently classified as a higher-priced Category 2 self-paid vaccine in China. In the three years before its market release, it sold more than 20 million doses annually, and the total supply of Enterovirus vaccines in China reached a peak of 29.92 million doses. The terminal price for consumers in China is approximately RMB$218 to RMB$300 (about NT$980-NT$1,350) per dose. Based on these figures, the estimated terminal market revenue for Enterovirus vaccines in China is about NT$29.6 to 40.8 billion, indicating a significant market demand.

In the Southeast Asian market, by the end of 2022, the EV71 vaccine developed by CAMS was launched in Thailand, with a terminal price of 3,900 Thai Baht, equivalent to approximately NT$3,500 per dose. This represents a higher-priced vaccine in Thailand. Sinovac Biotech Ltd. has obtained the EV71 drug registration in Indonesia, but the terminal price has not been queried at this time. Apart from these two countries, there is currently no EV71 vaccine available in the Southeast Asian market, making it a vacuum market. Southeast Asian countries, with their large population base and high demand for disease prevention, remain a key focus for overseas market expansion for MVC. The MVC EV71 vaccine can be administered to infants and young children starting from 2 months of age, and the Phase III clinical trial data has confirmed its protective efficacy against the B5 and

C4 subtypes prevalent in Southeast Asia. The product is highly competitive in the target market.



2. Market Supply and Demand for COVID-19 Vaccines

In the market for COVID-19 vaccines, the demand is transitioning from the peak of the global pandemic and the peak of global stockpiling strategies in 2020-2022 to a more endemic influenza-like pattern. Although countries around the world have gradually lifted the state of emergency for COVID-19 in 2023, the number of infections and hospitalizations due to COVID-19 has not been completely alleviated. It is expected that COVID-19 may evolve into a seasonal influenza-like pattern, coexisting with the virus. Countries have also been formulating policies to provide additional vaccine doses to high-risk populations at least once a year and promoting the self-payment model for vaccines.

Regarding the trend of COVID-19 transitioning to an influenza-like pattern, the current public demand for vaccines is in a period of decline after the peak, and it is expected that the demand will recover by the end of the year and into the following year. However, confirmation of strain selection and vaccine usage policies for variant strains will depend on the guidelines developed by organizations such as the World Health Organization (WHO). Therefore, the current focus is on obtaining international certification for vaccine approval and closely monitoring policy developments.

3. Market Supply and Demand for Quadrivalent Influenza Vaccines

In the domestic market, the public sector primarily drives the demand for seasonal quadrivalent influenza vaccines. The annual procurement quantity in previous years was approximately 6.3 million doses, with quoted prices ranging from NT$

236 to NT$242 per dose (including taxes). In addition to the public sector market, the self-payment market accounts for a scale of around 300,000 to 800,000 doses. For the current year, the procurement quantity for public sector influenza vaccines has increased to 6.99 million doses. Four manufacturers have been awarded the procurement contract at a price range of NT$236 to NT$242 per dose (including taxes). The results of the bidding process are summarized in the table below:

Unit: dose/NT$

Vendor	Price	Quantity
Adimmune	$237	3,493,450
Sanofi	$236	1,921,400
TTY	$242	864,630
MVC	$236	707,420
Total		6,986,900

Source: Engineering Council e-Procurement website

(4) Niche

MVC’s principal businesses include the R&D, manufacturing, and sales of vaccines and genetically modified protein drugs based on "novel cell culture process technology". This technology is an advanced vaccine production technology and a high technical barrier to entry, which can establish a competitive advantage for MVC. Furthermore, MVC also has the following competitive niche:

1. Professional and stable management team

   MVC's management team has years of accumulated technology and experience. The management team is comprised of senior professionals in the industry. The members can properly grasp the key technologies of products and have business development capabilities, which will lay the foundation for MVC's future development.

2. Taiwan’s only cell culture vaccine plant with mass production scale

   MVC is ahead of its competitors that MVC has a cell culture vaccine plant with a mass-production scale. With its own plant, the production schedule is highly flexible. As the plant has a large production capacity, MVC can cooperate with the government procurement schedule and policies to arrange vaccine mass production in the future. The conventional vaccine production processes involve animal tissues, which may affect vaccine production due to difficulties in obtaining animal sources and affecting the supply of raw materials. The use of cell culture processes has clean sources and reduces the possibility of contamination, which will enable stable production and supply.

3. Strong international resources in R&D

   MVC has a deep international cooperation network, and has good cooperative relations with internationally renowned R&D and epidemic prevention organizations, such as the National Institutes of Health (NIH), World Health

Organization (WHO)/ Utrecht Centre for Affordable Biotherapeutics (UCAB), CEPI and other organizations. MVC has co-development cooperation or being sponsored by those organizations on its vaccine research and development. MVC flexibly utilizes this international R&D network to accelerate the development and launch of novel vaccines.

4. Competitive advantages of MVC COVID-19 vaccine

   MVC's COVID-19 vaccine is based on the S-2P full-length recombinant spike protein technology transferred from US NIH, which is a combination of prefusion stabilized SARS-CoV-2 spike protein (S-2P) antigen, aluminum hydroxide, and CpG 1018 adjuvant. The other mRNA antigen technology, with the same spike protein coding is transferred to Moderna.

   The MVC COVID-19 vaccine was approved by the Ministry of Health and Welfare on July 19, 2021, and was selected as a WHO Solidarity Trial Vaccine (STV) in October 2021, with WHO leading and funding the Phase III clinical trials in the Philippines, Colombia, and the Republic of Mali. In addition, MVC COVID-19 vaccine was sponsored by the Consortium for Epidemic Prevention Innovation (CEPI), an international organization, to conduct a third dose of the MVC COVID-19 vaccine in combination with the mRNA vaccine and adenovirus vector vaccine. International attention and focus。

5. Competitive advantages of MVC EV71 vaccines

   a. The only globally developed vaccine with over 3,000 participants in multinational and multicenter clinical trials, providing evidence of vaccine efficacy and cross-protection against circulating subtypes in the ASEAN region.
   b. The results of the Phase III clinical trials of the MVC EV71 vaccine have been peer-reviewed and published in "The Lancet" journal, which is one of the highest-impact medical journals globally (Impact Factor: 202.731). The publication has received special commentary and recommendations from external experts invited by "The Lancet." The citation emphasizes the importance of the MVC EV71 vaccine for the prevention of infants under 2-6 months old and the long-term immune durability of the vaccine with the addition of a third dose.
   c. The only vaccine globally that follows a 2+1 dosing schedule (2 primary doses plus 1 booster dose) specifically designed for high-risk infants under 2 years old, extending the long-term protection of the vaccine. This vaccine has a significant market niche in populations with a high severity and fatality rate. Given the higher severity and mortality rate among infants under 6 months old and their significant weight changes during this period, the clinical trials conducted by MVC involved three age groups: 2 months to 6 months, 6 months to 2 years, and 2 years to under 6 years, to evaluate the optimal vaccine dosing and the effectiveness over time.

d. The vaccine is safe. The vaccine group in the Phase III clinical trials showed comparable reactions to the placebo group, indicating good safety and tolerability.
e. The vaccine demonstrates 100% efficacy, estimated to be 96.8% based on statistical modeling. Long-term follow-up of participants in Phase II clinical trials showed that even after 5 years of vaccination, a high level of antibody efficacy was maintained.
f. The vaccine exhibits cross-reactivity against different subtypes of viruses prevalent in China and the ASEAN region, providing a competitive edge for entry into the markets of Hong Kong, Macau, ASEAN countries, and others.
g. International PIC/S GMP production quality and capacity. The MVC Zhubei Biopharmaceutical Plant has passed the PIC/S GMP inspection, making it the first domestically capable PIC/S GMP level cell culture vaccine factory. In addition to providing a stable supply to the domestic market, it can accelerate the simultaneous application for regulatory approvals in various countries through the ASEAN Mutual Recognition Arrangement mechanism. The production capacity is also sufficient to cater to emerging markets with a large population of newborns, such as Southeast Asia.

(5) Positive and negative factors relating to future development, and responses thereto

1. Positive factors

1.1 Supporting policies:

Global policies place more emphasis on the stability of demand and the long life cycle of the vaccine market: Due to COVID-19, many countries place more emphasis on establishing prevention policies and their own capacity for mass production of vaccines. Also, the demand for vaccines and biological products is relatively stable, not susceptible to economic fluctuations, and has a long product life cycle. Despite the high capital requirement in the early stages and high technical entry barriers, MVC is expecting a stable profit due to the lack of competitors and the increasing emphasis of international policies on the market demand.

1.2 International cooperation:

Close cooperation with internationally renowned institutes to fulfill the needs of the global medical needs: MVC’s R&D Pipeline, such as EV71 vaccine, COVID-19 vaccine, and dengue vaccine, target the unmet medical needs, and thus MVC is able to fulfill the demand of the international market. Besides, MVC’s technology comes from the cooperation with world-renowned research institutes, including Taiwan National Health Research Institutes, US NIH, and WHO, to ensure its product quality and technology advantages.

1.3 Cutting-edge manufacturing process:

Wide range of cell-culture manufacturing process and PIC/S GMP verified high quality: MVC adopts the new cell-culture manufacturing process, which solves the adverse factors of traditional production processes such as high contamination risks, and high equipment specificity. The new process can help to diversify the product pipeline and avoid concentration risk on a single product. In addition, MVC Hsinchu Manufacturing Facility is the first PIC/S GMP qualified cell-cultured vaccine manufacturing plant in Taiwan that provides high vaccine quality. MVC will accelerate its entry into the global supply chain in the future through international certification mechanisms.

2. Negative factors

2.1 The decreasing birth rate is unfavorable to MVC’s development of vaccines for infants.

Responses:

In 2022 Taiwan’s annual birth rate dipped to 139 thousand, resulting in a shrinking target group. However, MVC’s products are high-quality novel vaccines targeting regional or global epidemics, and thus this strategy of MVC is able to create market segregation. Besides, MVC also plans to extend into ASEAN countries with high demographic dividends and high economic development, targeting consumers with high spending power. Currently, MVC is planning multination, multicenter clinical plans.

2.2 Taiwan’s biotech companies are relatively smaller in scale and no competition for international pharmaceutical companies.

Responses:

Taiwan has limited resources, and should concentrate them on high strategic industries with high economic values, such as vaccines. Due to the COVID-19 pandemic, the Taiwan government is establishing policies and regulations, and a suitable environment for biotech development. Based on this foundation, MVC has strengthened its competitive advantage and enhanced its visibility through its strong international connections, such as joining the WHO Solidarity Test Vaccine and co-operating with CEPI to conduct a mix-and-match booster trial. MVC achieves maximum development benefits with limited resources. Therefore, after the product launch and achieving stable sales of MVC’s main products in Taiwan’s market, MVC plans to apply for foreign drug licenses and expand its distribution channels, in order to create MVC's international corporate image and improve the capability of capital-raising.

(II) Key functions and manufacturing process of main products

(1) Key functions of main products

Products	Key functions	Competitive advantages
COVID-19 Vaccine	Prevent SARS-CoV-2 infection	1. The US NIH has 10 to 20 years of accumulated development experience. Its genetically recombinant S-2P spike protein vaccine antigen has replaced some amino acids and the protein structure is more stable than other development platforms. 2. The FDA-approved CpG1018 adjuvant was used to induce the desired Th1-biased immune response. 3. Clinical trial data show that it can produce high concentrations of neutralizing antibodies and has high safety. The titer of neutralizing antibodies is better than that of adenovirus vector vaccines. 4. The subunit protein vaccine can be used as the third booster. The cold chain transportation at 2-8°C is convenient, which is helpful for the global vaccine supply chain and promote long-term routine vaccination schedule.
EV71 Vaccine	Prevent EV 71 infection	1. MVC has established the mass production capacity with PIC/S GMP international standards. 2. We have taken the lead in evaluating the safety and efficacy of the vaccine for high-risk infants aged 2 to 6 months. The vaccine has demonstrated excellent safety and a protection rate of 100%. Statistical evaluations have shown a vaccine efficacy of 96.8%. 3. The results of Phase III clinical trial were reviewed and published by The Lancet (Impact Factor: 202.731), one of the most influential medical journals in the world, and received special commentary and recommendations from external experts invited by The Lancet. The Lancet recommendation also highlighted the importance of high-end enterovirus vaccines in newborn infants at 2-6 months of age and the immune durability benefits of the EV71 vaccine administered as a third additional dose. 4. Data from multicenter clinical trials conducted in multiple countries have demonstrated cross-protection against various subtypes of circulating viruses in China and Southeast Asia. 5. Human clinical trials have shown long-term protection from the vaccine, with sustained high antibody levels even after 5 years.

(2) Manufacturing process of main products

<COVID-19 vaccine>

COVID-19 vaccine is composed of SARS-CoV-2 spike protein (S-2P) antigen, aluminum hydroxide and CpG 1018 adjuvant in a stable pre-fusion configuration. MVC's PIC/S GMP certified Zhubei plant has a complete production line including antigen production, formulation, filling/finishing. The plant is able to complete the production, inspection and release of COVID-19 vaccines independently. However, in response to the strong demand for epidemic prevention at home and abroad, MVC entrusted domestic manufacturers to carry out some antigen production and multi-dose vial filling operations in order to rapidly expand production capacity within the tight delivery schedule.

1. Antigen production: To speed up the development and to spread the risk, the initial antigen production process scale-up is carried out from MVC's independent development and EirGenix’s CDMO sector at the same time, Later, MVC took the lead in completing the development of the process, so MVC's independently produced investigational vaccines for clinical trials at Zhubei plant; the mass production of vaccine antigens was started on both sides of MVC's Zhubei plant and EirGenix’s GMP plant simultaneously.
2. Formulation: To involve the composition of vaccine antigen, aluminum hydroxide and CpG 1018 adjuvant. Whether it is the antigen produced by MVC or EirGenix, the bulk will be uniformly sent to MVC’s Zhubei plant for formulation.
3. Aseptic filling/finishing: The capacity of cRABS automatic filling line on the third floor of MVC’s Zhubei plant is 10,000 pre-filled syringes per hour; aseptic filling of multiple doses vial is entrusted TTY Biopharm.
4. In-process control (IPC) and release QC in all process stages are controlled by MVC. The shipment inspection is completed by MVC’s QC laboratory of Zhubei plant and other impartial third party testing lab

<EV71 vaccine>

EV71 vaccine is manufactured through a cell culture process that uses VERO cell line and culture medium to mass-produce viral antigens, then to concentrate, purify and deactivate the antigen, and finally to formulate and fill/finish the product.

The Hsinchu Manufacturing Facility has passed the PIC/S GMP factory inspection and has become the first PIC/S GMP qualified cell-cultured vaccine manufacturing plant with mass production capability. The “adherent cell culture process” includes cell culture, concentration, filtration, deactivation, purification, formulation, and other dozens of process quality-control tests and finished product release tests such as the "host cell protein (HCP)" test. The whole process follows PIC/ S GMP regulations for quality management, including equipment verification, raw material specifications, raw material in and out management standard operating procedures, process standard operating procedures and environmental monitoring records, and other documents and operating specifications, to ensure the finished products are PIC/S GMP qualified.

(III) Supply of key materials

MVC’s key materials include culture media, adjuvants, and pre-filled syringes. MVC uses a cell-culture platform to manufacture its main products, such as EV71 vaccines, and COVID-19 vaccines, and thus the key materials are the “serum-free culture media” for the culture of cells, and adjuvants and syringes for filling. So far, there has been no shortage or interruption of supply, the quality and delivery time are stable, and the supply is sufficient.

(IV) List of major suppliers and customers

(1)A list of any suppliers accounting for 10 percent or more of MVC's total procurement amount in either of the 2 most recent fiscal years, the amounts bought from each, the percentage of total procurement accounted for by each, and an explanation of the reason for increases or decreases in the above figures:

Unit: NT$ thousand

Item	2022				2021			
	Company Name	Amount	%	Relation with Issuer	Company Name	Amount	%	Relation With Issuer
1	A	183,540	32	None	C	689,318	57.27	None
2	B	142,672	25	None	A	232,420	19.31	None
3	C	65,464	11	None	Others	281,935	23.42	-
	others	179,699	32	-				
Total		571,375	100		Total	1,203,673	100	

Analysis of increase and decrease:

The decrease in purchase amount was mainly due to the procurement of 5 million doses of the COVID-19 vaccine by the Taiwan Centers for Disease Control, which has been shipped since the third quarter of 2021 and has been finished shipping by the fourth quarter of 2022, and the decrease is mainly due to the decrease in production-related raw materials.

(2) A list of any customers accounting for 10 percent or more of MVC's total sales amount in either of the 2 most recent fiscal years, the amounts sold to each, the percentage of total sales accounted for by each, and an explanation of the reason for increases or decreases in the above figures: The decrease in sales results in a decrease in purchases with suppliers A and C.

Unit: NT$ thousand

Item	2022				2021			
	Company Name	Amount	%	Relation With Issuer	Company Name	Amount	%	Relation With Issuer
1	D	365,042	100	None	D	3,275,166	99.82	None
2	Others	-	-	-	Others	5,828	0.18	-
Total		365,042	100	-	Total	3,280,994	100	-

Analysis of increase and decrease:

The decrease in sales amount was mainly due to the procurement of 5 million doses of the COVID-19 vaccine by the Taiwan Centers for Disease Control, which has been shipped since the third quarter of 2021 and has been finished shipping by the fourth quarter of 2022.

(V) Production volume and value in the most recent two years:

Unit: NT$ thousand/doses

Main Products	2022			2021		
	Capacity	Qty	Amt	Capacity	Qty	Amt
COVID-19 Vaccine	10,000,000	1,093,550	211,745	10,000,000	5,669,032	1,106,036
Total	10,000,000	1,093,550	211,745	10,000,000	5,669,032	1,106,036

(VI) Sales volume and value in the most recent two years:

Unit: NT$ thousand/doses

Main Products	2022				2021			
	Local		Export		Local		Export	
	Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
COVID-19 Vaccine	551,682	365,042	-	-	4,448,318	3,275,166	-	-
Others	-	-	-	-	602	5,828	-	-
Total	551,682	365,042	-	-	4,448,920	3,280,994	-	-

III. Human Resources:

Year		2021	2022	Apr. 30, 2023
No. of employees	Researcher	85	87	78
	Management	5	5	4
	Engineer	13	15	14
	General employee	33	34	35
	Total	136	141	131
Average age		38.03	38.06	38.00
Average service year		3.33	3.84	4.04
Academic distribution ratio	PhD	17	17	16
	Master's	71	73	68
	Bachelor's	46	49	45
	Below high school	2	2	2

IV. Environmental Protection Expenditure:

Total amount (including compensation) and penalties incurred due to environmental pollution in the most recent year up to the publication date of the Annual Report, and explanation of future responsive countermeasures (including improvement measures) and possible expenditures: Not applicable.

V. Labor Relations:

(I) List any employee benefit plans, continuing education, training, retirement systems, and the status of their implementation, and the status of labor-management agreements and measures for preserving employees' rights and interests.

1. Employee benefits, continuing education, and training:

A. All employees of MVC are enrolled in Labor Insurance, National Health Insurance, and Pension plan. In addition, the MVC also provides year-end bonuses, bonuses, employee education training, and group insurance.

B. MVC prepares annual plans and budget plans, including festival gifts, employee gathering meals, annual company trips, and wedding and funeral subsidies, with an aim to provide support for the employees in order to encourage them to work together toward the development of MVC.

C. Education training: MVC sends employees to external training or workshops at relative academic institutions when required, and regularly organizes internal education training to improve the professional skills of employees in order to create overall benefits for MVC and employees.

2. Retirement system:

All employees of MVC are under the new labor retirement system, which is the defined contribution plan. The pension is appropriated in accordance with the "Monthly Contribution Wages Classification of Labor Pension" on a monthly basis, at no less than 6% of every employee's monthly pay, and deposit the pension to the individual's pension account.

3. Status of labor-management agreements and measures for preserving employees' rights and interests:

MVC has established various channels for employees to voice their opinions to facilitate the harmony between the labor and management, and to understand the employees' opinions on the management system, supervisor leadership, welfare system, and working environment. Also, the formulation and amendments of material policies are effective only after sufficient discussion between the employees and management. Therefore, there is no occurrence of labor disputes.

(II) List any losses suffered by MVC in the most recent 2 fiscal years and up to the annual report publication date due to labor disputes, and disclosing an estimate of possible expenses that could be incurred currently and in the future and measures being or to be taken. If a reasonable estimate cannot be made, an explanation of the facts of why it cannot be made shall be provided:

In the most recent fiscal year and as of the up to the date of publication of the annual report, all necessary measures regarding labor-management relations are implemented in accordance with the relevant laws and regulations. Hence, the implementation of the new or amended measures is smooth. The new or amended measures for labor-management relations are resolved after the communication between MVC and its employees. Hence, there is no dispute.

VI. IT Security Management:

(I) Describe the cyber security risk management framework, cyber security policies, concrete management programs, and investments in resources for cyber security management:

To effectively implement information security management and MVC has two information staffs, MVC not only reviews the applicability and protection measures of information security policies, but also establishes a complete information security management system to reduce corporate information security threats from the system, technical and procedural levels, and establishes the highest level of compliance with customer needs. Specifications for confidential information protection services. In addition, multi-layer information security protection is constructed, innovative technologies for information security defense are continuously introduced, and the information security control and management mechanism is integrated and internalized in the daily operation processes such as software and hardware maintenance and operation, and supplier information security management. The confidentiality, integrity, and availability of MVC's important assets are also actively monitored for the effectiveness of information security management, and based on review and continuous improvement, supervision and auditing are implemented to ensure the continued effectiveness of information security regulations.

When employees violate relevant norms and procedures, they will be dealt with by the information security violation handling process, and personnel sanctions will be carried out according to the violations (including employees' performance appraisal for the current year or taking necessary legal actions). In addition, regularly review and implement improvements including information security measures, education and training, and publicity to ensure that MVC's important confidential information is not leaked

(II) List any losses suffered by MVC in the most recent fiscal year and up to the annual report publication date due to significant cyber security incidents, the possible impacts therefrom, and measures being or to be taken. If a reasonable estimate cannot be made, an explanation of the facts of why it cannot be made shall be provided: None.

VII. Major Contracts:

Contracting party, major content, restrictive clause, and commencement date and expiration date of supply/distribution contracts, technical cooperation contracts, engineering/construction contracts, long-term loan contracts, and other contracts that would affect shareholders' equity, where the contracts were either effective as of the date of publication of the annual report or expired in the most recent year.

Nature of contracts	Contracting party	Contract duration	Contract content	Restrictions
Land Lease	Hsinchu Science Park Bureau	2013/10/1 - 2032/9/30	The lease of land of Biomedical Park in Shixing Section, Zhubei, Hsinchu County	None
Technology licensing contract	National Health Research Institutes, Taiwan Centers for Disease Control	2023/06/28 - 25 years after the obtaining of the first drug license of EV71 vaccine	Technologies related to serum-free culture medium EV71 vaccine	Restricted technology sub-licensing
Technology licensing contract	National Health Research Institutes, Taiwan Centers for Disease Control	2023/06/28 - 25 years after the obtaining of the first drug license of EV71 vaccine	Licensing of the phase I clinical study results for EV71 vaccine.	1. Restricted technology sub-licensing 2. Phase II clinical study to be conducted in Taiwan
Technology licensing contract	National Health Research Institutes	2014/4/25 - 2029/4/24	Development data of pre-clinical study for serum-free culture medium human-use influenza vaccine H7N9.	Restricted technology sub-licensing
Cooperative development contract	UCAB, MABXIENC, SPIMACO, and LIBBS	2016/03 - Completion of development and clinical trials.	Development of biosimilars against respiratory syncytial virus (RSV) among infants.	None
Technology licensing contract	U.S. National Health Research Institutes	2016/11 - 12 years after product launch	Obtaining of the rights to develop, manufacture, sell and sub-license dengue vaccines in 26 countries.	-
Supply contracts	(Korea) GC Pharma (Green Cross Corporation, GCC)	2018/04/23 - 10 years after product launch	An exclusive agent for GCC's quadrivalent influenza vaccine in the Taiwan market and rights to sell the vaccines by purchasing from GCC in form of finished goods or under MVC's brand by MVC's filling process.	-
Technology licensing contract	U.S. National Health Research Institutes	2020/05 - 20 years after product launch	Obtaining of the complete market rights to develop, manufacture, sell and import NIH COVID-19 vaccines in the world.	Restricted technology sub-licensing
Contract manufacturing	EirGenix,Inc.	2020/05/18~ 2025/05/17	Entrusted to develop MVC COVID-19 vaccine antigen production process.	None
Factory Lease	Hsinchu Science Park Bureau	2022/01/01 - 2026/12/31	Leased Plant	None

Chapter 6. Financial Information

I. Five-Year Financial Summary

(I) Condensed balance sheets and statements of comprehensive income

Condensed Balance Sheet - IFRS (consolidated)

Unit: NT$ thousand

Item		Financial summary for the last five years				
		2018	2019	2020	2021	2022
Current assets		772,420	518,929	2,009,680	3,721,246	5,462,422
Property, plant and equipment		1,322,070	1,331,975	1,159,857	1,233,960	1,200,472
Intangible assets		69,693	61,806	60,011	52,978	45,361
Other assets		18,979	364,354	261,266	290,827	639,434
Total assets		2,183,162	2,277,064	3,490,814	5,299,011	7,347,689
Current liabilities	Before distribution	137,545	227,827	160,975	439,087	355,232
	After distribution	137,545	227,827	160,975	439,087	355,232
Non-current liabilities		433,550	682,454	188,429	183,867	1,963,452
Total liabilities	Before distribution	571,095	910,281	349,404	622,954	2,318,684
	After distribution	571,095	910,281	349,404	622,954	2,318,684
Equity attributable to owners of parent		1,612,067	1,366,783	3,141,410	4,676,057	5,029,005
Share capital		1,555,240	1,560,258	2,110,988	2,128,865	3,278,399
Capital collected in advance		210	129,798	3,620	2,383	1,913
Capital surplus		532,957	294,575	2,319,154	1,135,010	2,798,085
Retained earnings	Before distribution	(476,340)	(617,718)	(1,291,998)	1,410,258	(1,131,510)
	After distribution	(476,340)	(617,718)	(1,291,998)	343,063	(1,131,510)
Other equity		-	(130)	(354)	(459)	82,118
Treasury stock		-	-	-	-	-
Non-controlling interest		-	-	-	-	-
Total equity	Before distribution	1,612,067	1,366,783	3,141,410	4,676,057	5,029,005
	After distribution (Note 1)	1,612,067	1,366,783	3,141,410	4,676,057	5,029,005

Note: The aforementioned “after distribution” is based on the resolution made by the Board of Directors or shareholders' meeting held in the following year.

Condensed Balance Sheet - IFRS (parent-only)

Unit: NT$ thousand

Item		Financial summary for the last five years				
		2018	2019	2020	2021	2022
Current assets		772,420	513,768	2,005,724	3,545,966	5,440,501
Property, plant and equipment		1,322,070	1,331,975	1,159,857	1,233,960	1,200,472
Intangible assets		69,693	61,806	60,011	52,978	45,361
Other assets		18,979	369,306	265,096	466,107	661,355
Total assets		2,183,162	2,276,855	3,490,688	5,299,011	7,347,689
Current liabilities	Before distribution	137,545	227,618	160,849	439,087	355,232
	After distribution	137,545	227,618	160,849	439,087	355,232
Non-current liabilities		433,550	682,454	188,429	183,867	1,963,452
Total liabilities	Before distribution	571,095	910,072	349,278	622,954	2,318,684
	After distribution	571,095	910,072	349,278	622,954	2,318,684
Share capital		1,555,240	1,560,258	2,110,988	2,128,865	3,278,399
Capital collected in advance		210	129,798	3,620	2,383	1,913
Capital surplus		532,957	294,575	2,319,154	1,135,010	2,798,085
Retained earnings	Before distribution	(476,340)	(617,718)	(1,291,998)	1,410,258	(1,131,510)
	After distribution	(476,340)	(617,718)	(1,291,998)	343,063	(1,131,510)
Other equity		-	(130)	(354)	(459)	82,118
Total equity	Before distribution	1,612,067	1,366,783	3,141,410	4,676,057	5,029,005
	After distribution	1,612,067	1,366,783	3,141,410	4,676,057	5,029,005

Note: The aforementioned “after distribution” is based on the resolution made by the Board of Directors or shareholders' meeting held in the following year.

Condensed Comprehensive Income Statement - IFRS (consolidated)

Unit: NT$ thousand

Item	Financial summary for the last five years				
	2018	2019	2020	2021	2022
Operation revenue	-	1,120	11,507	3,280,994	365,042
Gross profit	-	1,120	7,636	2,305,033	(212,602)
Income from operations	(466,336)	(603,912)	(763,881)	963,733	(1,536,265)
Non-operating income and expenses	(10,004)	(13,806)	89,601	446,525	61,692
Income before tax	(476,340)	(617,718)	(674,280)	1,410,258	(1,474,573)
Net income from continuing operations	(476,340)	(617,718)	(674,280)	1,410,258	(1,474,573)
Loss from discontinued operations	-	-	-	-	-
Net income (loss)	(476,340)	(617,718)	(674,280)	1,410,258	(1,474,573)
Other comprehensive income (net, after tax)	-	(130)	(224)	(105)	82,577
Total comprehensive income	(476,340)	(617,848)	(674,504)	1,410,153	(1,391,996)
Net income attributable to shareholders of the parent	(476,340)	(617,718)	(674,280)	1,410,258	(1,474,573)
Net income attributable to non-controlling interest	-	-	-	-	-
Comprehensive income attributable to shareholders of the parent	(476,340)	(617,848)	(674,504)	1,410,153	(1,391,996)
Comprehensive income attributable to non-controlling interest	-	-	-	-	-
Earnings per share	(1.85)	(2.35)	(2.30)	4.42	(4.56)

Condensed Comprehensive Income Statement - IFRS (parent-only)

Unit: NT$ thousand

Item	Financial summary for the last five years				
	2018	2019	2020	2021	2022
Operation revenue	-	1,120	11,507	3,280,994	365,042
Gross profit	-	1,120	7,636	2,305,033	(212,602)
Operating income	(466,336)	(601,974)	(762,968)	964,388	(1,536,072
Non-operating income and expenses	(10,004)	(15,744)	88,688	445,870	61,499
Income before tax	(476,340)	(617,718)	(674,280)	1,410,258	(1,474,573)
Net income from operations of continued segments	(476,340)	(617,718)	(674,280)	1,410,258	(1,474,573)
Loss from discontinued operations	-	-	-	-	-
Net income (loss)	(476,340)	(617,718)	(674,280)	1,410,258	(1,474,573)
Other comprehensive income (net, after tax)	-	(130)	(224)	(105)	82,577
Total comprehensive income	(476,340)	(617,848)	(674,504)	1,410,153	(1,391,996)
Earnings per share	(1.85)	(2.35)	(2.30)	4.42	(4.56)

(II) Names of CPAs and audit opinions for the most recent 5 years:

Year	Accounting firm	CPAs	Audit Opinion
2022	PwC Taiwan	Juanlu, Man-Yu Lin, Ya-Hui,	Unqualified opinion
2021	PwC Taiwan	Lin, Ya-Hui, Juanlu, Man-Yu	Unqualified opinion
2020	PwC Taiwan	Lin, Ya-Hui, Teng, Sheng-Wei	Unqualified opinion
2019	PwC Taiwan	Lin, Ya-Hui, Teng, Sheng-Wei	Unqualified opinion
2018	PwC Taiwan	Lin, Ya-Hui, Teng, Sheng-Wei	Unqualified opinion

II. Five-Year Financial Analyses

Financial analysis - IFRS (consolidated)

Item		Financial analysis for the last five years				
		2018	2019	2020	2021	2022
Financial structure (%)	Debt ratio	26.16	39.98	10.01	11.76	31.56
	Ratio of long-term capital to property, plant and equipment	154.73	153.85	287.09	393.85	582.48
Solvency (%)	Current ratio	561.58	227.77	1,248.44	847.50	1,537.71
	Quick ratio	523.20	203.63	1,157.51	654.32	1,247.85
	Interest coverage ratio	(45.17)	(31.30)	(40.07)	235.30	(53.84)
Operating performance	Accounts receivable turnover rate (times)	-	-	5.16	21.48	1.47
	Average collection days	-	-	71	17	248
	Inventory turnover rate (times)	-	-	0.09	3.05	1.04
	Account payables turnover rate (times)	-	-	0.14	17.69	5.85
	Average days in sales	-	-	4,046	120	351
	Property, plant and equipment turnover rate (times)	-	-	0.01	2.74	0.30
	Total asset turnover rate (times)	-	-	-	0.75	0.06
Profitability	Return on total assets (%)	(21.67)	(27.01)	(22.93)	32.20	(22.98)
	Return on stockholders' equity (%)	(30.41)	(41.47)	(29.91)	36.08	(30.39)
	Ratio of income before tax to paid-in capital (%)	(30.63)	(39.59)	(31.94)	66.24	(44.98)
	Profit ratio (%)	-	(55,153)	(5,860)	42.98	(403.95)
	Earnings per share (NT$)	(3.17)	(3.97)	(3.61)	6.65	(4.56)
Cash flow	Cash flow ratio (%)	Note 1	Note 1	Note 1	132.07	Note1
	Cash flow adequacy ratio (%)	Note 1	Note 1	Note 1	Note1	Note1
	Cash reinvestment ratio (%)	Note 1	Note 1	Note 1	11.51	Note1
Leverage	Operating leverage	-	-	-	1.12	-
	Financial leverage	-	-	-	1.01	-

Explanations for significant changes in the most recent two years (over 20%): (1) Financial structure: The increase in the ratio of liabilities to assets was mainly due to the increase in liabilities resulting from the issuance of convertible bonds and the decrease in assets due to cash outflows from operations. The increase in long-term capital as a percentage of property, plant and equipment was mainly due to the increase in long-term liabilities and net shareholders' equity as a result of the issuance of convertible bonds and the issuance of new shares with additional cash.increase in the ratio of long-term capital to property, plant and equipment was mainly due to the increase in retained earnings due to the COVID-19 vaccine contract of purchase, and turning losses into profits, increasing long-term capital. (2) Solvency: The increase in current and quick ratio was mainly due to the increase in cash due to the capital increase and the issuance of convertible bonds. The decrease in interest coverage ratio was mainly due to the decrease in operating income and net loss before tax for the period. (3) Operating performance: The decrease in accounts receivable turnover rate, increase in average collection days, decrease in inventory turnover rate, decrease in accounts payable turnover rate, increase in average days in sales, decrease in property, plant and equipment turnover rate, and decrease in total assets turnover rate were mainly due to the decrease in operating revenues and operating costs as a result of the closing of the domestic COVID-19 vaccine procurement contract with the Taiwan Centers for Disease Control. (4) Profitability: The decreases in return on assets, return on equity, net income before income taxes to paid-in capital, profit ratio and earnings per share were mainly due to the decrease in operating income as a result of the closing of the domestic COVID-19 vaccine procurement contract with the Taiwan Centers for Disease Control. (5) Cash flow: MVC has a net cash outflow from operating activities.

