sirnaomics

Advancing RNAi Therapeutics

(Incorporated in the Cayman Islands with limited liability)

Stock Code: 2257

Celebrating 15 Years of Excellence in RNAi Development

From Discovery to Clinic

2022 ANNUAL REPORT

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Corporate Information

BOARD OF DIRECTORS

Executive Directors

Dr. Yang Lu (*alias* Patrick Lu)
Chairman, President and Chief Executive Officer

Dr. Michael V. Molyneaux
Chief Medical Officer

Dr. David Mark Evans
Chief Scientific Officer

Dr. Xiaochang Dai
Scientific & Strategic Director
(re-designated from a non-executive Director effective from July 19, 2022)

Non-Executive Directors

Mr. Mincong Huang
Mr. Jiankang Zhang
Mr. Da Liu *(resignation effective from September 30, 2022)*
Mr. Jiajun Lai *(resignation effective from August 31, 2022)*

Independent Non-Executive Directors

Dr. Cheung Hoi Yu, *JP*
Mr. Fengmao Hua
Ms. Monin Ung
Ms. Shing Mo Han, Yvonne (*alias* Mrs. Yvonne Law), *BBS, JP*

AUDIT COMMITTEE

Ms. Shing Mo Han, Yvonne *(Chairperson)*
Mr. Fengmao Hua
Mr. Mincong Huang

REMUNERATION COMMITTEE

Ms. Monin Ung *(Chairperson)*
Dr. Xiaochang Dai
Dr. Cheung Hoi Yu

NOMINATION COMMITTEE

Mr. Fengmao Hua *(Chairperson)*
Dr. Yang Lu
Dr. Cheung Hoi Yu

AUTHORIZED REPRESENTATIVES

Dr. Yang Lu
Mr. Leung Ting Cheung

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Mr. Leung Ting Cheung

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www.sirnaomics.com

STOCK CODE

2257

Chairman's Statement

Dear Shareholders,

We sincerely appreciate all shareholders and stakeholders for your continuous support to Sirnaomics. 2022 was a remarkable year for the Company. Despite the volatile capital market and uncertainty in the development of the global economy, we are excited to see an increasing level of interests from the markets in learning the power of the RNA medicine (RNAi amd mRNA) as the next fast upcoming drug modality and the unique value proposition of Sirnaomics' proprietary delivery platforms with both Polypeptide Nanoparticle (PNP) and GalNAc Hepatocyte-targeted (GalAhead™) technologies. In 2022 we achieved excellent clinical data readouts with our core product STP705 for the treatment of isSCC (Phase IIb) and BCC (Phase II), and STP707 for the treatment of solid tumors with remarkable safety profile and active antitumor efficacy (Phase I). These clinical advancements have further validated our proprietary PNP delivery system for development of innovative RNAi therapeutics through both intradermal and intravenous administrations, and clearly solidify Sirnaomics' leading position in oncology application using RNAi therapeutics on the global stage. In addition, Sirnaomics has successfully received green light for an IND application of its first GalAhead™ product, STP122G, for anticoagulation indications. This approval marks a key milestone that the company is having two delivery platforms for its siRNA drug development with much broader therapeutic potential. Based on a series of preclinical and clinical study results, Sirnaomics is pushing forward for a medical aesthetic program using STP705 for fat reduction that has tremendous market potential.

We have always been prudent on our resource allocation and ensure the money is well spent on maximizing investors' return. In 2022 and going forward in 2023, we have reprioritized our focus in advancing our pipeline, committing more resources in advancing our STP705 assets to later stage of clinical development, and putting on hold the fibrosis programs until the Company is better capitalized. We have also optimized our team structure globally to become a nimbler organization to react to the fast changing business environment.

Looking forward, I believe 2023 will be another eventful year for Sirnaomics as we are advancing our oncology programs to late stage clinical development and the clinical assets with both the PNP and GalAhead™ dual platforms.

"Sirnaomics is the first clinical-stage RNA therapeutics group having significant presence in both Asia and the U.S., and the first RNA company with proof-of-concept human data readout in oncology for an RNAi therapeutic, both administered intradermally and intravenously."

On this occasion, I am pleased to present to you the Company's 2022 annual report and to report on the Group's coming development plans.

Technology advancement

As a leading RNA therapeutics biopharmaceutical company, Sirnaomics has never stopped pushing the frontier of its innovations and technology platform improvements. Two drug product formulations using PNP formulations have been evaluated for local therapeutic treatment with STP705 (a HKP carrier) in multiple Phase II clinical studies and systemic therapeutic treatment with STP707 (a HKP+H carrier) in a Phase I clinical study. We were thrilled to achieve excellent data readouts of Phase IIb and Phase II clinical trial of STP705 for the treatment of both isSCC and BCC, and outstanding interim efficacy and safety readouts of Phase I basket clinical trial of STP707 for the treatment of multiple solid tumor. These positive data readouts demonstrate the clinical potential of our siRNA therapeutic candidates, and more importantly continue to produce proof-of-concept data to validate our proprietary PNP delivery systems. The interim data of STP707 is a potential game changer candidate to allow Sirnaomics to be the first RNA company to treat a spectrum of solid tumors in the RNA industry. We have commenced communication with the FDA regarding our Phase III clinical study proposal for STP705 for the treatment of isSCC and will follow a similar approach for filing the Phase III study for the treatment of BCC in the second half of 2023.

To develop Sirnaomics' proprietary GalNAc technology platforms, we have advanced our GalAhead™ technology into IND-enabling study with a leading therapeutic candidate based on a positive readout from a 33-week non-human primate study. As at the date of this annual report, IND for STP122G, targeting Factor XI, has been submitted to the FDA and we expect to obtain a green light from FDA in April. We are planning to initiate the clinical study for the treatment of anticoagulant disorder in the second quarter of 2023. By knocking down the Factor XI, a liver-hepatocyte specific enzyme, we can treat disease that require anticoagulation such as atrial fibrillation, pulmonary embolism, deep vein thrombosis (DVT), and deep venous thrombosis prophylaxis for surgical procedures.

We also compared Sirnaomics' PDoV-GalNAc™ platform with an industry standard GalNAc structure using a mouse disease model. Sirnaomics' platform takes advantage of a PDoV™ design that leverages selected small peptides which do not only possess an active endosomal escape property, but also provide two binding sites for the conjugation of dual-siRNA inhibitors. In cell culture and animal models, the PDoV-GalNAc™ platform has accelerated targeted gene knockdown more rapidly than with GalNAc alone, which is attributed to the rapid endosomal escape afforded by PDoV™.

Given the validation of both of our proprietary PNP and GalNAc technology platforms, Sirnaomics is well positioned for the development of novel RNAi therapeutics for broad disease treatment.

Product candidates and clinical studies

Under the omnidirectional pressure of the complex and challenging industry environment, we continued to make steady progress by achieving milestones for our lead products.

Chairman's Statement

STP705: During the year 2022, we have announced excellent data readout for STP705 for the treatment of both isSCC and BCC. In December 2022, we announced our Phase IIb interim data for the treatment of isSCC, with majority (78%) patients achieved histological clearance and the lowest dosage (30 μg/ml) achieved 89% histological clearance. We have also announced exceptional interim result of our BCC trial and further achieved a 100% complete response using a 180 ug dosage with an excellent safety profile during the year. We expect to be expanding our STP705 oncology franchise by launching clinical trials for the treatment of liver cancer in Taiwan in 2023.

In the first quarter of 2023, we have formulated a communication package for the FDA and prepared to advance the treatment of isSCC to late-stage clinical development. We are excited to bring novel therapeutic to NMSC which is currently under-addressed with the lack of drugs in the market, and yet with a large population of unmet need of over 5 million cases per year in the U.S.

We have launched our clinical trial for the fat remodeling. This is our first medical aesthetic drug in the pipeline, and we are particularly encouraged by the excellent preclinical data obtained against the major drug in the market. We expect to release interim data in the second quarter of 2023 and complete the trial in second half of 2023. We believe this is a highly partnerable asset.

STP707: In February 2022, we saw another notable milestone for our siRNA drug candidate STP707, marking the start of the Phase I clinical trial for the treatment of a basket of terminal stage solid tumors, including liver, colon, pancreatic and melanoma cancers, in the U.S. for evaluating of the safety, tolerability, and anti-tumor activity of STP707, led by Dr. Anthony El-Khoueiry of University of Southern California. In December 2022, we have announced the positive safety interim data for participants from first three cohorts (3mg, 6mg and 12mg) of the clinical study. This is the first time that an RNAi cancer therapeutic has demonstrated a promising clinical benefit with excellent safety profile for the treatment of the metastasized tumors. The interim data of STP707 allowed us to expand our research with additional cohorts — a positive step forward in moving this treatment into the next phase. Currently, we have seen very good safety signal even when we have the dose escalated upto 36mg. With such a strong safety outcome for the PNP-siRNA formulation, we are envisioning that PNP delivery system might have a broader application potential for the systemic siRNA delivery.

We are currently exploring the combo treatment regime with immune checkpoint inhibitory antibody and STP707, while position the treatment as either the first or second line treatment in 2023, depending on the particular study protocol and market positioning. We are particularly excited about such arrangement as it will be the first ever combo treatment in the RNA sector for the treatment of solid tumors. Currently, we anticipate advancing the Phase II trial of STP707 upon the completion of dose escalation in Phase I.

These STP707 trials are expected to validate our intravenous administration formulation of our proprietary PNP delivery system and to broaden our array of indications.

STP122G: We take pride in our proprietary RNA delivery platforms, which differentiate the Company from our counterparts in the selection of therapeutic indications. In addition to our proprietary PNP delivery platform, our GalAhead™ delivery platform conjugates GalNAc moieties to unique RNAi trigger structures while our PDoV-GalNAc™ delivery platform conjugates GalNAc moieties to PDoV peptide linkers and up to two siRNAs conjugated to the peptide linker. The leading GalNAc-based therapeutic candidate, STP122G, is targeting coagulation Factor XI and has demonstrated long-lasting (>33 weeks) target knockdown and therapeutic benefit in a non-human primate study. We have filed a U.S. IND for STP122G in March 2023 and expect to obtain the approval from the FDA on the filing in April 2023. We expect patient enrollment to start in mid-2023. Meanwhile, we are on track to file an IND in the U.S. for STP125G in 2023, and STP144G in 2024.

RIM730: RNAimmune, our non-wholly owned subsidiary, uses advanced and proprietary delivery platform to develop mRNA-based vaccines and therapeutics, including prophylactic vaccine, tumor vaccine and therapeutics programs. While the COVID-19 pandemic has impacted on the progress and cost of our R&D, the pandemic has accelerated the verification of the capability of our mRNA delivery platform, which will bring significant advantages over traditional vaccines in terms of safety and efficacy/potency of immune response. RNAimmune has developed a panel of COVID-19 vaccine candidates with broad immune-responsiveness to multiple strains including, among other, Delta and Omicron. RNAimmune has filed a U.S. IND for RIM730 in the first quarter of 2023 and this effort is a demonstration for an establishment of the proprietary process for development of novel mRNA-based vaccine. Based on this process, RNAimmune is actively developing RSV mRNA vaccine and tumor antigen vaccine products.

Preclinical research and development

Sirnaomics preclinical R&D activities are highly dynamic and well-orchestrated among the headquarters and subsidiaries. The technology platform advancement and product pipeline expansion are one of the key priorities for the management team. We currently have PNP-based RNAi therapeutic programs: STP355, comprising siRNAs simultaneously targeting TGF-ß1 and VEGFR2 that are validated for their involvement in tumor angiogenesis and metastasis, targets multiple types of cancer including breast cancer, melanoma, and colorectal cancer, is at the IND-enabling study stage. We also have GalAhead™-based programs: STP125G for the treatment of hypertriglyceridemia and STP144G for the treatment of complement-mediated disease, both at IND-enabling study stage. The management team is very confident that we will have multiple clinical programs (new molecule entities) moving forward for clinical studies.

Regarding our milestone related to the development of manufacturing infrastructure, we have initiated the use of our clinical scale GMP-compliant manufacturing site in Guangzhou, China that are capable of being further developed into commercial-scale manufacturing. During 2022, eleven batches of drug products to support our preclinical toxicity studies and early stage of clinical studies have been produced from the facility.

Chairman's Statement

Acknowledgement

Building upon our success across financial and clinical fronts, we will continue to advance the Company by strengthening our management team and enhancing global business development effort. With the tremendous support from our dedicated investors and our seasoned management team, I strongly believe that we are well positioned as a major player in the transformative RNA therapeutics market given our presence in Asia and the U.S., and that we are on the right track to becoming a fully integrated international biopharmaceutical company.

Finally, on behalf of the Board, I would like to take the opportunity to extend my sincere gratitude to all employees for their hard work and commitment to the Group during 2022, as well as to our Shareholders for their long-term trust and continued support of the Group.

Yang (Patrick) Lu, Ph.D.
Chairman of the Board, Executive Director, President and Chief Executive Officer

Four-Year Financial Summary

A summary of the consolidated results and financial position of the Group for the last four financial years[1] is set out below:

	For the year ended December 31,			
	2022	2021	2020	2019
	US$'000	US$'000	US$'000	US$'000
Consolidated Results				
Other income	**2,114**	350	771	440
Other gains and losses	**(292)**	(244)	255	368
Changes in fair value of financial asset at FVTPL	**4**	—	—	—
Changes in fair value of financial liabilities at FVTPL	**(6,124)**	(146,038)	(17,574)	(2,584)
Administrative expenses	**(24,191)**	(16,120)	(5,157)	(4,667)
Research and development expenses	**(67,641)**	(40,673)	(14,894)	(10,213)
Impairment losses reversed/ (recognized) under expected credit loss model, net	**—**	—	242	(242)
Listing expenses	**—**	(12,192)	(885)	—
Other expenses	**(450)**	(678)	(8,943)	—
Finance costs	**(798)**	(339)	(243)	(229)
Loss for the year	**(97,378)**	(215,934)	(46,428)	(17,127)

	As at December 31,			
	2022	2021	2020	2019
	US$'000	US$'000	US$'000	US$'000
Consolidated Financial Position				
Total non-current assets	**46,682**	16,842	5,047	3,410
Total current assets	**117,249**	223,805	105,137	21,413
Total current liabilities	**(14,227)**	(16,228)	(94,099)	(2,797)
Total non-current liabilities	**(38,144)**	(14,131)	(110,265)	(70,978)
Net assets/(liabilities)	**111,560**	210,288	(94,180)	(48,952)
Reserves/(deficits) attributable to owners of the Company	**122,006**	211,615	(94,433)	(51,754)
Non-controlling interests	**(10,446)**	(1,327)	253	2,802
Total equity/(deficits)	**111,560**	210,288	(94,180)	(48,952)

Note:

(1) Four-year financial summary is presented as the Shares were listed on the Main Board of the Hong Kong Stock Exchange under Chapter 18A of the Listing Rules on December 30, 2021.

BUSINESS OVERVIEW

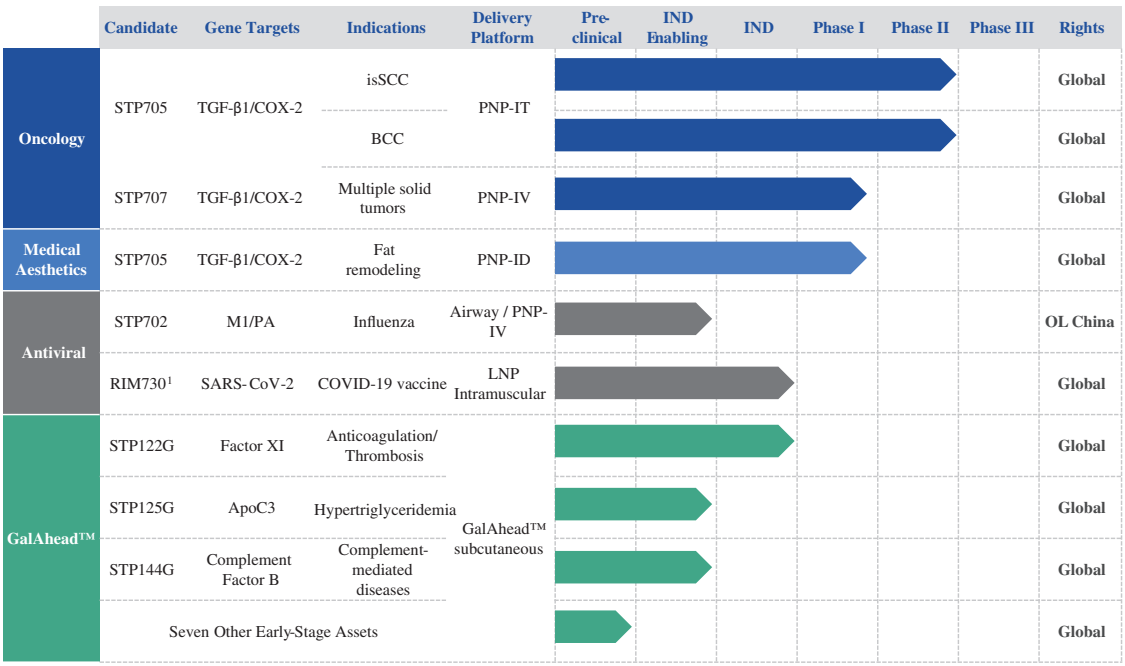
Founded in 2007, our mission is to become a fully-integrated international biopharmaceutical company, leveraging our depth of expertise in RNA therapeutics and novel delivery platform technologies. Capitalizing on our dual proprietary delivery platforms — PNP and GalAhead™, we have built an enriched clinical pipeline initially focuses on therapeutics for oncology and fibrosis, and expanding to anticoagulant therapies, cardiometabolic disease, complement mediated diseases and viral infections (to include human influenza, HBV, HPV and COVID-19) and medical aesthetics.

Our lead drug candidates STP705, formulated for local administration, and STP707, formulated for systemic administration, have achieved positive clinical readouts for the treatment of NMSC and solid tumor respectively, which corroborates the potential of our proprietary PNP delivery platform. With STP705 advancing to late-stage clinical development for the treatment of NMSC, we have solidified a leadership position in RNA medicine for cancer treatment on the global stage. We intend to further unlock therapeutic potential by expanding the capabilities of our proprietary delivery platforms to overcome the current barriers to the delivery of RNAi triggers and mRNA.

We have built an international professional team for discovery and development of RNAi therapeutics, mRNA vaccines and therapeutics. Currently we are focused specifically on the U.S. and Asia markets, which are supported by our R&D capabilities and manufacturing facilities in both regions. We are adopting a clinical development strategy to conduct clinical trials for our product candidates initially in the U.S. and then anticipate extending those trials globally and pursuing regulatory approvals in multiple markets around the globe.

Product Pipeline

Sirnaomics is advancing a deep and broad portfolio of product candidates and conducting nine clinical trials in the U.S. for our two lead clinical drug candidates, STP705 and STP707. Below is a prioritized product pipeline.



Note:

1. R&D conducted by our non-wholly owned subsidiary RNAimmune.

Abbreviations: isSCC = squamous cell carcinoma in situ; BCC = basal cell carcinoma; PNP = our polypeptide nanoparticle (PNP) RNAi delivery platform; PNP-IT = PNP platform formulated for intratumoral administration; PNP-IV = PNP platform formulated for intravenous administration; PNP-ID = PNP platform formulated for intradermal administration; GalAhead = our GalNAc RNAi delivery platform that conjugates GalNAc moieties to RNAi triggers; LNP = lipid nanoparticle (LNP) formulation for delivery of mRNA; OL China = out-licensed rights in mainland China, Hong Kong, Macau and Taiwan under agreement with Walvax but we retain the rights for rest of the world.

Clinical Programs

STP705

STP705 Powder for Injection (STP705) is a sterile, lyophilized drug product that has two small interfering RNAs (pixofisiran INN and lixadesiran INN) that target TGF-ß1 and COX-2, respectively. The drug product is formulated using our proprietary PNP carrier for intratumoral, intradermal, peridermal and subcutaneous administration. TGF-ß1 and COX-2 are well-known as gatekeeper targets for oncology and fibrosis disease drug development. TGF-ß1 regulates a broad range of cellular processes, including cell proliferation, differentiation, apoptosis, extracellular matrix production, angiogenesis, inflammation and immune response, while COX-2 is a proinflammatory and proliferative mediator. We are developing STP705 for the treatment of NMSC, including isSCC and BCC, recurrent keloids after keloidectomy, HTS and solid liver tumors, as well as for fat remodeling.

STP707

STP707 Powder for Infusion (STP707) is a sterile, lyophilized drug product that contains the same two siRNAs as STP705, formulated with a different proprietary nanoparticle carrier that facilitates intravenous infusion for systemic treatment. The product is currently under investigation in two clinical studies for the treatment of solid tumors and PSC, and potentially lung fibrosis. We also aim to develop combination therapies with STP707 and immune check point inhibitors or other oncology drugs currently used as treatments for solid tumors, including liver cancer (including HCC and CCA), metastatic cSCC and NSCLC.

We may not be able to ultimately develop and market our lead drug candidates STP705 and STP707 successfully.

Other Late-Stage Preclinical Candidates

We are evaluating multiple innovative siRNA molecules as candidates that employ different targeting approaches, utilizing (i) our proprietary PNP delivery platform; (ii) two unique and newly developed GalNAc platforms (GalAhead™ platform and PDoV-GalNAc™ platform); and (iii) our proprietary PLNP delivery platform, jointly developed with RNAimmune, our non-wholly owned subsidiary. Our pipeline preclinical candidates cover a range of therapeutic indications, spanning treatments for multiple type of cancers, bladder cancer, HBV, influenza, cardiometabolic, blood and complement-mediated diseases. We intend to advance promising candidates into clinical studies that support submission of IND to conduct initial human clinical trials in multiple countries.

Preclinical Drug Candidates Using the PNP Platform

STP355

STP355 comprises siRNAs simultaneously targeting TGF-ß1 and VEGFR2 that are validated for their involvement in tumor immunity and angiogenesis. STP355 is formulated with for systemic administration with our PNP delivery (HKP+H) platform. The therapeutic potential of STP355 has been demonstrated with multiple types of cancer models including breast cancer, melanoma, and colorectal cancer.

Preclinical Drug Candidates Using the GalAhead™ Platform

STP122G

STP122G is an siRNA that targets Factor XI. The siRNA construct is conjugated with the GalNAc ligand to facilitate targeted drug delivery when administered by subcutaneous injection. We are developing STP122G as a potential anticoagulant therapy. Using a non-human primate model, we have demonstrated long-lasting target silencing activity, up to 28-week after one dose and in toxicology studies in mice and non-human primates. No apparent toxicity or evidence of unexpected pharmacological effects were observed. Scale up of the manufacturing of the drug substance and drug product to produce materials that are in accordance with international GMP has enabled the release of clinical trial supplies. An IND for STP122G has been submitted to the FDA and is under review.

STP125G

STP125G is an siRNA that targets apolipoprotein C3 (APoC3). The siRNA construct is conjugated with the GalNAc ligand to facilitate targeted drug delivery when administered by subcutaneous injection. It is being developed for potential use in treating rare lipodystrophy conditions such as familial hypertriglyceridemia. After successful efficacy studies with cell culture and animal models of disease, APoC3-GalNAc-siRNA has been designated as a clinical candidate for further development. Nonclinical toxicology studies are in progress. The manufacture of drug substance in accordance with GMP has been completed and clinical trial supplies are being manufactured. We plan to submit an IND to the FDA in 2023.

STP144G

STP144G is an siRNA that targets Complement Factor B. The siRNA construct is conjugated with the GalNAc ligand to facilitate targeted drug delivery when administered by subcutaneous injection. We are developing STP144G for potential use in treating complement-mediated immunologic diseases. After successful efficacy studies with cell culture and animal models, this candidate was selected for further development. Development and production of the drug substance and drug product in accordance with GMP for clinical trial supplies has been completed. It is notable that STP144G is the first GalAhead™ product manufactured at our Guangzhou Facility. Nonclinical toxicology studies have been initiated. We are currently planning an IND for this product.

Preclinical Drug Candidates Using PDoV-GalNAc™ Platform

Several potential siRNA constructs conjugated to the PDov-GalNAc™ platform are currently in research and development. The siRNA in targets hepatocyte-expressed PCSK9 and is being developed for potential treatment of hypercholesterolemia, STP155G, targeting HBV viral mRNA is being developed for the treatment of hepatitis B; and STP165G, targeting hepatocyte-expressed angiotensinogen is being developed for its potential as an antihypertensive therapy.

mRNA Vaccine Candidates Using Our Proprietary mRNA Platform

RIM730, developed by RNAimmune, our non-wholly owned subsidiary, comprises mRNA coding for a modified full length prefusion spike protein from the SARS-CoV-2 variant, formulated with LNP delivery technology for intramuscular administration.

Delivery Platforms

Our proprietary delivery platforms for administration of RNA-based therapeutics serve as the foundation of our product pipeline. Our three platforms are as follow: (1) PNP delivery platform for both local and systemic administration of RNAi therapeutics to target the activated endothelial cells beyond liver hepatocyte cells; (2) a unique GalNAc-based RNAi delivery platforms (GalAhead™ platform and PDoV-GalNAc™ platform), that were developed for subcutaneous administration of siRNA drugs to liver hepatocytes; and (3) the proprietary PLNP delivery platform, jointly developed with RNAimmune, our non-wholly owned subsidiary, for administration of mRNA vaccines and therapeutics.

In the early days of the Company, we exclusively in-licensed an academic PNP nucleic acid delivery method. Leveraging our 15-year R&D effort, we are now able to advance PNP as a therapeutic delivery technology. Our PNP delivery platform is based on a naturally biodegradable polypeptide molecule, a histidine-lysine (HK) polymer. The HK polymers vary in the pattern of repeating histidine and lysine moieties and may be branched. When admixed at the appropriate ratio with RNA, the HK polymers self-assemble into nanoparticles that encapsulate the RNA. PNP serves as an excipient as part of our drug products to meet all pharmaceutical requirements for large scale manufacturing to successfully test in humans in multiple clinical studies. We obtained exclusive global rights for our PNP delivery technology.

We developed, through in-house efforts, our unique GalNAc-based RNAi delivery technologies, and hold the global exclusive rights. The GalAhead™ delivery system is a proprietary technology platform for RNAi therapeutics, discovered and developed by Sirnaomics. This platform relies on unique RNA structures that allow the knockdown of single or multiple distinct mRNA targets, specifically two key technological components: mxRNA™ and muRNA™. mxRNAs™ are comprised of single ~30 nt long oligonucleotides to downregulate individual genes, while muRNA™ molecules are comprised of multiple oligonucleotides to silence two or more targets simultaneously. The targeted delivery technology has demonstrated specific liver hepatocyte targeting via a cell surface receptor: ASGPR. Based upon this technology we have developed a series of siRNA drug candidates, validated them with cell culture and animal models of disease, and conducted rodent safety and non-human primate efficacy and safety studies.

PDoV™ leverages our expertise for enhancing of GalNAc-conjugated siRNA drug delivery. The PDoV-GalNAc™ platform takes advantage of the enhanced endosomal escape mechanism provided by PDoV™ which has two conjugation sites for two different siRNA inhibitors. When the PDoV™ is attached to a trivalent GalNAc, it allows efficient and specific siRNA delivery to liver hepatocytes. The PDoV-GalNAc™ has demonstrated a stronger RNAi therapeutic activity both in vitro and in vivo compared to GalNAc alone, which is attributed to the rapid endosomal escape afforded by PDoV™. We hold global exclusive right for the technology with multiple patent protections.

Our proprietary PLNP platform combines polypeptides and lipids to generate nanoparticles comprised of both to provide encapsulation of mRNA, allowing for efficient cellular delivery through better endosomal escape for novel mRNA vaccines and therapeutics. Our PLNP platform relies upon a less complex manufacturing process, as compared to the LNP delivery platforms, due to fewer components, and does not include polyethylene glycol, which is used in current LNP delivery platforms and is thought to cause severe adverse effects in some patients. Products formulated using our PLNP platform are stable at ambient temperatures, thus eliminating distribution costs associated with cold chain storage of LNP based products.

Manufacturing

We have developed clinical scale GMP-compliant manufacturing processes that are capable of being further developed into commercial-scale manufacturing. Our PNP manufacturing process uses microfluidic technology which we are continuously improving to support our current pipeline. In addition, we are continuously improving and exploring other PNP manufacturing processes to meet our expanded pipeline, which will be capable of supporting multiple indications. We are continuing to expand our industrial partnerships to support our global supply-chain oriented manufacturing approach including active pharmaceutical ingredients, excipients to support our PNP franchise, and clinical and commercial fill and finish facilities aimed at delivering high-quality products at low cost. For commercialization of late-stage products, our approach is global by leveraging both existing CDMOs and by establishing commercial production sites of our own. Pre-commercialization activities, including preparation for Process Performance Qualification (PPQ), are in process for Active Pharmaceutical Ingredient (API), novel excipient and drug product. We are also continuing to explore partnerships on next generation PNP formulation technologies for future commercial applications.

Our GalAhead™ delivery platform utilizes well-established CDMO partners which we are currently in the process of expanding, which includes early phase discussions with potential external commercial manufacturing facilities.

We completed the construction of a clinical manufacturing facility in Guangzhou (Guangzhou Facility) in 2021 to further enhance our in-house manufacturing capacity. During 2022, eleven batches of drug products were produced at this facility to support our preclinical tox studies and early stage of clinical studies for STP707, STP908, STP355 and STP369, and plans are underway to expand the capabilities at the Guangzhou Facility to support our expanding GalAhead™ product line. The successful operation of the Guangzhou Facility enables our in-house manufacturing capabilities and mark a transition from a biotech company to a biopharma corporation.

BUSINESS REVIEW

In 2022 and during the first few months of 2023 leading up to the date of this annual report, we continue to make significant progress with respect to our pipeline development and business development. In order to ensure sufficient cash runway in light of the uncertainty in global macro economy, the Company has prioritized resources allocation in programs that have the significant potential, and has put on hold or slowed down the development of other programs. The Company has also undergone a restructuring to optimize the U.S. and China team in early 2023.

The following milestones and achievements exemplify the Company's continued clinical execution across its broad pipeline.

Clinical Development

STP705

STP705 demonstrates positive Phase IIb clinical results for the treatment of isSCC

After we obtained excellent readouts from the Phase IIa clinical trial of STP705 for the treatment of isSCC in 2021, we initiated the Phase IIb clinical trial for the treatment of isSCC in May 2021 in the U.S. We are evaluating the two most efficacious dosing regimens previously identified in a Phase IIa clinical trial in a Phase IIb randomized, double-blind, placebo-controlled trial in up to 100 adult patients with isSCC. In December 2022, we announced the part-one of the Phase IIb interim data. The interim results showed that the majority (78%) of 32 patients with STP705 treatment achieved histological clearance. The lowest dosage in the trial at Cohort A (30 μg/ml) achieved 89% histological clearance. These positive results are clearly higher than the 12 patients in placebo group which achieved 58% histological clearance. No treatment-related AEs or SAEs was observed, and Local Skin Response Scores were stable or improved across all treatment groups.

In the first quarter of 2023, based upon large body of positive clinical readout from the Phase IIa and Phase IIb studies for the treatment of isSCC, we have commenced communicated with the FDA regarding our Phase III clinical study proposal for treatment of isSCC.

STP705 demonstrates positive Phase II clinical results for the treatment of BCC

In February 2022, we announced interim data from a Phase II clinical trial of STP705 for the treatment of BCC. The interim data examined results from three cohorts with 15 total subjects and showed a dose-dependent increase of the complete response patient numbers, with an improved cosmetic result and no significant cutaneous skin reactions. In August 2022, with further expansion of the clinical study, we announced achieving a 100% complete response using a 180 ug dose with an excellent safety profile. We have now completed the 240 ug dosage cohort and will finish up the final analysis. The final data readout of the study is expected to be released in the second quarter of 2023. The latest results from the Phase II clinical study of STP705 for the treatment of BCC demonstrated very favorable efficacy without any drug related AEs and SAEs, further validating the broad potential of this drug candidate for the treatment of NMSC and beyond. We are going to follow a similar approach for filing the Phase III study proposal to the FDA for the treatment of BCC.

With the excellent results from the isSCC and BCC trials, we are spearheading the development of the novel polypeptide-based siRNA therapeutics for NMSC which have an urgent need for new treatments in the U.S.

STP705 is in a Proof-of-Concept Phase I clinical study for localized fat reduction

In May 2022, we launched a Phase I proof-of-concept clinical trial of STP705 in adults undergoing abdominoplasty for medical aesthetics treatment. The first subject was dosed in November 2022. We expect interim data to be available in the second quarter of 2023 and the study is expected to be completed in the second half of 2023. The study will focus on safety and dosing, as well as looking for histological evidence of localized fat remodeling.

This study is our first activity to apply an RNAi therapeutic candidate for localized fat remodeling. Non-invasive fat reduction is a procedure to decrease or eliminate stubborn fat pockets in specific areas of the body; the current methods include cryolipolysis, radio frequency, and laser lipolysis. The Phase I dose-ranging, randomized, double-blind, vehicle-controlled trial is designed to enroll up to ten patients and evaluate the safety and tolerability of STP705, which will be delivered via subcutaneous injection. The primary endpoints are to assess injection comfort, characterize local and systemic safety, evaluate histological changes of subcutaneous doses of STP705, and compare the safety and tolerability of three different concentrations of STP705 (120ug/mL, 240ug/mL, 320ug/mL) to select dosages for future studies. We plan to use the information from this study to expand into the treatment of submental fat and other areas of noninvasive fat remodeling. The study is expected to be completed in the second half of 2023 and we expect interim data to be available in the second quarter of 2023. This Phase I study will focus on safety and dosing as well as looking for histological evidence of fat remodeling. This will better inform later stage development of this asset in the medical aesthetics category.

STP705 for Advanced Liver Tumors Expanded into Taiwan

In July 2022, we received regulatory clearance from the TMHW for our IND application to join the global Phase I, multicenter, open-label, dose escalation study of STP705 designed to evaluate safety, tolerability, pharmacokinetics, and anti-tumor activity in the treatment of patients with advanced liver tumors. The study was started in the U.S. in March 2021, and is expected to continue to expand in Taiwan. The first patient will be initiated into the study during second half of 2023.

STP705 Phase I/II clinical study for facial isSCC

Based on the positive results from the STP705 Phase IIa and Phase IIb clinical trials for the treatment of isSCC, we initiated a Phase I/II clinical study of STP705 for the treatment of patients with facial isSCC, and dosed the first patient in August 2022. We expect the clinical study report to be available in the third quarter of 2023. The progression to treatment of facial isSCC is evidence of the safety of STP705, as demonstrated in our Phase IIa clinical study for the treatment of isSCC. We expect to observe good cosmetic results compared with existing therapies or surgery. We also believe that there will be more interest from patients to have a scarless procedure on the face than other parts of the body.

STP707

STP707 Phase I clinical trial for the treatment of solid tumors

In February 2022, we launched a Phase I clinical trial of STP707 for the treatment of solid tumors in the U.S. The Phase I clinical trial, which is a multicenter, open label, dose escalation, and dose expansion study, evaluates the safety, tolerability, pharmacokinetics and antitumor activity of STP707. This is a "basket" study which enrolls a variety of subjects with advanced solid tumors, who have been unresponsive to standard therapies. Once either the maximum tolerated dose or the recommended Phase II dose has been established, additional patients will be enrolled to continue to investigate safety and anti-tumor activities. The study encompasses five cohorts who will receive one of five escalating doses (3mg, 6mg, 12mg, 24mg, 36mg and 48mg) of STP707 through IV administered weekly on a 28-day cycle. In December 2022, we announced the interim data for participants from the 3mg, 6mg, and 12mg dosing cohorts. To date, STP707 has demonstrated an excellent safety profile with the first three dosing cohorts and has exhibited a positive efficacy signal with many subjects exhibiting the best response of stable disease with a meaningful number of subjects remaining on study past the 100-day mark. This has allowed us to dose the additional planned cohorts. It is important to emphasize that participants in this study have received multiple forms of prior treatments including surgery, radiation, and tumor specific first-and second-line therapies. The positive result encourages us to proceed to a potential Phase II combination study with immune check point inhibitor drugs.

This study has also been approved in the second half of 2022 to expand to Taiwan as part of the global multicenter clinical trial. We plan to expand oncology clinical studies in Asia-Pacific area where there is a high unmet need for innovative therapies.

STP707 Phase I clinical trial for the treatment of PSC

In April 2022, we launched a Phase I clinical trial in the U.S. to evaluate the safety, tolerability, and pharmacokinetics of a single ascending dose of STP707 when administered by intravenous infusion to healthy subjects. The Phase I clinical trial was a single-center, randomized, dose-escalation, sequential cohort study.

IND Enabling Studies and Expected Clinical Studies

We submitted a U.S. IND for STP122G in March 2023 and we are on track to start filing the clinical study application in the second quarter of 2023 if greenlight is given by the FDA. This asset targets Factor XI and has the potential to be utilized in a broad range of disease states as a form of therapeutic anticoagulation. The product has the potential to be used in several diseases such as surgical prophylaxis to prevent deep vein thrombosis (DVT), chronic treatment in Atrial Fibrillation (AF) to prevent stroke, as well as maintenance treatment for DVT and pulmonary embolism.

We are expecting to submit a U.S. IND for RIM730 in the first quarter of 2023 based on the current progress of IND enabling studies for both efficacy and toxicity evaluation, drug formulation, CMC and previous guidance from the FDA.

Meanwhile, we are on track to submit a U.S. IND for STP125G in the fourth quarter of 2023, and STP144G in 2024.

Commencement of our Fill and Finish Plant Facility in Guangzhou

In December 2021, our Guangzhou Facility successfully completed its full commissioning tasks with media fill simulation three times in succession, followed by trial run success of STP705 in a lyophilized solid dose. Production and the facility have been in full operation during the Reporting Period. In 2022, the Guangzhou Facility has supported the production of lyophilized toxicity lots for STP707, STP908, STP355 and STP369. With multiple batches of drug products made by the Guangzhou Facility, continuous improvement in GMP compliance and aseptic processing operational assurance have been demonstrated. The flexibility for optimizing our clinical supplies strategy in Asia and adapting production to our clinical development programs well justified and confirmed our strategic decision in establishing this clinical manufacturing facility. With the recent full GMP batch of STP707 for human injection produced in the first quarter of 2023, the Guangzhou Facility is expected to be in full GMP-compliant manufacturing of our pipeline products, including formulation, fill and finish for both liquid and solid dose production, testing and release. In early 2023, the Guangzhou Facility initiated filling line capacity expansion to include liquid dose fill in 2R vial to support our GalAhead™ platform. An anticipated annual capacity of around 50,000 vials of lyophilized solid dose and 150,000 to 200,000 vials of liquid dose for human injectables dose capacity is sufficient to support all clinical trials we have currently planned and for future clinical developments.

RNAimmune's Series A Round Fundraising

In March 2022, RNAimmune, our non-wholly owned subsidiary, announced US$27 million Series A round of fundraising in the U.S. to accelerate its R&D of mRNA vaccines and drug discovery focused on infectious diseases, cancer and rare diseases.

Fueled by the fresh capital, RNAimmune is advancing its artificial intelligence algorithms, next generation delivery systems program, monovalent and bivalent COVID-19 vaccine programs, prophylactic respiratory syncytial virus (RSV) vaccine program, Pan-RAS tumor vaccine program in collaboration with the University of California, Los Angeles, and prophylactic HSV vaccine program in collaboration with the University of Houston.

Intellectual Properties

Sirnaomics is the exclusive owner of 20 pending patent applications filed in 2022 that cover our PNP delivery platform (without regard to any particular product or product family). These include two applications filed in China, 12 national stage applications stemming from the filing of an international (PCT) application in 2020 (including, among others, one Chinese application and one U.S. application), three new PCT applications and three other U.S. non-provisional applications. We continue to develop and use the PNP delivery platform technology for selected indications. Sirnaomics licensed this technology to RNAimmune for use in its mRNA vaccine platforms. RNAimmune has four additional U.S. applications filed in 2022 relating to drug delivery.

In 2022, the GalAhead™ RNAi delivery platform advanced in the developing novel therapeutic products focused on complement-related and other diseases. The GalAhead™ platform is protected by two families consisting of 26 pending internationally filed patents. Sirnaomics filed 12 additional applications in 2022 that protect embodiments of the platform directed to specific molecular targets.

The PDoV™ technology is protected by 12 pending international applications including the U.S. and China.

Strengthening of Executive Team and Board

The Company has restructured the management team to reflect the latest focus in executing our Group's development strategy. In July 2022, Dr. Xiaochang Dai was re-designated from a non-executive Director to an executive Director to oversee the scientific and strategic development of the Group. In November 2022, the Company appointed Mr. Yip Wing Kei (*alias* Nigel Yip) as Chief Financial Officer and Ms. Yun Zhang (*alias* Monica Zhang) as Chief Executive Officer, China. Additionally, in February 2023, Dr. Steven Long has left the role of Chief Development Officer of Sirnaomics and been hired as Chief Scientific Officer of RNAimmune, our non-wholly owned subsidiary. In March 2023, Mr. George Ji has retired from the role of Chief Operating Officer and is expected to support the Company in an advisory role, and Dr. David Mark Evans notified the Company that he will be formally stepping down from the role of Chief Scientific Officer and will be moving into a newly created role to be the Head of Discovery.