Note 1: N/A. All operating activities are cash outflows.

Note 2: The aforementioned financial statements are certified or audited by CPAs.

Financial analysis - IFRS (parent-only)

Item		Financial analysis for the last five years				
		2018	2019	2020	2021	2022
Financial structure (%)	Debt ratio	26.16	39.97	10.01	11.76	31.56
	Ratio of long-term capital to property, plant and equipment	154.73	153.85	287.09	393.85	582.48
Solvency (%)	Current ratio	561.58	225.72	1,246.96	807.58	1,531.53
	Quick ratio	523.20	201.55	1,155.96	608.07	1,241.68
	Interest coverage ratio	(45.17)	(31.30)	(40.07)	235.30	(53.84)
Operating performance	Account receivables turnover rate (times)	-	-	5.16	21.48	1.47
	Average collection period	-	-	71	17	248
	Inventory turnover rate (times)	-	-	0.09	3.05	1.04
	Account payables turnover rate (times)	-	-	0.14	17.69	5.85
	Average days in sales	-	-	4,046	120	351
	Property, plant and equipment turnover rate (times)	-	-	0.01	2.74	0.30
	Total asset turnover rate (times)	-	-	-	0.75	0.06
Profitability	Return on assets (%)	(21.67)	(27.01)	(22.93)	32.20	(22.98)
	Return on equity (%)	(30.41)	(41.47)	(29.91)	36.08	(30.39)
	Ratio of income before tax to paid-in capital (%)	(30.63)	(39.59)	(31.94)	66.24	(44.98)
	Profit ratio (%)	(55,153)	(27,393)	(5,860)	42.98	(403.95)
	Earnings per share (NT$)	(3.17)	(3.97)	(3.61)	6.65	(4.56)
Cash flow	Cash flow ratio (%)	Note 1	Note 1	Note 1	125.91	Note1
	Cash flow adequacy ratio (%)	Note 1	Note 1	Note 1	Note1	Note1
	Cash reinvestment ratio (%)	Note 1	Note 1	Note 1	10.97	Note1
Leverage	Operating leverage	-	-	-	1.12	-
	Financial leverage	-	-	-	1.01	-

Explanations for significant changes in the most recent two years (over 20%):

(1) Financial structure:

The increase in the ratio of liabilities to assets was mainly due to the increase in liabilities resulting from the issuance of convertible bonds and the decrease in assets due to cash outflows from operations. The increase in long-term capital as a percentage of property, plant and equipment was mainly due to the increase in long-term liabilities and net shareholders' equity as a result of the issuance of convertible bonds and the issuance of new shares with additional cash.increase in the ratio of long-term capital to property, plant and equipment was mainly due to the increase in retained earnings due to the COVID-19 vaccine contract of purchase, and turning losses into profits, increasing long-term capital.

(2) Solvency:

The increase in current and quick ratio was mainly due to the increase in cash due to the capital increase and the issuance of convertible bonds.

The decrease in interest coverage ratio was mainly due to the decrease in operating income and net loss before tax for the period.

(3) Operating performance:
The decrease in accounts receivable turnover rate, increase in average collection days, decrease in inventory turnover rate, decrease in accounts payable turnover rate, increase in average days in sales, decrease in property, plant and equipment turnover rate, and decrease in total assets turnover rate were mainly due to the decrease in operating revenues and operating costs as a result of the closing of the domestic COVID-19 vaccine procurement contract with the Taiwan Centers for Disease Control..

(4) Profitability:
The decreases in return on assets, return on equity, net income before income taxes to paid-in capital, profit ratio and earnings per share were mainly due to the decrease in operating income as a result of the closing of the domestic COVID-19 vaccine procurement contract with the Taiwan Centers for Disease Control.

(5) Cash flow: MVC has a net cash outflow from operating activities.

Note 1: N/A. All operating activities are cash outflows.

Note 2: The aforementioned financial statements are certified or audited by CPAs.

Note 3: The calculation formulas adopted are as follows:

1. Financial structure
   (1) Debt ratio = Total liabilities / Total assets
   (2) Ratio of long-term capital to property, plant and equipment = (Total equity + Non-current liabilities) / Net property, plant, and equipment
2. Solvency
   (1) Current ratio = Current assets / Current liabilities
   (2) Quick ratio = (Current assets - Inventory - Prepaid expenses) / Current liabilities
   (3) Interest coverage ratio = Income before tax and interest expenses / Interest expenses.
3. Operating ability
   (1) Receivables (including accounts receivable and notes receivable generated from operations) turnover rate = Net sales / Average balance of accounts receivable (including accounts receivable and notes receivable generated from operations) for each period.
   (2) Average days for cash receipts = 365 / Accounts receivable turnover rate
   (3) Inventory turnover rate = Cost of goods sold / Average inventories.
   (4) Payables (including accounts payable and notes payable generated from operations) turnover rate = Cost of goods sold / Average balance of accounts payable (including accounts payable and notes payable generated from operations) for each period.
   (5) Average days for sale of goods = 365 / Inventory turnover
   (6) Property, plant and equipment turnover rate = Net sales / Average net property, plant, and equipment
   (7) Total asset turnover rate = Net sales / Average total assets
4. Profitability
   (1) Return on assets = [Income after tax + Interest expenses x (1 - tax rate)] / Average total assets
   (2) Return on equity = Income after tax / Average total equity
   (3) Net profit margin = Income after tax / Net sales
   (4) Earnings per share = (Income attributable to owners of parent company - Preferred shares dividends) / Weighted average number of shares issued
5. Cash flow
   (1) Cash flow ratio = Net cash flows generated from operating activities / Current liabilities
   (2) Cash flow adequacy ratio = Net cash flow from operating activities for the most recent five years / (Capital expenditures + Inventory increment + Cash dividends) for the most recent five years
   (3) Cash reinvestment ratio = (Net cash flow from operating activities - Cash dividends) / (Gross property, plant, and equipment + Long-term investment + Other non-current assets + Working capital)
6. Leverage
   (1) Operating leverage = (Net operating revenue - Variable operating costs and expenses) / Operating income
   (2) Financial leverage = Operating income / (Operating income - Interest expenses)

III. Supervisors' or Audit Committee's Report for the Most Recent Year

Medigen Vaccine Biologics Corp.
Audit Committee Review Report

The Board of Directors has prepared and submitted MVC's 2022 Individual Financial Statements and Consolidated Financial Statements have been duly audited by Ms. Juanlu, Man-Yu and Ms. Lin, Ya-Hui, CPAs from PwC, who have attested the final report and issued the audit report. We have examined MVC's 2022 Financial Statements, Business Report and the proposal for deficit compensation and believe that there is no discrepancy. According to Article 14-4 of the Securities and Exchange Act and Article 219 of the Company Act for your review.

To Medigen Vaccine Biologics Corp.

The Audit Committee:

Independent Director: Yao-Chi Li

Independent Director: Chia-Hsiu Lin

Independent Director: Ming-Cheng Chang

March 8, 2023

IV. Financial Statements for the Most Recent Year:
Please refer to: Appendix A. 2022 Parent Company Only Financial Statements for the Most Recent Fiscal Year Certified by CPAs
Appendix B. 2022 Consolidated Financial Statements for the Most Recent Fiscal Year Certified by CPAs

V. Parent Company Only Financial Statements for the Most Recent Year Certified by CPAs:
Please refer to: Appendix A. 2022 Parent Company Only Financial Statements for the Most Recent Fiscal Year Certified by CPAs

VI. In the Most Recent Year and up to the Date of Publication of the Annual Report, Any Financial Difficulties Experienced by the Company or Its Affiliates and How Said Difficulties Will Affect the Company's Financial Situation: None.

Chapter 7. Review and Analysis on Financial Status, Financial Performance, and Risks

I. Financial Status

The material reasons for the significant changes in assets, liabilities, and shareholders' equity in the most recent two years. If the impact is significant, the future response plan shall be stated:

Unit: NT$ thousand

Item	2022	2021	Difference	
			Amount	%
Current assets	5,462,422	3,721,246	1,741,176	46.79
Property, plant and equipment	1,200,472	1,233,960	(33,488)	(2.71)
Intangible assets	45,361	52,978	(7,617)	(14.38)
Other assets	639,434	290,827	348,607	119.87
Total assets	7,347,689	5,299,011	2,048,678	38.66
Current liabilities	355,232	439,087	(83,855)	(19.10)
Non-current liabilities	1,963,452	183,867	1,779,585	967.87
Total liabilities	2,318,684	622,954	1,695,730	272.21
Share capital - common stock	3,278,399	2,128,865	1,149,534	54.00
Capital collected in advance	1,913	2,383	(470)	(19.72)
Capital surplus	2,798,085	1,135,010	1,663,075	146.53
Retained Earning (Accumulated deficit)	(1,131,510)	1,410,258	(2,541,768)	(180.23)
Other equity interest	82,118	(459)	82,577	17,990.63
Total equity	5,029,005	4,676,057	352,948	7.55

1. Main reasons and analysis on the impact of changes (changes greater than 20% or with an amount of more than NT$ 10 million):
   (1) Increase in current assets and total assets: Mainly due to the increase in cash due to cash capital increase and issuance of convertible bonds.
   (2) Increase in other assets: Mainly due to the increase in financial assets at fair value through other comprehensive income - non-current as a result of investment in marketable securities.
   (3) Increase in non-current liabilities and total liabilities: Mainly due to the issuance of convertible bonds.
   (4) Increase in common stock capital: Mainly due to the issuance of new shares in cash.
   (5) Increase in capital surplus: Mainly due to the issuance premium of new shares issued by cash capital increase.
   (6) Increase in loss to be covered: Mainly due to the decrease in operating income as a result of the closing of the domestic COVID-19 vaccine procurement contract with the Taiwan Centers for Disease Control.
   (7) Increase in other equity: Mainly due to the unrealized valuation gain on financial assets measured at fair value through other comprehensive income.

II. Financial Performance

1. The reasons for the significant changes in operating revenue, operating profit and net profit before tax for the most recent 2 years, projected sales volume and the basis thereto, and the possible impacts on the financial operations and countermeasures:

Unit: NT$ thousand

Item	2022	2021	Difference	
			Amount	%
Gross sales	365,042	3,280,994	(2,915,952)	(88.87)
Gross profit	(212,602)	2,305,033	(2,517,635)	(109.22)
Operating profit (loss)	(1,536,265)	963,733	(2,499,998)	(259.41)
Non-operating income and expenses	61,692	446,525	(384,833)	(86.18)
Net profit(loss) before income tax	(1,474,573)	1,410,258	(2,884,831)	(204.56)
Net income (loss)	(1,474,573)	1,410,258	(2,884,831)	(204.56)
Other comprehensive income(loss)	82,577	(105)	82,682	78,744.76
Total comprehensive income(loss)	(1,391,996)	1,410,153	(2,802,149)	(198.71)

Main reasons and analysis on the impact of changes (changes greater than 20% or with an amount of more than NT$ 10 million):

(1) Decrease in gross sales, gross profit, and operating profit, net income before income taxes, net income and total comprehensive income: Mainly due to the closing of the domestic COVID-19 vaccine procurement contract with the Taiwan Centers for Disease Control.

(2) Decrease in non-operating income and expenses: Mainly due to the increase in funding for the COVID-19 grant program signed with the Taiwan Centers for Disease Control in 2021, as MVC reached the clinical trial progress milestone.

(3) Increase in other comprehensive income (loss): This is mainly due to the unrealized valuation gains on financial assets measured at fair value through other comprehensive income.

2. The projected sales volume and the basis thereto, and the possible impacts on the financial operations and countermeasures:

(1) Sales volume forecast for the coming year and basis thereto

MVC has obtained 700,700 doses of publicly funded influenza vaccines and will launch the domestic influenza vaccine supply to provide the government and the public with a new choice of quality vaccines. The enterovirus 71 vaccine has also obtained a drug license from the Taiwan Food and Drug Administration, and will be introduced into the domestic vaccine supply and will be registered for inspection and submission in Southeast Asia.

(2) The possible impacts on the financial operations and countermeasures:

MVC will be taking a more prudent approach toward all capital planning before carrying out its business plans and accelerate the procedure of the launch of vaccines to generate profits and revenues.

III. Analysis of Cash Flow

(I) Analysis of changes in cash flow for current year

Unit: NT$ thousand

Cash and Cash Equivalents, Beginning of Year	Estimated net cash flow from operating activities	Estimated net cash flow from Investing activities	Estimated net cash flow from Financing activities	Cash and Cash Equivalents, End of Year
1,379,692	(1,100,611)	(2,397,917)	3,323,091	1,204,255
Analysis of changes in cash flow: (1) Operating activities: Mainly due to the cash outflow caused by the purchase of materials related to the production of COVID-19 vaccine in 2022. (2) Investing activities: The main reason is that the cash on the account is deposited in the fixed deposit. (3) Financing activities: Mainly due to the cash capital increase and the issuance of corporate bonds to raise funds.				

(II) Remedial plans for liquidity shortfalls: MVC has sufficient cash.

(III) Cash flow analysis for the coming year

Unit: NT$ thousand

Beginning balance	Estimated net cash flow from operating activities	Estimated net cash flows from investing and financing activities	Cash surplus (deficit)	Projected remedy for cash deficit	
				Investment plans	Financing plans
1,204,255	(527,041)	(36,670)	640,544	-	-
Analysis of change in cash flow in the next year： (1) Operating activities: Mainly due to the cash outflow caused by the expenditures related to the production of enterovirus 71 vaccine and quadrivalent flu vaccine in 2023. (2) Investing activities: It mainly refers to the capital expenditure required for the purchase of production machinery and equipment in 2023. (3) Financing activities: Mainly due to the employee's execution of employee stock options.					

IV. Major Capital Expenditure Items: None.

V. Investment Policy for the Most Recent Year, Main Causes for Profits/Losses, Improvement and Investment Plans for the Coming Year:

1. The most recent annual reinvestment policy

   To integrate MVC's outward investment and enhance investment management efficiency, the Board of Directors approved the establishment of MVC Capital Corp. in 2021. The capital increased to NT$300 million was approved by the Taipei City Government on May 3, 2023. In the future, the main direction is to invest in new technology industries such as biotechnology and environmental protection.

2. Analysis of the reasons for the profit or loss of the investment business

   MVC's recent annual reinvestment loss was NT$157 thousand, mainly due to MVC's fact that the investment holding company has no business activities yet. In the future, MVC will continue actively seeking investment targets and expanding investment income to achieve profit goals.

VI. Risk Management and Evaluation:

(I) Effects of changes in interest rate, exchange rate, and inflation rate on the company’s income and countermeasures thereto:

1. Effects of changes in interest rate on the company’s income and countermeasures thereto:

a. Changes in interest income and expenses in the last two years

MC’s bank interest expenses were NT$0 thousand and NT$ 88 thousand in the years 2022 and 2021, respectively. The interest expenses incurred from bank loans account for only a small portion of MVC’s total expenses. The interest income is calculated based on the interest rate of bank deposits. MVC's bank interest incomes were NT$ 5,472 thousand and NT$ 383 thousand in the years 2022 and 2021, respectively, and have an insignificant influence on MVC's income.

b. Specific measures in response to changes in interest rates

However, MVC takes corresponding measures toward the changes in market interest rates. Our financial unit monitors the fluctuation of interest rates at all times and put forth the most suitable long- and short-term bank loan plans base on the actual capital needs, to decrease capital cost.

2. Effects of changes in exchange rate on the company’s income and countermeasures thereto:

a.The impact of exchange rate changes in the last two years on the company's revenue and profit

Currently, most of MVC’s payments are made in New Taiwan Dollars, and only certain payments for the acquisition of equipment or consultant fees are made in foreign currencies. Nonetheless, the amounts paid in foreign currencies are not significant. MVC’s exchange gains were NT$28,858 thousand and NT$ 7,519 thousand in 2022 and 2021, respectively. The fluctuation in the exchange rate has no significant impact on MVC’s income.

b.Specific measures for exchange rate changes

Our financial units monitor the global financial situations and the fluctuation of exchange rates at all times and request our correspondent banks to provide professional consultation to grasp the trend of the exchange rates.

3. Effects of changes in inflation rate on the company’s income and countermeasures thereto:

a. The impact of inflation changes in the last two years on the company's revenue and profit

For the most recent year and up to the date of publication of the annual report, there is no occurrence of significant inflation. MVC's incomes for the past years were not significantly affected by inflation.

b. Specific measures to deal with inflation

MVC pays attention to inflation at any time, observes the rising price of raw materials and changes in product structure, so as to appropriately adjust the price of products and the inventory of raw materials.

(II) 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:

MVC is devoted to the development of its core businesses. It has not engaged in high-risk investments, highly leveraged investments, and loans to other parties, endorsements/guarantees, and derivatives transactions in recent years. Also, MVC has formulated the "Procedures for Acquisition and Disposal of Assets," "Procedures for Loaning of Company Funds," and "Procedures for Endorsements & Guarantees." These procedures have been approved by the Shareholders' Meeting. MVC will carry out its activities accordingly when required in the future.

(III) Research and development work to be carried out in the future, and further expenditures expected for research and development work:

The vaccines that have entered the late stages of clinical verifications include new vaccines such as COVID-19 vaccines and EV71 vaccines. The main R&D goal is to obtain drug licenses in Taiwan and Southeast Asian counties to provide required vaccine protections and obtain market revenues.

The future R&D expenses are planned according to the development schedule of the products. MVC will appropriate a certain percentage of its capital as R&D expenses based on the actual operating performance. It is expected that about $600 million will be allocated for research and development-related expenses this year to maintain MVC's competitiveness.

(IV) Effect on the company's financial operations of important policies adopted and changes in the legal environment at home and abroad, and measures to be taken in response:

1. Domestic:

The government continued to support the domestic biotech and pharmaceutical industry, with the Ministry of Science and Technology, Executive Yuan as the cross-department coordinator. Starting in 2012, in line with the industrial and medical needs, the subsequent industrial promotion plan was renamed "Taiwan Biotech Industry Takeoff Promotion Initiative." The initiative will continue to improve the fundamental plan which was already showing results. The government coordinated the industrial demands, strengthened cross-departmental coordination, services, and consulting industries, integrated resources, promoted the industrialization of pharmaceutical products and medical equipment, and improved the international competitiveness of the industry. In terms of laws and regulations, relevant taxation laws were amended to be in line with the government's policies in promoting the development of the biotech industry. In 2007, the "Act for the Development of Biotech and New Pharmaceuticals Industry," "Regulations Governing Tax Credit for biotech and new pharmaceutical company's expenditure in R&D talent training" and "Regulations Governing Application of Biotech and New Pharmaceuticals Company Shareholder Investment Tax Credits for Profit-Seeking Enterprise" were formulated and were beneficial to MVC's development of new drugs.

In terms of domestic vaccine policies, in October 2018, the Ministry of Health and Welfare has proposed the "Sufficing National Vaccine Funds and Promoting National Immunity Phase 3 Plan (2019-2023)." The central government planned to allocate NT$ 17 billion for the plan during the 5 year plan period. Based on the national vaccine fund, the 2018 procurement budget plan has exceeded NT$ 3.3 billion for the state-subsidized vaccine market coordinated by the Taiwan Centers for Disease Control. The compound annual growth rate (CAGR) from 2012 to 2018 reached 13.24%. The national vaccine policy actively strengthened the self-sufficient ability of domestic vaccines, and extend the inclusion of new vaccines in the state-subsidized vaccination. This has created a proactive and positive environment for the R&D of vaccines and future market strategy.

2. Overseas:

Currently, MVC's financial operations are not affected by international major policies and changes in the laws and regulations. MVC pays close attention to the policy and law changes at all times to respond in a timely manner.

(V) Effect on the company's crisis management of changes in the company's corporate image, and measures to be taken in response:

Although the biotech industry has an extremely high entry threshold, long R&D period, and high R&D risk, the product life cycles are relatively longer and technology added-value is also relatively higher. MVC pays close attention to the development trend of new drugs R&D and the pharmaceutical industry, evaluates possible impacts, and carries out necessary adjustments to the strategy so that it is able to respond flexibly to the changes in technology and industry with the aim to avoid possible impacts. In addition, to effectively implement information security management, in addition to reviewing the applicability and protection measures of information security policies, MVC has established a complete information security management system to reduce corporate information security threats from the system, technical and procedural levels, and establish a The highest standard of confidential information protection services. In addition, multi-layer information security protection is constructed, and innovative technologies for information security defense are continuously introduced. The information security control and management mechanism is integrated and internalized in the daily operation processes such as software and hardware maintenance and operation, supplier information security management, etc., to systematically monitor information security and maintain the basic The confidentiality, integrity and availability of MV C 's important assets are also actively monitored for the effectiveness of information security management, and based on review and continuous improvement, supervision and auditing are implemented to ensure the continued effectiveness of information security regulations. When employees violate relevant norms and procedures, they will be dealt with in accordance with the information security violation handling procedures, and personnel sanctions will be carried out according to the violations (including employees' performance appraisal for the current year or necessary legal actions); Improvement actions such as training and publicity to ensure that MVC's important confidential information is not leaked.

(VI) Effect on the company's crisis management of changes in the company's corporate image, and measures to be taken in response:

Based on the philosophy of bringing a better life to humans through biotech, MVC is committed to fulfilling its corporate social responsibility, maintaining its good corporate image, pursuing sustainable operation, and maximizing MVC's performance and shareholders' interests.

(VII) Expected benefits and possible risks associated with any merger and acquisitions, and mitigation measures being or to be taken:

In the most recent year and up to the date of publication of the annual report, MVC has no plan to acquire another company. If there are events of acquisitions or plans of acquisition, such matters shall be handled in accordance with relevant laws and regulations, and MVC shall take a prudent approach in the evaluation and risk management, to achieve expected business growth and shareholders' interests, maximize MVC's overall benefit and minimize risks.

(VIII) Expected benefits and possible risks associated with any plant expansion, and mitigation measures being or to be taken:

MVC constructed a factory in Biomedical Park in Zhubei, for the manufacturing of vaccines and biological products. The factory is a PIC/S GMP qualified vaccine manufacturing plant and will become the first cell-cultured vaccine manufacturing plant that has mass production capability. The factory is capable of supplying products for commercial products and other services right away. The capital and advanced technology required for the construction of the biological product manufacturing plant and equipment are collected from the capital increase through the issuance of shares and fundraising at the capital market. MVC has no risk of insufficient capital. Also, MVC is actively expanding its business, to decrease the risk of insufficient production capacity.

(IX) Risks associated with any consolidation of sales or purchasing operations, and mitigation measures being or to be taken:

1. Purchase:

   In terms of purchase concentration, the raw materials and materials for the manufacture of vaccine products must be subject to strict PIC/S GMP standard level restrictions, and the industrial technology threshold is high, so it has a relatively special industrial supply chain, not as other general industries have more procurement sources. Suppliers are available. Therefore, it is the risk of concentration of purchases in the vaccine industry. MVC's solution is to sign supply contracts with important raw material manufacturers to ensure the stability of supply and quality assurance.

2. Sales:

MVC obtained an approval letter from the Taiwan Food and Drug Administration for the registration of new drug testing in April, 2023, which is the first enterovirus 71 vaccine in Taiwan that is not approved under the accelerated approval mechanism (neutralizing antibodies). MVC is also the only domestic developer with its own production capacity for enterovirus 71 vaccines, and will market the vaccine in Taiwan as soon as possible and apply for drug certificates in Southeast Asia and other target markets. In addition, MVC quadrivalent influenza vaccine also obtained an approval letter from the Taiwan Food and Drug Administration for inspection and registration in March, 2023. Subsequently, MVC will be put into the supply of domestic quadrivalent influenza vaccines, providing the government and the public with a new choice of high-quality vaccines. In the future, MVC will continue to expand its presence in overseas markets to reduce the risk of concentrated sales.

(X) 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 percent stake in the company has been transferred or has otherwise changed hands, and mitigation measures being or to be taken:

There is no event of a large-scale transfer of shares of directors, supervisors, or major shareholders holding more than 10% of the total Company's shares.

(XI) Effects of, Risks Relating to and Response to the Changes in Management Rights:

In the most recent year and up to the date of publication of the annual report, there is no event of changes in management power of the Directors, Supervisors or major shareholders holding more than 10% of the Company's shares that may pose an influence on MVC's operation. Also, MVC has formulated comprehensive internal control systems and relative management regulations, to reduce the impact of changes in management power on MVC's operation.

(XII) Litigious or non-litigious matters: None.

(XIII) Other important risks and countermeasures:

1. Risk of capital deficiency due to large capital needs for vaccine development.

   Responses:

   A. Assistance and promotion of the government

      The biotech industry requires long-term and stable capital investment in the development and clinical trials of products, which is a huge burden on the capital operation of small-medium enterprises. Fortunately, the government provides subsidies for industrial technology plans and industry-academia cooperation plans. Also, the companies are encouraged to raise funds from the capital market to mitigate possible shortages of working capital. Therefore, MVC is actively obtaining various policy credits and entering the capital market through public offering.

   B. Raising funds from the capital market

      In addition to the low financing cost and flexible financial operation, the capital market is also able to attract investment from strategic investors, and enhance

MVC's ability in capital increase, business expansion, and recruiting of talents. Therefore, MVC's capital for the development of new drugs will be from the capital market.

2. Time-consuming clinical trials, and risk of failure

   Responses:

   The success rate of vaccine development is much higher than that of the general new drugs. Nonetheless, there exists possible failure. To balance out the time-consuming clinical trials, and risk of failure, MVC has adopted a biosimilar product pipeline. The effectiveness and safety of the series of products have been verified by the market over the years, and the development of the products requires a shorter time and has a higher success rate. Currently, MVC is planning to obtain relevant licenses to accelerate the process of clinical trials and market sales, to create medium-low risk sales revenue.

3. Biological product technology belongs to the high-tech industry. The products and relevant production technology are protected by patents and data exclusivity. Therefore, there are risks of violating others' patents or intellectual property rights.

   Responses:

   MVC carries out comprehensive due diligence on patents to avoid any violation of others' patents. In practice, there is only a small number of vaccine development plans in the world. Before MVC launched its vaccine projects, it carries out patent search on major markets. As each vaccine project has its own specificity, patent search is not difficult. Due to the small number of vaccine development plans, it is easy to trace back to the origin for the prevention of patent violation. None of the development projects introduced by MVC was an early R&D product, and there has been a certain patent layout and related literature, and in case of infringement of patents by others, there is sufficient evidence such as license contracts, development records, or clinical trial data to carry out patent litigation.

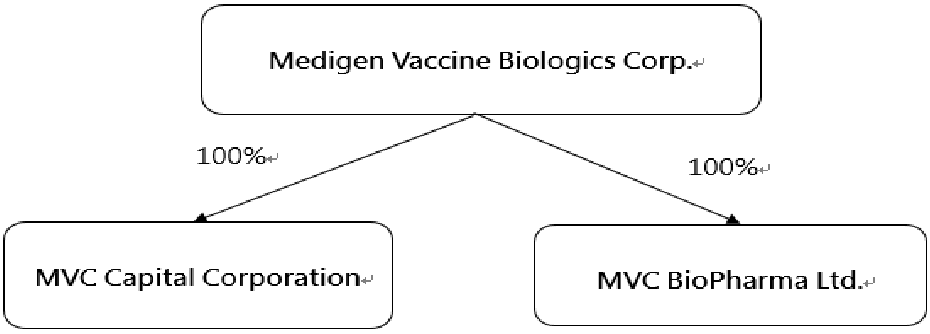
VII. Other Important Matters: None.

Chapter 8. Special Disclosure

I. Information on Affiliates:

(I) Consolidated business report

1. Structure of affiliates



2. Basic information of the company's affiliates

Names of affiliates	Date of incorporation	Address	Paid-in capital	Main business activities
MVC BioPharma Ltd.	2018.9.26	The Grand Pavilion Commercial Centre Oleander Way, 802 West Bay Road PO Box 32052, Grand Cayman KY1-1208 Cayman Islands	US$ 50,000 (2022.12.31 Rate: 29.8044)	Investment
MVC Capital Corporation	2022.01.06	7F. No. 16, Ln. 120, Sec. 1, Neihu Rd., Neihu Dist., Taipei City, Taiwan (R.O.C.)	NT$300,00,000	Investment

Note: The capital increase to $300 million was approved by the Taipei City Government on May 3, 2023.

3. Information for common shareholders of treated-as controlled companies and affiliates: None.
4. Industries covered by the business operation of the affiliates: None
5. Information on Directors, Supervisors and General Managers of affiliated enterprises:

Names of affiliates	Position	Name or Rep.	Shareholding	
			Number of shares	Percentage of ownership
MVC BioPharma Ltd.	Director Director	Shi-Chung Chang Tsan-Jian Chen	- -	0% 0%
MVC Capital Corporation	Chairman	Tsan-Jian Chen	30,000,000	100%

6. Operating status of affiliates:

Dec. 31, 2022; Unit: NT$ thousand

Names of affiliates	Capital	Total assets	Total liabilities	net worth	Sales revenue	Operating profit	Income (after tax)	Earnings per share (NT$) (after tax)
MVC BioPharma Ltd.	US$50,000 (Rate; 29.8044)	3,510	-	3,510	-	(91)	(83)	(1.67)
MVC Capital Corporation	NT$200,000	282,151	-	282,151	-	(102)	(74)	(0.0037)

(II) Consolidated financial statements:

Medigen Vaccine Biologics Corp.

Declaration of Consolidated Financial Statements of Affiliates

In 2022 (from January 1, 2022, to December 31, 2022), MVC required to be included in the consolidated financial statements of affiliates under the "Criteria Governing Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises" are all the same as MVC required to be included in the consolidated financial statements of parent and subsidiary companies as provided in the International Financial Reporting Standards (IFRS) 10, and relevant information that should be disclosed in the consolidated financial statements of affiliates has all been disclosed in the consolidated financial statements of parent and subsidiary companies. MVC hereby produces this declaration to the effect that no preparation for the separate consolidated financial statements of affiliates is required.