Inclusion into the Hang Seng Composite Index:

In September 2022, the Company was selected as a constituent stock of the Hang Seng Composite Index, Hang Seng Stock Connect Hong Kong Index and other Hang Seng Family of Indexes. This enabled the Company's stock to become eligible for southbound trading on the Hong Kong Stock Connect, which is a channel for stock trading between investors in Hong Kong and those in mainland China. This affords the Company with the opportunity to broaden exposure to more diversified investors, improves stock liquidity, and promotes the Company's reputation in the capital market.

Impact of COVID-19

The COVID-19 pandemic had some adverse impact on our business operations and financial performance for the Reporting Period. The Company experienced some material and prolonged disruption of our ongoing clinical and preclinical trials due to: (i) special work arrangements of our R&D staff and relevant government authorities in China and in the U.S.; (ii) fewer patients attending hospitals or clinics for trials; and (iii) shortage and higher cost of non-human primates driven by pandemic-related research. However, our global presence in the U.S. and China offered us the flexibility to work with vendors less impacted by the COVID-19 pandemic in different parts of the world to ensure a more seamless development of our preclinical drug candidates.

FUTURE AND OUTLOOK

At Sirnaomics, we are advancing an enriched drug product pipeline of innovative RNA based medicine to improve the lives and wellbeing of patients worldwide. Based on our proprietary technology platforms, world-leading clinical programs, highly experienced management team and well-established R&D and manufacturing facilities in the U.S. and Asia, the Company is well positioned to develop novel RNAi therapeutics for cancer, fibrosis diseases, viral infection, liver-metabolic diseases and medical aesthetics. We intend to continue to expand our competitive advantages and become a global leader by focusing on the following key business priorities and initiatives:

Advance development of our lead product candidates STP705 and STP707 through clinical trials toward market approvals in oncology in the U.S. and Asia

We have successfully leveraged the proof-of-concept human data from STP705. With the accumulation of successful human clinical data from STP705 for the treatment of isSCC, we expanded the clinical trials for STP705 into a wider range of oncology and fibrosis indications, including but not limited to BCC and liver cancer, as well as medical aesthetics indication such as fat reduction. We also continue to advance our clinical trials for STP707 and expand the therapeutic reach using systemic administration as a modality, opening up more opportunities to treat other indications which could not be addressed by STP705.

Our top priority is STP705 for the treatment of isSCC toward commercialization. The positive data readout from the part one of the Phase IIb trial demonstrated excellent safety profile, allowing us to complete the study ahead of scheduled time and advance to late-stage development. Together with STP705 for the treatment of BCC for which we expect to have the final data readout in the second quarter of 2023, we expect to further advance our STP705 skin cancer franchise to late-stage development in the second half of 2023.

Patient enrolment of a proof-of-concept Phase I STP705 trial to study fat remodeling in abdominoplasty patients has been completed. Data for the first two subjects have demonstrated significant fat remodeling. We are excited about the findings and expect to release interim data in second quarter of 2023 with the final readout in second half of 2023. We expect to move forward and study the asset in areas of the body where there is unmet need for a therapeutic such as submental fat reduction. This development program is expected to open up a new therapeutic area of medical aesthetics for our pipeline and has received very positive responses from the market. We will explore partnering opportunities for this particular asset.

To prepare for our expanding programs and further clinical development, our clinical teams in the U.S. and Asia are running multi-center global trials for indications such as isSCC and liver cancer, leveraging the populations of subjects for different indications in both parts of the world. To prepare for potential market approvals, we have started exploring potential partnerships and developed a commercialization plan to position STP705 when the upcoming clinical studies reach primary endpoints. Going forward, we plan to continue to invest in the studies for STP705 and expand indications beyond skin cancers.

While we advance the late-stage development of STP705 for the treatment of isSCC and BCC, we are excited to simultaneously move forward with STP707, which has proven the safety and efficacy of our proprietary PNP delivery systems in IV administration. In future development, STP707 and our targeted PNP delivery have potential to treat a variety of solid tumors and will differentiate Sirnaomics from other RNA players globally. As a result of positive interim data for STP707, we will explore collaboration of a Phase II combination trial, combining STP707 with novel approved cancer therapies such as immune check point inhibitors as well as traditional chemotherapy where first-and second-line treatments show minimal impact on disease outcomes. Such potential combination therapies may include CCA, HCC, melanoma, or pancreatic cancer. We will also explore other indications for Phase II trials and continue expanding our clinical development programs. STP707 is believed to have big market potential through IV administration and potential partnership possibility. We believe our optimal growth plan lies in dedicating our capital and corporate resources toward advancing our valuable assets with meaningful market potential.

Advance more innovative first-in-class preclinical assets into clinical stage

We are evaluating multiple innovative siRNA candidates that employ different targeting and nanoparticle technologies in preclinical studies. We plan to advance these promising candidates through IND-enabling studies that will support submission of investigational drug applications as we plan to conduct initial clinical trials in multiple countries.

Sirnaomics will accelerate the research and development of our next generation GalAhead™ platform. We have ten GalAhead™ candidates in the pipeline and expect to have two INDs submitted in 2023 (for STP122G and STP125G). STP122G, targeting Factor XI for subcutaneous administration, is expected to be the first representative candidate for the GalAhead™ delivery platform to enter clinical stage in 2023.

RNAimmune, our non-wholly owned subsidiary, is expected to advance to an IND application for RIM730 with the FDA in the first quarter of 2023 and accelerate the development of its mRNA platform.

Selectively pursue synergistic collaboration opportunities to maximize the potential of our clinical product candidates

Our strategy and business development team continues to actively explore global and local partnership and cooperation opportunities with other industry players, specifically for our lead products STP705 and STP707, and with our GalAhead™ delivery platform and preclinical assets, including, but not limited to, STP122G, STP125G and STP144G. Such partnerships and cooperation are expected to help accelerate the development of multiple preclinical and clinical assets.

These opportunities may include co-development, in-licensing and out-licensing arrangements. We have a proven track record of collaborating with biopharmaceutical and biotechnology companies across the globe which underscores our industry recognition and paves the way for long-term collaborations.

We aim to gain market coverage by leveraging our current and future business partners' expertise and business network.

Commercialization

The Group has been devoted to commercializing the core product STP705 for the treatment of isSCC. Having consulted with industry consultants and key opinion leaders, and taking into account the latest developments on STP705, we currently expect that, as soon as by end of 2023, our STP705 will reach phase III clinical trial for the treatment of isSCC, with the NDA filing to be made as soon as by end of 2024 and commercialization as soon as by end of 2025, subject to the regulatory review by the FDA. Nevertheless, the estimated timeline of the commercialization remains highly uncertain given the relatively early phase of clinical trials of STP705 for the treatment of isSCC and various factors that are beyond the control of the Company, including but not limited to the results of the clinical trials, discussion with the FDA on the design and protocol of subsequent trials, the possibility of conducting additional trials as may be requested by the FDA, and the approval and directions to be made by the FDA.

In addition, the successful commercialization of the Core Product depends on a number of factors, including: (i) favorable safety and efficacy data from our clinical trials; (ii) successful enrolment of patients in, and completion of, clinical trials; (iii) sufficient supplies of drug products that are either used in combination or in comparison with the Core Product in clinical trials; (iv) performance by or other third parties we engage to conduct clinical trials and their compliance with our protocols and applicable laws without compromising integrity of the resulting data; (v) capabilities and competence of our collaborators; (vi) receipt of regulatory approvals; (vii) commercial manufacturing capabilities; (viii) successful launch of commercial sales of the Core Product, if and when approved; (ix) obtaining and maintenance of favorable reimbursement from third-party payers for drugs, if and when approved; (x) competition with other drug candidates and drugs; (xi) the obtaining, maintenance and enforcement of patents, trademarks, trade secrets and other intellectual property protections and regulatory exclusivity for the Core Product; (xii) successful defense against any claims brought by third parties that we have infringed, misappropriated or otherwise violated any intellectual property of any such third party; and (xiii) the continued acceptable safety profile of the Core Product following regulatory approval.

Impact of COVID-19

We cannot foresee when the COVID-19 pandemic will become completely under control and therefore the aforementioned impacts on our business will remain. We are monitoring the COVID-19 situation as well as various regulatory and administrative measures adopted by local governments closely and will adjust our strategy and precautionary measures accordingly.

FINANCIAL REVIEW

	2022 US$'000	2021 US$'000
Other income	**2,114**	350
Other gains and losses	**(292)**	(244)
Changes in fair value of financial asset at FVTPL	**4**	—
Changes in fair value of financial liabilities at FVTPL	**(6,124)**	(146,038)
Administrative expenses	**(24,191)**	(16,120)
Research and development expenses	**(67,641)**	(40,673)
Listing expenses	**—**	(12,192)
Other expenses	**(450)**	(678)
Finance costs	**(798)**	(339)
Loss for the year	**(97,378)**	(215,934)

Overview

For the year ended December 31, 2022, the Group did not generate any revenue from product sales. The Group recorded a loss of US$97.4 million for the year ended December 31, 2022, as compared with US$215.9 million for the year ended December 31, 2021.

Substantially all of the Group's net losses resulted from changes in fair value of financial liabilities at FVTPL, research and development expenses and administrative expenses.

Revenue

For the year ended December 31, 2022, the Group did not generate any revenue from product sales and did not recognize revenue from the co-development and license agreement entered into with Walvax.

Other Income

The Group's other income primarily consists of: (i) government grants, including cash incentives to support the Group's research and development in the PRC and for the completion of the Listing; and (ii) interest income from restricted bank balances and bank balances.

For the year ended December 31, 2022, the other income of the Group increased to US$2.1 million representing a growth of US$1.7 million, or 504%, from US$0.4 million for the year ended December 31, 2021. The increase was primarily due to: (i) the Group obtained government grant of US$0.6 million upon completion of the Listing on the Hong Kong Stock Exchange; and (ii) increase in interest income from restricted bank balances and bank balances of US$1.1 million from US$0.2 million for the year ended December 31, 2021 to US$1.3 million for the year ended December 31, 2022.

Other Gains and Losses

The Group's other gains and losses primarily consist of: (i) net foreign exchange gains or losses; and (ii) changes in fair value of structured deposits.

For the year ended December 31, 2022, the other gains and losses of the Group increased to a loss of US$0.3 million representing a growth of US$0.1 million, or 20%, from a loss of US$0.2 million for the year ended December 31, 2021. The increase was primarily due to decrease in the gain on changes in fair value of structured deposits of US$0.3 million for the year ended December 31, 2021 to US$0.1 million for the year ended December 31, 2022.

Changes in Fair Value of Financial Liabilities at FVTPL

The Group's changes in fair value of financial liabilities at FVTPL mainly represent changes in fair value of: (i) preferred shares; (ii) Series C Warrants; (iii) convertible loans issued by Suzhou Sirnaomics to Series D investors; (iv) SAFE issued by RNAimmune to non-controlling shareholders of RNAimmune in August and September 2020; and (v) Series Seed and Series A preferred shares of RNAimmune.

For the year ended December 31, 2022, the loss on changes in fair value of financial liabilities at FVTPL of the Group decreased to US$6.1 million, representing a reduction of US$139.9 million, or 96%, from US$146.0 million for the year ended December 31, 2021, primarily due to automatic conversion of the Company's preferred shares to ordinary shares upon completion of the Listing on December 30, 2021.

Administrative Expenses

The following table sets forth the components of the Group's administrative expenses for the years indicated:

	Year ended December 31,		
	2022	2021	Changes
	US$'000	US$'000	%
Director's emolument and staff costs	**7,014**	8,144	(14%)
Professional and consultancy fees	**10,946**	5,297	107%
Traveling expenses	**415**	400	4%
Other office expenses	**1,442**	913	58%
Depreciation of property, plant and equipment and right-of-use assets	**1,458**	327	346%
Marketing and business development	**1,792**	215	733%
Insurance	**305**	207	47%
Others	**819**	617	33%
Total	**24,191**	16,120	50%

The Group's administrative expenses primarily consist of: (i) directors' emolument and staff costs relating to the Group's administrative staff; and (ii) professional and consultancy fees, including financial advisory service fees, legal fees for patent-related and general corporate advisory services and professional fees for regulatory compliance and maintaining listing status after the Listing.

For the year ended December 31, 2022, the administrative expenses of the Group increased to US$24.2 million, representing a growth of US$8.1 million, or 50%, from US$16.1 million for the year ended December 31, 2021. The increase was primarily attributable to: (i) professional and consultancy fees; (ii) marketing and business development activities; and (iii) depreciation of property, plant and equipment and right-of-use assets.

Research and Development Expenses

The following table sets forth the components of the Group's research and development expenses for the years indicated:

	Year ended December 31,		
	2022 US$'000	2021 US$'000	Changes %
Director's emolument and staff costs	**14,569**	16,537	(12%)
Chemistry, manufacturing and controls expenses	**16,815**	6,665	152%
Materials consumed	**10,153**	3,239	213%
Clinical trials expenses	**8,490**	4,510	88%
Preclinical test expenses	**11,790**	5,845	102%
Consultancy fee	**1,169**	1,725	(32%)
Depreciation of property, plant and equipment and right-of-use assets and amortization of intangible assets	**2,475**	1,303	90%
Others	**2,180**	849	157%
Total	**67,641**	40,673	66%

The Group's research and development expenses primarily consist of: (i) directors' emolument and staff costs relating to the research and development staff; (ii) chemistry, manufacturing and controls expenses; (iii) materials consumed; (iv) clinical trials expenses, mainly in relation to the engagement of CROs; and (v) preclinical test expenses, mainly in relation to the engagement of preclinical CROs.

For the year ended December 31, 2022, the research and development expenses of the Group increased to US$67.6 million, representing a growth of US$26.9 million, or 66%, from US$40.7 million for the year ended December 31, 2021. The increase was primarily attributable to: (i) chemistry, manufacturing and controls expenses and materials consumed; and (ii) clinical trials expenses and preclinical test expenses. Such increases were in line with the Group's continuous research and development efforts to support the Group's steadily advancing and expanding pipeline of drug candidates.

Listing Expenses

Listing expenses represent professional fees and other fees incurred in connection with the Listing on the Hong Kong Stock Exchange on December 30, 2021. For the year ended December 31, 2021, the Group recorded listing expenses charged to profit or loss of US$12.2 million.

Other Expenses

The following table sets forth the components of the Group's other expenses for the years indicated:

	Year ended December 31,	
	2022	2021
	US$'000	US$'000
Subscription fee of financial asset at FVTPL	**450**	—
Issuance costs of financial liabilities at FVTPL	**—**	678
Total	**450**	678

The Group's other expenses primarily consist of: (i) subscription fee of financial asset at FVTPL; and (ii) issuance costs of financial liabilities at FVTPL, mainly professional and consultancy fees in relation to the issuance of Series E preferred shares.

Finance Costs

The Group's finance costs were primarily interests on lease liabilities.

For the year ended December 31, 2022, the finance costs of the Group increased to US$0.8 million, representing an increase of US$0.5 million, or 135%, from US$0.3 million for the year ended December 31, 2021. This increase was primarily due to the increase in the interest on lease liabilities.

Income Tax Expense

No Hong Kong profits tax, U.S. corporate income and state taxes or China enterprise income tax were provided as the group entities had no assessable profits during the year ended December 31, 2022.

Loss for the Year

The Group's loss for the year decreased from US$215.9 million for the year ended December 31, 2021 to US$97.4 million for the year ended December 31, 2022. Such decrease in loss was primarily attributable to the decrease in loss on changes in fair value of financial liabilities at FVTPL and listing expenses, partly compensated by the increase in research and development expenses and administrative expenses.

Cash flows

	Year ended December 31,	
	2022	2021
	US$'000	US$'000
Net cash used in operating activities	**(88,708)**	(56,973)
Net cash used in investing activities	**(32,611)**	(6,035)
Net cash from financing activities	**15,888**	170,964
Net (decrease)/increase in cash and cash equivalents	**(105,431)**	107,956
Cash and cash equivalents at January 1	**211,994**	103,122
Effect of foreign exchange rate changes	**(1,334)**	916
Cash and cash equivalents at December 31	**105,229**	211,994

Net cash used in operating activities for the year ended December 31, 2022 increased to US$88.7 million, representing an increase of US$31.7 million, or 56%, from US$57.0 million for the year ended December 31, 2021. This increase was primarily due to the expansion of the Group's research and development activities, general corporate and administrative activities.

Net cash used in investing activities for the year ended December 31, 2022 increased to US$32.6 million, representing an increase of US$26.6 million, or 440%, from US$6.0 million for the year ended December 31, 2021. This increase was primarily due to: (i) increase in purchase of financial asset at FVTPL of US$15.0 million; and (ii) increase in purchase and deposits paid for property, plant and equipment of US$13.7 million.

Net cash from financing activities for the year ended December 31, 2022 decreased to US$15.9 million, representing a decrease of US$155.1 million, or 91%, from US$171.0 million for the year ended December 31, 2021. This decrease was primarily due to the reduction in the amount of equity fundraising. There is a reduction of proceeds from the exercise of over-allotment option of US$8.2 million and proceeds from issuance of Series A preferred shares of RNAimmune of US$14.6 million raised during the year ended December 31, 2022, from the issuance of Series E preferred shares of US$106.2 million and proceeds from the Listing of US$63.7 million during the year ended December 31, 2021.

Liquidity and Source of Funding and Borrowing

The Group's management monitors and maintains a level of cash and cash equivalents deemed adequate to finance the Group's operations. As at December 31, 2022, the Group's cash and cash equivalents were mainly denominated in United States Dollars, Renminbi and Hong Kong Dollars. The Group relies on equity and debt financing as the major source of liquidity. The Group had no bank borrowings as at December 31, 2022.

As at December 31, 2022, the Group had unutilized banking facilities of US$3.6 million.

As at December 31, 2022, the Group's cash and cash equivalents decreased to US$105.2 million from US$212.0 million as at December 31, 2021. The decrease was primarily resulted from the expansion of the Group's research and development activities, general corporate and administrative activities.

As at December 31, 2022, the current assets of the Group were US$117.2 million, including cash and cash equivalents of US$105.2 million and other current assets of US$12.0 million. As at December 31, 2022, the current liabilities of the Group were US$14.2 million, including trade and other payables of US$11.7 million, contract liability of US$0.7 million and lease liabilities of US$1.8 million.

As at December 31, 2022, the Group's net assets decreased to US$111.6 million from US$210.3 million as at December 31, 2021, primarily due to: (i) decrease in cash and cash equivalents from US$212.0 million as at December 31, 2021 to US$105.2 million as at December 31, 2022; and (ii) increase in financial liabilities at FVTPL from US$8.4 million as at December 31, 2021 to US$29.1 million as at December 31, 2022 primarily due to issuance of Series A preferred shares of RNAimmune in 2022, partly compensated by the increase in property, plant and equipment from US$7.9 million as at December 31, 2021 to US$24.1 million as at December 31, 2022 and purchase of financial asset at FVTPL of US$15.0 million in 2022.

Key Financial Ratios

The following table sets out the Group's key financial ratio as of the dates indicated:

	As at December 31,	
	2022	2021
	%	%
Current ratio	**824.1**	1,379.1

Note: Current ratio represents current assets divided by current liabilities as of the same date.

Material Investments

During the year ended December 31, 2022, the Group subscribed for an investment fund at a total subscription amount of US$15 million (exclusive of transaction costs) for investment purpose to provide the Group with an opportunity to enhance return by utilizing idle cash of the Group. The subscription also enables the Group to participate in the Hong Kong, U.S. and Mainland China securities markets while reducing direct investment risks by leveraging on the professional management of the investment fund and the investment manager. For further details, please refer to the announcements of the Company dated December 29, 2022 and January 12, 2023. The investment was classified as financial asset at FVTPL.

As at December 31, 2022, the Group had financial asset at FVTPL of US$15.0 million, representing over 5% of the Group's total assets. For the year ended December 31, 2022, the Group recognized a gain on changes in fair value of financial asset at FVTPL of US$4,000 and incurred subscription fee on the financial asset at FVTPL of US$450,000.

Material Acquisitions and Disposals

The Group did not have any material acquisitions or disposals of subsidiaries, associates (within the meaning of the Listing Rules) or joint ventures for the year ended December 31, 2022.

Pledge of Assets

As at December 31, 2022, the Group did not have any pledge of assets.

Contingent Liabilities

As at December 31, 2022, the Group did not have any material contingent liabilities.

Foreign Exchange Exposure

Certain bank balances, deposits and other receivables and trade and other payables denominated in foreign currency of respective group entities expose the Group to foreign currency risk.

The Group currently does not have a foreign currency hedging policy. The foreign exchange exposures is considered very minimal since majority of the Group's expenses is in U.S. dollar and this matches with the denomination of majority of our deposits. However, the management monitors foreign exchange exposure and will consider hedging significant foreign currency exposure should the need arise.