Sincerely,

Name of Company: Medigen Vaccine Biologics Corp.

Chairman: Shi-Chung Chang

Mar. 8, 2023

(III) Affiliation reports:

Medigen Vaccine Biologics Corp.

2022 Affiliation reports

1. Relationship between the subsidiaries and the controlling company

Unit: shares; %

Name of controlling company	Reason of control	Shareholding of controlling company			Directors, supervisors or managers appointed by the controlling company	
		Shares	%	Number of shares pledged	Position	Name
Medigen Biotech Corp.	Parent company that has controlling power over the company	67,748,844	19.74%	12,600,000	Chairman Director	Shi-Chung Chang Ken-Hu Chang

Note: The shareholder information is as of December 28, 2022, provided by the Taiwan Depository Clearing Corp.

2. Description of transactions
   (1) Purchase (sale) of goods: None.
   (2) Property transactions: None.
   (3) Financing facility: None.
   (4) Asset leasing: None.
   (5) Other transactions: None.
3. Endorsement/guarantee: None.
4. Other matters having significant effects on the Company's finance and business: None.

II. Issuance of Private Placement Securities during the Most Recent Year and up to the Date of Publication of the Annual Report: None.

III. Holding or Disposal of the Company's Stock by Subsidiaries during the Most Recent Year and up to the Date of Publication of the Annual Report: None.

IV. Other Supplementary Information: None.

V. Any Events during the Most Recent Year and up to the Date of Publication of the Annual Report that Had Significant Impacts on Shareholders' Right or Security Prices as Stated in Subparagraph 2 Paragraph 3 of Article 36 of Securities and Exchange Act: None.

Appendix A. 2022 Parent Company Only Financial Statements for the Most Recent Year Certified by CPAs

INDEPENDENT AUDITORS' REPORT TRANSLATED FROM CHINESE

To Medigen Vaccine Biologics Corporation

Opinion

We have audited the accompanying parent company only balance sheets of Medigen Vaccine Biologics Corporation (the "Company") as at December 31, 2022 and 2021, and the related parent company only statements of comprehensive income, of changes in equity and of cash flows for the years then ended, and notes to the parent company only financial statements, including a summary of significant accounting policies.

In our opinion, the parent company only financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2022 and 2021, and its financial performance and its cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

Basis for opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and Standards on Auditing of the Republic of China. Our responsibilities under those standards are further described in the *Auditors' responsibilities for the audit of the parent company only financial statements* section of our report. We are independent of the Company in accordance with the Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the Company's 2022 parent company only financial statements. These matters were addressed in the context of our audit of the parent company only financial statements as a whole and, in forming our opinion thereon, we do not provide a separate opinion on these matters.

Key audit matters for the Company's 2022 parent company only financial statements were as follows:

Impairment assessment of property, plant and equipment, right-of-use assets and intangible assets

Description

Refer to Note 4(17) for accounting policies on impairment of non-financial assets, Note 5(2) for uncertainty of accounting estimates and assumptions in relation to the impairment assessment of property, plant and equipment, right-of-use assets and intangible assets, Note 6(9) for details of property, plant and equipment, Note 6(10) for details of right-of-use assets, and Note 6(11) for details of intangible assets. As at December 31, 2022, the Company's property, plant and equipment, right-of-use assets and intangible assets at fair value amounted to NT$1,514,886 thousand, constituting 21% of total assets.

The Company measures recoverable amount based on the value in use. The evaluation of the value in use of each cash-generating unit involves management's subjective judgment, including the estimation of future cash flows and appropriate discount rates. As the aforementioned assumptions are highly uncertain, and the estimated results have a significant impact on the value in use, we considered the impairment assessment of property, plant and equipment, right-of-use assets and intangible assets as a key audit matter.

How our audit addressed the matter

We performed the following audit procedures in respect of the above key audit matter:

1. Assessed the reasonableness of the management's estimation process of the Company's future cash flows.
2. Discussed financial forecasts with management and assessed the reasonableness by comparing with historical results.
3. Reviewed the reasonableness of assumptions such as sales revenue growth rate and gross margin, and the parameters of the discount rate used, including the reasonableness of risk-free rate of the cost of equity capital, the risk coefficient of the industry, and similarity assets return in the market.

Assessment of allowance for inventory valuation losses

Description

Refer to Note 4(12) for accounting policy on inventory valuation, Note 5(2) for accounting estimates and assumptions in relation to inventory valuation, and Note 6(6) for details of inventory.

As at December 31, 2022, the Company's inventory and allowance for inventory valuation losses amounted to $987,952 thousand and $443,168 thousand, respectively, constituting 7% of the total assets.

The Company is primarily engaged in manufacturing and sales of vaccine related products which have risks of inventory losing value or becoming obsolete due to allowance, obsolescence or trivial sales amount. Inventories are measured at the lower of cost and net realisable value, using the item by item approach. A provision for loss on decline in value of inventory is recognised based on the net realisable value. As the inventory and allowance for loss are material to the financial statements and the determination of net realisable value involves subjective judgment and estimates, we considered the assessment of allowance for inventory valuation losses a key audit matter.

<u>How our audit addressed the matter</u>

We performed the following audit procedures on the above key audit matter:

1. Assessed the provision policy on allowance for inventory valuation losses based on the understanding of the Company's operations and industry.
2. Obtained an understanding of the inventory management process, participated in observing annual physical counts to assess the effectiveness of management's classification and controls over obsolete inventory.
3. Verified the accuracy of the Company's inventory aging report to check whether the inventory aging report was in accordance with the Company's accounting policy.
4. Examined the inventory valuation report to assess the adequacy of allowance for inventory valuation losses.

Responsibilities of management and those charged with governance for the parent company only financial statements

Management is responsible for the preparation and fair presentation of the parent company only financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, and for such internal control as management determines is necessary to enable the preparation of parent company only financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the parent company only financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the audit committee, are responsible for overseeing the Company's financial reporting process.

Auditors' responsibilities for the audit of the parent company only financial statements

Our objectives are to obtain reasonable assurance about whether the parent company only financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Standards on Auditing of the Republic of China will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these parent company only financial statements.

As part of an audit in accordance with the Standards on Auditing of the Republic of China, we exercise professional judgment and professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the parent company only financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the parent company only financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the parent company only financial statements, including the disclosures, and whether the parent company only financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the parent company only financial statements. We are responsible for the direction, supervision and performance of the audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the parent company only financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Juanlu, Man-Yu　　　　　　　　Lin, Ya-Hui

For and on behalf of PricewaterhouseCoopers, Taiwan

March 8, 2023

The accompanying parent company only financial statements are not intended to present the financial position and results of operations and cash flows in accordance with accounting principles generally accepted in countries and jurisdictions other than the Republic of China. The standards, procedures and practices in the Republic of China governing the audit of such financial statements may differ from those generally accepted in countries and jurisdictions other than the Republic of China. Accordingly, the accompanying parent company only financial statements and independent auditors' report are not intended for use by those who are not informed about the accounting principles or auditing standards generally accepted in the Republic of China, and their applications in practice.

As the financial statements are the responsibility of the management, PricewaterhouseCoopers cannot accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may derive from the translation.

MEDIGEN VACCINE BIOLOGICS CORPORATION
PARENT COMPANY ONLY BALANCE SHEETS
DECEMBER 31, 2022 AND 2021
(Expressed in thousands of New Taiwan dollars)

	Assets	Notes	December 31, 2022 AMOUNT	%	December 31, 2021 AMOUNT	%
	Current assets					
1100	Cash and cash equivalents	6(1) and 8	$ 1,182,334	16	$ 1,176,617	22
1110	Financial assets at fair value through profit or loss - current	6(2)	52,993	1	53,097	1
1136	Financial assets at amortised cost, net - current	6(1)(4)	2,979,940	41	800,000	15
1140	Contract assets - current	6(19)	-	-	339,148	6
1170	Accounts receivable, net	6(5)	194,400	3	301,041	6
1200	Other receivables		1,171	-	70	-
130X	Inventories	6(6)	544,784	7	563,495	11
1410	Prepayments	6(8)	370,986	5	79,632	2
1470	Other current assets	6(1), 7 and 8	113,893	1	232,866	4
11XX	**Total current assets**		5,440,501	74	3,545,966	67
	Non-current assets					
1517	Financial assets at fair value through other comprehensive income - non-current	6(3)	-	-	54,000	1
1550	Investments accounted for using equity method	6(7)	285,661	4	3,241	-
1600	Property, plant and equipment	6(9)	1,200,472	16	1,233,960	23
1755	Right-of-use assets	6(10)	269,053	4	179,569	4
1780	Intangible assets	6(11)	45,361	1	52,978	1
1990	Other non-current assets	6(1), 7 and 8	106,641	1	229,297	4
15XX	**Total non-current assets**		1,907,188	26	1,753,045	33
1XXX	**Total assets**		$ 7,347,689	100	$ 5,299,011	100

(Continued)

MEDIGEN VACCINE BIOLOGICS CORPORATION
PARENT COMPANY ONLY BALANCE SHEETS
DECEMBER 31, 2022 AND 2021
(Expressed in thousands of New Taiwan dollars)

	Liabilities and Equity	Notes	December 31, 2022 AMOUNT	%	December 31, 2021 AMOUNT	%
	Current liabilities					
2130	Contract liabilities - current	6(19)	$ -	-	$ 111,412	2
2150	Notes payable		581	-	1,730	-
2170	Accounts payable		108,520	2	86,804	2
2200	Other payables		226,119	3	235,274	4
2280	Lease liabilities - current		11,778	-	1,987	-
2399	Other current liabilities		8,234	-	1,880	-
21XX	**Total current liabilities**		355,232	5	439,087	8
	Non-current liabilities					
2500	Financial liabilities at fair value through profit or loss - non-current	6(2)	19,250	-	-	-
2530	Corporate bonds payable	6(12)	1,677,850	23	-	-
2580	Lease liabilities - non-current		266,352	4	183,867	4
25XX	**Total non-current liabilities**		1,963,452	27	183,867	4
2XXX	**Total liabilities**		2,318,684	32	622,954	12
	Equity					
	Share capital	6(15)				
3110	Common stock		3,278,399	44	2,128,865	40
3140	Capital collected in advance		1,913	-	2,383	-
	Capital surplus	6(16)				
3200	Capital surplus		2,798,085	38	1,135,010	21
	Retained earnings	6(17)				
3310	Legal reserve		141,026	2	-	-
3320	Special reserve		459	-	-	-
3350	Unappropriated retained earnings (accumulated deficit)		(1,272,995)	(17)	1,410,258	27
	Other equity interest	6(18)				
3400	Other equity interest		82,118	1	(459)	-
3XXX	**Total equity**		5,029,005	68	4,676,057	88
	Significant contingent liabilities and unrecognised contract commitments	9				
3X2X	**Total liabilities and equity**		$ 7,347,689	100	$ 5,299,011	100

The accompanying notes are an integral part of these parent company only financial statements.

MEDIGEN VACCINE BIOLOGICS CORPORATION
PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME
YEARS ENDED DECEMBER 31, 2022 AND 2021
(Expressed in thousands of New Taiwan dollars, except for earnings (loss) per share in New Taiwan dollars)

			Year ended December 31			
			2022		2021	
	Items	Notes	AMOUNT	%	AMOUNT	%
4000	Operating revenue	6(19)	$ 365,042	100	$ 3,280,994	100
5000	Operating costs	6(6)(24)(25)	(577,644)	(158)	(975,961)	(30)
5900	Net operating margin		(212,602)	(58)	2,305,033	70
	Operating expenses	6(24)(25)				
6100	Selling expenses		(72,833)	(20)	(7,498)	-
6200	General and administrative expenses		(110,648)	(31)	(140,059)	(4)
6300	Research and development expenses		(1,139,989)	(312)	(1,193,088)	(37)
6000	Total operating expenses		(1,323,470)	(363)	(1,340,645)	(41)
6900	Operating (loss) profit		(1,536,072)	(421)	964,388	29
	Non-operating income and expenses					
7100	Interest income	6(20)	7,569	2	2,739	-
7010	Other income	6(21)	68,671	19	442,358	14
7020	Other gains and losses	6(22)	12,304	3	7,446	-
7050	Finance costs	6(23)	(26,888)	(7)	(6,019)	-
7070	Share of loss of associates and joint ventures accounted for using equity method	6(7)	(157)	-	(654)	-
7000	Total non-operating income and expenses		61,499	17	445,870	14
7900	**Loss (profit) before income tax**		(1,474,573)	(404)	1,410,258	43
7950	Income tax (expense) benefit	6(26)	-	-	-	-
8200	**Loss (profit) for the year**		($ 1,474,573)	(404)	$ 1,410,258	43
	Components of other comprehensive income that will not be reclassified to profit or loss					
8330	Share of other comprehensive income of subsidiaries, associates and joint ventures accounted under the equity method that will not be reclassified to profit or loss	6(18)	$ 82,225	23	$ -	-
	Components of other comprehensive income that will be reclassified to profit or loss					
8361	Financial statements translation differences of foreign operations	6(18)	352	-	(105)	-
8300	**Other comprehensive income (loss) for the year**		$ 82,577	23	($ 105)	-
8500	**Total comprehensive (loss) income for the year**		($ 1,391,996)	(381)	$ 1,410,153	43
	(Loss) earnings per share	6(27)				
9750	Basic (loss) earnings per share		($ 4.56)		$ 4.42	
9850	Diluted (loss) earnings per share		($ 4.56)		$ 4.39	

The accompanying notes are an integral part of these parent company only financial statements.

MEDIGEN VACCINE BIOLOGICS CORPORATION
PARENT COMPANY ONLY STATEMENTS OF CHANGES IN EQUITY
YEARS ENDED DECEMBER 31, 2022 AND 2021
(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

		Capital			Retained Earnings			Other equity interest		
	Notes	Share capital - common stock	Capital collected in advance	Capital surplus	Legal reserve	Special reserve	Unappropriated retained earnings (accumulated deficit)	Exchange differences on translation of foreign financial statements	Unrealised gains (losses) from financial assets measured at fair value through other comprehensive income	Total equity
Year ended December 31, 2021										
Balance at January 1, 2021		$2,110,988	$ 3,620	$2,319,154	$ -	$ -	($1,291,998)	($ 354)	$ -	$3,141,410
Profit for the year		-	-	-	-	-	1,410,258	-	-	1,410,258
Other comprehensive loss	6(18)	-	-	-	-	-	-	(105)	-	(105)
Total comprehensive income (loss)		-	-	-	-	-	1,410,258	(105)	-	1,410,153
Capital surplus used to cover accumulated deficit	6(17)	-	-	(1,291,998)	-	-	1,291,998	-	-	-
Shares issued under employee stock plans	6(15)(16)	17,877	(1,237)	39,039	-	-	-	-	-	55,679
Share-based payment transaction	6(14)(16)	-	-	68,815	-	-	-	-	-	68,815
Balance at December 31, 2021		$2,128,865	$ 2,383	$1,135,010	$ -	$ -	$1,410,258	($ 459)	$ -	$4,676,057
Year ended December 31, 2022										
Balance at January 1, 2022		$2,128,865	$ 2,383	$1,135,010	$ -	$ -	$1,410,258	($ 459)	$ -	$4,676,057
Loss for the year		-	-	-	-	-	(1,474,573)	-	-	(1,474,573)
Other comprehensive income	6(18)	-	-	-	-	-	-	352	82,225	82,577
Total comprehensive income (loss)		-	-	-	-	-	(1,474,573)	352	82,225	(1,391,996)
Appropriations and distribution of 2021 retained earnings	6(17)									
Legal reserve		-	-	-	141,026	-	(141,026)	-	-	-
Special reserve		-	-	-	-	459	(459)	-	-	-
Common stock dividends		1,067,195	-	-	-	-	(1,067,195)	-	-	-
Issuance of common stock for cash	6(15)(16)	70,000	-	1,470,000	-	-	-	-	-	1,540,000
Share-based payment transaction (Cash capital increase)	6(14)(16)	-	-	7,474	-	-	-	-	-	7,474
Shares issued under employee stock plans	6(15)(16)	12,339	(470)	27,536	-	-	-	-	-	39,405
Share-based payment transaction	6(14)(16)	-	-	68,135	-	-	-	-	-	68,135
Issuance of convertible bonds	6(12)(16)	-	-	89,930	-	-	-	-	-	89,930
Balance at December 31, 2022		$3,278,399	$ 1,913	$2,798,085	$ 141,026	$ 459	($1,272,995)	($ 107)	$ 82,225	$5,029,005

The accompanying notes are an integral part of these parent company only financial statements.

MEDIGEN VACCINE BIOLOGICS CORPORATION
PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2022 AND 2021
(Expressed in thousands of New Taiwan dollars)

	Notes	Year ended December 31 2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES			
(Loss) profit before tax		($ 1,474,573)	$ 1,410,258
Adjustments			
Adjustments to reconcile profit (loss)			
Depreciation	6(9)(24)	104,749	100,181
Amortization of right-of-use assets	6(10)(24)	14,356	3,990
Amortization	6(11)(24)	8,787	8,371
Net loss of financial assets at fair value through profit or loss	6(2)(22)	16,554	73
Interest income	6(20)	(7,569)	(2,739)
Interest expense	6(23)	19,355	322
Interest expense on leasing liabilities	6(10)(23)	7,533	5,697
Share-based payment	6(14)(25)	75,609	68,815
Recognition of losses on investments accounted for using equity method	6(7)	157	654
Changes in operating assets and liabilities			
Changes in operating assets			
Contract assets - current		339,148	(339,148)
Accounts receivable, net		106,641	(296,578)
Other receivables		(1,101)	182
Inventories		18,711	(486,063)
Prepayments		(291,964)	(62,330)
Other current assets		103,016	(150,202)
Changes in operating liabilities			
Contract liabilities - current		(111,412)	111,412
Notes payable		(1,149)	1,133
Accounts payable		21,716	65,625
Other payables		(27,932)	115,151
Other current liabilities		6,354	1,367
Cash (outflow) inflow generated from operations		(1,073,014)	556,171
Interest received		7,536	2,720
Interest paid		(7,533)	(6,019)
Net cash flows (used in) from operating activities		(1,073,011)	552,872
CASH FLOWS FROM INVESTING ACTIVITIES			
Acquisition of financial assets at fair value through other comprehensive income - non-current		-	(54,000)
Disposal of financial assets at fair value through other comprehensive income - non-current	6(3)	54,000	-
Acquisition of financial assets at amortized cost		(2,979,940)	(1,900,000)
Proceeds from repayments of financial assets at amortised cost		800,000	1,100,000
Increase in prepayments for investments in stocks (recognised in "Other non-current assets")		-	(200,000)
Acquisition of property, plant, and equipment	6(28)	(47,429)	(124,530)
Decrease (increase) in refundable deposits (recognised in "Other non-current assets")		5,930	(2,924)
Acquisition of intangible assets	6(11)	(1,170)	(1,338)
Proceeds from disposals of property, plant, and equipment	6(28)	-	120,000
Increase in prepayments for equipment (recognised in "Other non-current assets")		(91,744)	(9,099)
Decrease (increase) in restricted assets (recognised in "Other current assets")		15,990	(31,006)
Net cash flows used in investing activities		(2,244,363)	(1,102,897)
CASH FLOWS FROM FINANCING ACTIVITIES			
Increase in short-term borrowings		-	30,000
Repayments of short-term borrowings		-	(30,000)
Issuance of coporate bonds payable	6(29)	1,755,250	-
Decrease in deposits received (recognised in "Other non-current liabilities")		-	(2,575)
Repayments of the principal amount of lease liabilities	6(29)	(11,564)	(1,928)
Issuance of common stock for cash	6(15)	1,540,000	-
Exercise of employee stock plan		39,405	55,679
Net cash flows from financing activities		3,323,091	51,176
Net increase (decrease) in cash and cash equivalents		5,717	(498,849)
Cash and cash equivalents at beginning of year		1,176,617	1,675,466
Cash and cash equivalents at end of year		$ 1,182,334	$ 1,176,617

The accompanying notes are an integral part of these parent company only financial statements.

MEDIGEN VACCINE BIOLOGICS CORPORATION

NOTES TO THE PARENT COMPANY ONLY FINANCIAL STATEMENTS

YEARS ENDED DECEMBER 31, 2022 AND 2021

(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

1. History and Organization

Medigen Vaccine Biologics Co., Ltd. (the "Company") was incorporated as a company limited by shares under the provisions of the Company Act of the Republic of China (R.O.C.) on October 22, 2012. The Company is primarily engaged in the research, development and wholesale of vaccine and biopharmaceutical, medical devices wholesale and retail, etc. Medigen Biotechnology Corporation holds 19.74% equity interest in the Company. Medigen Biotechnology Corporation is the Company's ultimate parent company.

2. The Date of Authorisation for Issuance of the Financial Statements and Procedures for Authorisation

The parent company only financial statements were authorised for issuance by the Board of Directors on March 8, 2023.

3. Application of New Standards, Amendments and Interpretations

(1) Effect of the adoption of new issuances of or amendments to International Financial Reporting Standards ("IFRS") that came into effect as endorsed by the Financial Supervisory Commission ("FSC")

New standards, interpretations and amendments endorsed by the FSC and became effective from 2022 are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IFRS 3, 'Reference to the conceptual framework'	January 1, 2022
Amendments to IAS 16, 'Property, plant and equipment: proceeds before intended use'	January 1, 2022
Amendments to IAS 37, 'Onerous contracts - cost of fulfilling a contract'	January 1, 2022
Annual improvements to IFRS Standards 2018–2020	January 1, 2022

The above standards and interpretations have no significant impact to the Company's financial condition and financial performance based on the Company's assessment.

(2) Effect of new issuances of or amendments to IFRSs as endorsed by the FSC but not yet adopted by the Company

New standards, interpretations and amendments endorsed by the FSC effective from 2023 are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IAS 1, 'Disclosure of accounting policies'	January 1, 2023
Amendments to IAS 8, 'Definition of accounting estimates'	January 1, 2023
Amendments to IAS 12, 'Deferred tax related to assets and liabilities arising from a single transaction'	January 1, 2023

The above standards and interpretations have no significant impact to the Company's financial condition and financial performance based on the Company's assessment.

(3) IFRSs issued by IASB but not yet endorsed by the FSC

New standards, interpretations and amendments issued by International Accounting Standards Board ("IASB") but not yet included in the IFRSs as endorsed by the FSC are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IFRS 10 and IAS 28, 'Sale or contribution of assets between an investor and its associate or joint venture'	To be determined by International Accounting Standards Board
Amendments to IFRS 16, 'Lease liability in a sale and leaseback'	January 1, 2024
IFRS 17, 'Insurance contracts'	January 1, 2023
Amendments to IFRS 17, 'Insurance contracts'	January 1, 2023
Amendment to IFRS 17, 'Initial application of IFRS 17 and IFRS 9 – comparative information'	January 1, 2023
Amendments to IAS 1, 'Classification of liabilities as current or non-current'	January 1, 2024
Amendments to IAS 1, 'Non-current liabilities with covenants'	January 1, 2024

The above standards and interpretations have no significant impact to the Company's financial condition and financial performance based on the Company's assessment.

4. Summary of Significant Accounting Policies

The principal accounting policies applied in the preparation of these parent company only financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

(1) Compliance statement

The parent company only financial statements have been prepared in accordance with the "Regulations governing the Preparation of Financial Reports by Securities Issuers".

(2) Basis of preparation

A. Except for financial instruments measured at the fair value, the parent company only financial statements have been prepared under the historical cost convention.

B. The preparation of financial statements in conformity with IFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the parent company only financial statements are disclosed in Note 5.

(3) Foreign currency translation

Items included in the financial statements of each of the Company's entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The parent company only financial statements are presented in "New Taiwan Dollars", which is the Company's functional and the Company's presentation currency.

A. Foreign currency transactions and balances

(a) Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions are recognised in profit or loss in the period in which they arise.

(b) Monetary assets and liabilities denominated in foreign currencies at the period end are re-translated at the exchange rates prevailing at the balance sheet date. Exchange differences arising upon re-translation at the balance sheet date are recognised in profit or loss.

(c) Non-monetary assets and liabilities denominated in foreign currencies held at fair value through profit or loss are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognised in profit or loss. Non-monetary assets and liabilities denominated in foreign currencies held at fair value through other comprehensive income are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognised in other comprehensive income. However, non-monetary assets and liabilities denominated in foreign currencies that are not measured at fair value are translated using the historical exchange rates at the dates of the initial transactions.

(d) All foreign exchange gains and losses are presented in the statement of comprehensive income within other 'gains and losses'.

B. Translation of foreign operations

(a) The operating results and financial position of all the company entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

i. Assets and liabilities for each balance sheet presented are translated at the closing exchange rate at the date of that balance sheet;

ii. Income and expenses for each statement of comprehensive income are translated at average exchange rates of that period; and

iii. All resulting exchange differences are recognised in other comprehensive income.

(b) When the foreign operation partially disposed of or sold is a subsidiary, cumulative exchange differences that were recorded in other comprehensive income are proportionately transferred to the non-controlling interest in this foreign operation. In addition, even when the Company retains partial interest in the former foreign subsidiary after losing control of the former foreign subsidiary, such transactions should be accounted for as disposal of all interest in the foreign operation.

(4) Classification of current and non-current items

A. Assets that meet one of the following criteria are classified as current assets; otherwise they are classified as non-current assets:

(a) Assets arising from operating activities that are expected to be realised, or are intended to be sold or consumed within the normal operating cycle;

(b) Assets held mainly for trading purposes;

(c) Assets that are expected to be realised within twelve months from the balance sheet date;

(d) Cash and cash equivalents, excluding restricted cash and cash equivalents and those that are to be exchanged or used to settle liabilities more than twelve months after the balance sheet date.

B. Liabilities that meet one of the following criteria are classified as current liabilities; otherwise they are classified as non-current liabilities:

(a) Liabilities that are expected to be settled within the normal operating cycle;

(b) Liabilities arising mainly from trading activities;

(c) Liabilities that are to be settled within twelve months from the balance sheet date;

(d) Liabilities for which the repayment date cannot be extended unconditionally to more than twelve months after the balance sheet date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

(5) Cash equivalents

Cash equivalents refer to short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Time deposits that meet the definition above and are held for the purpose of meeting short-term cash commitments in operations (within 3 months since acquired) are classified as cash equivalents.

(6) Financial assets at fair value through profit or loss

A. Financial assets at fair value through profit or loss are financial assets that are not measured at amortised cost or fair value through other comprehensive income.

B. On a regular way purchase or sale basis, financial assets at fair value through profit or loss are recognised and derecognised using trade date accounting.

C. At initial recognition, the Company measures the financial assets at fair value and recognises the transaction costs in profit or loss. The Company subsequently measures the financial assets at fair value, and recognises the gain or loss in profit or loss.

(7) Financial assets at fair value through other comprehensive income

A. Financial assets at fair value through other comprehensive income comprise equity securities which are not held for trading, and for which the Company has made an irrevocable election at initial recognition to recognise changes in fair value in other comprehensive income.

B. On a regular way purchase or sale basis, financial assets at fair value through other comprehensive income are recognised and derecognised using trade date accounting.

C. At initial recognition, the Company measures the financial assets at fair value plus transaction costs. The Company subsequently measures the financial assets at fair value:

The changes in fair value of equity investments that were recognised in other comprehensive income are reclassified to retained earnings and are not reclassified to profit or loss following the derecognition of the investment. Dividends are recognised as revenue when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Company and the amount of the dividend can be measured reliably.

(8) Financial assets at amortised cost

The Company's time deposits which do not fall under cash equivalents are those with a short maturity period and are measured at initial investment amount as the effect of discounting is immaterial.

(9) Accounts receivable

A. Accounts receivable entitle the Company a legal right to receive consideration in exchange for transferred goods or rendered services.

B. The short-term accounts receivable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(10) Impairment of financial assets

For financial assets at amortised cost including accounts receivable or contract assets that have a significant financing component, at each reporting date, the Company recognises the impairment provision for 12 months expected credit losses (ECLs) if there has not been a significant increase in credit risk since initial recognition or recognises the impairment provision for the lifetime ECLs if such credit risk has increased since initial recognition after taking into consideration all reasonable and verifiable information that includes forecasts. On the other hand, for accounts receivable or contract assets that do not contain a significant financing component, the Company recognises the impairment provision for lifetime ECLs.

(11) Derecognition of financial assets

The Company derecognises a financial asset when the contractual rights to receive the cash flows from the financial asset expire.

(12) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted-average method. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (allocated based on normal operating capacity). It excludes borrowing costs. The item by item approach is used in applying the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and applicable variable selling expenses.

(13) Investments accounted for using equity method/ subsidiaries

A. Subsidiaries are all entities controlled by the Company. The Company controls an entity when the Company is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

B. Unrealised gains or losses on transactions between the Company and subsidiaries have been eliminated. The accounting policies of the subsidiaries are consistent with the policies adopted by the company.

C. The Company's share of its subsidiaries'' post-acquisition profits or losses is recognised in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. When the company's share of losses in a subsidiaries equals or exceeds its interest in the subsidiary, the Company continues to recognise losses proportionate to its ownership.

D. Pursuant to the "Rules Governing the Preparation of Financial Statements by Securities Issuers," profit (loss) of the current period and other comprehensive income in the parent company only financial statements shall equal to the amount attributable to owners of the parent in consolidated financial statements. Owners' equity in the parent only company financial statements shall equal to equity attributable to owners of the parent in the consolidated financial statements.

(14) Property, plant and equipment

A. Property, plant and equipment are initially recorded at cost. Borrowing costs incurred during the construction period are capitalised.

B. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

C. Land is not depreciated. Other property, plant and equipment apply cost model and are depreciated using the straight-line method to allocate their cost over their estimated useful lives. Each part of an item of property, plant, and equipment with a cost that is significant in relation to the total cost of the item must be depreciated separately.

D. The assets' residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each financial year-end. If expectations for the assets' residual values and useful lives differ from previous estimates or the patterns of consumption of the assets' future economic benefits embodied in the assets have changed significantly, any change is accounted for as a change in estimate under IAS 8, 'Accounting Policies, Changes in Accounting Estimates and Errors', from the date of the change. The estimated useful lives of property, plant and equipment are as follows:

Buildings and structures	3 ~ 50 years
Machinery and equipment	2 ~ 20 years
Testing equipment	3 ~ 15 years
Office equipment	5 years
Computer and communication equipment	3 ~ 10 years
Leasehold improvements	1 ~ 10 years

(15) Leasing arrangements (lessee)－right-of-use assets/lease liabilities

A. Leases are recognised as a right-of-use asset and a corresponding lease liability at the date at which the leased asset is available for use by the Company. For short-term leases or leases of low-value assets, lease payments are recognised as an expense on a straight-line basis over the lease term.

B. Lease liabilities include the net present value of the remaining lease payments at the commencement date, discounted using the incremental borrowing interest rate. Lease payments are fixed payments, less any lease incentives receivable.

The Company subsequently measures the lease liability at amortised cost using the interest method and recognises interest expense over the lease term. The lease liability is remeasured and the amount of remeasurement is recognised as an adjustment to the right-of-use asset when there are changes in the lease term or lease payments and such changes do not arise from contract modifications.

C. At the commencement date, the right-of-use asset is stated at cost comprising the amount of the initial measurement of lease liability.

The right-of-use asset is measured subsequently using the cost model and is depreciated from the commencement date to the earlier of the end of the asset's useful life or the end of the lease term. When the lease liability is remeasured, the amount of remeasurement is recognised as an adjustment to the right-of-use asset.

D. For lease modifications that decrease the scope of the lease, the lessee shall decrease the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease, and recognise the difference between remeasured lease liability in profit or loss.

(16) Intangible assets

A. Computer software

Computer software is stated at cost and amortised on a straight-line basis over its estimated useful life of 3 years.

B. Professional techniques

Professional techniques is stated at cost and amortised on a straight-line basis over its estimated useful life of 12-20 years.

C. Vaccine patent

Vaccine patent is stated at cost and amortised on a straight-line basis over its estimated useful life of 15 years.

(17) Impairment of non-financial assets

The Company assesses at each balance sheet date the recoverable amounts of those assets where there is an indication that they are impaired. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell or value in use. When the circumstances or reasons for recognising impairment loss for an asset in prior years no longer exist or diminish, the impairment loss is reversed. The increased carrying amount due to reversal should not be more than what the depreciated or amortised historical cost would have been if the impairment had not been recognised.