Employees and Remuneration

As at December 31, 2022, the Group had a total of 225 employees. The following table sets forth the total number of employees by function as of December 31, 2022:

	Number of Employees
Management	**15**
Research	**106**
Manufacturing	**35**
Clinical and Regulation	**15**
General and Administrative	**54**
Total	**225**

The total remuneration cost incurred by the Group for the year ended December 31, 2022 was US$21.6 million, as compared to US$24.7 million for the year ended December 31, 2021. The remuneration of the employees of the Group comprises salaries and other allowances, retirement benefit scheme contributions, share-based payment expense as well as performance and discretionary bonus.

As required by relevant laws and regulations, the Group participates in various employee social security plans for the employees that are administered by local governments, including housing provident fund, pension insurance, medical insurance, maternity insurance, work-related injury insurance and unemployment insurance.

The Company has adopted the Pre-IPO Equity Incentive Plan, the RSU Scheme and the Share Option Scheme to incentivize eligible employees, details of which are set out in the section headed "Report of the Directors — Pre-IPO Equity Incentive Plan, RSU Scheme and Share Option Scheme" in this annual report.

Directors and Senior Management

EXECUTIVE DIRECTORS

Dr. Yang Lu (*alias* Patrick Lu) (陸陽) ("**Dr. Lu**"), aged 67, is the founder, the Chairman of the Board, an executive Director, the President and the Chief Executive Officer of the Group. Dr. Lu has led the Company from an early discovery effort to an siRNA therapeutics product company, with multiple programs currently at clinical stage. Dr. Lu participates in the decision-making on major issues concerning the Company through the Board. Dr. Lu is a member of the Nomination Committee.

Prior to establishing the Group, Dr. Lu served as a lab head and senior scientist at Genetic Therapy, Inc., a Novartis company in the U.S. from April 1994 to April 2000, and worked at Digene Corporation in the U.S. from May 2000 to May 2001. In June 2001, Dr. Lu co-founded Intradigm Corp. in the U.S. and served as the executive vice president and led research and development until January 2007.

Historically, Dr. Lu had also served as a senior scientific advisor for the South China Biotechnology Center, Sun Yat-sen University in Guangzhou in 1998, an adjunct professor (Industry) of Nanjing University from September 2009 to September 2012, the member of the task force to study nanobiotechnology by the governor of State of Maryland in the U.S. in 2010, and an adjunct professor of the South China Science and Technology University from December 2012 to November 2014. Dr. Lu has authored and co-authored more than 50 scientific publications, including a senior author for a research article in Nature Medicine, and is the inventor and/or co-inventor of more than 70 patents.

In 2008, Dr. Lu established Suzhou Sirnaomics to conduct research and development for RNAi based therapeutics in China. In 2012, Dr. Lu established Guangzhou Sirnaomics to conduct formulation and manufacture of its novel RNAi therapeutic product. Dr. Lu has received multiple awards and grants for his innovation effort and entrepreneurship from Suzhou Industry Park, Suzhou Municipal Government, Jiangsu Provincial Government, Guangzhou Economic Development Zone and Guangzhou Municipal Government. Dr. Lu has also served as the primary investigator and received grants for the National 11–5 and 12–5 key scientific programs in China.

Dr. Lu obtained a bachelor's degree in biology, a master's degree and a doctoral degree in botany from Sun Yat-sen University (中山大學) in the PRC in January 1982, December 1984 and June 1987, respectively. He also conducted postdoctoral research in molecular genetics at the University of Maryland at College Park in the U.S. from December 1987 to April 1990, where he was awarded a National Science Foundation Postdoctoral Fellowship Grant, and postdoctoral research in cancer at Georgetown University Medical Center in the U.S. from April 1990 to March 1992.

Dr. Michael V. Molyneaux ("**Dr. Molyneaux**") aged 53, is an executive Director and the Chief Medical Officer of the Group. Dr. Molyneaux is responsible for the development of clinical operations, medical affairs and regulatory affairs; responsible for managing external vendors and consultants; and responsible for leading KOL engagement and activities to support multiple projects.

Dr. Molyneaux has unique experience of over 20 years in diverse clinical environments and industry, with proven results in clinical operations. Dr. Molyneaux currently holds the Board Certification granted by the College of Family Physicians of Canada and the American Board of Family Medicine Certification. Dr. Molyneaux is also a licensed physician in the State of California in the U.S.

Prior to joining the Group, Dr. Molyneaux served as an emergency room physician of Queen Elizabeth Hospital in Canada from 2002 to 2008. Dr. Molyneaux subsequently served at the Passavant Area Hospital in Illinois, U.S. as an emergency room physician and a medical director from 2008 to 2013. Dr. Molyneaux also served as a wound care physician of the Advance Wound Healing and Hyperbaric Center from 2008 to 2013. Dr. Molyneaux then served as the chief medical officer of Macrocure Inc. from March 2013 to November 2015.

Dr. Molyneaux obtained a bachelor's degree of science from the University of Prince Edward Island in Canada in May 1991 and a Doctor of Medicine degree from Dalhousie University in Canada in May 1996. He completed the residency training in family medicine of Dalhousie University in Canada in June 1998 and then obtained a master's degree of business administration in Washington University, St. Louis in the U.S. in May 2012.

Dr. David Mark Evans ("**Dr Evans**"), aged 60, is an executive Director and the Chief Scientific Officer of the Group. Dr. Evans is responsible for scientific, technological and Research operations in oncology and fibrosis. Dr. Evans served as an executive vice president of research and development of the Group from March 2008 to January 2013. Dr. Evans has rich experience in pharmaceutical research and focuses on the development of siRNA therapeutics in oncology and fibrosis.

Prior to joining the Group, Dr. Evans served as (i) the head of in vitro screening group at Frederick National Lab for Cancer Research, a federally funded research and development center sponsored by the National Cancer Institution in the U.S., from February 2013 to April 2018; (ii) the vice president of operations at Emerald Biostructures Inc. in the U.S. from February 2012 to December 2012; (iii) the senior director at Dharmacon Inc., a wholly owned subsidiary of Thermo Fisher Scientific Inc., a company listed on the New York Stock Exchange (stock code: TMO), in the U.S. in July 2016; and (iv) the senior investigator at the Translational Genomics Research Institute in the U.S. from June 2003 to December 2005. Dr. Evans also worked at Psychiatric Genomics Inc. in the U.S. in 2002.

Dr. Evans received a bachelor's degree of science in biochemistry, a degree of doctor in philosophy and a diploma in biochemistry from the Imperial College in the U.K. in August 1983, April 1988 and April 1988, respectively. He was also a postdoctoral scientist at the University of Maryland School of Medicine in the U.S. from November 1987 to December 1989 and a postdoctoral fellow at the Pharmacology Department of Saint Louis University School of Medicine in the U.S. from January 1990 to March 1993. Dr. Evans has authored and co-authored more than 20 scientific publications with the first one tracing back to 1986 and is the named inventor of more than 20 registered patents and patent applications.

Dr. Xiaochang Dai (戴曉暢) ("**Dr. Dai**"), aged 60, is an executive Director and the Scientific and Strategic Director of the Group. He was appointed as a non-executive Director and was re-designated to an executive Director with effect from July 19, 2022. Dr. Dai participates in the formulation of the general corporate business plans, strategies and major decisions of the Company through the Board. Dr. Dai is a member of the Remuneration Committee.

Dr. Dai currently serves as a professor at School of Chemical Science and Engineering, Yunnan University since 2000, the executive director of Value Measure Investments Limited since January 2011 and the executive director of Trinity Power Limited since March 2012, respectively. Dr. Dai also serves as a director of Shenzhen Yunda Technology Industry Co., Ltd. (深圳市雲大科技產業有限公司) since August 2001.

Prior to joining the Group, Dr. Dai served as the executive director, director of scientific advisory committee, director of postdoctoral workstation, chief scientist at Yunda Technology Co., Ltd. (雲大科技股份有限公司), a company used to be listed on Shanghai Stock Exchange (stock code: 600181) and delisted since June 1, 2007, from January 2000 to December 2001, the chairman and general manager of Dalian High-tech Biopharmaceutical Co., Ltd. (大連高新生物製藥有限公司) in 2001, the chairman of Yunnan Walvax Biopharmaceutical Co., Ltd. (雲南沃森生物製藥有限公司), the predecessor of Walvax Biotechnology Co., Ltd. (雲南沃森生物技術股份有限公司), a company listed on Shenzhen Stock Exchange (stock code: 300142) from 2002 to 2004, the managing director of Kunming Baker Norton Pharmaceutical Co., Ltd. (昆明貝克諾頓製藥有限公司) in 2005, and the president of Kunyao Group Co., Ltd. (昆藥集團股份有限公司), a company listed on Shanghai Stock Exchange (stock code: 600422), from September 2015 to December 2017.

Dr. Dai obtained a bachelor's degree in chemistry in School of Chemistry, Yunnan Normal University in the PRC in July 1983, a master's degree in biochemistry in Shanghai Institute of Biochemistry, Chinese Academy of Sciences in the PRC in July 1988, and a doctoral degree in chemistry from The Scripps Research Institute in San Diego, California, U.S. in September 1998, respectively. He also conducted postdoctoral research in the laboratory of John N. Ablelson, Division of Biology and Biological Engineering, California Institute of Technology in the U.S. from November 1998 to December 1999.

NON-EXECUTIVE DIRECTORS

Mr. Mincong Huang (黃敏聰) ("**Mr. Huang**"), aged 34, is a non-executive Director. Mr. Huang participates in the formulation of the general corporate business plans, strategies and major decisions of the Company through the Board. Mr. Huang is a member of the Audit Committee.

Mr. Huang has rich experience in investment management. Mr. Huang currently serves as the executive vice president of Shenzhen Oriental Land Group Co., Ltd. (深圳市東方置地集團有限公司) since March 2015, the general manager of Shenzhen Oriental Ruijia Investment Partnership Enterprise Limited Partnership (深圳市東方瑞佳投資合夥企業有限合夥) since July 2016 and the director of Huang Family Capital since January 2019. Mr. Huang obtained his bachelor's degree in commerce from Macquarie University Australia in September 2013.

Mr. Jiankang Zhang (章建康) ("**Mr. Zhang**"), aged 65, is a non-executive Director. Mr. Zhang participates in the formulation of the general corporate business plans, strategies and major decisions of the Company through the Board.

Mr. Zhang has over 40 years of professional experience in biotechnology industry and global public health field. From March 2017 to August 2019, Mr. Zhang worked as the executive vice president and chief operating officer in Ustar Biotechnologies (Hangzhou) Limited (杭州優思達生物技術有限公司). Prior to that, Mr. Zhang worked at the Program for Appropriate Technology in Health (PATH), a global non-profit health organization as the chief representative in China from January 2007 to May 2016. From July 1999 to October 2006, he served as the general manager of Haemonetics China (美國血液技術公司). He was an editor of the International Journal of Biologicals from January 1982 to August 1990, which was operated by Shanghai Institute of Biological Products (上海生物製品研究所), where Mr. Zhang was the medical information specialist, project manager, assistant managing director and the executive deputy managing director for operation from January 1982 to June 1999 successively.

Mr. Zhang concurrently holds the following positions outside the Company:

- independent director of Shanghai Serum Bio-technology Co., Limited (上海賽倫生物技術股份有限公司) since August 2018;
- vice president and director of Walvax Biotechnology Co., Ltd. (雲南沃森生物技術股份有限公司), a company listed on Shenzhen Stock Exchange (stock code: 300142) since June 2020; and
- president and director of Shanghai Zerun Biotechnology Co., Ltd. (上海澤潤生物科技有限公司) since June 2020.

Mr. Zhang obtained his master's degree of business administration from China Europe International Business School in April 2000. He obtained a master's degree in library and information sciences majored in medicine in January 1992 from Dominican University in Illinois, the U.S. He graduated from Fudan University in the PRC with a bachelor's degree of arts in French language and literature in January 1982. He also obtained a diploma in public health from Shanghai Health Bureau in September 1977. He obtained a professional title of associate research fellow in January 1995 from the former Ministry of Health, the PRC.

INDEPENDENT NON-EXECUTIVE DIRECTORS

Dr. Cheung Hoi Yu (于常海) ("**Dr. Yu**"), *JP*, aged 68, is an independent non-executive Director. Dr. Yu participates in the decision-making on major issues concerning the Company through the Board. Dr. Yu is a member of the Remuneration Committee and the Nomination Committee.

Dr. Yu has rich experience in scientific research and business operations. In addition to his position in the Group, Dr. Yu also serves as (i) a director of CR-CP Life Science Fund Management Limited since May 2021; (ii) a member of the Biotech Advisory Panel of The Stock Exchange of Hong Kong Limited since April 2018; (iii) a member of the board of trustees of Gordon Research Conference, a group of international scientific conferences covering biological, chemical and physical sciences and the related technologies, since July 2014; (iv) a director at Asian Fund for Cancer Research since November 2012; and (v) a member of the Technology and Innovation Subsector of the Election Committee of Hong Kong since October 2021. Dr. Yu served as the chairman of the Hong Kong Council for Testing and Certification from January 2016 to December 2021. In addition to that, Dr. Yu serves as a professor at the Neuroscience Research Institute (北京大學神經科學研究所) at Peking University (北京大學) since January 2002.

Dr. Yu founded the Hong Kong Biotechnology Organization (HKBIO) in September 2009 and the Guangdong — Hong Kong — Macau Greater Bay Area Biotechnology Alliance in December 2017, and has been serving as the president. Dr. Yu also founded Hong Kong DNA Chips Limited, presently Hai Kang Life Corporation Limited, in May 1999, and has been serving as the president of the board and chief executive officer. Dr. Yu was appointed as a Justice of the Peace in July 2016.

Dr. Yu obtained a bachelor's degree of science, a master's degree of science, and a doctoral degree of philosophy, from the University of Saskatchewan in Canada, in May 1976, October 1980 and May 1984, respectively. Dr. Yu has published more than 170 scientific papers and is the inventor of more than 70 global patents.

Mr. Fengmao Hua (華風茂) ("**Mr. Hua**"), aged 54, is an independent non-executive Director. Mr. Hua participates in the decision-making on major issues concerning the Company through the Board. Mr. Hua is the chairperson of the Nomination Committee and a member of the Audit Committee.

In addition to his position at the Group, Mr. Hua serves as the chairman of the board of China Finance Strategies Investment Holdings since August 2014, and as independent non-executive director of (i) Lepu Biopharma Co., Ltd., a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 2157) since December 2021; (ii) Ferretti S.p.A., a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 9638) since December 2021; and (iii) Biocytogen Pharmaceuticals (Beijing) Co., Ltd., a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 2315) since September 2022. Mr. Hua has more than 15 years of experience in the investment banking industry. Mr. Hua previously worked at a number of investment banking firms where he was mainly responsible for corporate finance, public offering, reorganization, merger and acquisitions as well as other financial consulting work, the details of which are set forth below:

- prior to August 2005, Mr. Hua held various positions in various investment banks, including CLSA Capital Market Limited and Standard Chartered Securities Hong Kong Limited;

- from April 2008 to August 2014, Mr. Hua served as the head of direct investment department and the head of investment banking department in BOCOM International Holdings Company Limited;

- from July 2018 to June 2021, Mr. Hua served as an executive director and the chief financial officer of Viva Biotech Holdings, a company listed on the Hong Kong Stock Exchange (stock code: 1873); and

- he served as the chief executive officer and as an executive director of Chempartner Pharmatech Co., Ltd., a company listed on Shenzhen Stock Exchange (stock code: 300149), from July 2021 to October 2022 and from August 2021 to October 2022, respectively.

Mr. Hua obtained his bachelor's degree in English from Shanghai International Studies University (上海外國語大學) in the PRC in July 1989. He obtained his master's degree in business administration from the International University of Japan in June 1997 in Japan.

Ms. Monin Ung (黃夢瑩) ("**Ms. Ung**"), aged 54, is an independent non-executive Director. Ms. Ung participates in the decision-making on major issues concerning the Company through the Board. Ms. Ung is the chairperson of the Remuneration Committee.

In addition to her position at the Group, Ms. Ung also serves as a director at Adluux AI Group Limited operated out of Germany since November 2019. Ms. Ung is the legal adviser to the Greater Bay Area Biotech Alliance since June 2020 and she founded the Oxford Futurists group for futuristic forum discussions. Ms. Ung founded Mung7Art in January 2021, which is an art collective of digital artists across the world. Ms. Ung established the boutique legal practice of MUNG (黃夢瑩律師事務所) in July 2018 and has been serving as the managing partner since then. Prior to that, Ms. Ung held several positions in U.K. and U.S. international law firms where she advised clients on corporate finance and private equity transactions and intellectual property disputes.

Ms. Ung received a bachelor's degree of law (LL.B.) from Brunel University in the U.K. in July 1991, a master's degree of law (LL.M.) in Chinese and Comparative Law from the City University of Hong Kong in November 2001, and has been on the executive master's degree of business administration (EMBA) from Said Business School at the University of Oxford since January 2017. Ms. Ung became an advocate and solicitor in Singapore in May 1994, and a solicitor in Hong Kong in May 1997. She is also a recipient of the Hong Kong Chief Executive's Commendation for Community Service Award in July 2015.

Ms. Shing Mo Han, Yvonne (*alias* **Mrs. Yvonne Law**) **(盛慕嫻)** ("**Mrs. Yvonne Law**"), *BBS, JP*, aged 67, is an independent non-executive Director. Mrs. Yvonne Law participates in the decision-making on major issues concerning the Company through the Board. Mrs. Yvonne Law is the chairperson of the Audit Committee.

In addition to her position at the Group, Mrs. Yvonne Law currently serves as the independent non-executive director of (i) China Resources Pharmaceutical Group Limited, a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 3320) since August 2017; (ii) CSSC (Hong Kong) Shipping Company Limited, a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 3877) since May 2019; (iii) AEON Credit Service (Asia) Company Limited, a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 900) since June 2020; and (iv) China Merchants Energy Shipping Company Limited, a company listed on the Shanghai Stock Exchange (stock code: 601872) since October 2020.

Mrs. Yvonne Law's current public appointments include serving as a member of the Board of Governors of EXCEL (Extension and Continuing Education for Life) of The Hong Kong Academy for Performing Arts (HKAPA) since January 2023, as a member of the audit committee of HKAPA since September 2022 and as the co-opted chairman of the Main Tender Board for HKAPA since January 2022. She has been appointed to serve on the Board of Trustees of the Hong Kong Polytechnic University Superannuation Fund since May 2018, and a court member of the Hong Kong Polytechnic University since April 2016. She also serves as the advisor and finance committee member of Our Hong Kong Foundation since November 2015.

In the past, her appointments also include being a member of the 10th, 11th and 12th Jiangsu Provincial Committee of the Chinese People's Political Consultative Conference from January 2008 to January 2023, the treasurer of the Council of the Hong Kong Academy for Performing Arts, Home Affairs Bureau, from January 2016 to December 2021, the chairperson of the Hospital Governing Committee of Shatin Hospital from April 2011 to March 2017, and a member of the Hong Kong Hospital Authority from December 2007 to November 2013.

Mrs. Yvonne Law was appointed as a Justice of the Peace in July 2013 and awarded the Bronze Bauhinia Star by the Hong Kong government in June 2017. She was named as one of the China's National Hundred Outstanding Women Entrepreneurs by China Association of Women Entrepreneurs (中國女企業家協會) in October 2006.

Mrs. Yvonne Law was a partner at Deloitte Touche Tohmatsu/Deloitte China from April 1990 to May 2016. She was admitted as an associate of the Hong Kong Institute of Certified Public Accountants (formerly known as the Hong Kong Society of Accountants) in April 1980, a fellow member of the Chartered Association of Certified Accountants in December 1984 and an associate member and a fellow member of the Institute of Chartered Secretaries and Administrators in October 1980 and September 2001, respectively. She is also a founding member and past president of the Association of Women Accountants Hong Kong.

Mrs. Yvonne Law obtained a higher diploma in accountancy from the Hong Kong Polytechnic (currently known as The Hong Kong Polytechnic University) in October 1977, and she was conferred University Fellow of The Hong Kong Polytechnic University in the year 2016/2017.

SENIOR MANAGEMENT

Dr. Yang Lu (*alias* **Patrick Lu**) **(陸陽)**, aged 67, is the founder, the Chairman of the Board, an executive Director, the President and the Chief Executive Officer of the Group. See "Executive Directors" in this section for the biographical details of Dr. Lu.

Dr. Michael V. Molyneaux, aged 53, is an executive Director and the Chief Medical Officer of the Group. See "Executive Directors" in this section for the biographical details of Dr. Molyneaux.

Dr. David Mark Evans, aged 60, is an executive Director and the Chief Scientific Officer of the Group. See "Executive Directors" in this section for the biographical details of Dr. Evans.

Dr. Xiaochang Dai (戴曉暢), aged 60, is an executive Director and the Scientific and Strategic Director of the Group. See "Executive Directors" in this section for the biographical details of Dr. Dai.