(18) Notes and accounts payable

A. Accounts payable are liabilities for purchases of raw materials, goods or services and notes payable are those resulting from operating and non-operating activities.

B. The short-term notes and accounts payable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(19) Financial liabilities at fair value through profit or loss

A. Financial liabilities that meet one of the following criteria are designated as at fair value through profit or loss at initial recognition:

(a) Hybrid (combined) contracts; or

(b) They eliminate or significantly reduce a measurement or recognition inconsistency; or

(c) They are managed and their performance is evaluated on a fair value basis, in accordance with a documented risk management policy.

B. At initial recognition, the Company measures the financial liabilities at fair value. All related transaction costs are recognised in profit or loss. The Company subsequently measures these financial liabilities at fair value with any gain or loss recognised in profit or loss.

(20) Convertible bonds payable

Convertible bonds issued by the Company contain conversion options (that is, the bondholders have the right to convert the bonds into the Company's common shares by exchanging a fixed amount of cash for a fixed number of common shares), call options and put options. The Company classifies the bonds payable upon issuance as a financial asset, a financial liability or an equity instrument in accordance with the contract terms. They are accounted for as follows:

A. The embedded call options and put options are recognised initially at net fair value as'financial assets or financial liabilities at fair value through profit or loss'. They are subsequently remeasured and stated at fair value on each balance sheet date; the gain or loss is recognised as 'gain or loss on valuation of financial assets or financial liabilities at fair value through profit or loss'.
B. The host contracts of bonds are initially recognised at fair value. Any difference between the initial recognition and the redemption value is accounted for as the premium or discount on bonds payable and subsequently is amortised in profit or loss as an adjustment to 'finance costs' over the period of circulation using the effective interest method.
C. The embedded conversion options which meet the definition of an equity instrument are initially recognised in 'capital surplus—share options' at the residual amount of total issue price less the amount of financial assets or financial liabilities at fair value through profit or loss and bonds payable as stated above. Conversion options are not subsequently remeasured.
D. Any transaction costs directly attributable to the issuance are allocated to each liability or equity component in proportion to the initial carrying amount of each abovementioned item.
E. When bondholders exercise conversion options, the liability component of the bonds (including bonds payable and 'financial assets or financial liabilities at fair value through profit or loss') shall be remeasured on the conversion date. The issuance cost of converted common shares is the total book value of the abovementioned liability component and 'capital surplus—share options'.

(21) Derecognition of financial liabilities

A financial liability is derecognised when the obligation specified in the contract is either discharged or cancelled or expired.

(22) Employee benefits

A. Short-term employee benefits

Short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in respect of service rendered by employees in a period and should be recognised as expense in that period when the employees render service.

B. Pensions

Defined contribution plan

For defined contribution plan, the contributions are recognised as pension expense when they are due on an accrual basis. Prepaid contributions are recognised as an asset to the extent of a cash refund or a reduction in the future payments.

C. Termination benefits

Termination benefits are employee benefits provided in exchange for the termination of employment as a result from either the Company's decision to terminate an employee's employment before the normal retirement date, or an employee's decision to accept an offer of redundancy benefits in exchange for the termination of employment. The Company recognises expense when it can no longer withdraw an offer of termination benefits or when it recognises related restructuring costs, whichever is earlier. Benefits that are expected to be due more than 12 months after balance sheet date shall be discounted to their present value.

D. Employees' compensation and directors' remuneration

Employees' compensation and directors' and supervisors' remuneration are recognised as expense and liability, provided that such recognition is required under legal or constructive obligation and those amounts can be reliably estimated. Any difference between the resolved amounts and the subsequently actual distributed amounts is accounted for as changes in estimates. If employee compensation is paid by shares, the Company calculates the number of shares based on the closing price at the previous day of the board meeting resolution.

(23) Employee share-based payment

For the equity-settled share-based payment arrangements, the employee services received are measured at the fair value of the equity instruments granted at the grant date, and are recognised as compensation cost over the vesting period, with a corresponding adjustment to equity. The fair value of the equity instruments granted shall reflect the impact of market vesting conditions and non-vesting conditions. Compensation cost is subject to adjustment based on the service conditions that are expected to be satisfied and the estimates of the number of equity instruments that are expected to vest under the non-market vesting conditions at each balance sheet date. Ultimately, the amount of compensation cost recognised is based on the number of equity instruments that eventually vest.

(24) Income tax

A. The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or items recognised directly in equity, in which cases the tax is recognised in other comprehensive income or equity.

B. The current income tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in accordance with applicable tax regulations. It establishes provisions where appropriate based on the amounts expected to be paid to the tax authorities. An additional tax is levied on the unappropriated retained earnings and is recorded as income tax expense in the year the stockholders resolve to retain the earnings.

C. Deferred tax is recognised, using the balance sheet liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the parent only company balance sheet. However, the deferred tax is not accounted for if it arises from initial recognition of goodwill or of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred tax is provided on temporary differences arising on investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the Company and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

D. Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. At each balance sheet date, unrecognised and recognised deferred tax assets are reassessed.

(25) Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or stock options are shown in equity as a deduction, net of tax, from the proceeds.

(26) Dividends

Dividends are recorded in the Company's financial statements in the period in which they are resolved by the Company's shareholders. Cash dividends are recorded as liabilities; stock dividends are recorded as stock dividends to be distributed and are reclassified to ordinary shares on the effective date of new shares issuance.

(27) Revenue recognition

A. Sales of goods

(a) The Company manufactures and sells a range of Covid-19 vaccines and Covid-19 test kits. Sales are recognised when control of the products has transferred. Delivery occurs when the products have been shipped to the specific location, and either the customer has accepted the products in accordance with the sales contract, or the Company has objective evidence that all criteria for acceptance have been satisfied. Revenue is recognised based on the price specified in the contract, net of the estimated volume discounts and sales discounts and allowances, and only recognised to the extent that it is highly probable that a significant reversal will not occur. The estimation is subject to an assessment at each reporting date. Some contracts include multiple deliverables, such as storage, custody and delivery of Covid-19 vaccine and other services. The nature of this service is simple, it does not include an integration service and can be performed by another party. It is therefore accounted for as a separate performance obligation. In this case, the transaction price will be allocated to each performance obligation based on the stand-alone selling prices. Where these are not directly observable, they are estimated based on expected cost plus margin. The customer pays at the time specified in the payment schedule. If the services rendered exceed the payment, a contract asset is recognised. If the payments exceed the services rendered, a contract liability is recognised.

(b) A receivable is recognised when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

B. Technical service revenue

The Company provides technical service on cellular therapy product quality test and cell culture test. Revenue from providing services is recognised in the accounting period in which the services are rendered. For fixed-price contracts, revenue is recognised when the performance obligation is satisfied. For the contracts that the customers pay according to the agreement of payment schedule, if the services rendered exceed the payment, a contract asset is recognised. If the payments exceed the services rendered, a contract liability is recognised.

(28) Government grants

Government grants are recognised at their fair value only when there is reasonable assurance that the Company will comply with any conditions attached to the grants and the grants will be received. Government grants are recognised in profit or loss on a systematic basis over the periods in which the Company recognises expenses for the related costs for which the grants are intended to compensate.

5. Critical Accounting Judgements, Estimates and Key Sources of Assumption Uncertainty

The preparation of these parent company only financial statements requires management to make critical judgements in applying the Company's accounting policies and make critical assumptions and estimates concerning future events. Assumptions and estimates may differ from the actual results and are continually evaluated and adjusted based on historical experience and other factors. Such assumptions and estimates have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year; and the related information is addressed below:

(1) Critical judgements in applying the Company's accounting policies

None.

(2) Critical accounting estimates and assumptions

A. Impairment assessment of property, plant, and equipment, right-of-use assets, and intangible assets

The Company assesses impairment based on its subjective judgement and determines the separate cash flows of a specific Company of assets, useful lives of assets and the future possible income and expenses arising from the assets depending on how assets are utilised and industrial characteristics. Any changes of economic circumstances or estimates due to the change of Company strategy might cause material impairment on assets in the future.

B. Evaluation of inventories

As inventories are stated at the lower of cost and net realisable value, the Company must determine the net realisable value of inventories on balance sheet date using judgements and estimates. The Company evaluates the amounts of normal inventory consumption, obsolete inventories or inventories without market selling value on balance sheet date and writes down the cost of inventories to the net realisable value. Such an evaluation of inventories is principally based on the demand for the products within the specified period in the future. Therefore, there might be changes to the evaluation.

As of December 31, 2022, the carrying amount of inventories was $544,784.

6. Details of Significant Accounts

(1) Cash and cash equivalents

	December 31, 2022	December 31, 2021
Cash on hand and revolving funds	$ 102	$ 115
Checking accounts and demand deposits	1,157,190	1,182,503
Time deposits	3,027,624	832,631
	4,184,916	2,015,249
Transferred to financial assets at amortised cost	(2,979,940)	(800,000)
Transferred to other current assets - restricted assets	(15,016)	(31,006)
Transferred to other non-current assets - restricted assets	(7,626)	(7,626)
	$ 1,182,334	$ 1,176,617

A. The Company transacts with a variety of financial institutions all with high credit quality to disperse credit risk, so it expects that the probability of counterparty default is remote.

B. For details of restricted cash classified as other current and non-current assets - restricted since it was pledged for the security deposits for project and for lease, refer to Note 8.

(2) Financial assets (liabilities) at fair value through profit or loss

Assets Items	December 31, 2022	December 31, 2021
Current items:		
Financial assets mandatorily measured at fair value through profit or loss		
Beneficiary certificates	$ 53,100	$ 53,100
Valuation adjustment	(107)	(3)
	$ 52,993	$ 53,097

Liabilities Items	December 31, 2022	December 31, 2021
Non-current items:		
Financial liabilities held for trading		
Derivative instruments	$ 2,800	$ -
Valuation adjustment	16,450	-
	$ 19,250	$ -

A. Net amounts recognised in losses in relation to financial assets and liabilities at fair value through profit or loss are $16,554 and $73 for the years ended December 31, 2022 and 2021, respectively.

B. The Company has no financial assets at fair value through profit or loss pledged to others.

(3) Financial assets at fair value through other comprehensive income

	December 31, 2022	December 31, 2021
Non-current items:		
Equity instruments		
Unlisted stocks	$ -	$ 54,000
Valuation adjustment	-	-
	$ -	$ 54,000

A. The Company has elected to classify equity instrument investments that are considered to be strategic investments as financial assets at fair value through other comprehensive income.

B. As the Group's business strategy, the Company sold the stocks held at fair value during the year ended December 31, 2022. Please refer to Note 7.

C. For the years ended December 31, 2022 and 2021, amounts recognised in profit or loss and other comprehensive income in relation to the financial assets at fair value through other comprehensive income are both $0.

D. As at December 31, 2022 and 2021, without taking into account any collateral held or other credit enhancements, the maximum exposure to credit risk in respect of the amount that best represents the financial assets at fair value through other comprehensive income held by the Company was $0 and $54,000, respectively.

(4) Financial assets at amortised cost

Items	December 31, 2022	December 31, 2021
Time deposits (more than three months)	$ 2,979,940	$ 800,000
Interest rate	0.965%~4.15%	0.525%

A. Amounts recognised in interest income in relation to financial assets at amortised cost are $2,100 and $2,338 for the years ended December 31, 2022 and 2021, respectively.

B. As at December 31, 2022 and 2021, without taking into account any collateral held or other credit enhancements, the maximum exposure to credit risk in respect of the amount that best represents the financial assets at amortised cost held by the Company were $2,979,940 and $800,000, respectively.

C. The Company has no financial assets at amortised cost pledged to others.

D. Information relating to credit risk of financial assets at amortised cost is provided in Note 12(2). The counterparties of the Company's investments in certificates of deposits are financial institutions with high credit quality, so the Company expects that the probability of counterparty default is remote.

(5) Accounts receivable

	December 31, 2022	December 31, 2021
Accounts receivable	$ 194,400	$ 301,041

A. The ageing analysis of accounts receivable that were past due but not impaired is as follows:

	December 31, 2022	December 31, 2021
	Accounts receivable	Accounts receivable
Not past due	$ 194,400	$ 301,041
1 to 90 days	-	-
91 to 180 days	-	-
Over 180 days	-	-
	$ 194,400	$ 301,041

The above ageing analysis was based on past due date.

B. As of December 31, 2022 and 2021, accounts receivable were all from contracts with customers. As of January 1, 2021, the balance of receivables from contracts with customers amounted to $4,463.

C. As at December 31, 2022 and 2021, without taking into account any collateral held or other credit enhancements, the maximum exposure to credit risk in respect of the amount that best represents the accounts receivable held by the Company was $194,400 and $301,041, respectively.

D. Information relating to credit risk of accounts receivable is provided in Note 12(2).

(6) Inventories

	December 31, 2022		
	Cost	Allowance for valuation and obsolescence losses	Book value
Raw materials	$ 582,195	($ 119,247)	$ 462,948
Work in progress	110,309	(29,947)	80,362
Finished goods	295,448	(293,974)	1,474
	$ 987,952	($ 443,168)	$ 544,784

	December 31, 2021		
	Cost	Allowance for valuation and obsolescence losses	Book value
Raw materials	$ 259,508	$ -	$ 259,508
Work in progress	17,492	-	17,492
Finished goods	286,495	-	286,495
	$ 563,495	$ -	$ 563,495

The cost of inventories recognised as expense for the year:

	Year ended December 31, 2022	Year ended December 31, 2021
Cost of goods sold	$ 117,744	$ 975,961
Loss on abandonment of inventory	16,732	-
Loss on inventory valuation and obsolescence	443,168	-
	$ 577,644	$ 975,961

(7) Investments accounted for using equity method

	2022	2021
At January 1	$ 3,241	$ 4,000
Addition of investments accounted for using equity method	200,000	-
Share of profit or loss of investments accounted for using equity method	(157)	(654)
Changes in other equity items (Note 6(34))	82,577	(105)
At December 31	$ 285,661	$ 3,241

	December 31, 2022	December 31, 2021
MVC BioPharma Ltd	$ 3,510	$ 3,241
MVC Capital Corporation	282,151	-
	$ 285,661	$ 3,241

Information relating to the Company and its subsidaries is provided in the 2022 consolidated financial statements in Note 4(3).

On November 10, 2021, the Company invested $200,000 to establish MVC Capital Corporation as resolved by the Company's Board of Directors. The provisional office has completed the capital verification on December 27, 2021, and approved the establishment on January 6, 2022.

(8) Prepayments

	December 31, 2022	December 31, 2021
Prepayments for purchases	$ 358,617	$ 47,340
Others	12,369	32,292
	$ 370,986	$ 79,632

(9) Property, plant and equipment

	2022							
	Buildings and structures	Machinery and equipment	Testing equipment	Office equipment	Computers and communications equipment	Leasehold improvements	Construction in progress and equipment to be inspected	Total
At January 1								
Cost	$ 1,121,436	$ 487,174	$ 68,701	$ 3,245	$ 11,782	$ 2,551	$ 4,695	$ 1,699,584
Accumulated depreciation	(259,136)	(143,273)	(47,793)	(3,206)	(10,558)	(1,658)	-	(465,624)
	$ 862,300	$ 343,901	$ 20,908	$ 39	$ 1,224	$ 893	$ 4,695	$ 1,233,960
Opening net book amount	$ 862,300	$ 343,901	$ 20,908	$ 39	$ 1,224	$ 893	$ 4,695	$ 1,233,960
Additions	4,931	35,682	6,446	-	218	479	14,425	62,181
Reclassifications	323	10,672	2,667	-	-	-	(4,582)	9,080
Depreciation charge	(54,611)	(41,547)	(7,586)	(39)	(509)	(457)	-	(104,749)
Closing net book amount	$ 812,943	$ 348,708	$ 22,435	$ -	$ 933	$ 915	$ 14,538	$ 1,200,472
At December 31								
Cost	$ 1,126,690	$ 533,528	$ 77,814	$ 3,245	$ 12,000	$ 3,030	$ 14,538	$ 1,770,845
Accumulated depreciation	(313,747)	(184,820)	(55,379)	(3,245)	(11,067)	(2,115)	-	(570,373)
	$ 812,943	$ 348,708	$ 22,435	$ -	$ 933	$ 915	$ 14,538	$ 1,200,472

	2021							
	Buildings and structures	Machinery and equipment	Testing equipment	Office equipment	Computers and communications equipment	Leasehold improvements	Construction in progress and equipment to be inspected	Total
At January 1								
Cost	$ 1,117,417	$ 313,092	$ 61,471	$ 2,953	$ 10,943	$ 1,887	$ 17,537	$ 1,525,300
Accumulated depreciation	(204,828)	(109,554)	(38,637)	(2,504)	(8,749)	(1,171)	-	(365,443)
	$ 912,589	$ 203,538	$ 22,834	$ 449	$ 2,194	$ 716	$ 17,537	$ 1,159,857
Opening net book amount	$ 912,589	$ 203,538	$ 22,834	$ 449	$ 2,194	$ 716	$ 17,537	$ 1,159,857
Additions	2,352	98,054	7,230	292	734	664	4,695	114,021
Reclassifications	1,667	76,028	-	-	105	-	(17,537)	60,263
Depreciation charge	(54,308)	(33,719)	(9,156)	(702)	(1,809)	(487)	-	(100,181)
Closing net book amount	$ 862,300	$ 343,901	$ 20,908	$ 39	$ 1,224	$ 893	$ 4,695	$ 1,233,960
At December 31								
Cost	$ 1,121,436	$ 487,174	$ 68,701	$ 3,245	$ 11,782	$ 2,551	$ 4,695	$ 1,699,584
Accumulated depreciation	(259,136)	(143,273)	(47,793)	(3,206)	(10,558)	(1,658)	-	(465,624)
	$ 862,300	$ 343,901	$ 20,908	$ 39	$ 1,224	$ 893	$ 4,695	$ 1,233,960

A. For the years ended December 31, 2022 and 2021, no property, plant and equipment was pledged as collateral and no borrowing costs were capitalised as part of property, plant and equipment.

B. The significant components of buildings and structures include electromechanical air conditioning and fire protection engineering, which are depreciated over 3-15 years.

C. Reclassifications in current year represent transfers from prepaid equipment fee (recognised in “Other non-current assets”).

(10) Leasing arrangements－lessee

A. The Company leases various assets including land and buildings. Rental contracts are typically made for periods of 10 to 48 years. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose covenants, but leased assets may not be used as security for borrowing purposes.

B. The carrying amounts of right-of-use assets and the depreciation are as follows:

	December 31, 2022	December 31, 2021
	Carrying amount	Carrying amount
Right-of-use asset - Land	$ 175,818	$ 179,569
Right-of-use asset - Buildings	93,235	-
	$ 269,053	$ 179,569

	Year ended December 31, 2022	Year ended December 31, 2021
	Depreciation	Depreciation
Right-of-use asset - Land	$ 3,996	$ 3,990
Right-of-use asset - Buildings	10,360	-
	$ 14,356	$ 3,990

C. For the years ended December 31, 2022 and 2021, the additions to right-of-use assets were $103,840 and $0, respectively.

D. The information on profit or loss accounts relating to lease contracts is as follows:

	Year ended December 31, 2022	Year ended December 31, 2021
Items affecting profit or loss		
Interest expense on lease liabilities	$ 7,533	$ 5,697
Expense on short-term lease contracts	687	6,665

E. For the years ended December 31, 2022 and 2021, the Company's total cash outflow for leases were $19,784 and $14,290, respectively.

(11) Intangible assets

	2022			
	Professional techniques	Computer software	Vaccine patent	Total
At January 1				
Cost	$ 25,870	$ 2,935	$ 94,575	$ 123,380
Accumulated amortisation and impairment	(10,917)	(1,689)	(57,796)	(70,402)
	$ 14,953	$ 1,246	$ 36,779	$ 52,978
Opening net book amount as at January 1	$ 14,953	$ 1,246	$ 36,779	$ 52,978
Additions	-	1,170	-	1,170
Amortisation charge	(1,851)	(631)	(6,305)	(8,787)
Closing net book amount as at December 31	$ 13,102	$ 1,785	$ 30,474	$ 45,361
At December 31				
Cost	$ 25,870	$ 4,105	$ 94,575	$ 124,550
Accumulated amortisation and impairment	(12,768)	(2,320)	(64,101)	(79,189)
	$ 13,102	$ 1,785	$ 30,474	$ 45,361

	2021			
	Professional techniques	Computer software	Vaccine patent	Total
At January 1				
Cost	$ 25,870	$ 1,597	$ 94,575	$ 122,042
Accumulated amortisation and impairment	(9,066)	(1,474)	(51,491)	(62,031)
	$ 16,804	$ 123	$ 43,084	$ 60,011
Opening net book amount as at January 1	$ 16,804	$ 123	$ 43,084	$ 60,011
Additions	-	1,338	-	1,338
Amortisation charge	(1,851)	(215)	(6,305)	(8,371)
Closing net book amount as at December 31	$ 14,953	$ 1,246	$ 36,779	$ 52,978
At December 31				
Cost	$ 25,870	$ 2,935	$ 94,575	$ 123,380
Accumulated amortisation and impairment	(10,917)	(1,689)	(57,796)	(70,402)
	$ 14,953	$ 1,246	$ 36,779	$ 52,978

A. Details of amortisation on intangible assets are as follows:

	Year ended December 31, 2022		Year ended December 31, 2021	
Administrative expenses	$	631	$	215
Research and development expenses		8,156		8,156
	$	8,787	$	8,371

B. No interest expense was capitalised as part of intangible assets in 2022 and 2021.

(12) Corporate bonds payable

	December 31, 2022		December 31, 2021	
Corporate bonds payable	$	1,750,000	$	-
Less: Discount on bonds payable	(	72,150)		-
	$	1,677,850	$	-

A. The issuance of domestic convertible bonds by the Company:

(a) The terms of the first domestic unsecured convertible bonds issued by the Company are as follows:

i. The Company issued $1,750,000, 0% first domestic unsecured convertible bonds, as approved by the regulatory authority. The bonds mature 3 years from the issue date (May 9, 2022 ~ May 9, 2025) and will be redeemed in cash at face value at the maturity date. The bonds were listed on the Taipei Exchange on May 9, 2022.

ii. The bondholders have the right to ask for conversion of the bonds into common shares of the Company during the period from the date after three months of the bonds issue to the maturity date, except for the stop transfer period as specified in the terms of the bonds or the laws/regulations. The rights and obligations of the new shares converted from the bonds are the same as the issued and outstanding common shares.

iii. The conversion price of the bonds is set up based on the pricing model specified in the terms of the bonds, and is subject to adjustments if the condition of the increase in the number of ordinary shares issued (including private placement) by the Company occurs subsequently, including but not limited to issuance of common stock for cash, capital increase out of earnings or capital reserves, company merger, transfer of shares from other companies to issue new shares, stock splits and cash capital increase to participate in the issuance of overseas depositary receipts, etc. The conversion price was $278 per share on the issue date. In response to the Company’s capital increase out of cash and earnings, the conversion price was adjusted to $277.5 and $187.1 on July 1, 2022 and August 9, 2022, respectively.

iv. The bondholders have the right to require the Company to redeem any bonds at the price of the bonds’ face value upon two years from the issue date.

v. The Company may repurchase all the bonds outstanding in cash at the bonds' face value at any time after the following events occur: (i) the closing price of the Company's common shares is above the then conversion price by 30% for 30 consecutive trading days during the period from the date after three months of the bonds issue to 40 days before the maturity date, or (ii) the outstanding balance of the bonds is less than 10% of total initial issue amount during the period from the date after three months of the bonds issue to 40 days before the maturity date.

vi. Under the terms of the bonds, all bonds redeemed (including bonds repurchased from the Taipei Exchange), matured and converted are retired and not to be re-issued; all rights and obligations attached to the bonds are also extinguished.

B. Regarding the issuance of convertible bonds, the equity conversion options amounting to $89,930 were separated from the liability component and were recognised in 'capital surplus—share options' in accordance with IAS 32. The call options and put options embedded in bonds payable were separated from their host contracts and were recognised in 'financial liabilities at fair value through profit or loss' in net amount in accordance with IFRS 9 because the economic characteristics and risks of the embedded derivatives were not closely related to those of the host contracts. The effective interest rate of the bonds payable after such separation was 1.7882%.

(13) Pensions

A. The Company has established a defined contribution pension plan (the "New Plan") under the Labor Pension Act (the "Act"), covering all regular employees with R.O.C. nationality. Under the New Plan, the Company contributes monthly an amount based on 6% of the employees' monthly salaries and wages to the employees' individual pension accounts at the Bureau of Labor Insurance. The benefits accrued are paid monthly or in lump sum upon termination of employment.

B. The pension costs under the defined contribution pension plan of the Company for the years ended December 31, 2022 and 2021 were $6,525 and $5,828, respectively.

(14) Share-based payment

A. For the years ended December 31, 2022 and 2021, the Company's share-based payment arrangements were as follows:

Type of arrangement	Grant date	Quantity granted (in thousands)	Contract period	Vesting conditions
Employee stock options (2017-1-1)	2017.7.19	2,135	6 years	2-4 years' service
Employee stock options (2017-1-2)	2018.4.18	365	6 years	2-4 years' service
Employee stock options (2018-1-1)	2018.11.5	3,035	6 years	2-4 years' service
Employee stock options (2018-1-2)	2019.8.13	465	6 years	2-4 years' service
Employee stock options (2021)	2021.3.23	2,500	6 years	2-4 years' service
Cash capital increase reserved for employee preemption (2022)	2022.5.31	508	0.074 years	Vested immediately

B. Details of the share-based payment arrangements are as follows:

	2022		2021	
	No. of options (in thousands)	Weighted-average exercise price (in dollars)	No. of options (in thousands)	Weighted-average exercise price (in dollars)
Options outstanding at January 1	4,501	$ 140.45	3,715	$ 34.47
Options granted	-	-	2,500	226.50
Options exercised	(1,187)	33.20	(1,664)	33.46
Options expired	(179)	118.55	(50)	129.81
Options outstanding at December 31	3,135	121.76	4,501	140.45
Options exercisable at December 31	657	24.03	1,044	35.55

C. On March 1, 2022, the Company's board of directors has resolved to increase capital, and reserved 10% for employee preemption. The compensation cost recognised in 2022 was $7,474.

D. The Company recognised compensation cost due to options granted of $68,135 and $68,815 in 2022 and 2021, respectively.

E. Expenses incurred on share-based payment transactions are shown below:

	Year ended December 31, 2022	Year ended December 31, 2021
Equity-settled	$ 75,609	$ 68,815

F. The expiry date and exercise price of stock options outstanding at the balance sheet date are as follows:

		December 31, 2022		December 31, 2021	
Issue date approved	Expiry date	No. of shares (in thousands)	Exercise price (in dollars)	No. of shares (in thousands)	Exercise price (in dollars)
2017.7.19	2023.7.18	17	$ 19.90	191	$ 29.50
2018.4.18	2024.4.17	75	26.60	279	39.50
2018.11.5	2024.11.4	475	24.80	1,306	36.75
2019.8.13	2025.8.12	185	18.60	250	27.65
2021.3.23	2027.3.22	2,383	152.80	2,475	226.50

The price of employee stock option certificates issued has been adjusted in accordance with the terms and conditions of stock option on the Company's ex-rights base date of August 9, 2022.

G. The fair value of stock options granted on grant date is measured using the Black-Scholes option-pricing model. Relevant information is as follows:

Type of arrangement	Grant date	Stock fair value (in dollars)	Exercise price (in dollars)	Expected volatility (note)	Expected option life	Expected dividends	Risk-free interest rate	Fair value per unit (in dollars)
Employee stock options (2017-1-1)	2017.7.19	25.82	29.5	40.77%	4 years	-	0.7128%	7.27
				42.35%	4.5 years	-	0.7383%	8.12
				42.40%	5 years	-	0.7643%	8.64
Employee stock options (2017-1-2)	2018.4.18	39.45	39.5	40.05%	4 years	-	0.6595%	12.62
				39.65%	4.5 years	-	0.6909%	13.26
				40.14%	5 years	-	0.7242%	14.12
Employee stock options (2018-1-1)	2018.11.5	36.75	36.75	40.55%	4 years	-	0.7180%	11.94
				40.60%	4.5 years	-	0.7530%	12.66
				40.16%	5 years	-	0.7939%	13.22
Employee stock options (2018-1-2)	2019.8.13	27.65	27.65	39.13%	4 years	-	0.5253%	8.62
				39.15%	4.5 years	-	0.5308%	9.13
				39.16%	5 years	-	0.5395%	9.61
Employee stock options (2021)	2021.3.23	226.5	226.5	41.05%	4 years	-	0.2921%	73.00
				39.74%	4.5 years	-	0.3055%	75.00
				39.65%	5 years	-	0.3172%	78.70
Cash capital increase reserved for employee preemption (2022)	2022.5.31	223.5	220	53.63%	0.074 years	-	0.7326%	14.70

Note: The Company's expected price volatility rate was estimated based on the stock volatility of the same industry. The parent company's expected price volatility rate was estimated based on the volatility of the monthly average price announced by the Taipei Exchange.

(15) Share capital

A. As of December 31, 2022, the Company's authorised capital was $5,000,000, consisting of 500,000 thousand shares of ordinary stock (including 10,000 thousand shares reserved for employee stock options), and the paid-in capital was $3,278,399 with a par value of NT$10 (in dollars) per share. All proceeds from shares issued have been collected.

Movements in the number of the Company's ordinary shares outstanding are as follows (in thousands):

	2022	2021
At January 1	$ 212,887	$ 211,099
Employee stock options exercised last year but only registered this year	238	362
Employee stock options exercised	1,187	1,664
Employee stock options exercised this year but not yet registered	(191)	(238)
Cash capital increase	7,000	-
Common stock dividends	106,719	-
At December 31	$ 327,840	$ 212,887

B. The Board of Directors during its meeting on March 1, 2022 adopted a resolution for a cash capital increase of 7,000 thousand shares with a par value of $10 (in dollars) per share, at a premium issuance price of $220 (in dollars) per share. The total amount of shares is $1,540,000, which was fully received on July 1, 2022. The capital increase base date was July 1, 2022. On July 8, 2022, the Company had completed the registration.

(16) Capital surplus

Pursuant to the R.O.C. Company Act, capital surplus arising from paid-in capital in excess of par value on issuance of common stocks and donations can be used to cover accumulated deficit or to issue new stocks or cash to shareholders in proportion to their share ownership, provided that the Company has no accumulated deficit. Further, the R.O.C. Securities and Exchange Act requires that the amount of capital surplus to be capitalised mentioned above should not exceed 10% of the paid-in capital each year. Capital surplus should not be used to cover accumulated deficit unless the legal reserve is insufficient.

	2022				
	Share premium	Employee stock options	Stock options	Others	Total
At January 1	$ 1,042,061	$ 80,386	$ -	$ 12,563	$ 1,135,010
Cash capital increase	1,470,000	-	-	-	1,470,000
Share-based payment transaction (Cash capital increase)	7,474	-	-	-	7,474
Share issued under employee stock plans	35,024	(7,488)	-	-	27,536
Share-based payment transaction	-	68,135	-	-	68,135
Issurance of convertible bonds	-	-	89,930	-	89,930
Others	-	(143)	-	143	-
At December 31	$ 2,554,559	$ 140,890	$ 89,930	$ 12,706	$ 2,798,085

	2022			
	Share premium	Employee stock options	Others	Total
At January 1	$ 2,278,177	$ 40,847	$ 130	$ 2,319,154
Capital surplus used to cover accumulated deficit	(1,291,998)	-	-	(1,291,998)
Share issued under employee stock plans	55,882	(16,843)	-	39,039
Share-based payment transaction	-	68,815	-	68,815
Others	-	(12,433)	12,433	-
At December 31	$ 1,042,061	$ 80,386	$ 12,563	$ 1,135,010

(17) Retained earnings (accumulated deficit)

A. Under the Company's Articles of Incorporation, the current year's earnings, if any, shall first be used to pay all taxes and offset prior years' operating losses and then 10% of the remaining amount shall be set aside as legal reserve and the company shall set aside special reserve in accordance with the regulation or business requirements. The remainder, if any, to be retained or to be appropriated shall be resolved by the stockholders at the stockholders' meeting.

B. The Company's dividend policy is to distribute dividends in the form of stock dividends (including surplus and capital reserve allotment) or cash dividends. The board of directors considers the Company's operating results, capital requirements and the current year's surplus (less the required reserve) in proposing a surplus distribution which shall be approved by shareholders. According to the dividend policy adopted by the Board of Directors, cash dividends shall account for at least 50% of the total dividends distributable. If there is a capital expenditure plan in the future, the dividends will be distributed as stock dividends which shall be approved by the shareholders.

C. Except for covering accumulated deficit or issuing new stocks or cash to shareholders in proportion to their share ownership, the legal reserve shall not be used for any other purpose. The use of legal reserve for the issuance of stocks or cash to shareholders in proportion to their share ownership is permitted, provided that the distribution of the reserve is limited to the portion in excess of 25% of the Company's paid-in capital.

D. In accordance with the regulations, the Company shall set aside special reserve from the debit balance on other equity items at the balance sheet date before distributing earnings. When debit balance on other equity items is reversed subsequently, the reversed amount could be included in the distributable earnings.

E. On August 17, 2021, the shareholders adopted a resolution to offset capital surplus amounting to $1,291,998 against the deficit.

F. On June 30, 2022, the stockholders adopted the distribution of dividends from the 2021 earnings amounting to $1,067,195 at $5 (in dollars) per share. The stockholders also resolved the appropriations of legal and special reserve of $141,026 and $459, respectively. In addition, the Company ex-rights base date was August 9, 2022.

G. On March 8, 2023, the Board of Directors proposed a resolution to offset capital surplus amounting $1,272,995 against the 2022 deficit.

(18) Other equity items

	2022		
	Unrealised gains (losses) on valuation	Currency translation	Total
At January 1	$ -	($ 459)	($ 459)
Revaluation – gross			
–Subsidiary	82,225	-	82,225
Currency translation differences:			
–Subsidiary	-	352	352
At December 31	$ 82,225	($ 107)	$ 82,118

	2021		
	Unrealised gains (losses) on valuation	Currency translation	Total
At January 1	$ -	($ 354)	($ 354)
Currency translation differences:			
–Subsidiary	-	(105)	(105)
At December 31	$ -	($ 459)	($ 459)

(19) Operating revenue

A. Disaggregation of revenue from contracts with customers

The Company derives revenue from the transfer of goods and services over time and at a point in time in the following major product lines:

	December 31, 2022	December 31, 2021
	Sales revenue	Sales revenue
Revenue from contracts with customers	$ 365,042	$ 3,280,994
Timing of revenue recognition		
At a point in time	$ 313,585	$ 3,255,690
Over time	51,457	25,304
	$ 365,042	$ 3,280,994

B. Contract assets and liabilities

(a) The Company has recognised the following revenue-related contract assets and liabilities:

	December 31, 2022	December 31, 2021	January 1, 2021
Contract assets	$ -	$ 339,148	$ -
Contract liabilities	$ -	$ 111,412	$ -

(b) Revenue recognised that was included in the contract liability balance at the beginning of the year:

	Year ended December 31, 2022	Year ended December 31, 2021
Revenue recognised that was included in the contract liability balance at the beginning of the year	$ 111,412	$ -

(c) The contract assets and liabilities were mainly arising from the contract with the Centers for Disease Control, Ministry of Health and Welfare for the procurement of domestic COVID-19 vaccine. In addition, the liquidated damages related to the delay in the delivery of vaccines were considered as a deduction of revenue. Amounts of recognised deduction of cash for the contract in 2022 and 2021 were $88,164 and $109,723, respectively.

(20) Interest income

	Year ended December 31, 2022	Year ended December 31, 2021
Interest income from bank deposits	$ 5,436	$ 382
Interest income from financial assets measured at amortised cost	2,100	2,338
Other interest income	33	19
	$ 7,569	$ 2,739

(21) Other income

	Year ended December 31, 2022	Year ended December 31, 2021
Government grant income	$ 19,864	$ 442,358
Other income	48,807	-
	$ 68,671	$ 442,358

The Company signed a "COVID-19 vaccine development" subsidy contract with Taiwan CDC on October 13, 2020. The execution of the contract begins from the approval of funding to June 30, 2021. Taiwan CDC releases the subsidy based on the milestones achieved during the Phase I and Phase II clinical trials as specified in the contract. The Company guarantees to supply the Taiwan government preferentially in order to fulfill the requirement for epidemic prevention.

(22) Other gains and losses

	Year ended December 31, 2022	Year ended December 31, 2021
Foreign exchange gains	$ 28,858	$ 7,519
Losses on financial assets at fair value through profit or loss	(16,554)	(73)
	$ 12,304	$ 7,446

(23) Finance costs

	Year ended December 31, 2022	Year ended December 31, 2021
Interest expense		
Discount on corporate bonds payable	$ 19,355	$ -
Lease liabilities	7,533	5,697
Bank borrowings	-	88
Others	-	234
	$ 26,888	$ 6,019

(24) Expenses by nature

	Year ended December 31, 2022	Year ended December 31, 2021
Employee benefit expense	$ 255,859	$ 284,187
Depreciation charges on property, plant and equipment	104,749	100,181
Depreciation charges on right-of use assets	14,356	3,990
Amortisation charges on intangible assets	8,787	8,371
	$ 383,751	$ 396,729

(25) Employee benefit expense

	Year ended December 31, 2022	Year ended December 31, 2021
Wages and salaries	$ 156,156	$ 189,593
Compensation cost of share-based payment arrangements	75,609	68,815
Labour and health insurance fees	12,574	11,147
Pension costs	6,525	5,828
Other personnel expenses	4,995	8,804
	$ 255,859	$ 284,187

A. In accordance with the Articles of Incorporation of the Company, a ratio of distributable profit of the current year, after covering accumulated losses, shall be distributed as employees' compensation and directors' remuneration. The ratio shall not be lower than 1% for employees' compensation and shall not be higher than 1% for directors' remuneration. If the company has accumulated deficit, it shall reserve the compensation amount in advance.

B. For the year ended December 31, 2022, no employees' compensation and directors' remuneration were accrued due to the accumulated deficit. For the year ended December 31, 2021, employees' compensation and directors' remuneration were accrued at $43,847 and $1,462, respectively, and the amounts were estimated as wages and salaries in accordance with the Articles of Incorporation of the Company.

For 2021, the employees' compensation and directors' remuneration resolved by the Board of Directors amounted to $45,000 and $2,100, respectively, which were different from the estimated amounts recognized in 2021 financial statements of $43,847 and $1,462, by $1,791, such difference was recognized in profit or loss for the year ended December 31, 2022.

Information about employees' compensation and directors' remuneration of the Company as resolved by the Board of Directors will be posted in the "Market Observation Post System" at the website of the Taiwan Stock Exchange.

(26) Income tax

A. For the years ended December 31, 2022 and 2021, the Company had no income tax expense and deferred tax assets.

B. Reconciliation between income tax expense and accounting profit

	Year ended December 31, 2022	Year ended December 31, 2021
Tax calculated based on (loss) profit before tax and statutory tax rate	($ 294,915)	$ 282,052
Expenses disallowed by tax regulation	7,318	2,632
Temporary differences not recognised as deferred tax assets	83,210	-
Change in assessment of realisation of deferred tax assets	-	(284,684)
Taxable loss not recognised as deferred tax assets	204,387	-
Income tax expense	$ -	$ -

C. Details of the amount the Company is entitled as investment tax credit and unrecognised deferred tax assets are as follows:

December 31, 2022				
Governing law	Qualifying items	Unused tax credits	Unrecognised deferred tax assets	Expiry year
Act For The Development Of Biotech And New Pharmaceuticals Industry	Research and development	$ 715,814	$ 715,814	Note

December 31, 2021						
Governing law	Qualifying items	Unused tax credits		Unrecognised deferred tax assets		Expiry year
Act For The Development Of Biotech And New Pharmaceuticals Industry	Research and development	$	479,156	$	479,156	Note

Note: On September 19, 2014, the Company was approved by the Ministry of Economic Affairs as biotech new drug companies. The Company and its shareholders may apply incentives under the "Act For The Development Of Biotech And New Pharmaceuticals Industry". The approval letter from the Ministry of Economic Affairs can be deducted within five years from the year the Company will have taxable income after its issuance.

D. Expiration dates of unused tax losses and amounts of unrecognised deferred tax assets are as follows:

December 31, 2022							
Year incurred	Amount filed/ assessed		Unused amount		Unrecognised deferred tax assets		Expiry year
2022	$	1,021,935	$	1,021,935	$	1,021,935	2032
2020		675,680		675,680		675,680	2030
2019		609,285		589,909		589,909	2029
	$	2,306,900	$	2,287,524	$	2,287,524	

December 31, 2021							
Year incurred	Amount filed/ assessed		Unused amount		Unrecognised deferred tax assets		Expiry year
2020	$	675,680	$	675,680	$	675,680	2030
2019		609,285		589,909		589,909	2029
	$	1,284,965	$	1,265,589	$	1,265,589	

E. The amounts of deductible temporary differences that were not recognised as deferred tax assets are as follows:

	December 31, 2022		December 31, 2021	
Deductible temporary differences	$	-	$	-

F. The Company’s income tax returns through 2020 have been assessed and approved by the Tax Authority.

(27) Earnings (loss) per share

	Year ended December 31, 2022		
	Amount after tax	Restrospectively adjusted weighted average number of ordinary shares outstanding (shares in thousands)	Loss per share (in dollars)
Basic loss per share			
Loss attributable to ordinary shareholders of the parent	($ 1,474,573)	323,477	($ 4.56)

	Year ended December 31, 2021		
	Amount after tax	Restrospectively adjusted weighted average number of ordinary shares outstanding (shares in thousands)	Earnings per share (in dollars)
Basic earnings per share			
Profit attributable to ordinary shareholders of the parent	$ 1,410,258	318,739	$ 4.42
Diluted earnings per share			
Profit attributable to ordinary shareholders of the parent	$ 1,410,258	318,739	
Assumed conversion of all dilutive potential ordinary shares			
Employee stock options	-	2,255	
Employees' compensation	-	147	
Profit attributable to ordinary shareholders of the parent plus assumed conversion of all dilutive potential ordinary shares	$ 1,410,258	321,141	$ 4.39

A. For the years ended December 31, 2022 and 2021, the weighted average number of ordinary shares outstanding was retrospectively adjusted as proportion of capital increase out of earnings at the effective date of August 9, 2022.

B. In 2022, the Company incurred a net loss. As the potential common shares will have an antidilutive effect, the diluted loss per share was not calculated.

(28) Supplemental cash flow information

A. Investing activities with partial cash payments

	Year ended December 31, 2022	Year ended December 31, 2021
Purchase of property, plant and equipment	$ 62,181	$ 114,021
Add: Opening balance of payable on equipment	5,948	16,457
Less: Ending balance of payable on equipment	(20,700)	(5,948)
Cash paid during the year	$ 47,429	$ 124,530

B. Investing activities with partial cash received

	Year ended December 31, 2022	Year ended December 31, 2021
Disposal of property, plant and equipment	$ -	$ -
Add: Opening balance of other receivables on equipment	-	120,000
Less: Ending balance of other receivables on equipment	-	-
Cash received during the year	$ -	$ 120,000

(29) Changes in liabilities from financing activities

	2022	
	Lease liabilities	Corporate bonds payable
At January 1	$ 185,854	$ -
Changes in cash flow from financing activities	(11,564)	1,755,250
Changes in other non-cash items activities	103,840	(77,400)
At December 31	$ 278,130	$ 1,677,850

	2021
	Lease liabilities
At January 1	$ 187,782
Changes in cash flow from financing activities	(1,928)
At December 31	$ 185,854

The Company had no change in corporate bonds payable from financing activities in 2021.

7. Related Party Transactions

(1) Parent and ultimate controlling party

The ultimate parent of the Company is Medigen Biotechnology Corporation.

(2) Names of related parties and relationship

Names of related parties	Relationship with the Company
Schweitzer Biotech Company Ltd.	Director
Winston Medical Supply Co., Ltd.	Other related party
Taiwan Bio Therapeutics Co., Ltd. (Taiwan Bio Therapeutics)	Other related party
U-GEN Biotechnology Inc. (U-GEN)	Other related party
MVC Capital Corporation (MVC Capital) (Note 1)	Subsidiary

Note 1: The establishment of MVC Capital was approved on January 6, 2022.

(3) Significant related party transactions

A. Disposal of financial assets

	Accounts	No. of shares (In thousands)	Objects	Year ended December 31, 2022 Proceeds	Gain/(loss)
MVC Capital	Financial assets at fair value through other comprehensive income-Non-current	3,600	Taiwan Bio Therapeutics	$ 54,000	$ -

B. In 2021, the Company participated in the cash capital increase of the other related party, U-GEN on behalf of the subsidiary, MVC Capital being established, and the amount was $27,795.

(4) Key management compensation

	Year ended December 31, 2022	Year ended December 31, 2021
Salaries and other short-term employee benefits	$ 16,957	$ 10,434
Post-employment benefits	216	120
Share-based payments	20,394	14,562
Total	$ 37,567	$ 25,116

8. Pledged Assets

The Company's assets pledged as collateral are as follows:

Pledged asset	Book value 2022	Book value 2021	Purpose
Time deposit - restricted (recognised in "Other current assets")	$ 15,016	$ 31,006	Security deposit for plan and credit line of bank borrowings
Time deposit - restricted (recognised in "Other non- current assets")	7,626	7,626	Security deposit of leases
	$ 22,642	$ 38,632	

9. Significant Contingent Liabilities and Unrecognised Contract Commitments

(1) Contingencies

None.

(2) Commitments

A. The Company signed a three party technical license agreement with the Centers for Disease Control, Department of Health, Executive Yuan (now Taiwan CDC) and National Health Research Institute (NHRI) on June 28, 2013 for the development of Enterovirus Vaccine 71 (EV71). Under the contract, the Company shall pay milestone payments as the research progresses and the royalty calculated by net sales when products are launched in the future. The final data from the phase III multi-region clinical trial for EV71 vaccine was unblinded on June 20, 2021, and the result was as expected. Accordingly, the Company requested a new drug application (NDA) for EV71 vaccine from the Food and Drug Administration on October 1, 2021. As of December 31, 2022, it is still under review by the Food and Drug Administration.

B. The Company signed the license agreement with NHRI for the H7N9 novel influenza vaccine. The contract period is from April 25, 2014 through April 24, 2029. The contract includes authorised H7N9 novel influenza virus strains, vaccine manufacturing process, pre-clinical animal trials and other intellectual properties, and the complete rights to manufacture and sell the vaccine products in Taiwan. The Company has made payments as specified in the contract. The phase I and phase II clinical trials have passed the review by Taiwan CDC and approved for future reference.

C. The Company contracted with the United States National Institute of Health (NIH) on November 17, 2016 regarding the license agreement for the dengue fever vaccine, which granted the Company complete rights of R&D, manufacture, selling and re-authorization. There were 17 countries included in the original authorised region. On September 17, 2017, the rights for 9 additional countries were obtained, which has expanded the total authorised region to 26 countries. The Company is required to make a certain amount of royalty and milestone payment under the contract. The Company has completed phase II clinical trials and retrieved clinical trial reports.

D. The Company signed a global commercial COVID-19 vaccine license agreement with US NIH on May 5, 2020 in order to attain the complete rights for the R&D, manufacture, and sales of COVID-19 vaccine. Under the contract, the Company is required to pay a certain amount of royalty, milestone payment and royalty calculated by net sales. On June 10, 2021, the Company unblinded the analytical data during the Phase II clinical trial and the result was as expected. After unblinding, the Company applied with the Ministry of Health and Welfare for an Emergency Use Authorization (EUA) on June 15, 2021 , and also submitted the relevant documents for the clinical trial and manufacture. On July 19, 2021, the application was approved by the Ministry of Health and Welfare, and the Company has obtained the approval for the project manufacture.

E. Capital expenditures contracted for but not yet incurred.

	December 31, 2022	December 31, 2021
Property, plant and equipment	$ 26,605	$ 7,096

10. Significant Disaster Loss

None.

11. Significant Events after the Balance Sheet Date

None.

12. Others

(1) Capital management

The Company's capital management is based on the business scale of the Company's business, considering the future growth of the industry and product development, setting an appropriate market share, and planning the corresponding capital expenditures, and then calculating operating capital based on the financial operational plan, then finally considering the projected operating profit and cash flow from the competitiveness of products to determine the appropriate capital structure.

(2) Financial instruments

A. Financial instruments by category

	December 31, 2022	December 31, 2021
Financial assets		
Financial assets at fair value through profit or loss		
Financial assets mandatorily measured at fair value through profit or loss	$ 52,993	$ 53,097
Financial assets at fair value through other comprehensive income		
Designation of equity instrument	$ -	$ 54,000
Financial assets at amortised cost	$ 4,447,599	$ 2,530,037

	December 31, 2022	December 31, 2021
Financial liabilities		
Financial liabilities at fair value through profit or loss		
Financial liabilities mandatorily measured at fair value through profit or loss	$ 19,250	$ -
Financial liabilities at amortised cost	$ 2,013,070	$ 323,808
Lease liabilities	$ 278,130	$ 185,854

Note: Financial assets at amortised cost include cash and cash equivalents, time deposits (more than three months), accounts receivable, other receivables, restricted assets, performance guarantee and refundable deposits; financial liabilities at amortised cost include, accounts and notes payable, other payables and corporate bonds payable.

B. Financial risk management policies

(a) The Company’s activities expose the Company to a variety of financial risks: market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The Company’s overall risk management policy focuses on unpredictable events in the financial market and seeks to reduce the risks that potentially pose adverse effects on the Company’s financial condition and performance.

(b) Risk management is executed by the Company’s finance department by following policies approved by the Board of Directors. Through cooperation with the Company’s operating units, finance department is responsible for identifying, evaluating and hedging financial risks. The Board provides written principles for overall risk management, as well as written policies covering specific issues, such as foreign exchange risk, interest rate risk, credit risk, and investment of excess liquidity.

C. Significant financial risks and degrees of financial risks

(a) Market risk

Foreign exchange risk

i. The Company is exposed to exchange rate risk arising from the transactions of the Company used in various functional currency, primarily with respect to the USD. Foreign exchange rate risk arises from future commercial transactions and recognised assets and liabilities.

ii. The Company's businesses involve some non-functional currency operations (the Company's functional currency: NTD). The information on assets and liabilities denominated in foreign currencies whose values would be materially affected by the exchange rate fluctuations is as follows:

	December 31, 2022		
	Foreign currency amount (In thousands)	Exchange rate	Book value (NTD)
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	$ 25,417	30.71	$ 780,556

	December 31, 2021		
	Foreign currency amount (In thousands)	Exchange rate	Book value (NTD)
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	$ 3,456	27.68	$ 95,662

iii. The realised exchange gain arising from significant foreign exchange variation on the monetary items held by the Company for the years ended December 31, 2022 and 2021, amounted to $28,858 and $7,519, respectively.

iv. Analysis of foreign currency market risk arising from significant foreign exchange variation:

	Year ended December 31, 2022			
	Sensitivity analysis			
	Degree of variation	Effect on profit or loss		Effect on other comprehensive income
(Foreign currency: functional currency)				
Financial assets				
Monetary items				
USD:NTD	1%	$	6,244	$ -

	Year ended December 31, 2021			
	Sensitivity analysis			
	Degree of variation	Effect on profit or loss		Effect on other comprehensive income
(Foreign currency: functional currency)				
Financial assets				
Monetary items				
USD:NTD	1%	$	766	$ -

Price risk

i. The Company's equity securities, which are exposed to price risk, are the held financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income. To manage its price risk arising from investments in equity securities, the Company diversifies its portfolio. Diversification of the portfolio is done in accordance with the limits set by the Company.

ii. The Company's investments in equity securities comprise shares and beneficiary securities issued by the companies. The prices of beneficiary securities would change due to the change of the future value of investee companies. If the prices of these equity securities had increased/decreased by 1% with all other variables held constant, post-tax profit for the years ended December 31, 2022 and 2021 would have increased/decreased by $530 and $531, respectively, as a result of gains/losses on beneficiary securities classified as at fair value through profit or loss. Other components of equity would have increased/decreased by $0 and $540, respectively, as a result of other comprehensive income classified as equity investment at fair value through other comprehensive income.

(b) Credit risk

i. Credit risk refers to the risk of financial loss to the Company arising from default by the clients or counterparties of financial instruments on the contract obligations. The main factor is that counterparties could not repay in full of the accounts receivable based on the agreed terms, and the contract cash flows of financial assets at amortised cost.

ii. According to the Company's credit policy, the Company is responsible for managing and analysing the credit risk for each of the new clients before standard payment and delivery terms and conditions are offered. Internal risk control assesses the credit quality of the customers, taking into account their financial position, past experience and other factors.

iii. Individual risk limits are set based on internal or external ratings in accordance with limits set by the Board of Directors. The utilisation of credit limits is regularly monitored.

iv. The Company will only accept those banks and financial institutions with good credit ratings.

v. The Company adopts the following assumptions under IFRS 9, if the contract payments were past due over 30 days based on the terms, there has been a significant increase in credit risk on that instrument since initial recognition; and the default occurs when the contract payments are past due over 90 days.

vi. The following indicators are used to determine whether the credit impairment of debt instruments has occurred:

(i) It becomes probable that the issuer will enter bankruptcy or other financial reorganisation due to their financial difficulties;

(ii) The disappearance of an active market for that financial asset because of financial difficulties;

(iii) Default or delinquency in interest or principal repayments;

(iv) Adverse changes in national or regional economic conditions that are expected to cause a default.

vii. The Company classifies customer's accounts receivable and contract assets in accordance with customer types. The Company applies the modified approach using a provision matrix based on the loss rate methodology to estimate expected credit loss. The Company's loss allowance as of ended December 31, 2022 and 2021 was $0 for both years.

viii. In 2022 and 2021, there was no case of customers' exceeding their credit limit, and the management did not expect any major losses due to a breach of contract by a counterparty.

(c) Liquidity risk

i. Cash flow forecasting is performed in the operating entities of the Company and aggregated by Company finance. Company finance monitors rolling forecasts of the Company's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Company does not breach borrowing limits or covenants on any of its borrowing facilities. Such forecasting takes into consideration the Company's debt financing plans, covenant compliance, compliance with internal balance sheet ratio targets.

ii. Surplus cash held by the operating entities over and above balance required for working capital management are transferred to the Company finance. Company finance invests surplus cash in interest bearing current accounts, time deposits, money market deposits and marketable securities, choosing instruments with appropriate maturities or sufficient liquidity to provide sufficient headroom as determined by the abovementioned forecasts. As at December 31, 2022 and 2021, the Company held money market position of $1,182,334 and $1,176,617, respectively, and financial assets at fair value through profit or loss - current of $52,993 and $53,097, respectively, that are expected to readily generate cash inflows for managing liquidity risk.

iii. The Company has no undrawn borrowing facilities as at December 31, 2022 and 2021.

iv. The table below analyses the Company's non-derivative financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date for non-derivative financial liabilities. The amounts disclosed in the table are the contractual undiscounted cash flows.

December 31, 2022	Less than 1 year	Over 1 year
Non-derivative financial liabilities		
Corporate bonds payable	$ -	$ 1,750,000
Lease liabilities	19,098	426,360

December 31, 2021	Less than 1 year	Over 1 year
Non-derivative financial liabilities		
Lease liabilities	$ 7,626	$ 335,526

Except for the above, the non-derivative financial liabilities of the Company are all expiring within one year.

(3) Fair value information

A. The different levels that the inputs to valuation techniques are used to measure fair value of financial and non-financial instruments have been defined as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. A market is regarded as active where a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. The fair value of the Company's investment in beneficiary securities is included in Level 1.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3:Unobservable inputs for the asset or liability. The fair value of the Company's investment in equity investment without active market is included in Level 3.

B. Financial instruments not measured at fair value

The carrying amounts of cash and cash equivalents, time deposits maturing in excess of three months, accounts receivable, other receivables, restricted assets, refundable deposits, and financial liabilities measured at amortised cost including short-term borrowings, accounts and notes payable, other payables, long-term borrowings, current portion are approximate to their fair values.

C. The related information on financial and non-financial instruments measured at fair value by level on the basis of the nature, characteristics and risks of the assets and liabilities is as follows:

(a) The related information on the nature of the assets and liabilities is as follows:

December 31, 2022	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurements				
Financial assets at fair value through profit or loss				
Beneficiary certificates	$ 52,993	$ -	$ -	$ 52,993
Liabilities				
Recurring fair value measurements				
Financial liabilities at fair value through profit or loss				
Derivative instruments	$ -	$ 19,250	$ -	$ 19,250

December 31, 2021	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurements				
Financial assets at fair value through profit or loss				
Beneficiary certificates	$ 53,097	$ -	$ -	$ 53,097
Financial assets at fair value through other comprehensive income				
Equity securities	-	-	54,000	54,000
	$ 53,097	$ -	$ 54,000	$ 107,097

(b) The methods and assumptions the Company used to measure fair value are as follows:

i. The Company's current financial assets measured at fair value through profit and loss are Level 1 open-end funds, and uses net value as their fair values.

ii. Except for financial instruments with active markets, the fair value of other financial instruments is measured by using valuation techniques such as discounted cash flow method.

iii. The Company takes into account adjustments for credit risks to measure the fair value of financial and non-financial instruments to reflect credit risk of the counterparty and the Company's credit quality.

D. For the years ended December 31, 2022 and 2021, there was no transfer between Level 1 and Level 2.

E. The following chart is the movement of Level 3 for the years ended December 31, 2022 and 2021:

	2022
	Equity instruments
At January 1	$ 54,000
Disposed during the year	(54,000)
At December 31	$ -

	2021
	Equity instruments
At January 1	$ -
Acquired during the year	54,000
At December 31	$ 54,000

F. The valuation procedures for fair value of financial instruments being categorised within Level 3 is measured by using valuation techniques. Such assessment is to ensure the valuation results are reasonable by applying independent information to make results close to current market conditions, confirming the resource of information is independent, reliable and in line with other resources.

H. The following is the qualitative information of significant unobservable inputs and sensitivity analysis of changes in significant unobservable inputs to valuation model used in Level 3 fair value measurement:

	Fair value at December 31, 2021	Valuation technique	Significant unobservable input		Relationship of inputs to fair value
Non-derivative equity instrument:					
Unlisted shares	$ 54,000	Discounted cash flow	Long-term revenue growth rate	3.82%	The higher the long-term revenue growth rate, the higher the fair value; the higher the discount rate, the lower the fair value
			Discount rate	25.05%	

I. The Company has carefully assessed the valuation models and assumptions used to measure fair value. However, use of different valuation models or assumptions may result in different measurement. The following is the effect on profit or loss or on other comprehensive income from financial assets and liabilities categorised within Level 3 if the inputs used to valuation models have changed:

			December 31, 2021	
			Recognised in other comprehensive income	
	Input	Change	Favourable change	Unfavourable change
Financial assets				
Equity instrument	Long-term revenue growth rate	±1%	$ 335	($ 335)
	Discount rate	±1%	766	(424)

(4) Other matter

Due to the Covid-19 pandemic and the government's multiple prevention measures, the Company has adopted countermeasures accordingly and continually manages related affairs. There was no significant impact on the Company's operations and business in 2022.

13. Supplementary Disclosures

(1) Significant transactions information

A. Loans to others: None.

B. Provision of endorsements and guarantees to others: None.

C. Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures): Refer to table 1.

D. Acquisition or sale of the same security with the accumulated cost exceeding \$300 million or 20% of the Company's paid-in capital: None.

E. Acquisition of real estate reaching \$300 million or 20% of paid-in capital or more: None.

F. Disposal of real estate reaching \$300 million or 20% of paid-in capital or more: None.

G. Purchases or sales of goods from or to related parties reaching \$100 million or 20% of paid-in capital or more: None.

H. Receivables from related parties reaching \$100 million or 20% of paid-in capital or more: None.

I. Trading in derivative instruments undertaken during the reporting periods: Refer to Note 6(2).

J. Significant inter-company transactions during the reporting periods: None.

(2) Information on investees

Names, locations and other information of investee companies (not including investees in Mainland China): Refer to table 2.

(3) Information on investments in Mainland China

A. Basic information: None.

B. Significant transactions, either directly or indirectly through a third area, with investee companies in the Mainland Area: None.

(4) Major shareholders information

Major shareholders information: Refer to table 3.

14. Segment Information

Not applicable.

Medigen Vaccine Biologics Corporation

Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures)

December 31, 2022

Table 1

Expressed in thousands of NTD

(Except as otherwise indicated)

				As of December 31, 2022				
Securities held by	Marketable securities （Note 1）	Relationship with the securities issuer （Note 2）	General ledger account	Number of shares	Book value （Note 3）	Ownership (%)	Fair value	Footnote （Note 4）
Medigen Vaccine Biologics Corporation	Cathay Taiwan Money Market Fund	-	Financial assets at fair value through profit or loss - current	4,029,529	$ 50,850	-	$ 50,850	
Medigen Vaccine Biologics Corporation	Franklin Templeton SinoAm Emerging Markets Bond Fund A-TWD	-	Financial assets at fair value through profit or loss - current	303,466	2,143	-	2,143	

Note 1: Marketable securities in the table refer to stocks, bonds, beneficiary certificates and other related derivative securities within the scope of IFRS 9 ‘Financial Instrument’.

Note 2: Leave the column blank if the issuer of marketable securities is non-related party.

Note 3: Fill in the amount after adjusted at fair value and deducted by accumulated impairment for the marketable securities measured at fair value; fill in the acquisition cost or amortised cost deducted by accumulated impairment for the marketable securities not measured at fair value.

Note 4: The number of shares of securities and their amounts pledged as security or pledged for loans and their restrictions on use under some agreements should be stated in the footnote if the securities presented herein have such conditions.

Medigen Vaccine Biologics Corporation

Information on investees

For the year ended December 31, 2022

Table 2

Expressed in thousands of NTD

(Except as otherwise indicated)

Investor	Investee (Notes 1 and 2)	Location	Main business activities	Initial investment amount: Balance as at December 31, 2022	Initial investment amount: Balance as at December 31, 2021	Shares held as at December 31, 2022: Number of shares	Shares held as at December 31, 2022: Ownership (%)	Shares held as at December 31, 2022: Book value	Net profit (loss) of the investee for the year ended December 31, 2022 (Note 2(2))	Investment income (loss) recognised by the Company for the year ended December 31, 2022 (Note 2(3))	Footnote
Medigen Vaccine Biologics Corporation	MVC BioPharma Ltd.	Cayman	Investing	$ 7,081	$ 7,081	50,000	100.00	$ 3,510	($ 83)	($ 83)	
Medigen Vaccine Biologics Corporation	MVC Capital Corporation	Taiwan	Investing	200,000	200,000	20,000,000	100.00	282,151	(74)	(74)	Note 3

Note 1: If a public company is equipped with an overseas holding company and takes consolidated financial report as the main financial report according to the local law rules, it can only disclose the information of the overseas holding company about the disclosure of related overseas investee information.

Note 2: If situation does not belong to Note 1, fill in the columns according to the following regulations:

(1)The columns of ‘Investee’, ‘Location’, ‘Main business activities’, Initial investment amount’ and ‘Shares held as at December 31, 2022’ should fill orderly in the Company’s (public company’s) information on investees and every directly or indirectly controlled investee’s investment information, and note the relationship between the Company (public company) and its investee each (ex. direct subsidiary or indirect subsidiary) in the ‘footnote’ column.

(2)The ‘Net profit (loss) of the investee for the year ended December 31, 2022’ column should fill in amount of net profit (loss) of the investee for this period.

(3)The ‘Investment income (loss) recognised by the Company for the year ended December 31, 2022’ column should fill in the Company (public company) recognised investment income (loss) of its direct subsidiary and recognised investment income (loss) of its investee accounted for under the equity method for this period. When filling in recognised investment income (loss) of its direct subsidiary, the Company (public company) should confirm that direct subsidiary’s net profit (loss) for this period has included its investment income (loss) which shall be recognised by regulations.

Note 3: On November 10, 2021, the Company’s Board of Directors resolved to establish MVC Capital Corporation by investing $200,000. Additionally, the establishment has been approved on January 6, 2022.

Medigen Vaccine Biologics Corporation

Major shareholders information

December 31, 2022

Table 3

Name of major shareholders	Shares	
	Number of shares held	Ownership (%)
Medigen Biotechnology Corporation	64,748,844	19.74

Note: The major shareholders information is provided by Taiwan Depository & Clearing Corporation. As of December 28, 2022, shareholders held more than 5% of the company's ordinary shares that have been delivered without physical registration.