Dr. Edward Yongxiang Wang ("**Dr. Wang**"), aged 70, is the Chief Production Officer of the Group. Prior to joining the Group, Dr. Wang served as (i) the senior scientist in the National Cancer Institute — Biopharmaceutical development program in the U.S. from January 2001 to December 2004; (ii) the technology director of Charter Medical Ltd. from January 2005 to December 2006; (iii) the deputy director of engineering in the US AERAS Global Tuberculosis Vaccine Foundation R&D Base (a non-profit organization affiliated with the Bill & Melinda Gates Foundation) from May 2007 to October 2011; (iv) the technology consultant of Parexel International in Ben Venue Laboratory of Boehringer Ingelheim from October 2011 to October 2012; (v) the vice president of technical operations at Wuxi Biological Base of WuXi AppTec Co., Ltd., a company listed on the Hong Kong Stock Exchange (stock code: 2359), from October 2012 to February 2014; (vi) the director of vaccine production in Newlink Genetics Inc. for a special project to fight the Ebola Epidemic from August 2014 to June 2016; and (vii) the deputy general manager at Shanghai Furen Medicine R&D Co., Ltd. (上海輔仁醫藥研發有限公司) from October 2016 to June 2018.

Dr. Wang received his bachelor's degree of biophysics in University of Science and Technology of China in the PRC in November 1976, his master's degree of biochemistry in Tokyo Institute of Technology in Japan in September 1983, and his doctoral degree of technology at the Department of Chemical Engineering in the Faculty of Engineering and Materials Science at the Helsinki University of Technology in Finland in December 1995.

Mr. Yip Wing Kei (*alias* **Nigel Yip**) **(葉永基)** ("**Mr. Yip**"), aged 37, is the vice president of corporate finance and has been appointed as the Chief Financial Officer of the Group, re-designated from the position of Chief Financial Officer, China with effect from November 15, 2022, and the Chief Financial Officer of RNAimmune. Mr. Yip has over 14 years of experience in strategic planning, financial analysis and management, merger and acquisition, private equity investment, fundraising and internal control. Mr. Yip joined the Group in October 2018 as the vice president of corporate finance and was appointed as the Chief Financial Officer, China in December 2020.

Prior to joining the Group, Mr. Yip served as an analyst in the merger and acquisition department of KPMG Corporate Finance Limited from August 2008 to April 2010, and an associate in the investment banking division of Rothschild (Hong Kong) Limited from May 2010 to August 2015. Mr. Yip worked in Credit Suisse (Hong Kong) Limited from October 2015 to October 2018 and served as an associate in Investment Banking Division and a vice president in Ultra High Net Worth Entrepreneur Coverage Department.

Mr. Yip holds a Master of Business Administration (MBA) degree from the University of Chicago Booth School of Business and a Bachelor of Economics and Finance degree from the University of Hong Kong.

Ms. Yun Zhang (*alias* **Monica Zhang**) **(張蘊)**, aged 37, has been appointed as the Chief Executive Officer, China of the Group, re-designated from the position of Chief Operating Officer, China with effect from November 15, 2022, and is the board secretary of the Group, and the joint company secretary of the Company. Ms. Zhang has over 14 years of international experience in strategic management, fundraising, operation, marketing, business development and corporate governance. Ms. Zhang joined the Group in November 2015 as the deputy General Manager of Guangzhou Sirnaomics, and then served as the executive deputy General Manager of Guangzhou Sirnaomics from January 2017 to November 2020. Ms. Zhang has been serving as the board secretary of the Group since March 2018, and was appointed as the Chief Operating Officer, China of the Group in November 2020.

Prior to joining the Group, Ms. Zhang worked at the National Foundation for Cancer Research (NFCR) in Maryland, the U.S. from July 2009 to October 2015, with her last position serving as a program manager. Ms. Zhang is actively involved in the biopharmaceutical sectors in the U.S. and the PRC, serving as a director of the board and the vice president of marketing and communication of the Chinese Biopharmaceutical Association (CBA) in Maryland, the U.S. since January 2013, and the deputy general secretary of the Guangzhou Biotechnology Organization (GZ-BIO) in the PRC since August 2017. Ms. Zhang is an active member of the BayHelix Group.

Ms. Zhang holds a Bachelor of English Studies (Translation and Interpretation) from the Shanghai University of International Business and Economics and a Master of International Affairs from the American University in Washington, D.C., U.S.

JOINT COMPANY SECRETARIES

Ms. Yun Zhang (*alias* **Monica Zhang**) **(張蘊)**, aged 37, is the Chief Executive Officer, China of the Group and the joint company secretary of the Company. See "Senior Management" in this section for the biographical details of Ms. Zhang.

Mr. Leung Ting Cheung (*alias* **Leo Leung**) **(梁庭彰)**, aged 39, is the joint company secretary of the Company. Mr. Leung has over 16 years of experience in accounting and corporate compliance. From January 2006 to January 2008, he worked as an audit assistant at Horwath Hong Kong CPA Limited (now known as BDO Limited), a company which engages in the provision of assurance services. He joined KPMG as an accountant in January 2008 and was promoted to assistant audit manager in July 2008. He was later promoted to audit manager in October 2011 and left KPMG in May 2012. Thereafter, from May 2012 to August 2015, he worked as a senior manager at World Smart Accounting Services Limited, a company which engages in the provision of accountancy and company secretarial services. From January 2016 to November 2018, he worked as a financial consultant for Sun Cheong Creative Development Holdings Limited, a company used to be listed on the Hong Kong Stock Exchange (stock code: 1781). From November 2018 to April 2020, he worked as the financial controller and company secretary of EuroEyes International Eye Clinic Limited, a company listed on the Hong Kong Stock Exchange (stock code: 1846).

Mr. Leung has been a member and a fellow of the Hong Kong Institute of Certified Public Accountants since February 2010 and May 2017, respectively. Mr. Leung obtained his bachelor's degree in commerce with a major in accounting and finance from the University of Auckland, New Zealand in May 2004. He further obtained a graduate diploma in commerce with commercial law specialization in May 2005 from the same university.

Report of the Directors

The Board is pleased to present this report of the Directors together with the audited consolidated financial statements of the Group for the year ended December 31, 2022.

GENERAL INFORMATION

The Company was incorporated in the Cayman Islands on October 15, 2020 as an exempted company with limited liability.

PRINCIPAL ACTIVITIES

We are an RNA therapeutics biopharmaceutical company with product candidates in preclinical and clinical stages that focuses on the discovery and development of innovative drugs for indications with medical needs and large market opportunities.

BOARD OF DIRECTORS

The Board consists of ten Directors, including four executive Directors, two non-executive Directors and four independent non-executive Directors.

The Directors during the year ended December 31, 2022 and up to the date of this annual report were:

Executive Directors

Dr. Yang Lu (*alias* Patrick Lu) *(Chairman of the Board, President and Chief Executive Officer)*
Dr. Michael V. Molyneaux *(Chief Medical Officer)*
Dr. David Mark Evans *(Chief Scientific Officer)*
Dr. Xiaochang Dai *(re-designated from a non-executive Director effective from July 19, 2022) (Scientific and Strategic Director)*

Non-executive Directors

Mr. Mincong Huang
Mr. Jiankang Zhang
Mr. Da Liu *(resignation effective from September 30, 2022)*
Mr. Jiajun Lai *(resignation effective from August 31, 2022)*

Independent Non-executive Directors

Dr. Cheung Hoi Yu, *JP*
Mr. Fengmao Hua
Ms. Monin Ung
Ms. Shing Mo Han, Yvonne (*alias* Mrs. Yvonne Law), *BBS, JP*

In accordance with Article 16.2 of the amended and restated Articles of Association of the Company, any Director appointed by the Board to fill a casual vacancy or as an addition to the Board shall hold office only until the next following general meeting of the Company and shall then be eligible for re-election at that meeting.

In accordance with Article 16.19 of the amended and restated Articles of Association of the Company, at every annual general meeting one-third of the Directors for the time being (or, if their number is not a multiple of three, then the number nearest to but not less than one-third) shall retire from office by rotation provided that every Director (including those appointed for a specific term) shall be subject to retirement by rotation at least once every three years. A retiring Director shall retain office until the close of the meeting at which he retires and shall be eligible for re-election thereat. The Company at any annual general meeting at which any Directors retire may fill the vacated office by electing a like number of persons to be Directors.

Accordingly, at the forthcoming annual general meeting to be held on June 28, 2023, Dr. Yang Lu, Mr. Mincong Huang, Dr. Cheung Hoi Yu and Ms. Monin Ung shall retire from office and have offered themselves for re-election at the annual general meeting. Details of the Directors to be re-elected at the forthcoming annual general meeting are set out in the circular to Shareholders of the Company dated April 27, 2023.

Biographical Details of Directors and Senior Management

Biographical details of Directors and senior management of the Group are set out in the section headed "Directors and Senior Management" on pages 32 to 41 of this annual report.

Changes in Information of Directors

Save as disclosed in this annual report, there has been no change in information required to be disclosed pursuant to Rule 13.51B(1) of the Listing Rules during the year ended December 31, 2022.

Confirmation of Independence of Independent Non-Executive Directors

The Company has received an annual confirmation of independence pursuant to Rule 3.13 of the Listing Rules from each of the independent non-executive Directors. The Company considers such Directors to be independent.

RESULTS

The results of the Group for the year ended December 31, 2022 are set out in the consolidated statement of profit or loss and other comprehensive income on page 167 of this annual report.

Report of the Directors

BUSINESS REVIEW

A fair review of the business of the Group, including an analysis of the Group's financial performance, important events affecting the Group that have occurred since the end of the Reporting Period and an indication of likely future developments in the Group's business is set out in the sections headed "Chairman's Statement" and "Management Discussion and Analysis" of this annual report. These discussions form part of this report of the Directors.

PRINCIPAL RISKS AND UNCERTAINTIES

The following list is a summary of certain principal risks and uncertainties involved in the Group's operations, some of which are beyond our control:

Risks Relating to the Research and Development of Our Drug Candidates

- Our business and financial prospects depend substantially on the success of our clinical-stage and preclinical-stage drug candidates. If we are unable to successfully complete clinical development, obtain regulatory approvals or achieve commercialization for our drug candidates, or if we experience significant delays or cost overruns in doing any of the foregoing, our business and competitive position could be materially and adversely affected.

- Clinical drug development involves a costly and time-consuming process with an uncertain outcome, and we may encounter unexpected difficulties executing our clinical trials.

Risks Relating to Regulatory Approvals and Government Regulations

- All material aspects of the research, development and commercialization of biopharmaceutical products are heavily regulated, and the approval process is usually lengthy, costly and unpredictable. Any failure to comply with existing or future regulations and industry standards or any adverse actions by drug approval authorities against us could negatively impact our reputation and our business, financial condition, results of operations and prospects.

- The regulatory approval processes of the NMPA, the FDA and other comparable regulatory authorities are time-consuming and unpredictable. If we are unable to obtain without undue delay any regulatory approvals for our drug candidates in our targeted markets, our business may be subject to actual or perceived harm.

Risks Relating to Manufacturing of Our Drug Candidates

- We are exposed to various supply chain risks as we depend on a stable, adequate and quality supply of raw materials, technical services, equipment and infrastructure construction services, and any price increases or interruptions of such supply may have a material adverse effect on our business.

- Changes in U.S. and international trade policies, particularly with regard to China, may cause significant disruptions to our drug candidate manufacturing and other operations.

Risks Relating to Commercialization and Business Development of Our Drug Candidates

- The commercialization and business development of our drug candidates might not be in our full control.

Risks Relating to Our Financial Position and Need for Additional Capital

- We incurred net losses in the past and anticipate that we will continue to incur net losses for the foreseeable future.

- We had net cash outflow from operating activities since our inception. We may need to obtain additional financing to fund our operations. If we are unable to obtain such financing, we may be unable to complete the development and commercialization of our major drug candidates.

Risks Relating to Our Intellectual Property Rights

- If we are unable to obtain and maintain patent and other intellectual property protection for our drug candidates, or if the scope of such intellectual property rights obtained is not sufficiently broad, third parties could develop and commercialize products and technologies similar or identical to ours and compete directly against us, and our ability to successfully commercialize any product or technology may be adversely affected.

- Even if we are able to obtain patent protection for our drug candidates, the term of such protection, if any, is limited, and third parties could develop and commercialize products and technologies similar or identical to ours and compete directly against us after the expiration of our patent rights, if any, which would have a material adverse effect on our ability to successfully commercialize any product or technology.

Risks Relating to Our Reliance on Third Parties

- We work with various third parties to develop our drug candidates and may have limited control over them. If these third parties fail to duly perform their contractual obligations or meet expected timelines, we may be unable to obtain regulatory approvals for, or commercialize, our drug candidates, and our business, financial condition and results of operations could be materially and adversely affected.

- We have entered into collaborations with our partners and may form or seek additional collaborations or strategic alliances or enter into additional licensing arrangements in the future. We may not realize any or all benefits of such alliances or licensing arrangements, and disputes may arise between us and our current or future collaboration partners.

Risks Relating to Our Operations

- The loss of any key members of our senior management team or our inability to attract, retain and motivate highly qualified management, clinical and scientific personnel could delay or prevent the successful development of our drug candidates and result in a material and adverse effect on our business and results of operations.

- We are subject to the risks of doing business in multiple jurisdictions.

Risks Relating to Doing Our Business in the PRC

- We have historically received government grants and subsidies for our research and development activities and enjoyed preferential tax treatment in the past. Expiration of, or changes to, these incentives or policies, or our failure to satisfy any condition for these incentives, would have an adverse effect on our results of operations.

- The biopharmaceutical industry in the PRC is highly regulated and such regulations are subject to change, which may affect approvals and commercialization of our drug candidates.

- There are uncertainties regarding the interpretation and enforcement of Chinese laws, rules and regulations.

- Changes in the political and economic policies of the Chinese government may materially and adversely affect our business, financial condition, results of operations and prospects and may result in our inability to sustain our growth and expansion strategies.

ENVIRONMENTAL POLICIES AND PERFORMANCE

The Group is committed to fulfilling social responsibility, promoting employee benefits and development, protecting the environment and giving back to community and achieving sustainable growth.

Further details of the Company's environmental policies and performance are set out in the section headed "Environmental, Social and Governance Report" in this annual report.

COMPLIANCE WITH RELEVANT LAWS AND REGULATIONS

As far as the Board and management are aware, the Group has complied in all material aspects with the relevant laws and regulations that have a significant impact on the business and operation of the Group. During the year ended December 31, 2022, there was no material breach of, or non-compliance with, applicable laws and regulations by the Group.

KEY RELATIONSHIPS WITH STAKEHOLDERS

The Group recognizes the importance of maintaining a good relationship with its stakeholders, including Shareholders, employees, suppliers, medical experts, patients and other business associates are key to the Group success. The Group will continue to ensure effective communication and maintain good relationship with each of its key stakeholders.

An account of the Company's key relationships with its major stakeholders is set out in the section headed "Environmental, Social and Governance Report" in this annual report.

PRE-IPO EQUITY INCENTIVE PLAN, RSU SCHEME AND SHARE OPTION SCHEME

Pre-IPO Equity Incentive Plan

On January 21, 2021, the Company adopted the Pre-IPO Equity Incentive Plan to, among others, attract and retain outstanding individuals to serve as directors, officers, employees, consultants, and advisors to the Company. Each share option granted under the Pre-IPO Equity Incentive Plan represents the right to purchase the Shares of the Company at a pre-determined exercise price, subject to vesting and other conditions provided for under the Pre-IPO Equity Incentive Plan. The Company issued and allotted 12,770,000 Shares in aggregate to a professional trustee which holds the Shares on trust under the Pre-IPO Equity Incentive Plan.

The principal terms of the Pre-IPO Equity Incentive Plan are set out below. The terms of the Pre-IPO Equity Incentive Plan were not subject to the provisions of Chapter 17 of the Listing Rules when it was adopted.

(1) Purpose

The purpose of the Pre-IPO Equity Incentive Plan is to attract and retain outstanding individuals to serve as directors, officers, employees, consultants, and advisors to our Group.

(2) Participants

The participants of the Pre-IPO Equity Incentive Plan shall be: (i) a director, officer or employee of the Group, or (ii) an individual that has been engaged to be a director, officer or employee of the Group, or (iii) a consultant or advisor who provides services to the Group, or (iv) an individual that has been engaged to provide services to the Group.

(3) Administration

The compensation committee of the Board (or such successor committee with the same or similar authority) and full power and authority to administer in its sole discretion the Pre-IPO Equity Incentive Plan, including the authority to: (i) interpret the provisions of the Pre-IPO Equity Incentive Plan; (ii) prescribe, amend and rescind rules and regulations relating to the Pre-IPO Equity Incentive Plan; (iii) correct any defect, supply any omission, or reconcile any inconsistency in carrying into effect the Pre-IPO Equity Incentive Plan; and (iv) make all other determinations necessary or advisable for the administration of the Pre-IPO Equity Incentive Plan.

A majority of the members of the compensation committee of the Board constitutes a quorum, and must make all determinations of the committee. The compensation committee of the Board may make any determination under the Pre-IPO Equity Incentive Plan without notice or meeting by a writing that a majority of the committee members have signed. All committee determinations are final and binding. If, at any time, the compensation committee of the Board is not in existence, the Board must administer the Pre-IPO Equity Incentive Plan and all references to the compensation committee of the Board in the Pre-IPO Equity Incentive Plan are deemed to mean the Board.

To the extent applicable law permits, the Board may delegate to another committee of the Board or to one or more officers of the Company any or all of the authority and responsibility of the compensation committee of the Board.

(4) Awards

An award means a grant of options, share appreciation rights or restricted shares.

(5) Discretionary grant of awards

Subject to the terms and conditions of the Pre-IPO Equity Incentive Plan, the compensation committee of the Board has full power and authority in its sole discretion to: (i) designate from time to time the participants to receive awards under the plan; (ii) determine the type or types of awards to be granted to each participant; (iii) determine the number of shares with respect to which an award relates; and (iv) determine any terms and conditions of an award. Awards under the plan may be granted either alone or in addition to, in tandem with, or in substitution for any other award (or any other award granted under another plan of the Group). The compensation committee's designation of a participant to receive an award in a given year does not require the compensation committee to designate such person to receive an award in any other year.

(6) Shares reserved

An aggregate of 12,770,000 Shares were reserved for issuance under the Pre-IPO Equity Incentive Plan.

(7) Replenishment of shares

If an award lapses, expires, terminates, or is canceled without the issuance of shares or payment of cash under the award, then the shares subject to or reserved for in respect of such award, or the shares to which such award relates, may again be used for new awards, including issuance pursuant to incentive share options. If shares are delivered to (or withheld by) the Company in payment of the exercise price or withholding taxes of an award, then such shares may be used for new awards under the Pre-IPO Equity Incentive Plan, including issuance pursuant to incentive share options. If shares are issued under an award and if the Company subsequently reacquires them pursuant to rights reserved upon the issuance of the shares, then such shares may be used for new awards under the plan but excluding issuance pursuant to incentive share options.

(8) Options

Subject to the terms and conditions of the Pre-IPO Equity Incentive Plan, the compensate committee of the Board must determine all terms and conditions of each option, including but not limited to:

(i) whether the option is an incentive stock option or a nonqualified stock option;

(ii) the number of Shares subject to the option;

(iii) the exercise price per share, which must not be less than the fair market value of a share as determined on the date of grant; provided, however, that an incentive stock option granted to a 10% owner-employee must have an exercise price that is at least 110% of the fair market value of a share on the date of grant;

(iv) the terms and conditions of exercise;

(v) unless the applicable option award or other applicable share option agreement (which has been approved by the compensation committee of the Board) expressly provides otherwise, the option, subject to the holder's continued employment or service by or for the Group, will vest 25% on the first anniversary of the date of grant and will vest in 1/36 portions for the then next 36 months thereafter on the last business day of each calendar month;

(vi) unless the applicable option award or other applicable share option agreement (which has been approved by the compensation committee of the Board) expressly provides otherwise, and notwithstanding anything else to the contrary in section (8)(v) hereof, the option may vest, in full, in the sole discretion of the compensation committee of the Board, upon a change of control of the Group;

(vii) the applicable option award or other applicable share option agreement (which has been approved by the compensation committee of the Board) expressly provides otherwise, the expiration or termination date of the option will be the fifth anniversary of the date of grant of the option, provided, however, that each incentive stock option granted to a 10% owner-employee must terminate no later than the fifth anniversary of the date of grant;

(viii) upon a participant's death, the option may be exercised by the person or persons to whom such participant's rights under the option pass by will or by applicable law or, if no such person has such rights, by his or her executor or administrator.

(9) Share appreciation rights

Subject to the terms and conditions of the Pre-IPO Equity Incentive Plan, the compensation committee of the Board must determine all terms and conditions of each share appreciation right, including but not limited to:

(i) the number of shares to which the share appreciation right relates;

(ii) the grant price, provided, however, that the grant price must not be less than the fair market value of the shares subject to the share appreciation right as determined on the date of grant;

(iii) the terms and conditions of exercise or maturity;

(iv) the termination date, provided, however, that a share appreciation right must terminate no later than the fifth anniversary of the date of grant;

(v) whether the share appreciation right will be settled in cash, shares, or a combination thereof;

(vi) upon a participant's death, the share appreciation right may be exercised by the person or persons to whom such participant's rights under the share appreciation right pass by will or by applicable law or, if no such person has such rights, by his or her executor or administrator.

(10) Restricted shares

Subject to the terms and conditions of the Pre-IPO Equity Incentive Plan, the compensation committee of the Board must determine all terms and conditions of each award of restricted shares, including but not limited to:

(i) the number of shares to which the award relates;

(ii) the period of time over which, and/or the criteria or conditions that must be satisfied so that, the risk of forfeiture and/or restrictions on transfer imposed on the restricted shares will lapse;

(iii) with respect to awards of restricted shares, the manner of registration of certificates for such shares, and whether to hold in escrow such certificates pending lapse of the risk of forfeiture and/or restrictions on transfer, or to issue such shares with an appropriate legend referring to such restrictions;

(iv) with respect to awards of restricted shares, whether dividends paid with respect to such shares are paid immediately or held in escrow or otherwise defined, and whether such dividends are subject to the same terms and conditions as the awards to which they related, all in a manner to avoid giving rise to additional taxes under US Tax Code Section 409A.

Details of the movements of the outstanding share options granted under the Pre-IPO Equity Incentive Plan during the year ended December 31, 2022 are as follows:

	Date of grant	Expiry date	Exercise price per Share (US$)	Number of share options					
				At January 1, 2022	Granted during the year	Exercised during the year	Cancelled during the year	Lapsed during the year	At December 31, 2022
Directors									
Dr. Yang Lu									
Tranche 2017–1	September 1, 2017	August 30, 2022	1.50	200,000	—	(200,000)	—	—	—
Tranche 2018–1	August 28, 2018	December 30, 2022	1.60	400,000	—	(400,000)	—	—	—
Tranche 2020–1	December 15, 2020	December 28, 2029	2.35	675,000	—	—	—	—	675,000
Tranche 2021–5	July 12, 2021	December 30, 2030	3.50	1,100,000	—	—	—	—	1,100,000
Tranche 2021–6	September 30, 2021	December 30, 2030	3.55	150,000	—	—	—	—	150,000
Dr. Xiaochang Dai									
Tranche 2018–2	August 28, 2018	December 30, 2027	1.45	200,000	—	—	—	—	200,000
Tranche 2021–5	July 12, 2021	December 30, 2030	3.50	250,000	—	—	—	—	250,000
Dr. Michael V. Molyneaux									
Tranche 2016–1	October 3, 2016	December 30, 2025	1.356	600,000	—	—	—	—	600,000
Tranche 2017–2	February 28, 2017	December 30, 2025	1.356	400,000	—	—	—	—	400,000
Tranche 2018–2	August 28, 2018	December 30, 2027	1.45	200,000	—	—	—	—	200,000
Tranche 2020–2	July 30, 2020	December 28, 2029	1.75	200,000	—	—	—	—	200,000
Tranche 2021–4	January 26, 2021	December 30, 2030	2.35	10,000	—	—	—	—	10,000
Tranche 2021–5	July 12, 2021	December 30, 2030	3.50	100,000	—	—	—	—	100,000
Dr. David Mark Evans									
Tranche 2017–3	September 1, 2017	December 30, 2025	1.356	110,000	—	(5,000)	—	—	105,000
Tranche 2018–2	August 28, 2018	December 30, 2027	1.45	300,000	—	—	—	—	300,000
Tranche 2020–2	July 30, 2020	December 28, 2029	1.75	500,000	—	—	—	—	500,000
Tranche 2021–4	January 26, 2021	December 30, 2030	2.35	10,000	—	—	—	—	10,000
Tranche 2021–5	July 12, 2021	December 30, 2030	3.50	50,000	—	—	—	—	50,000

	Date of grant	Expiry date	Exercise price per Share (US$)	Number of share options: At January 1, 2022	Granted during the year	Exercised during the year	Cancelled during the year	Lapsed during the year	At December 31, 2022
Five highest paid individuals in aggregate									
Tranche 2018–2	August 28, 2018	December 30, 2027	1.45	100,000	—	(30,000)	—	—	**70,000**
Tranche 2018–3	November 8, 2018	December 30, 2027	1.60	250,000	—	(40,000)	—	—	**210,000**
Tranche 2019–2	August 1, 2019	December 30, 2028	1.75	100,000	—	—	—	—	**100,000**
Tranche 2020–2	July 30, 2020	December 28, 2029	1.75	200,000	—	—	—	—	**200,000**
Tranche 2020–5	November 5 & December 15, 2020	December 28, 2029	2.35	200,000	—	—	—	—	**200,000**
Other grantees									
Tranche 2016–2	October 3, 2016	December 30, 2025	1.356	800,000	—	(65,000)	—	—	**735,000**
Tranche 2017–2	September 1, 2017	December 30, 2025	1.356	28,000	—	(4,950)	—	—	**23,050**
Tranche 2017–3	September 1, 2017	December 30, 2025	1.356	631,000	—	(31,000)	—	—	**600,000**
Tranche 2017–4	February 28, 2017	December 30, 2025	1.356	100,000	—	—	—	—	**100,000**
Tranche 2018–2	August 28, & October 1, 2018	December 30, 2027	1.45	815,000	—	(105,000)	—	—	**710,000**
Tranche 2018–3	November 8, 2018	December 30, 2027	1.60	20,000	—	(10,000)	—	—	**10,000**
Tranche 2019–2	March 28 & August 1, 2019	December 30, 2028	1.75	80,000	—	(1,000)	—	—	**79,000**
Tranche 2019–3	August 1, 2019	December 30, 2028	1.75	50,000	—	(50,000)	—	—	**—**
Tranche 2019–4	December 1, 2019	December 30, 2028	1.75	50,000	—	(50,000)	—	—	**—**
Tranche 2020–1	July 30, August 1 & December 15, 2020	December 28, 2029	1.75	600,000	—	—	—	—	**600,000**
Tranche 2020–2	July 30, 2020	December 28, 2029	1.75	600,000	—	(50,000)	—	—	**550,000**
Tranche 2020–3	August 17, 2020	December 28, 2029	1.75	100,000	—	—	—	—	**100,000**
Tranche 2020–4	November 5 & December 15, 2020	December 28, 2029	2.35	125,000	—	(50,000)	—	—	**75,000**
Tranche 2020–5	November 5, 9, 16 & December 15, 2020	December 28, 2029	2.35	465,000	—	(47,600)	—	—	**417,400**
Tranche 2021–1	April 15, 2021	December 30, 2030	2.35	8,333	—	(8,333)	—	—	**—**
Tranche 2021–2	April 15, 2021	December 30, 2030	2.35	7,500	—	—	—	—	**7,500**
Tranche 2021–3	April 15, 2021	December 30, 2030	2.35	7,500	—	—	—	—	**7,500**
Tranche 2021–4	January 26, February 22 & April 15, 2021	December 30, 2030	3.50	201,000	—	(33,600)	—	—	**167,400**
Tranche 2021–5	July 12, 2021	December 30, 2030	3.50	1,488,000	—	(23,300)	—	—	**1,464,700**
Tranche 2021–6	September 30, 2021	December 30, 2030	3.55	282,212	—	(5,000)	—	—	**277,212**
				12,763,545	—	(1,209,783)	—	—	**11,553,762**

Notes:

(1) The unvested portion of share options granted under the Pre-IPO Equity Incentive Plan vested immediately upon fulfillment of milestone of the completion of Listing on December 30, 2021.

RSU Scheme

On April 22, 2022, the Board approved the adoption of the RSU Scheme to incentivize skilled and experienced personnel, and to recognize the contributions of the eligible participants of the Group. The RSU Scheme is initially valid and effective for the period commencing on the adoption date (i.e. April 22, 2022) and ending on the business day immediately prior to the 10th anniversary of the adoption date. The RSU Scheme does not constitute a share option scheme or an arrangement analogous to a share option scheme for the purpose of Chapter 17 of the Listing Rules when it was adopted. No shareholders' approval was required to adopt the RSU Scheme.

The principal terms of the RSU Scheme are set out below.

(1) Purpose

The purposes of the RSU Scheme are to:

(i) recognize the contributions by the eligible participants with an opportunity to acquire a proprietary interest in the Company;

(ii) encourage and retain such individuals for the continual operation and development of the Group;

(iii) provide additional incentives for them to achieve performance goals;

(iv) attract suitable personnel for further development of the Group; and

(v) motivate the eligible participants to maximize the value of the Company for the benefits of both the eligible participants and the Company, with a view to achieving the objectives of increasing the value of the Group and aligning the interests of the eligible participants directly to the Shareholders through ownership of Shares.

(2) Effectiveness and Duration

Subject to any early termination as may be determined by the Board pursuant to the terms of the RSU Scheme, the RSU Scheme shall be valid and effective for a period of 10 years commencing on the RSU Scheme Adoption Date, after which no awards will be granted, but the provisions of the RSU Scheme shall in all other respects remain in full force and effect and the awards granted during the term of the RSU Scheme may continue to be valid and vest in accordance with their respective terms of grant.

(3) Administration

The Board shall have the sole and absolute right to, among other things, interpret and construe the provisions of the RSU Scheme, determine the Senior Grantees who will be granted awards under the RSU Scheme, the terms and conditions on which awards are granted to Senior Grantees and when the RSUs granted to Senior Grantees pursuant to the RSU Scheme may vest. The Chief Executives shall have the sole and absolute right to, among other things, determine the Junior Grantees who will be granted awards under the RSU Scheme, the terms and conditions on which awards are granted to Junior Grantees and when the RSUs granted to Junior Grantees pursuant to the RSU Scheme may vest.

The Company may appoint a trustee to assist with the administration and vesting of RSUs granted pursuant to the RSU Scheme. The Administrative Committee may (i) exercise the mandate granted by the Shareholders at general meetings of the Company and direct the Company to allot and issue Shares to the trustee to be held by the trustee to satisfy the RSUs upon vesting; and/or (ii) direct and procure the trustee to receive existing Shares from any Shareholder or purchase existing Shares (either on-market or off-market) to satisfy the RSUs upon exercise. The trustee will receive new Shares or purchase existing Shares only when there is a particular grant of RSUs. The Company shall procure that sufficient funds are provided to the trustee by whatever means as the Administrative Committee may determine to enable the trustee to satisfy its obligations in connection with the administration of the RSU Scheme.

(4) Eligible Participants and Grant of Awards

(I) Eligible participants

Eligible participants of the RSU Scheme include the following:

(i) any employee (whether full time or part time), executive, officer, director (including executive, non-executive and independent non-executive directors) of any member of the Group or any Related Entity; and

(ii) any consultant, advisor, or agent of any member of the Group or of any Related Entity who, in the sole opinion of the Board, have contributed or will contribute to the growth and development of the Group or any Related Entity.

(II) Grant of awards

The Board and the Chief Executives (as the case may be) shall be entitled at any time during the term of the RSU Scheme to make a grant to any eligible participant, as the Board or the Chief Executives (as the case may be) may in its absolute discretion determine. The amount of an award of RSUs may be determined at the sole and absolute discretion of the Board and the Chief Executives (as the case may be) and may differ among selected eligible participant.

Awards may be granted on such terms and conditions (such as by linking the vesting of the RSUs to the attainment or performance of milestones or targets by any member of the Group, the RSU grantee or any group of RSUs grantees) as the Board and the Chief Executives (as the case may be) may determine, provided such terms and conditions shall be consistent with any other terms and conditions of the RSU Scheme and shall be set out in the notice of RSU grant issued by the Company.

The consideration (if any) payable by a selected eligible participant to the trustee for acceptance of the award under the RSU Scheme shall be determined at the sole and absolute discretion of the Board (in the case of Senior Grantees) or the Chief Executives (in the case of Junior Grantees) and any such consideration shall be held by the trustee as income of the trust fund and be applied by the trustee as it deems appropriate or desirable in accordance with the terms of the RSU Scheme and the trust deed.

(5) Maximum Number of Shares Available for Awards

(I) RSU Scheme Limit

The Board shall not make any further award of RSUs which will result in the number of Shares awarded under the RSU Scheme exceeding 10% of the issued Shares as at the RSU Scheme Adoption Date (i.e. the RSU Scheme Limit). The granting of awards is also subject to an annual limit of 3% of the total issued Shares as at the RSU Scheme Adoption Date, unless otherwise approved by the Shareholders.

Any Share covered by an award (or any portion of an award) which is forfeited, cancelled or expired (whether voluntarily or involuntarily) shall be deemed not to have been issued for purposes of determining the RSU Scheme Limit. Shares that actually have been issued under the RSU Scheme pursuant to an award of RSUs shall not be returned to the RSU Scheme and shall not become available for future issuance under the RSU Scheme, except (i) otherwise permitted by the RSU Scheme, and (ii) that if unvested Shares are forfeited, or repurchased by the Company at their original purchase price, such Shares shall become available for future grant under the RSU Scheme.

The Shares underlying the RSU Scheme may be issued by the Company pursuant to authorization granted by the Shareholders by way of general or specific mandate(s), and the general or specific mandate(s) may be refreshed from time to time in accordance with the Listing Rules.

(II) Maximum entitlement of each eligible participant

The maximum number of Shares which may be awarded to any one eligible participant under the RSU Scheme may not exceed 1% of the issued Shares as at the RSU Scheme Adoption Date.

(6) Vesting of Awards

Subject to the terms of the RSU Scheme and any additional requirement under the Listing Rules and the specific terms and conditions applicable to each award of RSUs (including performance milestones or targets, if applicable), the RSUs granted in an award shall be determined by the Board or the Chief Executives (as the case may be). If the performance milestones or targets and/or other conditions determined by the Board or the Chief Executives (if any) are not satisfied, the RSU shall automatically lapse on the date on which any such condition is not satisfied, as determined by the Board or the Chief Executives (as the case may be) in its/his sole and absolute discretion.

The RSUs which have vested shall be satisfied at the sole and absolute discretion of the Board or the Chief Executives (as the case may be) within a reasonable period from the vesting date of such RSUs, either by: (a) the Administrative Committee directing and procuring the trustee to transfer the Shares underlying the RSUs to the RSU grantee or his wholly owned entity (as represented by the RSU grantee) from the trust fund; and/or (b) the Administrative Committee directing and procuring the trustee to pay to the RSU grantee in cash an amount which is equivalent to the market value of the Shares, pursuant to the terms of the RSU Scheme.

Details of the movements of the outstanding RSUs granted under the RSU Scheme during the year ended December 31, 2022 are as follows:

	Date of grant	Vesting period	Exercise period	Number of RSUs					
				At January 1, 2022	Granted during the year	Exercised during the year	Cancelled during the year	Lapsed during the year	At December 31, 2022
Senior Grantees — Executive Directors									
Dr. Yang Lu									
Tranche 2022-1	November 24, 2022	Note 1	Note 3	—	101,000[4]	—	—	—	**101,000**
Tranche 2022-2	November 24, 2022	Note 2	Note 3	—	17,400[4]	—	—	—	**17,400**
Dr. Xiaochang Dai									
Tranche 2022-1	November 24, 2022	Note 1	Note 3	—	90,000[4]	—	—	—	**90,000**
Tranche 2022-2	November 24, 2022	Note 2	Note 3	—	10,000[4]	—	—	—	**10,000**
Dr. Michael V. Molyneaux									
Tranche 2022-1	November 24, 2022	Note 1	Note 3	—	60,400[4]	—	—	—	**60,400**
Tranche 2022-2	November 24, 2022	Note 2	Note 3	—	7,700[4]	—	—	—	**7,700**
Dr. David Mark Evans									
Tranche 2022-1	November 24, 2022	Note 1	Note 3	—	38,800[4]	—	—	—	**38,800**
Tranche 2022-2	November 24, 2022	Note 2	Note 3	—	4,400[4]	—	—	—	**4,400**
Five highest paid individuals in aggregate									
Tranche 2022–1	November 24, 2022	Note 1	Note 3	—	44,000	—	—	—	**44,000**
Tranche 2022–2	November 24, 2022	Note 2	Note 3	—	12,100	—	—	—	**12,100**
Other Senior Grantees									
Tranche 2022-1	November 24, 2022	Note 1	Note 3	—	32,000	—	—	—	**32,000**
Tranche 2022-2	November 24, 2022	Note 2	Note 3	—	15,400	—	—	—	**15,400**
Junior Grantee — Connected Person									
Dr. Xianbin Yang									
Tranche 2022-1	November 24, 2022	Note 1	Note 3	—	4,000[4]	—	—	—	**4,000**
Tranche 2022-2	November 24, 2022	Note 2	Note 3	—	5,300[4]	—	—	—	**5,300**
Other Junior Grantees									
Tranche 2022-1	November 24, 2022	Note 1	Note 3	—	137,200	—	—	—	**137,200**
Tranche 2022-2	November 24, 2022	Note 2	Note 3	—	323,500	—	—	—	**323,500**
				—	903,200	—	—	—	**903,200**

Notes:

(1) 50% of the Tranche 2022-1 RSUs granted shall vest on each of the first and second anniversary of the date of grant respectively.

(2) 25% of the Tranche 2022-2 RSUs granted shall vest on each of the first, second, third and fourth anniversary of the date of grant respectively.

(3) The RSUs shall be valid from the grant date and shall continue for a period of 10 years from the date of grant.

(4) 339,000 RSUs were conditionally granted to these connected grantees who are either the directors, chief executives and/or substantial shareholder of members of the Group. These grants were subsequently approved by the independent Shareholders at the extraordinary general meeting of the Company held on February 3, 2023.

(5) The closing price of the Shares immediately before the date on which the RSUs were granted was HK$57.8 per Share.

(6) The grant date fair value of each Tranche 2022-1 RSUs was approximately US$6.82–US$7.50. The grant date fair value of each Tranche 2022-2 RSUs was approximately US$6.82–US$7.50. The accounting standards and policies adopted are set out in note 4 to the consolidated financial statements. The methodology and assumptions used are disclosed in note 30 to the consolidated financial statements.

(7) Upon the adoption of the RSU Scheme on April 22, 2022, RSUs in respect of a total of 8,904,023 Shares, may be granted under the RSU Scheme Limit.

(8) On June 28, 2022, the RSU annual mandate was granted by the Shareholders to the Directors at an extraordinary general meeting of the Company, pursuant to which the maximum number of new Shares which may be issued under the RSU annual mandate is 2,671,206. As at December 31, 2022, RSUs in respect of a total of 1,768,006 Shares are available for grant under the RSU annual mandate.

(9) As at the date of this annual report, the total number of Shares available for issue pursuant to the grant of further RSUs under the RSU Scheme is 8,081,273, representing approximately 9.13% of the issued Shares.

Share Option Scheme

On April 22, 2022, the Board resolved to propose the adoption of the Share Option Scheme for the approval by the Shareholders. The Share Option Scheme constitutes a share option scheme under Chapter 17 of the Listing Rules, and the adoption of the Share Option Scheme was approved by the Shareholders on June 28, 2022.

The principal terms of the Share Option Scheme are set out below.

(1) Purpose

The purposes of the Share Option Scheme are to:

(i) recognize the contributions by the eligible participants with an opportunity to acquire a proprietary interest in the Company;

(ii) encourage and retain such individuals for the continual operation and development of the Group;

(iii) provide additional incentives for them to achieve performance goals;

(iv) attract suitable personnel for further development of the Group; and

(v) motivate the eligible participants to maximize the value of the Company for the benefits of both the eligible participants and the Company, with a view to achieving the objectives of increasing the value of the Group and aligning the interests of the eligible participants directly to the Shareholders through ownership of Shares.

(2) Effective and Duration

The Share Option Scheme shall take effect on the date of the passing of an ordinary resolution to approve the adoption of the Share Option Scheme by the Shareholders in general meeting, provided that the Listing Committee of the Hong Kong Stock Exchange granting approval for the listing of, and permission to deal in, any Shares to be issued and allotted pursuant to the exercise of share options granted under the Share Option Scheme.

The Share Option Scheme shall be valid and effective for a period of 10 years commencing on the Share Option Scheme Adoption Date, after which period no further share options will be granted under the Share Option Scheme, but the provisions of the Share Option Scheme shall remain in full force and effect to the extent necessary to give effect to the exercise of any share options granted prior thereto or otherwise as may be required in accordance with the provisions of the Share Option Scheme.

(3) Administration

The Board shall have the sole and absolute right to, among other things, interpret and construe the provisions of the Share Option Scheme, determine the Senior Grantees who will be offered share options under the Share Option Scheme and the subscription price in relation to such share options in accordance with the provisions of the Share Option Scheme. The Chief Executives shall have the sole and absolute right to, among other things, determine the Junior Grantees who will be offered share options under the Share Option Scheme and the subscription price in relation to such share options in accordance with the provisions of the Share Option Scheme.