Appendix B. 2022 Consolidated Financial Statements for the Most Recent Year Certified by CPAs

INDEPENDENT AUDITORS' REPORT

To Medigen Vaccine Biologics Corporation

Opinion

We have audited the accompanying consolidated balance sheets of Medigen Vaccine Biologics Corporation and subsidiaries (the "Group") as at December 31, 2022 and 2021, and the related consolidated statements of comprehensive income, of changes in equity and of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2022 and 2021, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations that came into effect as endorsed by the Financial Supervisory Commission.

Basis for opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and Standards on Auditing of the Republic of China. Our responsibilities under those standards are further described in the *Auditors' responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the Group's 2022 consolidated financial statements. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and, in forming our opinion thereon, we do not provide a separate opinion on these matters.

Key audit matters for the Group's 2022 consolidated financial statements were as follows:

Impairment assessment of property, plant and equipment, right-of-use assets and intangible assets

Description

Refer to Note 4(17) for accounting policies on impairment of non-financial assets, Note 5(2) for uncertainty of accounting estimates and assumptions in relation to the impairment assessment of property, plant and equipment, right-of-use assets and intangible assets, Note 6(8) for details of property, plant and equipment, Note 6(9) for details of right-of-use assets, and Note 6(10) for details of intangible assets. As at December 31, 2022, the Group's property, plant and equipment, right-of-use assets and intangible assets at fair value amounted to NT$1,514,886 thousand, constituting 21% of the consolidated total assets.

The Group measures recoverable amount based on the value in use. The evaluation of the value in use of each cash-generating unit involves management's subjective judgment, including the estimation of future cash flows and appropriate discount rates. As the aforementioned assumptions are highly uncertain, and the estimated results have significant impact on the value in use, we considered the impairment assessment of property, plant and equipment, right-of-use assets and intangible assets as a key audit matter.

How our audit addressed the matter

We performed the following audit procedures in respect of the above key audit matter:

1. Assessed the reasonableness of the management's estimation process of the Group's future cash flows.
2. Discussed financial forecasts with management and assessed the reasonableness by comparing with historical results.
3. Reviewed the reasonableness of assumptions such as sales revenue growth rate and gross margin, and the parameters of the discount rate used, including the reasonableness of risk-free rate of the cost of equity capital, the risk coefficient of the industry, and similarity assets return in the market.

Assessment of allowance for inventory valuation losses

Description

Refer to Note 4(13) for accounting policy on inventory valuation, Note 5(2) for accounting estimates and assumptions in relation to inventory valuation, and Note 6(6) for details of inventory.

As at December 31, 2022, the Group's inventory and allowance for inventory valuation losses amounted to $987,952 thousand and $443,168 thousand, respectively, constituting 7% of the consolidated total assets.

The Group is primarily engaged in manufacturing and sales of vaccine related products which have risks of inventory losing value or becoming obsolete due to allowance, obsolescence or trivial sales amount. Inventories are measured at the lower of cost and net realisable value, using the item by item approach. A provision for loss on decline in value of inventory is recognised based on the net realisable value. As the inventory and allowance for loss are material to the financial statements and the determination of net realisable value involves subjective judgment and estimates, we considered the assessment of allowance for inventory valuation losses a key audit matter.

How our audit addressed the matter

We performed the following audit procedures on the above key audit matter:

1. Assessed the provision policy on allowance for inventory valuation losses based on the understanding of the Company's operations and industry.
2. Obtained an understanding of the inventory management process, participated in observing annual physical counts to assess the effectiveness of management's classification and controls over obsolete inventory.
3. Verified the accuracy of the Group's inventory aging report to check whether the inventory aging report was in accordance with the Group's accounting policy.
4. Examined the inventory valuation report to assess the adequacy of allowance for inventory valuation losses.

Other matter – Parent company only financial reports

We have audited and expressed an unqualified opinion on the parent company only financial statements of Medigen Vaccine Biologics Corporation as at and for the years ended December 31, 2022 and 2021.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations that came into effect as endorsed by the Financial Supervisory Commission, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the audit committee, are responsible for overseeing the Group's financial reporting process.

Auditors' responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Standards on Auditing of the Republic of China will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the Standards on Auditing of the Republic of China, we exercise professional judgment and professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk

of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Juanlu, Man-Yu Lin, Ya-Hui

For and on Behalf of PricewaterhouseCoopers, Taiwan

March 8, 2023

The accompanying consolidated financial statements are not intended to present the financial position and results of operations and cash flows in accordance with accounting principles generally accepted in countries and jurisdictions other than the Republic of China. The standards, procedures and practices in the Republic of China governing the audit of such financial statements may differ from those generally accepted in countries and jurisdictions other than the Republic of China. Accordingly, the accompanying consolidated financial statements and independent auditors' report are not intended for use by those who are not informed about the accounting principles or auditing standards generally accepted in the Republic of China, and their applications in practice.

As the financial statements are the responsibility of the management, PricewaterhouseCoopers cannot accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may derive from the translation.

MEDIGEN VACCINE BIOLOGICS CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2022 AND 2021
(Expressed in thousands of New Taiwan dollars)

	Assets	Notes	December 31, 2022 AMOUNT	%	December 31, 2021 AMOUNT	%
	Current assets					
1100	Cash and cash equivalents	6(1) and 8	$ 1,204,255	16	$ 1,379,692	26
1110	Financial assets at fair value through profit or loss - current	6(2)	52,993	1	53,097	1
1136	Financial assets at amortised cost, net - current	6(1)(4)	2,979,940	41	800,000	15
1140	Contract assets - current	6(18)	-	-	339,148	6
1170	Accounts receivable, net	6(5)	194,400	3	301,041	6
1200	Other receivables		1,171	-	70	-
130X	Inventory	6(6)	544,784	7	563,495	11
1410	Prepayments	6(7)	370,986	5	79,632	1
1470	Other current assets	6(1) and 8	113,893	1	205,071	4
11XX	**Total current assets**		5,462,422	74	3,721,246	70
	Non-current assets					
1517	Financial assets at fair value through other comprehensive income - non-current	6(3)	263,556	4	54,000	1
1600	Property, plant and equipment	6(8)	1,200,472	16	1,233,960	23
1755	Right-of-use assets	6(9)	269,053	4	179,569	4
1780	Intangible assets	6(10)	45,361	1	52,978	1
1990	Other non-current assets	6(1) and 8	106,825	1	57,258	1
15XX	**Total non-current assets**		1,885,267	26	1,577,765	30
1XXX	**Total assets**		$ 7,347,689	100	$ 5,299,011	100

(Continued)

MEDIGEN VACCINE BIOLOGICS CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2022 AND 2021
(Expressed in thousands of New Taiwan dollars)

	Liabilities and Equity	Notes	December 31, 2022 AMOUNT	%	December 31, 2021 AMOUNT	%
	Current liabilities					
2130	Contract liabilities - current	6(18)	$ -	-	$ 111,412	2
2150	Notes payable		581	-	1,730	-
2170	Accounts payable		108,520	2	86,804	2
2200	Other payables		226,119	3	235,274	4
2280	Lease liabilities - current		11,778	-	1,987	-
2399	Other current liabilities		8,234	-	1,880	-
21XX	**Total current liabilities**		355,232	5	439,087	8
	Non-current liabilities					
2500	Financial liabilities at fair value through profit or loss - non-current	6(2)	19,250	-	-	-
2530	Corporate bonds payable	6(11)	1,677,850	23	-	-
2580	Lease liabilities - non-current		266,352	4	183,867	4
25XX	**Total non-current liabilities**		1,963,452	27	183,867	4
2XXX	**Total liabilities**		2,318,684	32	622,954	12
	Equity attributable to owners of parent					
	Share capital	6(14)				
3110	Common stock		3,278,399	44	2,128,865	40
3140	Capital collected in advance		1,913	-	2,383	-
	Capital surplus	6(15)				
3200	Capital surplus		2,798,085	38	1,135,010	21
	Retained earnings	6(16)				
3310	Legal reserve		141,026	2	-	-
3320	Special reserve		459	-	-	-
3350	Unappropriated retained earnings (accumulated deficit)		(1,272,995)	(17)	1,410,258	27
	Other equity interest	6(17)				
3400	Other equity interest		82,118	1	(459)	-
31XX	**Equity attributable to owners of parent**		5,029,005	68	4,676,057	88
3XXX	**Total equity**		5,029,005	68	4,676,057	88
	Significant contingent liabilities and unrecognised contract commitments	9				
3X2X	**Total liabilities and equity**		$ 7,347,689	100	$ 5,299,011	100

The accompanying notes are an integral part of these consolidated financial statements.

MEDIGEN VACCINE BIOLOGICS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
YEARS ENDED DECEMBER 31, 2022 AND 2021
(Expressed in thousands of New Taiwan dollars, except for earnings (loss) per share in New Taiwan dollars)

	Items	Notes	2022 AMOUNT	2022 %	2021 AMOUNT	2021 %
4000	Operating revenue	6(18)	$ 365,042	100	$ 3,280,994	100
5000	Operating costs	6(6)(23)(24)	(577,644)	(158)	(975,961)	(30)
5900	Net operating margin		(212,602)	(58)	2,305,033	70
	Operating expenses	6(23)(24)				
6100	Selling expenses		(72,833)	(20)	(7,498)	-
6200	General and administrative expenses		(110,841)	(31)	(140,714)	(4)
6300	Research and development expenses		(1,139,989)	(312)	(1,193,088)	(37)
6000	Total operating expenses		(1,323,663)	(363)	(1,341,300)	(41)
6900	Operating (loss) profit		(1,536,265)	(421)	963,733	29
	Non-operating income and expenses					
7100	Interest income	6(19)	7,605	2	2,740	-
7010	Other income	6(20)	68,671	19	442,358	14
7020	Other gains and losses	6(21)	12,304	3	7,446	-
7050	Finance costs	6(22)	(26,888)	(7)	(6,019)	-
7000	Total non-operating income and expenses		61,692	17	446,525	14
7900	**(Loss) profit before income tax**		(1,474,573)	(404)	1,410,258	43
7950	Income tax (expense) benefit	6(25)	-	-	-	-
8200	**(Loss) profit for the year**		($ 1,474,573)	(404)	$ 1,410,258	43
	Other comprehensive income					
	Components of other comprehensive income that will not be reclassified to profit or loss					
8316	Unrealised gains from investments in equity instruments measured at fair value through other comprehensive income	6(3)(17)	$ 82,225	23	$ -	-
	Components of other comprehensive income that will be reclassified to profit or loss					
8361	Financial statements translation differences of foreign operations	6(17)	352	-	(105)	-
8300	**Other comprehensive income (loss) for the year**		$ 82,577	23	($ 105)	-
8500	**Total comprehensive (loss) income for the year**		($ 1,391,996)	(381)	$ 1,410,153	43
	(Loss) profit attributable to:					
8610	Owners of parent		($ 1,474,573)	(404)	$ 1,410,258	43
	Comprehensive (loss) income attributable to:					
8710	Owners of parent		($ 1,391,996)	(381)	$ 1,410,153	43
	(Loss) earnings per share	6(26)				
9750	Basic (loss) earnings per share		($ 4.56)		$ 4.42	
9850	Diluted (loss) earnings per share		($ 4.56)		$ 4.39	

The accompanying notes are an integral part of these consolidated financial statements.

MEDIGEN VACCINE BIOLOGICS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
YEARS ENDED DECEMBER 31, 2022 AND 2021
(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

		Equity attributable to owners of the parent								
		Capital			Retained Earnings			Other equity interest		
	Notes	Share capital - common stock	Advance receipts for share capital	Capital surplus	Legal reserve	Special reserve	Unappropriated retained earnings (accumulated deficit)	Exchange differences on translation of foreign financial statements	Unrealised gains (losses) from financial assets measured at fair value through other comprehensive income	Total equity
Year ended December 31, 2021										
Balance at January 1, 2021		$2,110,988	$ 3,620	$2,319,154	$ -	$ -	($1,291,998)	($ 354)	$ -	$3,141,410
Profit for the year		-	-	-	-	-	1,410,258	-	-	1,410,258
Other comprehensive loss	6(17)	-	-	-	-	-	-	(105)	-	(105)
Total comprehensive income (loss)		-	-	-	-	-	1,410,258	(105)	-	1,410,153
Capital surplus used to cover accumulated deficit	6(16)	-	-	(1,291,998)	-	-	1,291,998	-	-	-
Shares issued under employee stock plans	6(14)(15)	17,877	(1,237)	39,039	-	-	-	-	-	55,679
Share-based payment transaction	6(13)(15)	-	-	68,815	-	-	-	-	-	68,815
Balance at December 31, 2021		$2,128,865	$ 2,383	$1,135,010	$ -	$ -	$1,410,258	($ 459)	$ -	$4,676,057
Year ended December 31, 2022										
Balance at January 1, 2022		$2,128,865	$ 2,383	$1,135,010	$ -	$ -	$1,410,258	($ 459)	$ -	$4,676,057
Loss for the year		-	-	-	-	-	(1,474,573)	-	-	(1,474,573)
Other comprehensive income	6(17)	-	-	-	-	-	-	352	82,225	82,577
Total comprehensive income (loss)		-	-	-	-	-	(1,474,573)	352	82,225	(1,391,996)
Appropriations and distribution of 2021 retained earnings	6(16)									
Legal reserve		-	-	-	141,026	-	(141,026)	-	-	-
Special reserve		-	-	-	-	459	(459)	-	-	-
Common stock dividends		1,067,195	-	-	-	-	(1,067,195)	-	-	-
Issuance of common stock for cash	6(14)(15)	70,000	-	1,470,000	-	-	-	-	-	1,540,000
Share-based payment transaction (Cash capital increase)	6(13)(15)	-	-	7,474	-	-	-	-	-	7,474
Shares issued under employee stock plans	6(14)(15)	12,339	(470)	27,536	-	-	-	-	-	39,405
Share-based payment transaction	6(13)(15)	-	-	68,135	-	-	-	-	-	68,135
Issuance of convertible bonds	6(11)(15)	-	-	89,930	-	-	-	-	-	89,930
Balance at December 31, 2022		$3,278,399	$ 1,913	$2,798,085	$ 141,026	$ 459	($1,272,995)	($ 107)	$ 82,225	$5,029,005

The accompanying notes are an integral part of these consolidated financial statements.

MEDIGEN VACCINE BIOLOGICS CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

YEARS ENDED DECEMBER 31, 2022 AND 2021

(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

		Year ended December 31	
	Notes	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES			
(Loss) profit before tax		($ 1,474,573)	$ 1,410,258
Adjustments			
Adjustments to reconcile profit (loss)			
Depreciation	6(8)(23)	104,749	100,181
Amortization of right-of-use assets	6(9)(23)	14,356	3,990
Amortization	6(10)(23)	8,787	8,371
Net loss on financial assets at fair value through profit or loss	6(2)(21)	16,554	73
Interest income	6(19)	(7,605)	(2,740)
Interest expense	6(22)	19,355	322
Interest expense on leasing liabilities	6(9)(22)	7,533	5,697
Share-based payment	6(13)(24)	75,609	68,815
Changes in operating assets and liabilities			
Changes in operating assets			
Contract assets - current		339,148	(339,148)
Accounts receivable, net		106,641	(296,578)
Other receivables		(1,101)	182
Inventories		18,711	(486,063)
Prepayments		(291,964)	(62,330)
Other current assets		75,221	(122,407)
Changes in operating liabilities			
Current contract liabilities		(111,412)	111,412
Notes payable		(1,149)	1,133
Accounts payable		21,716	65,625
Other payables		(27,932)	115,025
Other current liabilities		6,354	1,367
Cash (outflow) inflow generated from operations		(1,101,002)	583,185
Interest received		7,572	2,721
Interest paid		(7,533)	(6,019)
Net cash flows (used in) from operating activities		(1,100,963)	579,887
CASH FLOWS FROM INVESTING ACTIVITIES			
Acquisition of financial assets at fair value through other comprehensive income	6(27)	(99,536)	(54,000)
Acquisition of financial assets at amortized cost		(2,979,940)	(1,900,000)
Proceeds from repayments of financial assets at amortised cost		800,000	1,100,000
Increase in prepayments for investments (recognised in "Other non-current assets")		-	(27,795)
Acquisition of property, plant, and equipment	6(27)	(47,429)	(124,530)
Decrease (increase) in refundable deposits (recognised in "Other non-current assets")		5,912	(2,920)
Acquisition of intangible assets	6(10)	(1,170)	(1,338)
Proceeds from disposals of property, plant, and equipment	6(27)	-	120,000
Increase in prepayments for equipment (recognised in "Other non-current assets")		(91,744)	(9,099)
Decrease (increase) in restricted assets (recognised in "Other current assets")		15,990	(31,006)
Net cash flows used in investing activities		(2,397,917)	(930,688)
CASH FLOWS FROM FINANCING ACTIVITIES			
Increase in short-term borrowings		-	30,000
Repayments of short-term borrowings		-	(30,000)
Issuance of corporate bonds payable	6(28)	1,755,250	-
Decrease in deposits received (recognised in "Other non-current liabilities")		-	(2,575)
Repayment of the principal amount of lease liabilities	6(28)	(11,564)	(1,928)
Issuance of common stock for cash	6(14)	1,540,000	-
Exercise of employee stock plan		39,405	55,679
Net cash flows from financing activities		3,323,091	51,176
Changes in exchange rates		352	(105)
Net decrease in cash and cash equivalents		(175,437)	(299,730)
Cash and cash equivalents at beginning of year		1,379,692	1,679,422
Cash and cash equivalents at end of year		$ 1,204,255	$ 1,379,692

The accompanying notes are an integral part of these consolidated financial statements.

MEDIGEN VACCINE BIOLOGICS CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2022 AND 2021
(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

1. History and Organization

Medigen Vaccine Biologics Co., Ltd. (the "Company") was incorporated as a company limited by shares under the provisions of the Company Act of the Republic of China (R.O.C.) on October 22, 2012. The Company and its subsidiaries (collectively referred herein as the "Group") are primarily engaged in the research, development and wholesale of vaccine and biopharmaceutical, medical devices wholesale and retail, etc. Medigen Biotechnology Corporation holds 19.74% equity interest in the Company. Medigen Biotechnology Corporation is the Group's ultimate parent company.

2. The Date of Authorisation for Issuance of the Financial Statements and Procedures for Authorisation

These consolidated financial statements were authorised for issuance by the Board of Directors on March 8, 2023.

3. Application of New Standards, Amendments and Interpretations

(1) Effect of the adoption of new issuances of or amendments to International Financial Reporting Standards ("IFRS") that came into effect as endorsed by the Financial Supervisory Commission ("FSC")

New standards, interpretations and amendments endorsed by the FSC and became effective from 2022 are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IFRS 3, 'Reference to the conceptual framework'	January 1, 2022
Amendments to IAS 16, 'Property, plant and equipment: proceeds before intended use'	January 1, 2022
Amendments to IAS 37, 'Onerous contracts cost of fulfilling a contract'	January 1, 2022
Annual improvements to IFRS Standards 2018–2020	January 1, 2022

The above standards and interpretations have no significant impact to the Group's financial condition and financial performance based on the Group's assessment.

(2) Effect of new issuances of or amendments to IFRSs as endorsed by the FSC but not yet adopted by the Group

New standards, interpretations and amendments endorsed by the FSC effective from 2023 are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IAS 1, 'Disclosure of accounting policies'	January 1, 2023
Amendments to IAS 8, 'Definition of accounting estimates'	January 1, 2023
Amendments to IAS 12, 'Deferred tax related to assets and liabilities arising from a single transaction'	January 1, 2023

The above standards and interpretations have no significant impact to the Group's financial condition and financial performance based on the Group's assessment.

(3) IFRSs issued by IASB but not yet endorsed by the FSC

New standards, interpretations and amendments issued by IASB but not yet included in the IFRSs as endorsed by the FSC are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IFRS 10 and IAS 28, 'Sale or contribution of assets between an investor and its associate or joint venture'	To be determined by International Accounting Standards Board
Amendments to IFRS 16, 'Lease liability in a sale and leaseback'	January 1, 2024
IFRS 17, 'Insurance contracts'	January 1, 2023
Amendments to IFRS 17, 'Insurance contracts'	January 1, 2023
Amendment to IFRS 17, 'Initial application of IFRS 17 and IFRS 9 – comparative information'	January 1, 2023
Amendments to IAS 1, 'Classification of liabilities as current or non-current'	January 1, 2024
Amendments to IAS 1, 'Non-current liabilities with covenants'	January 1, 2024

The above standards and interpretations have no significant impact to the Group's financial condition and financial performance based on the Group's assessment.

4. Summary of Significant Accounting Policies

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

(1) Compliance statement

The consolidated financial statements of the Group have been prepared in accordance with the "Regulations Governing the Preparation of Financial Reports by Securities Issuers", International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations that came into effect as endorsed by the FSC (collectively referred herein as the "IFRSs").

(2) Basis of preparation

A. Except for the Financial assets at the fair value, the consolidated financial statements have been prepared under the historical cost convention.

B. The preparation of financial statements in conformity with IFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 5.

(3) Basis of consolidation

A. Basis for preparation of consolidated financial statements:

(a) All subsidiaries are included in the Group's consolidated financial statements. Subsidiaries are all entities controlled by the Group. The Group controls an entity when the Group is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Consolidation of subsidiaries begins from the date the Group obtains control of the subsidiaries and ceases when the Group loses control of the subsidiaries.

(b) Inter-company transactions, balances and unrealised gains or losses on transactions between companies within the Group are eliminated. Accounting policies of subsidiaries have been adjusted where necessary to ensure consistency with the policies adopted by the Group.

(c) Profit or loss and each component of other comprehensive income are attributed to the owners of the parent and to the non-controlling interests. Total comprehensive income is attributed to the owners of the parent and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

(d) Changes in a parent's ownership interest in a subsidiary that do not result in the parent losing control of the subsidiary (transactions with non-controlling interests) are accounted for as equity transactions, i.e. transactions with owners in their capacity as owners. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognised directly in equity.

(e) When the Group loses control of a subsidiary, the Group remeasures any investment retained in the former subsidiary at its fair value. That fair value is regarded as the fair value on initial recognition of a financial asset or the cost on initial recognition of the associate or joint venture. Any difference between fair value and carrying amount is recognised in profit or loss. All amounts previously recognised in other comprehensive income in relation to the subsidiary are reclassified to profit or loss on the same basis as would be required if the related assets or liabilities were disposed of. That is, when the Group loses control of a subsidiary, all gains or losses previously recognised in other comprehensive income in relation to the subsidiary should be reclassified from equity to profit or loss, if such gains or losses would be reclassified to profit or loss when the related assets or liabilities are disposed of.

B. Subsidiaries included in the consolidated financial statements:

Name of investor	Name of subsidiary	Main business activities	Ownership (%)	
			December 31, 2022	December 31, 2021
The Company	MVC BioPharma Ltd.	Investing	100	100
The Company	MVC Capital Corporation	Investing	100	-

On November 10, 2021, the Company's Board of Directors resolved to establish MVC Capital Corporation by investing $200,000. Additionally, the establishment has been approved on January 6, 2022.

C. Subsidiaries not included in the consolidated financial statements: None.

D. Adjustments for subsidiaries with different balance sheet dates: None.

E. Significant restrictions: None.

F. Subsidiaries that have non-controlling interests that are material to the Group: None.

(4) Foreign currency translation

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in "New Taiwan Dollars", which is the Company's functional and the Group's presentation currency.

A. Foreign currency transactions and balances

(a) Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions are recognised in profit or loss in the period in which they arise.

(b) Monetary assets and liabilities denominated in foreign currencies at the period end are re-translated at the exchange rates prevailing at the balance sheet date. Exchange differences arising upon re-translation at the balance sheet date are recognised in profit or loss.

(c) Non-monetary assets and liabilities denominated in foreign currencies held at fair value through profit or loss are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognised in profit or loss. Non-monetary assets and liabilities denominated in foreign currencies held at fair value through other comprehensive income are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognised in other comprehensive income. However, non-monetary assets and liabilities denominated in foreign currencies that are not measured at fair value are translated using the historical exchange rates at the dates of the initial transactions.

(d) All other foreign exchange gains and losses based are presented in the statement of comprehensive income within 'other gains and losses'.

B. Translation of foreign operations

(a) The operating results and financial position of all the group entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

i. Assets and liabilities for each balance sheet presented are translated at the closing exchange rate at the date of that balance sheet;

ii. Income and expenses for each statement of comprehensive income are translated at average exchange rates of that period; and

iii. All resulting exchange differences are recognised in other comprehensive income.

(b) When the foreign operation partially disposed of or sold is a subsidiary, cumulative exchange differences that were recorded in other comprehensive income are proportionately transferred to the non-controlling interest in this foreign operation. In addition, even when the Group retains partial interest in the former foreign subsidiary after losing control of the former foreign subsidiary, such transactions should be accounted for as disposal of all interest in the foreign operation.

(5) Classification of current and non-current items

A. Assets that meet one of the following criteria are classified as current assets; otherwise they are classified as non-current assets:

(a) Assets arising from operating activities that are expected to be realised, or are intended to be sold or consumed within the normal operating cycle;

(b) Assets held mainly for trading purposes;

(c) Assets that are expected to be realised within twelve months from the balance sheet date;

(d) Cash and cash equivalents, excluding restricted cash and cash equivalents and those that are to be exchanged or used to settle liabilities more than twelve months after the balance sheet date.

B. Liabilities that meet one of the following criteria are classified as current liabilities; otherwise they are classified as non-current liabilities:

(a) Liabilities that are expected to be settled within the normal operating cycle;

(b) Liabilities arising mainly from trading activities;

(c) Liabilities that are to be settled within twelve months from the balance sheet date;

(d) Liabilities for which the repayment date cannot be extended unconditionally to more than twelve months after the balance sheet date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

(6) Cash equivalents

Cash equivalents refer to short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Time deposits that meet the definition above and are held for the purpose of meeting short-term cash commitments in operations (within 3 months since acquired) are classified as cash equivalents.

(7) Financial assets at fair value through profit or loss

A. Financial assets at fair value through profit or loss are financial assets that are not measured at amortised cost or fair value through other comprehensive income.

B. On a regular way purchase or sale basis, financial assets at fair value through profit or loss are recognised and derecognised using trade date accounting.

C. At initial recognition, the Group measures the financial assets at fair value and recognises the transaction costs in profit or loss. The Group subsequently measures the financial assets at fair value, and recognises the gain or loss in profit or loss.

(8) Financial assets at fair value through other comprehensive income

A. Financial assets at fair value through other comprehensive income comprise equity securities which are not held for trading, and for which the Group has made an irrevocable election at initial recognition to recognise changes in fair value in other comprehensive income.

B. On a regular way purchase or sale basis, financial assets at fair value through other comprehensive income are recognised and derecognised using trade date accounting.

C. At initial recognition, the Group measures the financial assets at fair value plus transaction costs. The Group subsequently measures the financial assets at fair value:

The changes in fair value of equity investments that were recognised in other comprehensive income are reclassified to retained earnings and are not reclassified to profit or loss following the derecognition of the investment. Dividends are recognised as revenue when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

(9) Financial assets at amortised cost

The Group’s time deposits which do not fall under cash equivalents are those with a short maturity period and are measured at initial investment amount as the effect of discounting is immaterial.

(10) Accounts receivable

A. Accounts receivable entitle the Group a legal right to receive consideration in exchange for transferred goods or rendered services.

B. The short-term accounts receivable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(11) Impairment of financial assets

For financial assets at amortised cost including accounts receivable or contract assets that have a significant financing component, at each reporting date, the Group recognises the impairment provision for 12 months expected credit losses (ECLs) if there has not been a significant increase in credit risk since initial recognition or recognises the impairment provision for the lifetime ECLs if such credit risk has increased since initial recognition after taking into consideration all reasonable and verifiable information that includes forecasts. On the other hand, for accounts receivable or contract assets that do not contain a significant financing component, the Group recognises the impairment provision for lifetime ECLs.

(12) Derecognition of financial assets

The Group derecognises a financial asset when the contractual rights to receive the cash flows from the financial asset expire.

(13) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted-average method. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (allocated based on normal operating capacity). It excludes borrowing costs. The item by item approach is used in applying the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and applicable variable selling expenses.

(14) Property, plant and equipment

A. Property, plant and equipment are initially recorded at cost. Borrowing costs incurred during the construction period are capitalised.

B. Subsequent costs are included in the asset’s carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

C. Land is not depreciated. Other property, plant and equipment apply cost model and are depreciated using the straight-line method to allocate their cost over their estimated useful lives. Each part of an item of property, plant, and equipment with a cost that is significant in relation to the total cost of the item must be depreciated separately.

D. The assets' residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each financial year-end. If expectations for the assets' residual values and useful lives differ from previous estimates or the patterns of consumption of the assets' future economic benefits embodied in the assets have changed significantly, any change is accounted for as a change in estimate under IAS 8, 'Accounting Policies, Changes in Accounting Estimates and Errors', from the date of the change. The estimated useful lives of property, plant and equipment are as follows:

Buildings and structures	3 ~ 50 years
Machinery and equipment	2 ~ 20 years
Testing equipment	3 ~ 15 years
Office equipment	5 years
Computer and communication equipment	3 ~ 10 years
Leasehold improvements	1 ~ 10 years

(15) Leasing arrangements (lessee)－right-of-use assets/lease liabilities

A. Leases are recognised as a right-of-use asset and a corresponding lease liability at the date at which the leased asset is available for use by the Group. For short-term leases or leases of low-value assets, lease payments are recognised as an expense on a straight-line basis over the lease term.

B. Lease liabilities include the net present value of the remaining lease payments at the commencement date, discounted using the incremental borrowing interest rate. Lease payments are fixed payments, less any lease incentives receivable.

The Group subsequently measures the lease liability at amortised cost using the interest method and recognises interest expense over the lease term. The lease liability is remeasured and the amount of remeasurement is recognised as an adjustment to the right-of-use asset when there are changes in the lease term or lease payments and such changes do not arise from contract modifications.

C. At the commencement date, the right-of-use asset is stated at cost comprising the amount of the initial measurement of lease liability.

The right-of-use asset is measured subsequently using the cost model and is depreciated from the commencement date to the earlier of the end of the asset's useful life or the end of the lease term. When the lease liability is remeasured, the amount of remeasurement is recognised as an adjustment to the right-of-use asset.

D. For lease modifications that decrease the scope of the lease, the lessee shall decrease the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease, and recognise the difference between remeasured lease liability in profit or loss.

(16) Intangible assets

A. Computer software

Computer software is stated at cost and amortised on a straight-line basis over its estimated useful life of 3 years.

B. Professional techniques

Professional techniques is stated at cost and amortised on a straight-line basis over its estimated useful life of 12-20 years.

C. Vaccine patent

Vaccine patent is stated at cost and amortised on a straight-line basis over its estimated useful life of 15 years.

(17) Impairment of non-financial assets

The Group assesses at each balance sheet date the recoverable amounts of those assets where there is an indication that they are impaired. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell or value in use. When the circumstances or reasons for recognising impairment loss for an asset in prior years no longer exist or diminish, the impairment loss is reversed. The increased carrying amount due to reversal should not be more than what the depreciated or amortised historical cost would have been if the impairment had not been recognised.

(18) Notes and accounts payable

A. Accounts payable are liabilities for purchases of raw materials, goods or services and notes payable are those resulting from operating and non-operating activities.

B. The short-term notes and accounts payable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(19) Financial liabilities at fair value through profit or loss

A. Financial liabilities that meet one of the following criteria are designated as at fair value through profit or loss at initial recognition:

(a) Hybrid (combined) contracts; or

(b) They eliminate or significantly reduce a measurement or recognition inconsistency; or

(c) They are managed and their performance is evaluated on a fair value basis, in accordance with a documented risk management policy.

B. At initial recognition, the Group measures the financial liabilities at fair value. All related transaction costs are recognised in profit or loss. The Group subsequently measures these financial liabilities at fair value with any gain or loss recognised in profit or loss.

(20) Convertible bonds payable

Convertible bonds issued by the Group contain conversion options (that is, the bondholders have the right to convert the bonds into the Group's common shares by exchanging a fixed amount of cash for a fixed number of common shares), call options and put options. The Group classifies the bonds payable upon issuance as a financial asset, a financial liability or an equity instrument in accordance with the contract terms. They are accounted for as follows:

A. The embedded call options and put options are recognised initially at net fair value as'financial assets or financial liabilities at fair value through profit or loss'. They are subsequently remeasured and stated at fair value on each balance sheet date; the gain or loss is recognised as 'gain or loss on valuation of financial assets or financial liabilities at fair value through profit or loss'.

B. The host contracts of bonds are initially recognised at fair value. Any difference between the initial recognition and the redemption value is accounted for as the premium or discount on bonds payable and subsequently is amortised in profit or loss as an adjustment to 'finance costs' over the period of circulation using the effective interest method.