The Administrative Committee shall be responsible for, among other things, applying to the Listing Committee of the Hong Kong Stock Exchange for the approval of the listing of, and permission to deal in, any Shares to be issued pursuant to the exercise of share options under the Share Option Scheme on the Hong Kong Stock Exchange and other administrative work of the Share Option Scheme as delegated by the Board and the Chief Executives from time to time.

(4) Eligible Participants and Making and Acceptance of a Grant

Eligible participants of the Share Option Scheme include the following:

(i) any employee (whether full time or part time, and include persons who are granted share options as an inducement to enter into employment contracts with the Group), executive, officer or director (including executive, non-executive and independent non-executive directors) of any member of the Group or any Related Entity; and

(ii) any consultant, advisor or agent of any member of the Group or of any Related Entity who, in the sole opinion of the Board, have contributed or will contribute to the growth and development of the Group or any Related Entity.

The Board (in the case of Senior Grantees) and the Chief Executives (in the case of Junior Grantees) shall be entitled at any time during the operation of the Share Option Scheme, at its/his sole and absolute discretion, to make an offer of share options to an eligible participants by letter in such form as the Board or the Chief Executives (as the case may be) may from time to time determine. An amount of HK$1.00 is payable by the share option grantee to the Company upon acceptance of the offer of share options, and such remittance shall not be refundable and shall not be deemed to be a part payment of the subscription price.

(5) Maximum Number of Shares Available for Subscription

(I) Share Option Scheme Limit

The total number of Shares which may be issued upon exercise of all share options that may be granted under the Share Option Scheme and any other schemes of the Company shall not in aggregate exceed 10% of the issued Shares as of the Share Option Scheme Adoption Date (i.e. the Share Option Scheme Limit), unless the Company obtains the approval of the Shareholders in accordance with the terms of the Share Option Scheme in sub-paragraph (II) below to refresh the Share Option Scheme Limit. Share options lapsed in accordance with the terms of the Share Option Scheme shall not be counted for the purpose of calculating the Share Option Scheme Limit.

(II) Refreshment of Share Option Scheme Limit

Subject to any additional requirement under the Listing Rules, the Company may seek the approval of the Shareholders in general meeting to refresh the Share Option Scheme Limit. Share options previously granted under the Share Option Scheme, including share options outstanding, cancelled or lapsed in accordance with the relevant option scheme or exercised options, shall not be counted for the purpose of calculating the limit to be refreshed.

The Company may seek separate approval by the Shareholders in general meeting to grant share options beyond the Share Option Scheme Limit, provided that such share options are granted only to participants specifically identified by the Company and any other applicable requirements under the Listing Rules are complied with before the approval of the Shareholders is sought.

(III) Maximum number of Shares issued pursuant to share options

The maximum number of Shares which may be issued upon exercise of all outstanding share options granted and yet to be exercised under the Share Option Scheme and any other share options granted and yet to be exercised under any other schemes of the Company shall not exceed 30% of the issued Shares from time to time.

(IV) Maximum entitlement of each eligible participants

Subject to any additional requirement under the Listing Rules, where any new grant of share options to any eligible participants, when aggregated with all share options granted to such eligible participants (excluding any share options lapsed in accordance with the terms of the relevant schemes) in the 12-month period up to and including the share option grant date of such new grant, would result in the total number of Shares issued and to be issued to such eligible participants in aggregate exceeding over 1% of the issued Shares as at the share option grant date of such new grant, such new grant of share options must be separately approved by the Shareholders in general meeting with such eligible participants and his/her close associates (or associates if the eligible participants is a connected person of the Company) abstain from voting.

(6) Subscription Price

The subscription price shall be a price determined by the Board or the Chief Executives (as the case may be) and notified to any share option grantee (subject to any adjustments made pursuant to the "Changes in Capital Structure" clause of the Share Option Scheme) which shall be not less than the highest of:

(i) the closing price of a Share as stated in the Hong Kong Stock Exchange's daily quotations sheet on the share option grant date of the relevant share options, which must be a Business Day;

(ii) an amount equivalent to the average closing price of a Share as stated in the Hong Kong Stock Exchange's daily quotation sheets for the 5 Business Days immediately preceding the share option grant date of the relevant share options; and

(iii) the nominal value per Share on the share option grant date.

(7) Vesting and Exercise Period

The Board or the Chief Executives (as the case may be) may specify the exercise period, vesting schedule and conditions (including performance milestones or targets, if applicable) of the share options in the share option grant letter, provided, however, that all share options shall automatically lapse upon the expiry of the 10th anniversary of the share option grant date. Unless the share options have been withdrawn and cancelled or been forfeited in whole or in part, and subject to the provisions in the Share Option Scheme, the share option grantee may exercise his rights under the Share Option Scheme according to the vesting schedule set out in the relevant share option grant letter.

Details of the movements of the outstanding share options granted under the Share Option Scheme during the year ended December 31, 2022 are as follows:

	Date of grant	Exercise price per Share (HK$)	Vesting period	Exercise period	Number of share options					
					At January 1, 2022	Granted during the year	Exercised during the year	Cancelled during the year	Lapsed during the year	At December 31, 2022
Senior Grantees — Executive Directors										
Dr. Yang Lu										
Tranche 2022-1	November 24, 2022	58.9	Note 1	Note 3	—	101,000[4]	—	—	—	**101,000**
Tranche 2022-2	November 24, 2022	58.9	Note 2	Note 3	—	117,600[4]	—	—	—	**117,600**
Dr. Xiaochang Dai										
Tranche 2022-1	November 24, 2022	58.9	Note 1	Note 3	—	90,000	—	—	—	**90,000**
Tranche 2022-2	November 24, 2022	58.9	Note 2	Note 3	—	55,000	—	—	—	**55,000**
Dr. Michael V. Molyneaux										
Tranche 2022-1	November 24, 2022	58.9	Note 1	Note 3	—	60,400	—	—	—	**60,400**
Tranche 2022-2	November 24, 2022	58.9	Note 2	Note 3	—	38,950	—	—	—	**38,950**
Dr. David Mark Evans										
Tranche 2022-1	November 24, 2022	58.9	Note 1	Note 3	—	38,800	—	—	—	**38,800**
Tranche 2022-2	November 24, 2022	58.9	Note 2	Note 3	—	22,250	—	—	—	**22,250**
Five highest paid individuals in aggregate										
Tranche 2022–1	November 24, 2022		Note 1	Note 3	—	44,000	—	—	—	**44,000**
Tranche 2022–2	November 24, 2022		Note 2	Note 3	—	61,200	—	—	—	**61,200**
Other Senior Grantees										
Tranche 2022-1	November 24, 2022	58.9	Note 1	Note 3	—	32,000	—	—	—	**32,000**
Tranche 2022-2	November 24, 2022	58.9	Note 2	Note 3	—	77,900	—	—	—	**77,900**
Junior Grantee — Connected Person										
Dr. Xianbin Yang										
Tranche 2022-1	November 24, 2022	58.9	Note 1	Note 3	—	4,000	—	—	—	**4,000**
Tranche 2022-2	November 24, 2022	58.9	Note 2	Note 3	—	11,000	—	—	—	**11,000**
Other Junior Grantees										
Tranche 2022-1	November 24, 2022	58.9	Note 1	Note 3	—	137,200	—	—	—	**137,200**
Tranche 2022-2	November 24, 2022	58.9	Note 2	Note 3	—	620,350	—	—	—	**620,350**
					—	1,511,650	—	—	—	**1,511,650**

Notes:

(1) 50% of the Tranche 2022-1 share options granted shall vest on each of the first and second anniversary of the date of grant respectively.

(2) 25% of the Tranche 2022-2 share options granted shall vest on each of the first, second, third and fourth anniversary of the date of grant respectively.

(3) The share options shall be valid from the grant date and shall continue for a period of 10 years from the date of grant.

(4) 218,600 share options were conditionally granted to Dr. Yang Lu, being the Chairman of the Board, the Chief Executive Officer, an executive Director and a substantial shareholder of the Company. The grants were subsequently approved by the independent Shareholders at the extraordinary general meeting of the Company held on February 3, 2023.

(5) The closing price of the Shares immediately before the date on which the share options were granted was HK$57.8 per Share.

(6) The grant date fair value of each Tranche 2022-1 share options was approximately US$3.95–US$4.63. The grant date fair value of each Tranche 2022-2 share options was approximately US$4.26–US$4.93. The accounting standards and policies adopted are set out in note 4 to the consolidated financial statements. The methodology and assumptions used are disclosed in note 30 to the consolidated financial statements.

(7) Upon the adoption of the Share Option Scheme on June 28, 2022, share options to subscribe for a total of 8,904,023 Shares, may be granted under the Share Option Scheme Limit.

(8) As at December 31, 2022, share options to subscribe for a total of 7,392,373 Shares are available for grant under the Share Option Scheme Limit.

(9) As at the date of this annual report, the total number of Shares available for issue upon exercise of all outstanding share options granted and/or conditionally granted under the Share Option Scheme is 1,419,250, representing approximately 1.60% of the issued Shares.

(10) As at the date of this annual report, the total number of Shares available for issue pursuant to the grant of further share options under the Share Option Scheme is 7,484,773, representing approximately 8.45% of the issued Shares.

The number of Shares that may be issued in respect of share options and RSUs granted under all schemes of the Company during the year ended December 31, 2022 divided by the weighted average number of Shares of the Company for the year ended December 31, 2022 is 3.18%.

FINANCIAL SUMMARY

A summary of the audited consolidated results and financial position of the Group for the last four financial years is set out on page 9 of this annual report. This summary does not form part of the audited consolidated financial statements.

SUBSIDIARIES

Particulars of the Company's principal subsidiaries are set out in note 35 to the consolidated financial statements.

PROPERTY, PLANT AND EQUIPMENT

Details of the movements in property, plant and equipment of the Group during the year ended December 31, 2022 are set out in note 17 to the consolidated financial statements.

SHARE CAPITAL AND RESERVES

Details of the movements in the Company's share capital and reserves during the year ended December 31, 2022 are set out in notes 27 and 36 to the consolidated financial statements.

DISTRIBUTABLE RESERVES

As at December 31, 2022, the Company had US$518,808,000 distributable reserves.

DIVIDENDS

The Board did not recommend the distribution of a final dividend for the year ended December 31, 2022.

CHARITABLE DONATIONS

The Group did not make charitable donations during the year ended December 31, 2022.

DEBENTURE ISSUED

The Group did not issue any debenture during the year ended December 31, 2022.

BANK BORROWINGS

As at December 31, 2022, the Group did not have any bank borrowings.

PERMITTED INDEMNITY

Pursuant to the Articles of Association and subject to the applicable laws and regulations, every Director shall be entitled to be indemnified out of the assets of the Company against all losses or liabilities incurred or sustained by the Director as a Director in defending any proceedings, whether civil or criminal, in which judgement is given in the Director's favour, or in which the Director is acquitted.

Such permitted indemnity provision has been in force for the year ended December 31, 2022. The Company has arranged appropriate liability insurance coverage for the Directors.

EMOLUMENTS OF DIRECTORS AND FIVE HIGHEST PAID INDIVIDUALS

The emoluments of the Directors and senior management of the Group are decided by the Board with reference to the recommendation given by the Remuneration Committee, having regard to the individual performance and comparable market statistics.

Details of the emoluments of the Directors and the five highest paid individuals for the year ended December 31, 2022 are set out in notes 13 and 14 to the consolidated financial statements.

None of the Directors waived or agreed to waive any remuneration and there were no emoluments were paid by the Group to any of the directors or the five highest paid individuals as an inducement to join, or upon joining the Group, or as compensation for loss of office during the year ended December 31, 2022.

DIRECTORS' SERVICE CONTRACTS AND APPOINTMENT LETTERS

The Company has entered into a service contract with each of the executive Directors and non-executive Directors and a letter of appointment with each of the independent non-executive Directors. Each of the service contracts and the letters of appointment is for an initial fixed term of three years. All Directors are subject to retirement from office and re-election at the annual general meeting of the Company in accordance with the Memorandum and Articles of Association of the Company.

Save as disclosed above, none of our Directors has entered into, or has proposed to enter into, a service contract with any member of our Group (other than contracts expiring or determinable by the employer within one year without the payment of compensation (other than statutory compensation)).

MANAGEMENT CONTRACTS

No contract, other than employment contracts, concerning the management and administration of the whole or any substantial part of the Company's business was entered into or existed during the year ended December 31, 2022.

DIRECTORS' INTERESTS IN TRANSACTIONS, ARRANGEMENTS OR CONTRACTS OF SIGNIFICANCE

Save as disclosed in this annual report, none of the Directors nor any entity connected with the Directors had a material interest, either directly or indirectly, in any transactions, arrangements or contracts of significance to which the Company or any of its subsidiaries was a party during or at the end of the year ended December 31, 2022.

CONTRACTS OF SIGNIFICANCE WITH CONTROLLING SHAREHOLDERS

During the year ended December 31, 2022, the Company had no controlling shareholder.

DIRECTORS' INTERESTS IN COMPETING BUSINESS

None of the Directors or their respective close associates had engaged in or had any interest in any business, apart from the Group's business, which competed or was likely to compete, either directly or indirectly, with the Group's business at any time during the year ended December 31, 2022.

DIRECTORS' AND CHIEF EXECUTIVE'S INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY OR ITS ASSOCIATED CORPORATIONS

As at December 31, 2022, the interests and short positions of the Directors and the chief executive of the Company in any of the Shares, underlying Shares and debentures of the Company and its associated corporations, within the meaning of Part XV of the SFO, which were required to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they are taken or deemed to have under such provisions of the SFO), or which were required, pursuant to section 352 of the SFO, to be recorded in the register referred to therein; or which were required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code were as follows:

Interests in Shares and underlying Shares

Name of Director or chief executive	Nature of interest	Number of Shares/ underlying Shares	Approximate percentage of interest in the Company [1]
Dr. Yang Lu	Beneficial interest; Settlor of a discretional trust [2]	13,237,075 (L)	15.05%
Dr. Xiaochang Dai	Beneficial interest; Interests in controlled corporations [3]	8,545,007 (L)	9.71%
Dr. Michael V. Molyneaux	Beneficial interest [4]	1,677,450 (L)	1.91%
Dr. David Mark Evans	Beneficial interest; Interest held jointly with another person [5]	1,160,788 (L)	1.32%
Mr. Mincong Huang	Beneficial interest; Beneficiary of a trust [6]	757,551 (L)	0.86%

Notes:

(L) denotes long position.

(1) The calculation is based on the total number of 87,967,680 issued Shares as at December 31, 2022.

(2) Dr. Yang Lu ("**Dr. Lu**") is the settlor of The Yang Lu Family Trust and the beneficiaries of The Yang Lu Family Trust are Zheng Joan Wang and Laura Yao Lu, being Dr. Lu's spouse and daughter, respectively. Zheng Joan Wang and Laura Yao Lu are co-trustees of The Yang Lu Family Trust. Therefore, Dr. Lu is deemed to be interested in the 2,500,000 Shares held by The Yang Lu Family Trust. Under the SFO, the deemed interest of Dr. Lu consists of: (i) 2,500,000 Shares held by The Yang Lu Family Trust; (ii) 8,475,075 Shares held by Dr. Lu himself; (iii) options granted to Dr. Lu to subscribe for 1,925,000 Shares under the Pre-IPO Equity Incentive Plan; (iv) 218,600 share options conditionally granted to him to subscribe for 218,600 Shares under the Share Option Scheme, subject to vesting conditions; and (v) 118,400 Shares underlying the 118,400 RSUs conditional granted to him under the RSU Scheme, subject to vesting conditions.

(3) Value Measure Investments Limited and Trinity Power Limited are wholly owned by Dr. Xiaochang Dai ("**Dr. Dai**"). Under the SFO, Dr. Dai is deemed to be interested in 7,850,007 Shares held by Value Measure Investments Limited and Trinity Power Limited. Dr. Dai is also interested in: (i) options granted to him to subscribe for 450,000 Shares under the Pre-IPO Equity Incentive Plan; (ii) 145,000 share options granted to him to subscribe for 145,000 Shares under the Share Option Scheme, subject to vesting conditions; and (iii) 100,000 Shares underlying the 100,000 RSUs conditionally granted to him under the RSU Scheme, subject to vesting conditions.

(4) Dr. Michael V. Molyneaux ("**Dr. Molyneaux**") is interested in: (i) options granted to him to subscribe for 1,510,000 Shares under the Pre-IPO Equity Incentive Plan; (ii) 99,350 share options granted to him to subscribe for 99,350 Shares under the Share Option Scheme, subject to vesting conditions; and (iii) 68,100 Shares underlying the 68,100 RSUs conditionally granted to him under the RSU Scheme, subject to vesting conditions.

(5) Dr. David Mark Evans ("**Dr. Evans**") is interested in: (i) options granted to him to subscribe for 965,000 Shares under the Pre-IPO Equity Incentive Plan; (ii) 91,538 Shares jointly held by him and his spouse, Julee Ann Evans; (iii) 61,050 share options granted to him to subscribe for 61,050 Shares under the Share Option Scheme, subject to vesting conditions; and (iv) 43,200 Shares underlying the 43,200 RSUs conditionally granted to him under the RSU Scheme, subject to vesting conditions.

(6) Soaring Star Ventures Limited owns 600,601 Shares. The Huang Family Trust is the beneficiary of Soaring Star Ventures Limited and Mr. Mincong Huang ("**Mr. Huang**") is the beneficiary of the Huang Family Trust. Mr. Huang also owns 156,950 Shares. Accordingly, Mr. Huang is deemed to be interested in 751,551 Shares.

Interests in associated corporations

Name of Director or chief executive	Nature of interest	Associated corporations	Number of shares	Approximate percentage of shareholding in the associated corporation
Dr. Molyneaux	Beneficial interest [2]	EDIRNA Inc.	250,000	25.00% [1]
Mr. Huang	Beneficiary of a trust [4]	RNAimmune, Inc.	1,851,851	8.92% [3]

Notes:

(1) The calculation is based on the total number of 1,000,000 common shares issued by EDIRNA Inc. as at December 31, 2022.

(2) Dr. Molyneaux is interested in 250,000 common shares of EDIRNA Inc. held by himself.

(3) The calculation is based on the total number of 20,759,256 common shares issued by RNAimmune, Inc. as at December 31, 2022.

(4) Huang Family Capital Ltd owns 1,851,851 common shares of RNAimmune, Inc. Mr. Huang is the director of Huang Family Capital Ltd. The Huang Family Trust is the beneficiary of Huang Family Capital Ltd and Mr. Huang is the beneficiary of the Huang Family Trust. Accordingly, Mr. Huang is deemed to be interested in 1,851,851 common shares of RNAimmune, Inc. held by Huang Family Capital Ltd.

Save as disclosed above, as at December 31, 2022, so far as is known to any Directors or chief executive of the Company, none of the Directors or chief executive of the Company had any interests or short positions in the Shares, underlying Shares and debentures of the Company or its associated corporations, which were required, pursuant to section 352 of the SFO, to be recorded in the register referred to therein; or which were required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code.

SUBSTANTIAL SHAREHOLDER'S INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES

As at December 31, 2022, so far as the Directors are aware, the following persons (other than the Directors and chief executive of the Company) had or were deemed or taken to have interests or short positions in the Shares or underlying Shares which would fall to be disclosed to the Company and the Hong Kong Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO or which were required to be recorded in the register kept by the Company pursuant to section 336 of the SFO:

Name of substantial shareholders	Nature of interest	Number of Shares/ underlying Shares	Approximate percentage of interest in the shareholding [1]
Yu ZENG	Interest in a controlled corporation [2]	4,564,495 (L)	5.19%
Xialing YAN	Interest of spouse [3]	4,564,495 (L)	5.19%
Shenzhen Qianhai Rotating Boulder Fund Management Co., Ltd. ("**Rotating Boulder Fund**")	Interest in controlled corporations [2]	4,564,495 (L)	5.19%
Shenzhen Rotating Boulder Tiancheng The Second Investment Partnership (Limited Partnership) ("**Tiancheng The Second**")	Interest in a controlled corporation [2]	4,564,495 (L)	5.19%
Shenzhen Rotating Boulder Tiancheng The Third Investment Partnership (Limited Partnership) ("**Tiancheng The Third**")	Interest in a controlled corporation [2]	4,564,495 (L)	5.19%
Shanghai Chongshi Enterprise Management Partnership (LP) ("**Shanghai Chongshi**")	Beneficial Interest [2]	4,564,495 (L)	5.19%

Notes:

(L) denotes long position.

(1) The calculation is based on the total number of 87,967,680 issued Shares as at December 31, 2022.