C. The embedded conversion options which meet the definition of an equity instrument are initially recognised in 'capital surplus—share options' at the residual amount of total issue price less the amount of financial assets or financial liabilities at fair value through profit or loss and bonds payable as stated above. Conversion options are not subsequently remeasured.

D. Any transaction costs directly attributable to the issuance are allocated to each liability or equity component in proportion to the initial carrying amount of each abovementioned item.

E. When bondholders exercise conversion options, the liability component of the bonds (including bonds payable and 'financial assets or financial liabilities at fair value through profit or loss') shall be remeasured on the conversion date. The issuance cost of converted common shares is the total book value of the abovementioned liability component and 'capital surplus—share options'.

(21) Derecognition of financial liabilities

A financial liability is derecognised when the obligation specified in the contract is either discharged or cancelled or expires.

(22) Employee benefits

A. Short-term employee benefits

Short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in respect of service rendered by employees in a period and should be recognised as expense in that period when the employees render service.

B. Pensions

Defined contribution plans

For defined contribution plans, the contributions are recognised as pension expense when they are due on an accrual basis. Prepaid contributions are recognised as an asset to the extent of a cash refund or a reduction in the future payments.

C. Termination benefits

Termination benefits are employee benefits provided in exchange for the termination of employment as a result from either the Group's decision to terminate an employee's employment before the normal retirement date, or an employee's decision to accept an offer of redundancy benefits in exchange for the termination of employment. The Group recognises expense when it can no longer withdraw an offer of termination benefits when it recognises related restructuring costs, whichever is earlier. Benefits that are expected to be due more than 12 months after balance sheet date shall be discounted to their present value.

D. Employees' compensation and directors' remuneration

Employees' compensation and directors' and supervisors' remuneration are recognised as expense and liability, provided that such recognition is required under legal or constructive obligation and those amounts can be reliably estimated. Any difference between the resolved amounts and the subsequently actual distributed amounts is accounted for as changes in estimates. If employee compensation is paid by shares, the Group calculates the number of shares based on the closing price at the previous day of the board meeting resolution.

(23) Employee share-based payment

For the equity-settled share-based payment arrangements, the employee services received are measured at the fair value of the equity instruments granted at the grant date, and are recognised as compensation cost over the vesting period, with a corresponding adjustment to equity. The fair value of the equity instruments granted shall reflect the impact of market vesting conditions and non-vesting conditions. Compensation cost is subject to adjustment based on the service conditions that are expected to be satisfied and the estimates of the number of equity instruments that are expected to vest under the non-market vesting conditions at each balance sheet date. Ultimately, the amount of compensation cost recognised is based on the number of equity instruments that eventually vest.

(24) Income tax

A. The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or items recognised directly in equity, in which cases the tax is recognised in other comprehensive income or equity.

B. The current income tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in accordance with applicable tax regulations. It establishes provisions where appropriate based on the amounts expected to be paid to the tax authorities. An additional tax is levied on the unappropriated retained earnings and is recorded as income tax expense in the year the stockholders resolve to retain the earnings.

C. Deferred tax is recognised, using the balance sheet liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated balance sheet. However, the deferred tax is not accounted for if it arises from initial recognition of goodwill or of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred tax is provided on temporary differences arising on investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

D. Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. At each balance sheet date, unrecognised and recognised deferred tax assets are reassessed.

(25) Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or stock options are shown in equity as a deduction, net of tax, from the proceeds.

(26) Dividends

Dividends are recorded in the Company’s financial statements in the period in which they are resolved by the Company’s shareholders. Cash dividends are recorded as liabilities; stock dividends are recorded as stock dividends to be distributed and are reclassified to ordinary shares on the effective date of new shares issuance.

(27) Revenue recognition

A. Sales of goods

(a) The Group manufactures and sells a range of Covid-19 vaccines and Covid-19 test kits. Sales are recognised when control of the products has transferred. Delivery occurs when the products have been shipped to the specific location, and either the customer has accepted the products in accordance with the sales contract, or the Group has objective evidence that all criteria for acceptance have been satisfied. Revenue is recognised based on the price specified in the contract, net of the estimated volume discounts and sales discounts and allowances, and only recognised to the extent that it is highly probable that a significant reversal will not occur. The estimation is subject to an assessment at each reporting date. Some contracts include multiple deliverables, such as storage, custody and delivery of Covid-19 vaccine and other services. The nature of this service is simple, it does not include an integration service and can be performed by another party. It is therefore accounted for as a separate performance obligation. In this case, the transaction price will be allocated to each performance obligation based on the stand-alone selling prices. Where these are not directly observable, they are estimated based on expected cost plus margin. The customer pays at the time specified in the payment schedule. If the services rendered exceed the payment, a contract asset is recognised. If the payments exceed the services rendered, a contract liability is recognised.

(b) A receivable is recognised when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

B. Technical service revenue

The Group provides technical service on cellular therapy product quality test and cell culture test. Revenue from providing services is recognised in the accounting period in which the services are rendered. For fixed-price contracts, revenue is recognised when the performance obligation is satisfied. For the contracts that the customers pay according to the agreement of payment schedule, if the services rendered exceed the payment, a contract asset is recognised. If the payments exceed the services rendered, a contract liability is recognised.

(28) Government grants

Government grants are recognised at their fair value only when there is reasonable assurance that the Group will comply with any conditions attached to the grants and the grants will be received. Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises expenses for the related costs for which the grants are intended to compensate.

(29) Operating segments

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The Group's chief operating decision maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Board of Directors that makes strategic decisions.

5. Critical Accounting Judgements, Estimates and Key Sources of Assumption Uncertainty

The preparation of these consolidated financial statements requires management to make critical judgements in applying the Group's accounting policies and make critical assumptions and estimates concerning future events. Assumptions and estimates may differ from the actual results and are continually evaluated and adjusted based on historical experience and other factors. Such assumptions and estimates have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year; and the related information is addressed below:

(1) Critical judgements in applying the Group's accounting policies

None.

(2) Critical accounting estimates and assumptions

A. Impairment assessment of property, plant, and equipment, right-of-use assets, and intangible assets.

The Group assesses impairment based on its subjective judgement and determines the separate cash flows of a specific group of assets, useful lives of assets and the future possible income and expenses arising from the assets depending on how assets are utilised and industrial characteristics. Any changes of economic circumstances or estimates due to the change of Group strategy might cause material impairment on assets in the future.

B. Evaluation of inventories

As inventories are stated at the lower of cost and net realisable value, the Group must determine the net realisable value of inventories on balance sheet date using judgements and estimates. The Group evaluates the amounts of normal inventory consumption, obsolete inventories or inventories without market selling value on balance sheet date and writes down the cost of inventories to the net realisable value. Such an evaluation of inventories is principally based on the demand for the products within the specified period in the future. Therefore, there might be changes to the evaluation.

As of December 31, 2022, the carrying amount of inventories was $544,784.

6. Details of Significant Accounts

(1) Cash and cash equivalents

	December 31, 2022	December 31, 2021
Cash on hand and revolving funds	$ 102	$ 115
Checking accounts and demand deposits	1,179,111	1,385,578
Time deposits	3,027,624	832,631
	4,206,837	2,218,324
Transferred to financial assets at amortised cost	(2,979,940)	(800,000)
Transferred to other current assets - restricted assets	(15,016)	(31,006)
Transferred to other non-current assets - restricted assets	(7,626)	(7,626)
	$ 1,204,255	$ 1,379,692

A. The Group transacts with a variety of financial institutions all with high credit quality to disperse credit risk, so it expects that the probability of counterparty default is remote.

B. For details of restricted cash classified as other current and non-current assets - restricted since it was pledged for the security deposits for project and for lease, refer to Note 8.

(2) Financial assets (liabilities) at fair value through profit or loss

Assets Items	December 31, 2022	December 31, 2021
Current items:		
Financial assets mandatorily measured at fair value through profit or loss		
Beneficiary certificates	$ 53,100	$ 53,100
Valuation adjustment	(107)	(3)
	$ 52,993	$ 53,097

Liabilities Items	December 31, 2022	December 31, 2021
Non-current items:		
Financial liabilities held for trading		
Derivative instruments	$ 2,800	$ -
Valuation adjustment	16,450	-
	$ 19,250	$ -

A. Net amounts recognised in losses in relation to financial assets and liabilities at fair value through profit or loss are $16,554 and $73 for the years ended December 31, 2022 and 2021, respectively.

B. The Group has no financial assets and liabilities at fair value through profit or loss pledged to others.

(3) Financial assets at fair value through other comprehensive income

Items	December 31, 2022	December 31, 2021
Non-current items:		
Equity instruments		
Unlisted stocks	$ 181,331	$ 54,000
Valuation adjustment	82,225	-
	$ 263,556	$ 54,000

A. The Group has elected to classify equity instrument investments that are considered to be strategic investments as financial assets at fair value through other comprehensive income.

B. Amounts recognised in profit or loss and other comprehensive income in relation to the financial assets at fair value through other comprehensive income are listed below:

	2022	2021
Equity instruments at fair value through other comprehensive income		
Fair value change recognised in other comprehensive income	$ 82,225	$ -

C. As at December 31, 2022 and 2021, without taking into account any collateral held or other credit enhancements, the maximum exposure to credit risk in respect of the amount that best represents the financial assets at fair value through other comprehensive income held by the Group was $263,556 and $54,000, respectively.

(4) Financial assets at amortised cost

Items	December 31, 2022	December 31, 2021
Time deposits (more than three months)	$ 2,979,940	$ 800,000
Interest rate	0.965%~4.15%	0.525%

A. Amounts recognised in interest income in relation to financial assets at amortised cost are $2,100 and $2,338 for the years ended December 31, 2022 and 2021, respectively.

B. As at December 31, 2022 and 2021, without taking into account any collateral held or other credit enhancements, the maximum exposure to credit risk in respect of the amount that best represents the financial assets at amortised cost held by the Group were $2,979,940 and $800,000, respectively.

C. The Group has no financial assets at amortised cost pledged to others.

D. Information relating to credit risk of financial assets at amortised cost is provided in Note 12(2). The counterparties of the Group's investments in certificates of deposits are financial institutions with high credit quality, so the Group expects that the probability of counterparty default is remote.

(5) Accounts receivable

	December 31, 2022	December 31, 2021
Accounts receivable	$ 194,400	$ 301,041

A. The ageing analysis of accounts receivable that were past due but not impaired is as follows:

	December 31, 2022	December 31, 2021
	Accounts receivable	Accounts receivable
Not past due	$ 194,400	$ 301,041
1 to 90 days	-	-
91 to 180 days	-	-
Over 180 days	-	-
	$ 194,400	$ 301,041

The above ageing analysis was based on past due date.

B. As at December 31, 2022 and 2021, accounts receivable were all from contracts with customers. As of January 1, 2021, the balance of receivables from contracts with customers amounted to $4,463.

C. As at December 31, 2022 and 2021, without taking into account any collateral held or other credit enhancements, the maximum exposure to credit risk in respect of the amount that best represents the accounts receivable held by the Group was $194,400 and $301,041, respectively.

D. Information relating to credit risk of accounts receivable is provided in Note 12(2).

(6) Inventories

	December 31, 2022		
	Cost	Allowance for valuation and obsolescence losses	Book value
Raw materials	$ 582,195	($ 119,247)	$ 462,948
Work in progress	110,309	(29,947)	80,362
Finished goods	295,448	(293,974)	1,474
	$ 987,952	($ 443,168)	$ 544,784

	December 31, 2021		
	Cost	Allowance for valuation and obsolescence losses	Book value
Raw materials	$ 259,508	$ -	$ 259,508
Work in progress	17,492	-	17,492
Finished goods	286,495	-	286,495
	$ 563,495	$ -	$ 563,495

The cost of inventories recognised as expense for the year:

	Year ended December 31, 2022	Year ended December 31, 2021
Cost of goods sold	$ 117,744	$ 975,961
Loss on abandonment of inventory	16,732	-
Loss on inventory valuation and obsolescence	443,168	-
	$ 577,644	$ 975,961

(7) Prepayments

	December 31, 2022	December 31, 2021
Prepayments for purchases	$ 358,617	$ 47,340
Others	12,369	32,292
	$ 370,986	$ 79,632

(8) Property, plant and equipment

	2022							
	Buildings and structures	Machinery and equipment	Testing equipment	Office equipment	Computers and communications equipment	Leasehold improvements	Construction in progress and equipment to be inspected	Total
At January 1								
Cost	$ 1,121,436	$ 487,174	$ 68,701	$ 3,245	$ 11,782	$ 2,551	$ 4,695	$ 1,699,584
Accumulated depreciation	(259,136)	(143,273)	(47,793)	(3,206)	(10,558)	(1,658)	-	(465,624)
	$ 862,300	$ 343,901	$ 20,908	$ 39	$ 1,224	$ 893	$ 4,695	$ 1,233,960
Opening net book amount	$ 862,300	$ 343,901	$ 20,908	$ 39	$ 1,224	$ 893	$ 4,695	$ 1,233,960
Additions	4,931	35,682	6,446		218	479	14,425	62,181
Reclassifications	323	10,672	2,667	-	-	-	(4,582)	9,080
Depreciation charge	(54,611)	(41,547)	(7,586)	(39)	(509)	(457)	-	(104,749)
Closing net book amount	$ 812,943	$ 348,708	$ 22,435	$ -	$ 933	$ 915	$ 14,538	$ 1,200,472
At December 31								
Cost	$ 1,126,690	$ 533,528	$ 77,814	$ 3,245	$ 12,000	$ 3,030	$ 14,538	$ 1,770,845
Accumulated depreciation	(313,747)	(184,820)	(55,379)	(3,245)	(11,067)	(2,115)	-	(570,373)
	$ 812,943	$ 348,708	$ 22,435	$ -	$ 933	$ 915	$ 14,538	$ 1,200,472

	2021							
	Buildings and structures	Machinery and equipment	Testing equipment	Office equipment	Computers and communicating equipment	Leasehold improvements	Construction in progress and equipment to be inspected	Total
At January 1								
Cost	$ 1,117,417	$ 313,092	$ 61,471	$ 2,953	$ 10,943	$ 1,887	$ 17,537	$ 1,525,300
Accumulated depreciation	(204,828)	(109,554)	(38,637)	(2,504)	(8,749)	(1,171)	-	(365,443)
	$ 912,589	$ 203,538	$ 22,834	$ 449	$ 2,194	$ 716	$ 17,537	$ 1,159,857
Opening net book amount	$ 912,589	$ 203,538	$ 22,834	$ 449	$ 2,194	$ 716	$ 17,537	$ 1,159,857
Additions	2,352	98,054	7,230	292	734	664	4,695	114,021
Reclassifications	1,667	76,028	-	-	105	-	(17,537)	60,263
Depreciation charge	(54,308)	(33,719)	(9,156)	(702)	(1,809)	(487)	-	(100,181)
Closing net book amount	$ 862,300	$ 343,901	$ 20,908	$ 39	$ 1,224	$ 893	$ 4,695	$ 1,233,960
At December 31								
Cost	$ 1,121,436	$ 487,174	$ 68,701	$ 3,245	$ 11,782	$ 2,551	$ 4,695	$ 1,699,584
Accumulated depreciation	(259,136)	(143,273)	(47,793)	(3,206)	(10,558)	(1,658)	-	(465,624)
	$ 862,300	$ 343,901	$ 20,908	$ 39	$ 1,224	$ 893	$ 4,695	$ 1,233,960

A. For the years ended December 31, 2022 and 2021, no property, plant and equipment was pledged as collateral and no borrowing costs were capitalised as part of property, plant and equipment.

B. The significant components of buildings and structures include electromechanical air conditioning and fire protection engineering, which are depreciated over 3-15 years.

C. Reclassifications in current year represent transfers from prepaid equipment fee (recognised in “Other non-current assets”).

(9) Leasing arrangements－lessee

A. The Group leases various assets including land and buildings. Rental contracts are typically made for periods of 10 to 48 years. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose covenants, but leased assets may not be used as security for borrowing purposes.

B. The carrying amounts of right-of-use assets and the depreciation are as follows:

	December 31, 2022		December 31, 2021	
	Carrying amount		Carrying amount	
Right-of-use asset - Land	$	175,818	$	179,569
Right-of-use asset - Buildings		93,235		-
	$	269,053	$	179,569

	Year ended December 31, 2022		Year ended December 31, 2021	
	Depreciation		Depreciation	
Right-of-use asset - Land	$	3,996	$	3,990
Right-of-use asset - Buildings		10,360		-
	$	14,356	$	3,990

C. For the years ended December 31, 2022 and 2021, the additions to right-of-use assets were $103,840 and $0, respectively.

D. The information on profit and loss accounts relating to lease contracts is as follows:

	Year ended December 31, 2022		Year ended December 31, 2021	
Items affecting profit or loss				
Interest expense on lease liabilities	$	7,533	$	5,697
Expense on short-term lease contracts		687		6,665

E. For the years ended December 31, 2022 and 2021, the Group’s total cash outflow for leases were $19,784 and $14,290, respectively.

(10) Intangible assets

	2022			
	Professional techniques	Computer software	Vaccine patent	Total
At January 1				
Cost	$ 25,870	$ 2,935	$ 94,575	$ 123,380
Accumulated amortisation and impairment	(10,917)	(1,689)	(57,796)	(70,402)
	$ 14,953	$ 1,246	$ 36,779	$ 52,978
Opening net book amount as at January 1	$ 14,953	$ 1,246	$ 36,779	$ 52,978
Additions	-	1,170	-	1,170
Amortisation charge	(1,851)	(631)	(6,305)	(8,787)
Closing net book amount as at December 31	$ 13,102	$ 1,785	$ 30,474	$ 45,361
At December 31				
Cost	$ 25,870	$ 4,105	$ 94,575	$ 124,550
Accumulated amortisation and impairment	(12,768)	(2,320)	(64,101)	(79,189)
	$ 13,102	$ 1,785	$ 30,474	$ 45,361

	2021			
	Professional techniques	Computer software	Vaccine patent	Total
At January 1				
Cost	$ 25,870	$ 1,597	$ 94,575	$ 122,042
Accumulated amortisation and impairment	(9,066)	(1,474)	(51,491)	(62,031)
	$ 16,804	$ 123	$ 43,084	$ 60,011
Opening net book amount as at January 1	$ 16,804	$ 123	$ 43,084	$ 60,011
Additions	-	1,338	-	1,338
Amortisation charge	(1,851)	(215)	(6,305)	(8,371)
Closing net book amount as at December 31	$ 14,953	$ 1,246	$ 36,779	$ 52,978
At December 31				
Cost	$ 25,870	$ 2,935	$ 94,575	$ 123,380
Accumulated amortisation and impairment	(10,917)	(1,689)	(57,796)	(70,402)
	$ 14,953	$ 1,246	$ 36,779	$ 52,978

A. Details of amortisation on intangible assets are as follows:

	Year ended December 31, 2022	Year ended December 31, 2021
Administrative expenses	$ 631	$ 215
Research and development expenses	8,156	8,156
	$ 8,787	$ 8,371

B. No interest expense was capitalised as part of intangible assets in 2022 and 2021.

(11) Corporate bonds payable

	December 31, 2022	December 31, 2021
Corporate bonds payable	$ 1,750,000	$ -
Less: Discount on bonds payable	(72,150)	-
	$ 1,677,850	$ -

A. The issuance of domestic convertible bonds by the Company:

(a) The terms of the first domestic unsecured convertible bonds issued by the Company are as follows:

i. The Company issued $1,750,000, 0% first domestic unsecured convertible bonds, as approved by the regulatory authority. The bonds mature 3 years from the issue date (May 9, 2022 ~ May 9, 2025) and will be redeemed in cash at face value at the maturity date. The bonds were listed on the Taipei Exchange on May 9, 2022.

ii. The bondholders have the right to ask for conversion of the bonds into common shares of the Company during the period from the date after three months of the bonds issue to the maturity date, except for the stop transfer period as specified in the terms of the bonds or the laws/regulations. The rights and obligations of the new shares converted from the bonds are the same as the issued and outstanding common shares.

iii. The conversion price of the bonds is set up based on the pricing model specified in the terms of the bonds, and is subject to adjustments if the condition of the increase in the number of ordinary shares issued (including private placement) by the Company occurs subsequently, including but not limited to issuance of common stock for cash, capital increase out of earnings or capital reserves, company merger, transfer of shares from other companies to issue new shares, stock splits and cash capital increase to participate in the issuance of overseas depositary receipts, etc. The conversion price was $278 per share on the issue date. In response to the Company’s capital increase out of cash and earnings, the conversion price was adjusted to $277.5 and $187.1 on July 1, 2022 and August 9, 2022, respectively..

iv. The bondholders have the right to require the Company to redeem any bonds at the price of the bonds’ face value upon two years from the issue date.

v. The Company may repurchase all the bonds outstanding in cash at the bonds’ face value at any time after the following events occur: (i) the closing price of the Company's common shares is above the then conversion price by 30% for 30 consecutive trading days during the period from the date after three months of the bonds issue to 40 days before the maturity date, or (ii) the outstanding balance of the bonds is less than 10% of total initial issue amount during the period from the date after three months of the bonds issue to 40 days before the maturity date.

vi. Under the terms of the bonds, all bonds redeemed (including bonds repurchased from the Taipei Exchange), matured and converted are retired and not to be re-issued; all rights and obligations attached to the bonds are also extinguished.

B. Regarding the issuance of convertible bonds, the equity conversion options amounting to $89,930 were separated from the liability component and were recognised in ‘capital surplus—share options’ in accordance with IAS 32. The call options and put options embedded in bonds payable were separated from their host contracts and were recognised in ‘financial liabilities at fair value through profit or loss’ in net amount in accordance with IFRS 9 because the economic characteristics and risks of the embedded derivatives were not closely related to those of the host contracts. The effective interest rate of the bonds payable after such separation was 1.7882%.

(12) Pensions

A. The Company has established a defined contribution pension plan (the “New Plan”) under the Labor Pension Act (the “Act”), covering all regular employees with R.O.C. nationality. Under the New Plan, the Company contributes monthly an amount based on 6% of the employees’ monthly salaries and wages to the employees’ individual pension accounts at the Bureau of Labor Insurance. The benefits accrued are paid monthly or in lump sum upon termination of employment.

B. The pension costs under the defined contribution pension plans of the Group for the years ended December 31, 2022 and 2021 were $6,525 and $5,828, respectively.

(13) Share-based payment

A. For the years ended December 31, 2022 and 2021, the Group's share-based payment arrangements were as follows:

Type of arrangement	Grant date	Quantity granted (in thousands)	Contract period	Vesting conditions
Employee stock options (2017-1-1)	2017.7.19	2,135	6 years	2-4 years' service
Employee stock options (2017-1-2)	2018.4.18	365	6 years	2-4 years' service
Employee stock options (2018-1-1)	2018.11.5	3,035	6 years	2-4 years' service
Employee stock options (2018-1-2)	2019.8.13	465	6 years	2-4 years' service
Employee stock options (2021)	2021.3.23	2,500	6 years	2-4 years' service
Cash capital increase reserved for employee preemption (2022)	2022.5.31	508	0.074 years	Vested immediately

B. Details of the share-based payment arrangements are as follows:

	2022		2021	
	No. of options (in thousands)	Weighted-average exercise price (in dollars)	No. of options (in thousands)	Weighted-average exercise price (in dollars)
Options outstanding at January 1	4,501	$ 140.45	3,715	$ 34.47
Options granted	-	-	2,500	226.50
Options exercised	(1,187)	33.20	(1,664)	33.46
Options expired	(179)	118.55	(50)	129.81
Options outstanding at December 31	3,135	121,76	4,501	140.45
Options exercisable at December 31	657	24.03	1,044	35.55

C. On March 1, 2022, the Company's board of directors has resolved to increase capital, and reserved 10% for employee preemption. The compensation cost recognised in 2022 was $7,474.

D. The Group recognised compensation cost due to options granted of $68,135 and $68,815 in 2022 and 2021, respectively.

E. Expenses incurred on share-based payment transactions are shown below:

	Year ended December 31, 2022	Year ended December 31, 2021
Equity-settled	$ 75,609	$ 68,815

F. The expiry date and exercise price of stock options outstanding at the balance sheet date are as follows:

Issue date approved	Expiry date	December 31, 2022 No. of shares (in thousands)	December 31, 2022 Exercise price (in dollars)	December 31, 2021 No. of shares (in thousands)	December 31, 2021 Exercise price (in dollars)
2017.7.19	2023.7.18	17	$ 19.90	191	$ 29.50
2018.4.18	2024.4.17	75	26.60	279	39.50
2018.11.5	2024.11.4	475	24.80	1,306	36.75
2019.8.13	2025.8.12	185	18.60	250	27.65
2021.3.23	2027.3.22	2,383	152.80	2,475	226.50

The price of employee stock option certificates issued has been adjusted in accordance with the terms and conditions of stock option on the Company's ex-rights base date of August 9, 2022.

G. The fair value of stock options granted on grant date is measured using the Black-Scholes option-pricing model. Relevant information is as follows:

Type of arrangement	Grant date	Stock fair value (in dollars)	Exercise price (in dollars)	Expected volatility (note)	Expected option life	Expected dividends	Risk-free interest rate	Fair value per unit (in dollars)
Employee stock options (2017-1-1)	2017.7.19	25.82	29.50	40.77%	4 years	-	0.7128%	7.27
				42.35%	4.5 years	-	0.7383%	8.12
				42.40%	5 years	-	0.7643%	8.64
Employee stock options (2017-1-2)	2018.4.18	39.45	39.50	40.05%	4 years	-	0.6595%	12.62
				39.65%	4.5 years	-	0.6909%	13.26
				40.14%	5 years	-	0.7242%	14.12
Employee stock options (2018-1-1)	2018.11.5	36.75	36.75	40.55%	4 years	-	0.7180%	11.94
				40.60%	4.5 years	-	0.7530%	12.66
				40.16%	5 years	-	0.7939%	13.22
Employee stock options (2018-1-2)	2019.8.13	27.65	27.65	39.13%	4 years	-	0.5253%	8.62
				39.15%	4.5 years	-	0.5308%	9.13
				39.16%	5 years	-	0.5395%	9.61
Employee stock options (2021)	2021.3.23	226.5	226.5	41.05%	4 years	-	0.2921%	73.00
				39.74%	4.5 years	-	0.3055%	75.00
				39.65%	5 years	-	0.3172%	78.70
Cash capital increase reserved for employee preemption (2022)	2022.5.31	223.5	220	53.63%	0.074 years	-	0.7326%	14.70

Note: The Group’s expected price volatility rate was estimated based on the stock volatility of the same industry. The parent company’s expected price volatility rate was estimated based on the volatility of the monthly average price announced by the Taipei Exchange.

(14) Share capital

A. As of December 31, 2022, the Company's authorised capital was $5,000,000, consisting of 500,000 thousand shares of ordinary stock (including 10,000 thousand shares reserved for employee stock options), and the paid-in capital was $3,278,399 with a par value of NT$10 (in dollars) per share. All proceeds from shares issued have been collected.

Movements in the number of the Company's ordinary shares outstanding are as follows (in thousands):

	2022	2021
At January 1	$ 212,887	$ 211,099
Employee stock options exercised last year but only registered this year	238	362
Employee stock options exercised	1,187	1,664
Employee stock options exercised this year but not yet registered	(191)	(238)
Cash capital increase	7,000	-
Common stock dividends	106,719	-
At December 31	$ 327,840	$ 212,887

B. The Board of Directors during its meeting on March 1, 2022 adopted a resolution for a cash capital increase of 7,000 thousand shares with a par value of $10 (in dollars) per share, at a premium issuance price of $220 (in dollars) per share. The total amount of shares is $1,540,000, which was fully received on July 1, 2022. The capital increase base date was July 1, 2022. On July 8, 2022, the Company had completed the registration.

(15) Capital surplus

Pursuant to the R.O.C. Company Act, capital surplus arising from paid-in capital in excess of par value on issuance of common stocks and donations can be used to cover accumulated deficit or to issue new stocks or cash to shareholders in proportion to their share ownership, provided that the Company has no accumulated deficit. Further, the R.O.C. Securities and Exchange Act requires that the amount of capital surplus to be capitalised mentioned above should not exceed 10% of the paid-in capital each year. Capital surplus should not be used to cover accumulated deficit unless the legal reserve is insufficient.

	2022				
	Share premium	Employee stock options	Stock options	Others	Total
At January 1	$ 1,042,061	$ 80,386	$ -	$ 12,563	$ 1,135,010
Cash capital increase	1,470,000	-	-	-	1,470,000
Share-based payment transaction (Cash capital increase)	7,474	-	-	-	7,474
Share issued under employee stock plans	35,024	(7,488)	-	-	27,536
Share-based payment transaction	-	68,135	-	-	68,135
Issurance of convertible bonds	-	-	89,930	-	89,930
Others	-	(143)	-	143	-
At December 31	$ 2,554,559	$ 140,890	$ 89,930	$ 12,706	$ 2,798,085

	2021			
	Share premium	Employee stock options	Others	Total
At January 1	$ 2,278,177	$ 40,847	$ 130	$ 2,319,154
Capital surplus used to cover accumulated deficit	(1,291,998)	-	-	(1,291,998)
Share issued under employee stock plans	55,882	(16,843)	-	39,039
Share-based payment transaction	-	68,815	-	68,815
Others	-	(12,433)	12,433	-
At December 31	$ 1,042,061	$ 80,386	$ 12,563	$ 1,135,010

(16) Retained earnings (accumulated deficit)

A. Under the Company's Articles of Incorporation, the current year's earnings, if any, shall first be used to pay all taxes and offset prior years' operating losses and then 10% of the remaining amount shall be set aside as legal reserve and the Company shall set aside special reserve in accordance with the regulation or business requirements. The remainder, if any, to be retained or to be appropriated shall be resolved by the stockholders at the stockholders' meeting.

B. The Company's dividend policy is to distribute dividends in the form of stock dividends (including surplus and capital reserve allotment) or cash dividends. The board of directors considers the Company's operating results, capital requirements and the current year's surplus (less the required reserve) in proposing a surplus distribution which shall be approved by shareholders. According to the dividend policy adopted by the Board of Directors, cash dividends shall account for at least 50% of the total dividends distributable. If there is a capital expenditure plan in the future, the dividends will be distributed as stock dividends which shall be approved by the shareholders.

C. Except for covering accumulated deficit or issuing new stocks or cash to shareholders in proportion to their share ownership, the legal reserve shall not be used for any other purpose. The use of legal reserve for the issuance of stocks or cash to shareholders in proportion to their share ownership is permitted, provided that the distribution of the reserve is limited to the portion in excess of 25% of the Company's paid-in capital.

D. In accordance with the regulations, the Company shall set aside special reserve from the debit balance on other equity items at the balance sheet date before distributing earnings. When debit balance on other equity items is reversed subsequently, the reversed amount could be included in the distributable earnings.

E. On August 17, 2021, the shareholders adopted a resolution to offset capital surplus amounting to $1,291,998 against the deficit.

F. On June 30, 2022, the stockholders adopted the distribution of dividends from the 2021 earnings amounting to $1,067,195 at $5 (in dollars) per share. The stockholders also resolved the appropriations of legal and special reserve of $141,026 and $459, respectively. In addition, the Company ex-rights base date was August 9, 2022.

G. On March 8, 2023, the Board of Directors proposed a resolution to offset capital surplus amounting $1,272,995 against the 2022 deficit.

(17) Other equity items

	2022		
	Unrealised gains (losses) on valuation	Currency translation	Total
At January 1	$ -	($ 459)	($ 459)
Revaluation – gross			
–Group	82,225	-	82,225
Currency translation differences:			
–Group	-	352	352
At December 31	$ 82,225	($ 107)	$ 82,118

	2021		
	Unrealised gains (losses) on valuation	Currency translation	Total
At January 1	$ -	($ 354)	($ 354)
Currency translation differences:			
–Group	-	(105)	(105)
At December 31	$ -	($ 459)	($ 459)

(18) Operating revenue

A. Disaggregation of revenue from contracts with customers

The Group derives revenue from the transfer of goods and services over time and at a point in time in the following major product lines:

	Year ended December 31, 2022	Year ended December 31, 2021
Revenue from contracts with customers	$ 365,042	$ 3,280,994
Timing of revenue recognition		
At a point in time	$ 313,585	$ 3,255,690
Over time	51,457	25,304
	$ 365,042	$ 3,280,994

B. Contract assets and liabilities

(a) The Group has recognised the following revenue-related contract assets and liabilities:

	December 31, 2022	December 31, 2021	January 1, 2021
Contract assets	$ -	$ 339,148	$ -
Contract liabilities	$ -	$ 111,412	$ -

(b) Revenue recognised that was included in the contract liability balance at the beginning of the year:

	Year ended December 31, 2022	Year ended December 31, 2021
Revenue recognised that was included in the contract liability balance at the beginning of the year	$ 111,412	$ -

(c) The contract assets and liabilities were mainly arising from the contract with the Centers for Disease Control, Ministry of Health and Welfare for the procurement of domestic COVID-19 vaccine. In addition, the liquidated damages related to the delay in the delivery of vaccines were considered as a deduction of revenue.

Amounts of recognised deduction of cash for the contract in 2022 and 2021 were $88,164 and $109,723, respectively.

(19) Interest income

	Year ended December 31, 2022	Year ended December 31, 2021
Interest income from bank deposits	$ 5,472	$ 383
Interest income from financial assets measured at amortised cost	2,100	2,338
Other interest income	33	19
	$ 7,605	$ 2,740

(20) Other income

	Year ended December 31, 2022	Year ended December 31, 2021
Government grant income	$ 19,864	$ 442,358
Other income	48,807	-
	$ 68,671	$ 442,358

The Company signed a "COVID-19 vaccine development" subsidy contract with Taiwan CDC on October 13, 2020. The execution of the contract begins from the approval of funding to June 30, 2021. Taiwan CDC releases the subsidy based on the milestones achieved during the Phase I and Phase II clinical trials as specified in the contract. The Company guarantees to supply the Taiwan government preferentially in order to fulfill the requirement for epidemic prevention.

(21) Other gains and losses

	Year ended December 31, 2022	Year ended December 31, 2021
Foreign exchange gains	$ 28,858	$ 7,519
Losses on financial assets at fair value through profit or loss	(16,554)	(73)
	$ 12,304	$ 7,446

(22) Finance costs

	Year ended December 31, 2022	Year ended December 31, 2021
Interest expense		
Discount on corporate bonds payable	$ 19,355	$ -
Lease liabilities	7,533	5,697
Bank borrowings	-	88
Others	-	234
	$ 26,888	$ 6,019

(23) Expenses by nature

	Year ended December 31, 2022	Year ended December 31, 2021
Employee benefit expense	$ 255,859	$ 284,187
Depreciation charges on property, plant and equipment	104,749	100,181
Depreciation charges on right-of use assets	14,356	3,990
Amortisation charges on intangible assets	8,787	8,371
	$ 383,751	$ 396,729

(24) Employee benefit expense

	Year ended December 31, 2022	Year ended December 31, 2021
Wages and salaries	$ 156,156	$ 189,593
Compensation cost of share-based payment arrangements	75,609	68,815
Labour and health insurance fees	12,574	11,147
Pension costs	6,525	5,828
Other personnel expenses	4,995	8,804
	$ 255,859	$ 284,187

A. In accordance with the Articles of Incorporation of the Company, a ratio of distributable profit of the current year, after covering accumulated losses, shall be distributed as employees' compensation and directors' remuneration. The ratio shall not be lower than 1% for employees' compensation and shall not be higher than 1% for directors' remuneration. If the company has accumulated deficit, it shall reserve the compensation amount in advance.

B. For the year ended December 31, 2022, no employees' compensation and directors' remuneration were accrued due to the accumulated deficit. For the year ended December 31, 2021, employees' compensation and directors' remuneration were accrued at $43,847 and $1,462, respectively, and the amounts were estimated as wages and salaries in accordance with Articles of Incorporation of the Company.

   For 2021, the employees' compensation and directors' remuneration resolved by the Board of Directors amounted to $45,000 and $2,100, respectively, which were different from the estimated amounts recognized in the 2021 financial statements of $43,847 and $2,100, by $1,791, such difference was recognized in profit or loss for the year ended December 31, 2022. Information about employees' compensation and directors' remuneration of the Company as resolved by the Board of Directors will be posted in the "Market Observation Post System" at the website of the Taiwan Stock Exchange.

(25) Income tax

A. For the years ended December 31, 2022 and 2021, the Company had no income tax expense and deferred tax assets.

B. Reconciliation between income tax expense and accounting profit

	Year ended December 31, 2022	Year ended December 31, 2021
Tax calculated based on profit before tax and statutory tax rate	$ (294,915)	$ 282,052
Expenses disallowed by tax regulation	7,318	2,632
Temporary differences not recognised as deferred tax assets	83,210	-
Change in assessment of realisation of deferred tax assets	-	(284,684)
Taxable loss not recognised as deferred tax assets	204,387	-
Income tax expense	$ -	$ -

C. Details of the amount the Company is entitled as investment tax credit and unrecognised deferred tax assets are as follows:

December 31, 2022				
Governing law	Qualifying items	Unused tax credits	Unrecognised deferred tax assets	Expiry year
Act For The Development Of Biotech And New Pharmaceuticals Industry	Research and development	$ 715,814	$ 715,814	Note

December 31, 2021				
Governing law	Qualifying items	Unused tax credits	Unrecognised deferred tax assets	Expiry year
Act For The Development Of Biotech And New Pharmaceuticals Industry	Research and development	$ 479,156	$ 479,156	Note

Note: On September 19, 2014, the Company was approved by the Ministry of Economic Affairs as biotech new drug companies. The Company and its shareholders may apply incentives under the "Act For The Development Of Biotech And New Pharmaceuticals Industry". The approval letter from the Ministry of Economic Affairs can be deducted within five years from the year the Company will have taxable income after its issuance.

D. Expiration dates of unused tax losses and amounts of unrecognised deferred tax assets are as follows:

December 31, 2022						
Year incurred		Amount filed/ assessed		Unused amount		Unrecognised deferred tax assets	Expiry year

Year incurred	Amount filed/ assessed	Unused amount	Unrecognised deferred tax assets	Expiry year
2022	$ 1,021,935	$ 1,021,935	$ 1,021,935	2032
2020	675,680	675,680	675,680	2030
2019	609,285	589,909	589,909	2029
	$ 2,306,900	$ 2,287,524	$ 2,287,524	

December 31, 2021

Year incurred	Amount filed/ assessed	Unused amount	Unrecognised deferred tax assets	Expiry year
2020	$ 675,680	$ 675,680	$ 675,680	2030
2019	609,285	589,909	589,909	2029
	$ 1,284,965	$ 1,265,589	$ 1,265,589	

E. The amounts of deductible temporary differences that were not recognised as deferred tax assets are as follows:

	December 31, 2022	December 31, 2021
Deductible temporary differences	$ -	$ -

F. The Company's income tax returns through 2020 have been assessed and approved by the Tax Authority.

(26) Earnings (losses) per share

	Year ended December 31, 2022		
	Amount after tax	Restrospectively adjusted weighted average number of ordinary shares outstanding (shares in thousands)	Loss per share (in dollars)
Basic loss per share			
Loss attributable to ordinary shareholders	($ 1,474,573)	323,477	($ 4.56)

	Year ended December 31, 2021		
	Amount after tax	Restrospectively adjusted weighted average number of ordinary shares outstanding (shares in thousands)	Earnings per share (in dollars)
Basic earnings per share			
Profit attributable to ordinary shareholders	$ 1,410,258	318,739	$ 4.42
Diluted earnings per share			
Profit attributable to ordinary shareholders	$ 1,410,258	318,739	
Assumed conversion of all dilutive potential ordinary shares			
Employee stock options	-	2,255	
Employees' compensation	-	147	
Profit attributable to ordinary shareholders of the parent plus assumed conversion of all dilutive potential ordinary shares	$ 1,410,258	321,141	$ 4.39

A. For the years ended December 31, 2022 and 2021, the weighted average number of ordinary shares outstanding was retrospectively adjusted as proportion of capital increase out of earnings at the effective date of August 9, 2022.

B. In 2022, the Group incurred a net loss. As the potential common shares will have an anti-dilutive effect, the diluted loss per share was not calculated.

(27) Supplemental cash flow information

A. Investing activities with partial cash payments

	Year ended December 31, 2022	Year ended December 31, 2021
Acquisition of financial assets at fair value through other comprehensive income	$ 127,331	$ 54,000
Less: Opening balance of prepayments	(27,795)	-
Cash paid during the year	$ 99,536	$ 54,000

	Year ended December 31, 2022	Year ended December 31, 2021
Purchase of property, plant and equipment	$ 62,181	$ 114,021
Add: Opening balance of payable on equipment	5,948	16,457
Less: Ending balance of payable on equipment	(20,700)	(5,948)
Cash paid during the year	$ 47,429	$ 124,530

B. Investing activities with partial cash received

	Year ended December 31, 2022	Year ended December 31, 2021
Disposal of property, plant and equipment	$ -	$ -
Add: Opening balance of other receivables on equipment	-	120,000
Less: Ending balance of other receivables on equipment	-	-
Cash received during the year	$ -	$ 120,000

(28) Changes in liabilities from financing activities

	2022	
	Lease liabilities	Corporate bonds payable
At January 1	$ 185,854	$ -
Changes in cash flow from financing activities	(11,564)	1,755,250
Changes in other non-cash items activities	103,840	(77,400)
At December 31	$ 278,130	$ 1,677,850

	2021
	Lease liabilities
At January 1	$ 187,782
Changes in cash flow from financing activities	(1,928)
At December 31	$ 185,854

The Group had no change in corporate bonds payable from financing activities in 2021.

7. Related Party Transactions

(1) Parent and ultimate controlling party

The ultimate parent of the Company is Medigen Biotechnology Corporation.

(2) Names of related parties and relationship

Names of related parties	Relationship with the Company
Schweitzer Biotech Company Ltd.	Director
Winston Medical Supply Co., Ltd.	Other related party
Taiwan Bio Therapeutics Co., Ltd.	Other related party
U-GEN Biotechnology Inc. (U-GEN)	Other related party

(3) Significant related party transactions

A. For the years ended December 31, 2022 and 2021, the Group participated in the capital increase of U-GEN in the amount of $30,127 and $27,795, respectively.

(4) Key management compensation

	Year ended December 31, 2022	Year ended December 31, 2021
Salaries and other short-term employee benefits	$ 16,957	$ 10,434
Post-employment benefits	216	120
Share-based payments	20,394	14,562
	$ 37,567	$ 25,116

8. Pledged Assets

The Group's assets pledged as collateral are as follows:

	Book value		
Pledged asset	December 31, 2022	December 31, 2021	Purpose
Time deposit - restricted (recognised in "Other current assets")	$ 15,016	$ 31,006	Security deposit for plan and credit line of bank borrowings
Time deposit - restricted (recognised in "Other non-current assets")	7,626	7,626	Security deposit for lease
	$ 22,642	$ 38,632	

9. Significant Contingent Liabilities and Unrecognised Contract Commitments

(1) Contingencies

None.

(2) Commitments

A. The Company signed a three party technical license agreement with Centers for Disease Control, Department of Health, Executive Yuan (now Taiwan Centers for Disease Control, Taiwan CDC) and National Health Research Institute (NHRI) on June 28, 2013 for the development of Enterovirus Vaccine 71 (EV71). Under the contract, the Company shall pay milestone payments as the research progresses and net sales royalty when products are launched in the future. The final data from the Phase III multi-region clinical trial for EV71 vaccine were unblinded on June 20, 2021, and the results were as expected. Accordingly, the Company requested a new drug application (NDA) for EV71 vaccine from the Food and Drug Administration on October 1, 2021. As of December 31, 2022, it is still under review by the Food and Drug Administration.

B. The Company signed the license agreement with NHRI for the H7N9 novel influenza vaccine. The contract period is from April 25, 2014 through April 24, 2029. The contract includes authorized H7N9 novel influenza virus strains, vaccine manufacturing process, pre-clinical animal trials and other intellectual properties, and the complete rights to manufacture and sell the vaccine products in Taiwan. The Company has made payments as specified in the contract. The phase I and phase II clinical trials have passed the review by Taiwan CDC and approved for future reference.

C. The Company contracted with United States National Institute of Health (NIH) on November 17, 2016 regarding the license agreement for the dengue fever vaccine, which granted the Company complete rights of R&D, manufacture, selling and re-authorization. There were 17 countries included in the original authorized region. On September 17, 2017, the rights for 9 additional countries were obtained, which has expanded the total authorized region to 26 countries. The Company is required to make a certain amount of royalty and milestone payment under the contract. The Company has completed phase II clinical trials and retrieved clinical trial reports.

D. The Company signed a global commercial COVID-19 vaccine license agreement with US NIH on May 5, 2020 in order to attain the complete rights for the R&D, manufacture, and sales of COVID-19 vaccine. Under the contract, the Company is required to pay a certain amount of royalty, milestone payment and sales royalty payment. On June 10, 2021, the Company performed the unblinding of the analytical data during the Phase II clinical trial. The unblinding results were as expected, and after applying with the Ministry of Health and Welfare for an Emergency Use Authorization (EUA) on June 15, 2021 with the relevant documents for the clinical trial and manufacturing, the application was approved by the Ministry of Health and Welfare on July 19, 2021, and the Company has obtained the approval for the project manufacturing.

E. Capital expenditures contracted for but not yet incurred.

	December 31, 2022	December 31, 2021
Property, plant and equipment	$ 26,605	$ 7,096

10. Significant Disaster Loss

None.

11. Significant Events after the Balance Sheet Date

None.

12. Others

(1) Capital management

The Group's capital management is based on the business scale of the Group's business, considering the future growth of the industry and product development, setting an appropriate market share, and planning the corresponding capital expenditures, and then calculating operating capital based on the financial operational plan, then finally considering the projected operating profit and cash flow from the competitiveness of products to determine the appropriate capital structure.

(2) Financial instruments

A. Financial instruments by category

	December 31, 2022	December 31, 2021
Financial assets		
Financial assets at fair value through profit or loss		
Financial assets mandatorily measured at fair value through profit or loss	$ 52,993	$ 53,097
Financial assets at fair value through other comprehensive income		
Designation of equity instrument	$ 263,556	$ 54,000
Financial assets at amortised cost	$ 4,469,704	$ 2,705,483

	December 31, 2022	December 31, 2021
Financial liabilities		
Financial liabilities at fair value through profit or loss		
Financial liabilities mandatorily measured at fair value through profit or loss	$ 19,250	$ -
Financial liabilities at amortised cost	$ 2,013,070	$ 323,808
Lease liabilities	$ 278,130	$ 185,854

Note: Financial assets at amortised cost include cash and cash equivalents, time deposits (more than three months), accounts receivable, other receivables, restricted assets, performance guarantee and refundable deposits; financial liabilities at amortised cost include accounts and notes payable, other payables and corporate bonds payable.

B. Financial risk management policies

(a) The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management policy focuses on unpredictable events in the financial market and seeks to reduce the risks that potentially pose adverse effects on the Group's financial condition and performance.

(b) Risk management is executed by the Group's finance department by following policies approved by the Board of Directors. Through cooperation with the Group's operating units, finance department is responsible for identifying, evaluating and hedging financial risks. The Board provides written principles for overall risk management, as well as written policies covering specific issues, such as foreign exchange risk, interest rate risk, credit risk, and investment of excess liquidity.

C. Significant financial risks and degrees of financial risks

(a) Market risk

Foreign exchange risk

i. The Group operates internationally and is exposed to foreign exchange risk arising from the transactions of the Company and its subsidiary used in various functional currency, primarily with respect to the USD. Foreign exchange risk arises from future commercial transactions and recognised assets and liabilities.

ii. The Group's businesses involve some non-functional currency operations (the Company's and certain subsidiaries' functional currency: NTD; other certain subsidiary's functional currency: USD). The information on assets and liabilities denominated in foreign currencies whose values would be materially affected by the exchange rate fluctuations is as follows:

	December 31, 2022		
	Foreign currency amount (In thousands)	Exchange rate	Book value (NTD)
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	$ 25,417	30.71	$ 780,556

	December 31, 2021		
	Foreign currency amount (In thousands)	Exchange rate	Book value (NTD)
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	$ 3,456	27.68	$ 95,662

iii. The realised exchange gain arising from significant foreign exchange variation on the monetary items held by the Group for the years ended December 31, 2022 and 2021, amounted to $28,858 and $7,519, respectively.

iv. Analysis of foreign currency market risk arising from significant foreign exchange variation:

	Year ended December 31, 2022		
	Sensitivity analysis		
	Degree of variation	Effect on profit or loss	Effect on other comprehensive income
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	1%	$ 6,244	$ -

	Year ended December 31, 2021		
	Sensitivity analysis		
	Degree of variation	Effect on profit or loss	Effect on other comprehensive income
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	1%	$ 766	$ -

Price risk

i. The Group's equity securities, which are exposed to price risk, are the held financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income. To manage its price risk arising from investments in equity securities, the Group diversifies its portfolio. Diversification of the portfolio is done in accordance with the limits set by the Group.

ii. The Group's investments in equity securities comprise shares and beneficiary securities issued by the companies. The prices of beneficiary securities would change due to the change of the future value of investee companies. If the prices of these equity securities had increased/decreased by 1% with all other variables held constant, post-tax profit for the years ended December 31, 2022 and 2021 would have increased/decreased by $530 and $531, respectively, as a result of gains/losses on equity securities classified as at fair value through profit or loss. Other components of equity would have increased/decreased by $2,519 and $540, respectively, as a result of other comprehensive income classified as equity investment at fair value through other comprehensive income.

(b) Credit risk

i. Credit risk refers to the risk of financial loss to the Group arising from default by the clients or counterparties of financial instruments on the contract obligations. The main factor is that counterparties could not repay in full the accounts receivable based on the agreed terms, and the contract cash flows of financial assets at amortised cost.

ii. According to the Group's credit policy, each local entity in the Group is responsible for managing and analysing the credit risk for each of their new clients before standard payment and delivery terms and conditions are offered. Internal risk control assesses the credit quality of the customers, taking into account their financial position, past experience and other factors.

iii. Individual risk limits are set based on internal or external ratings in accordance with limits set by the Board of Directors. The utilisation of credit limits is regularly monitored.

iv. The Company will only accept those banks and financial institutions with good credit ratings.

v. The Group adopts the following assumptions under IFRS 9, if the contract payments were past due over 30 days based on the terms, there has been a significant increase in credit risk on that instrument since initial recognition; and the default occurs when the contract payments are past due over 90 days.

vi. The following indicators are used to determine whether the credit impairment of debt instruments has occurred:
   (i) It becomes probable that the issuer will enter bankruptcy or other financial reorganisation due to their financial difficulties;
   (ii) The disappearance of an active market for that financial asset because of financial difficulties;
   (iii) Default or delinquency in interest or principal repayments;
   (iv) Adverse changes in national or regional economic conditions that are expected to cause a default.

vii. The Group classifies customer's accounts receivable and contract assets in accordance with customer types. The Group applies the modified approach using a provision matrix based on the loss rate methodology to estimate expected credit loss. The Group's loss allowance for the years ended December 31, 2022 and 2021 was $0 for both years.

viii. In 2022 and 2021, there was no case of customers' exceeding their credit limit, and the management did not expect any major losses due to a breach of contract by a counterparty.

(c) Liquidity risk

i. Cash flow forecasting is performed in the operating entities of the Group and aggregated by Group finance. Group finance monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Group does not breach borrowing limits or covenants on any of its borrowing facilities. Such forecasting takes into consideration the Group's debt financing plans, covenant compliance, compliance with internal balance sheet ratio targets.

ii. Surplus cash held by the operating entities over and above balance required for working capital management are transferred to the Group finance. Group finance invests surplus cash in interest bearing current accounts, time deposits, money market deposits and marketable securities, choosing instruments with appropriate maturities or sufficient liquidity to provide sufficient headroom as determined by the abovementioned forecasts. As at December 31, 2022 and 2021, the Group held money market position of $1,204,255 and $1,379,692, respectively, and financial assets at fair value through profit or loss-current of $52,993 and $53,097, respectively, that are expected to readily generate cash inflows for managing liquidity risk.

iii. The Group has no undrawn borrowing facilities at December 31, 2022 and 2021.

iv. The table below analyses the Group's non-derivative financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date for non-derivative financial liabilities. The amounts disclosed in the table are the contractual undiscounted cash flows.

December 31, 2022	Less than 1 year	Over 1 year
Non-derivative financial liabilities		
Corporate bonds payable	$ -	$ 1,750,000
Lease liabilities	19,098	426,360

December 31, 2021	Less than 1 year	Over 1 year
Non-derivative financial liabilities		
Lease liabilities	$ 7,626	$ 335,526

Except for the above, the non-derivative financial liabilities of the Group are all expiring within one year.

(3) Fair value information

A. The different levels that the inputs to valuation techniques are used to measure fair value of financial and non-financial instruments have been defined as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. A market is regarded as active where a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. The fair value of the Group's investment in beneficiary securities is included in Level 1.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Unobservable inputs for the asset or liability. The fair value of the Group's investment in equity investment without active market is included in Level 3.

B. Financial instruments not measured at fair value

The carrying amounts of cash and cash equivalents, time deposits (more than three months), accounts receivable, other receivables, restricted assets, refundable deposits, and financial liabilities at amortised cost include short-term borrowings, accounts and notes payable, other payables and long-term borrowings (including current portion) are approximate to their fair values.

C. The related information on financial and non-financial instruments measured at fair value by level on the basis of the nature, characteristics and risks of the assets and liabilities is as follows:

(a) The related information on the nature of the assets and liabilities is as follows:

December 31, 2022	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurements				
Financial assets at fair value through profit or loss				
Beneficiary certificates	$ 52,993	$ -	$ -	$ 52,993
Financial assets at fair value through other comprehensive income				
Equity securities	-	-	263,556	263,556
	$ 52,993	$ -	$ 263,556	$ 316,549

December 31, 2022	Level 1	Level 2	Level 3	Total
Liabilities				
Recurring fair value measurements				
Financial liabilities at fair value through profit or loss				
Derivative instruments	$ -	$ 19,250	$ -	$ 19,250

December 31, 2021	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurements				
Financial assets at fair value through profit or loss				
Beneficiary certificates	$ 53,097	$ -	$ -	$ 53,097
Financial assets at fair value through other comprehensive income				
Equity securities	-	-	54,000	54,000
	$ 53,097	$ -	$ 54,000	$ 107,097

(b)The methods and assumptions the Group used to measure fair value are as follows:

i. The Group's current financial assets measured at fair value through profit and loss are level 1 open-end funds, and the net values are used as their fair values.

ii. Except for financial instruments with active markets, the fair value of other financial instruments is measured by using valuation techniques or by reference to counterparty quotes. The fair value of financial instruments measured by using valuation techniques can be referred to current fair value of instruments with similar terms and characteristics in substance, discounted cash flow method or other valuation methods, including calculated by applying model using market information available at the consolidated balance sheet date.

iii. The valuation of derivative financial instruments is based on valuation model widely accepted by market participants, such as present value techniques and option pricing models.

iv. The Group takes into account adjustments for credit risks to measure the fair value of financial and non-financial instruments to reflect credit risk of the counterparty and the Group's credit quality.

D. For the years ended December 31, 2022 and 2021, there was no transfer between Level 1 and Level 2.

E. The following chart is the movement of Level 3 for the year ended December 31, 2022 and 2021:

	2022	2021
	Equity instrument	Equity instrument
At January 1	$ 54,000	$ -
Recorded as unrealised gains (losses) from investments in equity instruments measured at fair value through other comprehensive income	82,225	-
Acquired during the year	127,331	54,000
At December 31	$ 263,556	$ 54,000

F. The valuation procedures for fair value of financial instruments being categorised within Level 3 is measured by using valuation techniques. Such assessment is to ensure the valuation results are reasonable by applying independent information to make results close to current market conditions, confirming the resource of information is independent, reliable and in line with other resources.

G. The following is the qualitative information of significant unobservable inputs and sensitivity analysis of changes in significant unobservable inputs to valuation model used in Level 3 fair value measurement:

	Fair value at December 31, 2022	Valuation technique	Significant unobservable input		Relationship of inputs to fair value
Non-derivative equity instrument:					
Unlisted shares	$ 175,634	Market comparable companies	Price-to-book ratio multiple	4.38%	The higher the multiple, the higher the fair value; the higher the discount for lack of marketability, the lower the fair value
			Discount for lack of marketability	30%	
〃	87,922	Recent non-active market price	Not applicable	Not applicable	Not applicable

	Fair value at December 31, 2021	Valuation technique	Significant unobservable input		Relationship of inputs to fair value
Non-derivative equity instrument:					
Unlisted shares	$54,000	Discounted cash flow	Long-term revenue growth rate	3.82%	The higher the long-term revenue growth rate, the higher the fair value; the higher the discount rate, the lower the fair value
			Discount rate	25.05%	

H. The Group has carefully assessed the valuation models and assumptions used to measure fair value. However, use of different valuation models or assumptions may result in different measurement. The following is the effect on profit or loss or on other comprehensive income from financial assets and liabilities categorised within Level 3 if the inputs used to valuation models have changed:

			December 31, 2022	
			Recognised in other comprehensive income	
	Input	Change	Favourable change	Unfavourable change
Financial assets				
Equity instrument	Price-to-book ratio multiple	±1%	$ 1,756	($ 1,756)
	Discount for lack of marketability	±1%	(753)	753

			December 31, 2021	
			Recognised in other comprehensive income	
	Input	Change	Favourable change	Unfavourable change
Financial assets				
Equity instrument	Long-term revenue growth rate	±1%	$ 335	($ 335)
	Discount rate	±1%	766	(424)

(4) Other matter

Due to the Covid-19 pandemic and the government's multiple prevention measures, the Group has adopted countermeasures accordingly and continually manages related affairs. There was no significant impact on the Group's operations and business in 2022.

13. Supplementary Disclosures

(1) Significant transactions information

A. Loans to others: None.

B. Provision of endorsements and guarantees to others: None.

C. Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures): Refer to table 1.

D. Acquisition or sale of the same security with the accumulated cost exceeding $300 million or 20% of the Company’s paid-in capital: None.

E. Acquisition of real estate reaching $300 million or 20% of paid-in capital or more: None.

F. Disposal of real estate reaching $300 million or 20% of paid-in capital or more: None.

G. Purchases or sales of goods from or to related parties reaching $100 million or 20% of paid-in capital or more: None.

H. Receivables from related parties reaching $100 million or 20% of paid-in capital or more: None.

I. Trading in derivative instruments undertaken during the reporting periods: Refer to Note 6(2).

J. Significant inter-company transactions during the reporting periods: None.

(2) Information on investees

Names, locations and other information of investee companies (not including investees in Mainland China): Refer to table 2.

(3) Information on investments in Mainland China

A. Basic information: None.

B. Significant transactions, either directly or indirectly through a third area, with investee companies in the Mainland Area: None.

(4) Major shareholders information

Major shareholders information: Refer to table 3.

14. Segment Information

(1) General information

The Group operates business only in a single industry. The chief operating decision-maker, Board of Directors, who allocates resources and assesses performance of the Group as a whole, has identified that the Group has only one reportable operating segment.

(2) Measurement of segment information

A. The Group evaluates the performance of the operating segments based on operating profit and loss before tax, which serves as the basis for performance evaluation. In addition, the accounting policies and accounting estimates of the operating segments are the same as described in Note 4 and 5.

B. The financial information reported to the decision maker is the same as the financial information in the consolidated income statement and uses a consistent measurement method.

(3) Information on products and services

Refer to Note 6 (18) for the related information.

(4) Geographical information

The main external customer income of the Group is mainly generated in Taiwan.

(5) Major customer information

Major customer information of the Group for the years ended December 31, 2022 and 2021 is as follows:

	Year ended December 31, 2022		Year ended December 31, 2021	
	Revenue		Revenue	
Customer A	$	365,042	$	3,275,166

Medigen Vaccine Biologics Corporation and Subsidiaries

Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures)

December 31, 2022

Table 1

Expressed in thousands of NTD

(Except as otherwise indicated)

Securities held by	Marketable securities (Note 1)	Relationship with the securities issuer (Note 2)	General ledger account	As of December 31, 2022 Number of shares	Book value (Note 3)	Ownership (%)	Fair value	Footnote (Note 4)
Medigen Vaccine Biologics Corporation	Cathay Taiwan Money Market Fund	-	Financial assets at fair value through profit or loss - current	4,029,529	$ 50,850	-	$ 50,850	-
Medigen Vaccine Biologics Corporation	Franklin Templeton SinoAm Emerging Markets Bond Fund A-TWD	-	Financial assets at fair value through profit or loss - current	303,466	2,143	-	2,143	-
MVC Capital Corporation	Taiwan Bio Therapeutics Co., Ltd.	Other related party	Financial assets at fair value through other comprehensive income - non-current	5,176,363	175,634	10.05%	175,634	-
MVC Capital Corporation	U-GEN Biotechnology Inc.	Other related party	Financial assets at fair value through other comprehensive income - non-current	1,727,893	57,922	0.94%	57,922	-
MVC Capital Corporation	Thermolysis Co.,Ltd.	-	Financial assets at fair value through other comprehensive income - non-current	2,000,000	30,000	6.06%	30,000	-

Note 1: Marketable securities in the table refer to stocks, bonds, beneficiary certificates and other related derivative securities within the scope of IFRS 9 ‘Financial Instrument’.

Note 2: Leave the column blank if the issuer of marketable securities is non-related party.

Note 3: Fill in the amount after adjusted at fair value and deducted by accumulated impairment for the marketable securities measured at fair value; fill in the acquisition cost or amortised cost deducted by accumulated impairment for the marketable securities not measured at fair value.

Note 4: The number of shares of securities and their amounts pledged as security or pledged for loans and their restrictions on use under some agreements should be stated in the footnote if the securities presented herein have such conditions.

Medigen Vaccine Biologics Corporation and Subsidiaries

Information on investees

For the year ended December 31, 2022

Table 2

Expressed in thousands of NTD

(Except as otherwise indicated)

Investor	Investee (Notes 1 and 2)	Location	Main business activities	Initial investment amount		Shares held as at December 31, 2022			Net profit (loss) of the investee for the year ended December 31, 2022 (Note 2(2))	Investment income (loss) recognised by the Company for the year ended December 31, 2022 (Note 2(3))	Footnote
				Balance as at December 31, 2022	Balance as at December 31, 2021	Number of shares	Ownership (%)	Book value			
Medigen Vaccine Biologics Corporation	MVC BioPharma Ltd.	Cayman	Investing	$ 7,081	$ 7,081	50,000	100.00	$ 3,510	($ 83)	($ 83)	
Medigen Vaccine Biologics Corporation	MVC Capital Corporation	Taiwan	Investing	200,000	200,000	20,000,000	100.00	282,151	(74)	(74)	Note 3

Note 1: If a public company is equipped with an overseas holding company and takes consolidated financial report as the main financial report according to the local law rules, it can only disclose the information of the overseas holding company about the disclosure of related overseas investee information.

Note 2: If situation does not belong to Note 1, fill in the columns according to the following regulations:

(1)The columns of 'Investee', 'Location', 'Main business activities', Initial investment amount' and 'Shares held as at December 31, 2022' should fill orderly in the Company's (public company's) information on investees and every directly or indirectly controlled investee's investment information, and note the relationship between the Company (public company) and its investee each (ex. direct subsidiary or indirect subsidiary) in the 'footnote' column.

(2)The 'Net profit (loss) of the investee for the year ended December 31, 2022' column should fill in amount of net profit (loss) of the investee for this period.

(3)The 'Investment income (loss) recognised by the Company for the year ended December 31, 2022' column should fill in the Company (public company) recognised investment income (loss) of its direct subsidiary and recognised investment income (loss) of its investee accounted for under the equity method for this period. When filling in recognised investment income (loss) of its direct subsidiary, the Company (public company) should confirm that direct subsidiary's net profit (loss) for this period has included its investment income (loss) which shall be recognised by regulations.

Note 3: On November 10, 2021, the Company's Board of Directors resolved to establish MVC Capital Corporation by investing $200,000. Additionally, the establishment has been approved on January 6, 2022.

Medigen Vaccine Biologics Corporation and Subsidiaries

Major shareholders information

December 31, 2022

Table 3

Name of major shareholders	Shares	
	Number of shares held	Ownership (%)
Medigen Biotechnology Corporation	64,748,844	19.74

Note: The major shareholders information is provided by Taiwan Depository & Clearing Corporation. As of December 28, 2022, shareholders held more than 5% of the company's ordinary shares that have been delivered without physical registration.

Medigen Vaccine Biologics Corp.

Chairman: Ming-Cheng Chang