(2) Each of Rotating Boulder Fund (as general partner of Shanghai Chongshi), Tiancheng The Third (as a limited partner holding approximately 47.50% in Shanghai Chongshi), Tiancheng The Second (as a limited partner holding approximately 64.36% in Tiancheng The Third), and Yu ZENG (as the controlling shareholder of Rotating Boulder Fund) is deemed to be interested in the Shares held by Shanghai Chongshi under the SFO.

(3) Xialing YAN is the spouse of Yu ZENG, and was therefore deemed to be interested in the Shares in which Yu ZENG was interested under the SFO.

Save as disclosed above, as at December 31, 2022, the Company has not been notified of any other relevant interests or short positions in the Shares or underlying Shares, which would fall to be disclosed to the Company and the Hong Kong Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO, or which were required to be recorded in the register kept by the Company pursuant to section 336 of the SFO.

ARRANGEMENTS TO PURCHASE SHARES OR DEBENTURES

Save as disclosed in this annual report, at no time during the year ended December 31, 2022 was the Company or any of its subsidiaries a party to any arrangements to enable the Directors to acquire benefits by means of the acquisition of Shares in, or debentures of, the Company or any other body corporate.

EMPLOYEES AND REMUNERATION POLICY

As at December 31, 2022, the Group had 225 employees. The Company has established the Remuneration Committee for reviewing the Group's remuneration policy and the remuneration structure of the Directors and senior management of the Group taking into consideration the Group's operating results, individual performance of each of the Directors and senior management and comparable market practices.

The remuneration package of our employees includes salaries, bonuses, contributions to retirement benefits plans, share option incentives, allowances and benefits in kind. We endeavor to attract and retain our employees by offering share options and employee benefits including but not limited to medical plan, dental plan and other benefits, providing tuition assistance and training opportunities, offering flexible worksite schedules and recognizing employee commitment and achievement by offering bonus and cash incentive award on performance basis and promotions based on annual performance appraisal process. Particulars of the retirement benefits plans are set out in note 29 to the consolidated financial statements.

The Company has adopted the Pre-IPO Equity Incentive Plan, the RSU Scheme and the Share Option Scheme to incentivize eligible employees, details of which are set out in the section headed "Pre-IPO Equity Incentive Plan, RSU Scheme and Share Option Scheme" as set out in this report of the Directors.

EQUITY-LINKED AGREEMENTS

Save as disclosed in the section headed "Pre-IPO Equity Incentive Plan, RSU Scheme and Share Option Scheme" as set out in this report of the Directors, no equity-linked agreements that will or may result in the Company issuing shares or that require the Company to enter into any agreements that will or may result in the Company issuing Shares were entered into by the Group, or existed during the year ended December 31, 2022.

PURCHASE, SALE OR REDEMPTION OF THE COMPANY'S LISTED SECURITIES

During the year ended December 31, 2022, as the Board considered that the trading price of the Shares did not reflect their intrinsic value, the Board determined to exercise its powers under the general mandate to repurchase Shares granted by the Shareholders at the annual general meeting held on June 28, 2022. The Share repurchases could reflect the Board's confidence in the Company's development prospects. The total number of Shares repurchased by the Company on the Hong Kong Stock Exchange during the year ended December 31, 2022 was 1,245,150 at a total consideration (before expenses) of HK$79,525,520. As at December 31, 2022, 1,072,550 repurchased Shares have been cancelled. As at the date of this annual report, the remaining 172,600 repurchased Shares were subsequently cancelled.

Details of the Share repurchases during the year ended December 31, 2022 are as follows:

Month	Total number of Shares repurchased	Highest purchase price per Share (HK$)	Lowest purchase price per Share (HK$)	Total consideration (before expenses) (HK$)
July 2022	628,500	70.40	62.05	41,039,525.00
August 2022	27,300	66.90	64.20	1,776,357.50
September 2022	293,350	69.90	63.95	19,390,110.00
October 2022	123,400	66.00	60.15	7,942,487.50
November 2022	15,100	57.90	54.10	846,682.50
December 2022	157,500	57.95	51.15	8,530,357.50

Save as disclosed above, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities during the year ended December 31, 2022.

MATERIAL LITIGATION

The Company was not involved in any material litigation or arbitration during the year ended December 31, 2022. The Directors are also not aware of any material litigation or claims that are pending or threatened against the Group during the year ended December 31, 2022.

CONTINUING DISCLOSURE OBLIGATIONS PURSUANT TO THE LISTING RULES

The Company does not have any other disclosure obligations under Rules 13.20, 13.21 and 13.22 of the Listing Rules.

USE OF PROCEEDS FROM THE LISTING

The Company's Shares were listed on the Hong Kong Stock Exchange on December 30, 2021 with gross proceeds of US$63.7 million raised. On January 21, 2022, the over-allotment option as described in the Prospectus was partially exercised by the Joint Representatives with gross proceeds of US$8.3 million raised on January 26, 2022. The net proceeds raised during the Global Offering (including the partial exercise of the over-allotment option) were approximately US$54.8 million with a total of 8,513,450 new Shares issued. There was no change in the intended use of net proceeds as previously disclosed in the Prospectus and the Company intends to utilize the additional net proceeds on a pro rata basis for the purposes as set out in the section headed "Future Plans and Use of Proceeds" in the Prospectus. The Company will gradually utilize the residual amount of the net proceeds in accordance with such intended purposes based on actual business needs.

The table below sets forth a detailed breakdown and description of the use of net proceeds as at December 31, 2022:

Purposes	% of use of net proceeds (as disclosed in the Prospectus)	Net proceeds from Global Offering (US$ million)	Utilized net proceeds up to December 31, 2021 (US$ million)	Net proceeds utilized during the Reporting Period (US$ million)	Unutilized net proceeds up to December 31, 2022 (US$ million)	Estimated timeline for utilizing the net proceeds from Global Offering
To fund the development and commercialization of STP705	57.9%	31.7	—	11.7	20.0	By mid of 2024
To fund the development of STP707	15.6%	8.6	—	7.9	0.7	By mid of 2023
To fund our GalNAc Program yielded products such as STP122G, STP133G, and STP144G and other preclinical stage product candidates, and where such research and development will further advance our proprietary GalAhead™ and PDoV-GalNAc delivery platforms for development of novel product candidates	15.4%	8.4	—	8.4	—	—
To fund the research and development of our other preclinical drug candidates	7.3%	4.0	—	4.0	—	—
For general corporate and working capital purposes	3.8%	2.1	—	2.1	—	—
Total	100.0%	54.8	—	34.1	20.7	

MAJOR CUSTOMERS AND SUPPLIERS

Major customers

The Company did not generate any revenue from product sales during the year ended December 31, 2022.

Major suppliers

For the year ended December 31, 2022, purchases from the five largest suppliers in the aggregate accounted for 43.4% of the Group's total purchases, while purchases from the largest supplier accounted for 15.0% of the Group's total purchases.

To the best of the knowledge of the Directors, none of the Directors, their respective close associates or any shareholder (which to the knowledge of the Directors, own more than 5% of the Company's issued share capital) has any direct/indirect interest in any of the Group's five largest suppliers during the year ended December 31, 2022.

RELATED PARTY TRANSACTIONS AND CONNECTED TRANSACTIONS

On November 24, 2022, 339,000 RSUs were conditionally granted to five connected grantees who are either the directors, chief executives and/or substantial shareholder of members of the Group, aim to (i) recognize the past contributions made to the Group by the grantees; (ii) encourage, motivate and retain the grantees, whose contributions are beneficial to the continual operation, development and long-term growth of the Group; and (iii) provide additional incentive for the grantees to continuously generate new clinical assets and facilitate the commercialization of the Group's assets in the pipeline, with a view to achieve the objectives of increasing the value of the Group and aligning the interests of the grantees to the Shareholders through ownership of Shares.

The table below shows a breakdown of RSUs that were conditionally granted to the directors, chief executives and/or substantial shareholder of members of the Group:

Name of the grantees	Position held with the Company/ relationship with the Group	Number of RSUs
Dr. Yang Lu	Chairman, Chief Executive Officer, Executive Director and substantial shareholder of the Company	118,400
Dr. Xiaochang Dai	Executive Director	100,000
Dr. Michael V. Molyneaux	Chief Medical Officer and Executive Director	68,100
Dr. David Mark Evans	Chief Scientific Officer and Executive Director	43,200
Dr. Xianbin Yang	General Manager of a subsidiary of the Company	9,300
Total		339,000

Each of the conditional grants of RSUs to the five connected grantees were subsequently approved by the independent Shareholders at the extraordinary general meeting of the Company held on February 3, 2023.

Save as disclosed above, details of material related party transactions of the Group undertaken in the normal course of business are set out in note 34 to the consolidated financial statements, none of which fall under the definition of "Connected Transactions" or "Continuing Connected Transactions" under Chapter 14A of the Listing Rules.

IMPORTANT EVENTS AFTER THE REPORTING PERIOD

On March 16, 2023, a total of 822,750 new Shares were issued and allotted to a trustee, held on trust for the benefit of eligible participants under the RSU Scheme.

Save as above and disclosed in this annual report, no important events affecting the Company occurred since the Reporting Period and up to the date of this annual report.

COMPLIANCE WITH THE CORPORATE GOVERNANCE CODE

Save as disclosed in the Corporate Governance Report, the Board is of the view that the Company has complied with the code provisions in the CG Code as set out in Appendix 14 to the Listing Rules during the Reporting Period. No Director is aware of any information that reasonably reveals that there was any non-compliance with the code provisions of the CG Code by the Company at any time during the Reporting Period.

For details of the Corporate Governance Report, please refer to pages 79 to 97 of this annual report.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

The text of the Environmental, Social and Governance Report is set out on pages 98 to 161 of this annual report.

PRE-EMPTIVE RIGHTS

There is no provision for pre-emptive rights under the Articles of Association or the laws of the Cayman Islands which would oblige the Company to offer new Shares on a pro-rata basis to the existing Shareholders.

TAX RELIEF AND EXEMPTION

The Directors are not aware of any tax relief and exemption available to the Shareholders by reason of their holding of the Company's securities.

Report of the Directors

SUFFICIENCY OF PUBLIC FLOAT

Based on the information publicly available to the Company and within the knowledge of the Directors, as at the date of this annual report, the Company has maintained the public float as required under the Listing Rules.

AUDIT COMMITTEE

The Audit Committee had, together with the management of the Company, reviewed the consolidated financial statements of the Group for the year ended December 31, 2022 and the accounting principles and policies adopted by the Group.

AUDITOR

The consolidated financial statements of the Group for the year ended December 31, 2022 have been audited by Deloitte Touche Tohmatsu, Certified Public Accountants and Registered Public Interest Entity Auditor, who will retire and, being eligible, offer themselves for re-appointment at the forthcoming annual general meeting.

ANNUAL GENERAL MEETING

The forthcoming annual general meeting of the Company will be held on Wednesday, June 28, 2023. The notice of the annual general meeting will be published and dispatched in due course in the manner as required by the Listing Rules.

CLOSURE OF REGISTER OF MEMBERS

For the purpose of determining the Shareholders' eligibility to attend and vote at the annual general meeting, the register of members of the Company will be closed from Friday, June 23, 2023 to Wednesday, June 28, 2023 (both days inclusive), during which no transfer of Shares will be registered. In order to be eligible to attend and vote at the annual general meeting, all duly completed share transfer forms accompanied by the relevant share certificates, must be lodged with the Company's Hong Kong Share Registrar, Computershare Hong Kong Investor Services Limited at Shops 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong for registration not later than 4:30 p.m. on Wednesday, June 21, 2023.

On behalf of the Board

Dr. Yang Lu
Chairman

Hong Kong, March 28, 2023

The Board is pleased to present the corporate governance report of the Company for the Reporting Period.

The Board is committed to achieving good corporate governance standards. The Board believes that good corporate governance principles and practices should emphasize accountability and an increase in transparency which will enable the Group's stakeholders, including Shareholders, employees, suppliers, medical experts, patients and the community to have trust and faith in the Group to take care of their needs, enhance corporate value, formulate its business strategies and policies, and enhance the sustainability of the Company's business.

CORPORATE MISSION, VALUES AND CULTURE

The Company's mission is to develop novel therapeutics to alleviate human suffering and advance patient care in areas of high unmet medical need. The guiding principles of the Company are: Innovation, Global Vision with a Patient Centered focus.

Our values and culture require that we:

- Treat employees and colleagues with respect; Sirnaomics does not tolerate discrimination or harassment of any kind.
- Encourage the involvement of all employees in creative problem solving.
- Provide consistent leadership and competent on-the-job training and development.
- Maintain an open-door policy that encourages interaction and discussion.
- Encourage ideas to improve the workplace and increase productivity.
- Make "Do It Right the First Time" our team attitude to ensure continued growth and prosperity.

CORPORATE GOVERNANCE PRACTICES

The Company has adopted and applied the code provisions of the CG Code set out in Appendix 14 to the Listing Rules. To the best knowledge of the Directors, except for code provision C.2.1 of the CG Code set out below, the Company has complied with all applicable code provisions under the CG Code during the Reporting Period.

Code provision C.2.1 provides that the roles of the chairman and the chief executive should be separate and should not be performed by the same individual. The roles of chairman of the Board and chief executive officer of our Company are currently performed by Dr. Yang Lu ("**Dr. Lu**"). In view of Dr. Lu's substantial contribution to the Group since our establishment and his extensive experience, we consider that having Dr. Lu acting as both

our chairman and chief executive officer will provide strong and consistent leadership to the Group and facilitate the efficient execution of our business strategies. We consider it appropriate and beneficial to our business development and prospects that Dr. Lu continues to act as both the chairman and chief executive officer, and therefore currently do not propose to separate the functions of chairman and chief executive officer. The Board will continue to review the effectiveness of the corporate governance structure of the Group in order to assess whether separation of the roles of chairman of the Board and chief executive officer is necessary.

BOARD OF DIRECTORS

Board Composition

As at the date of this annual report, the Board consists of ten Directors, including four executive Directors, two non-executive Directors and four independent non-executive Directors as follow:

Executive Directors

Dr. Yang Lu (*alias* Patrick Lu) *(Chairman of the Board, President and Chief Executive Officer)*
Dr. Michael V. Molyneaux *(Chief Medical Officer)*
Dr. David Mark Evans *(Chief Scientific Officer)*
Dr. Xiaochang Dai *(re-designated from a non-executive Director effective from July 19, 2022) (Scientific and Strategic Director)*

Non-executive Directors

Mr. Mincong Huang
Mr. Jiankang Zhang
Mr. Da Liu *(resignation effective from September 30, 2022)*
Mr. Jiajun Lai *(resignation effective from August 31, 2022)*

Independent Non-executive Directors

Dr. Cheung Hoi Yu, *JP*
Mr. Fengmao Hua
Ms. Monin Ung
Ms. Shing Mo Han, Yvonne (*alias* Mrs. Yvonne Law), *BBS, JP*

The biographies of the Directors are set out under the section headed "Directors and Senior Management" of this annual report.

Throughout the Reporting Period, the Board has complied at all times with the requirements under Rules 3.10(1) and (2), and 3.10A of the Listing Rules relating to the appointment of at least three independent non-executive Directors representing at least one-third of the Board and with at least one independent non-executive Director possesses appropriate professional qualifications or accounting or related financial management expertise.

The Board has received from each independent non-executive Directors a written annual confirmation of such director's independence pursuant to Rule 3.13 of the Listing Rules, and the Nomination Committee has assessed the independence of each independent non-executive Director and the Company considers each of them to be independent.

To the best knowledge of the Company, none of the members of the Board is related to one another and the Directors do not have financial, business, family or other material/relevant relationships with each other.

Board Diversity Policy

The Board has adopted a board diversity policy (the "**Board Diversity Policy**") in order to enhance the effectiveness of our Board and to maintain high standard of corporate governance. The Board Diversity Policy sets out the criteria in selecting candidates to the Board, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service. The ultimate decision will be based on merit and contribution that the selected candidates will bring to the Board.

Pursuant to the Board Diversity Policy, the Nomination Committee is responsible for reviewing the structure, size and composition of the Board at least annually. The Company is committed to achieving and maintaining at least one Director of a different gender on the Board. The Nomination Committee monitors and evaluates the implementation of the Board Diversity Policy from time to time to ensure its continued effectiveness. The Board Diversity Policy is well implemented as evidenced by the fact that there are both female (two out of ten) and male (eight out of ten) Directors ranging from 34 years old to 68 years old with wide variety of working experience from different industries and business sectors. After an annual assessment by the Nomination Committee, the Board considers the current structure, size and composition of the Board is performing a balanced and independent monitoring function on management practices to complement the Company's corporate strategies.

The Board also places emphasis on diversity (including gender diversity) across all levels of the Group, and the Group has achieved a balanced gender diversity in the workforce. As at December 31, 2022, the employees of the Group (including senior management) comprise of approximately 43.1% female and 56.9% male. The Group will continue striving towards increased female representation at both the Board and workforce levels.

Induction and Continuing Professional Development

Each newly appointed Director is provided with necessary induction and information to ensure that the Director has a proper understanding of the Company's operations and businesses as well as the Director's responsibilities under relevant statutes, laws, rules and regulations. The Directors are also provided with regular updates on the Company's performance, position and prospects to enable the Board as a whole and each Director to discharge their duties.

Directors are encouraged to participate in continuous professional development to develop and refresh their knowledge and skills. The Company has provided relevant reading materials published by professional bodies or regulators to the Directors to keep them abreast of the latest development of legal, regulatory and corporate governance. During the Reporting Period, the Company's public relations consultant provided a media training session to Directors who regularly attend meetings with media, analysts and/or investors. Certain Directors have also participated in conferences, seminars, forums and/or training programs organized by professional bodies and/or regulators.

Directors have access to the advice and services of the joint company secretaries to ensure that board procedures, and all applicable law, rules and regulations, are followed.

Record of training received by the Directors during the Reporting Period are summarized as follows:

Name of Directors	Reading materials	Media training	Attending conferences, seminars, forums and/or training programs
Executive Directors			
Dr. Yang Lu	√	√	
Dr. Michael V. Molyneaux	√	√	
Dr. David Mark Evans	√	√	
Dr. Xiaochang Dai [(1)]	√	√	√
Non-executive Directors			
Mr. Mincong Huang	√		
Mr. Jiankang Zhang	√		√
Mr. Da Liu [(2)]	√		
Mr. Jiajun Lai [(3)]	√		
Independent Non-executive Directors			
Dr. Cheung Hoi Yu	√		√
Mr. Fengmao Hua	√		√
Ms. Monin Ung	√		√
Ms. Shing Mo Han, Yvonne	√		√

Notes:

(1) Dr. Xiaochang Dai was re-designated from a non-executive Director to an executive Director with effect from July 19, 2022.

(2) Mr. Da Liu resigned as a non-executive Director with effect from September 30, 2022.

(3) Mr. Jiajun Lai resigned as a non-executive Director with effect from August 31, 2022.

Chairman and Chief Executive Officer

The roles of chairman of the Board and chief executive officer of the Company are currently performed by Dr. Lu. Under code provision C.2.1 of the CG Code, the responsibilities between the chairman and chief executive officer should be separate and should not be performed by the same individual. Taking into account Dr. Lu's extensive experience in the industry, we consider that having Dr. Lu acting as both the chairman and chief executive officer will provide strong and consistent leadership to the Group and facilitate the efficient execution of our business strategies. Dr. Lu provides a keen leadership for the Board and ensures that the Board works effectively and performs its responsibilities, and that all key and appropriates issues are discussed by the Board in a timely manner. To facilitate the effective contribution of Directors, Dr. Lu encourages Directors with different views to voice their concerns and allows sufficient time for discussion of issues, so as to ensure constructive relations between executive and non-executive Directors. We consider it appropriate and beneficial to our business development and prospects that Dr. Lu continues to act as both our chairman and chief executive officer.

While this constitutes a deviation from code provision C.2.1 of the CG Code, the Directors believe that this structure will not impair the balance of power and authority between the Board and the management of the Company, given that: (i) there are sufficient checks and balances in the Board, as a decision to be made by our Board requires approval by at least a majority of our Directors, and the Board comprises four independent non-executive Directors, which is in compliance with the requirement under the Listing Rules; (ii) Dr. Lu and the other Directors are aware of and undertake to fulfil their fiduciary duties as Directors, which require, among other things, that Dr. Lu acts for the benefit and in the best interests of our Company and will make decisions for the Group accordingly; and (iii) the balance of power and authority is ensured by the operations of the Board which comprises experienced and high caliber individuals who meet regularly to discuss issues affecting the operations of the Company. Moreover, the overall strategic and other key business, financial, and operational policies of the Group are made collectively after thorough discussion at both Board and senior management levels. The Board will continue to review the effectiveness of the corporate governance structure of the Group in order to assess whether separation of the roles of chairman of the Board and chief executive officer is necessary.

The Board will continue to review and monitor the practices of the Company with an aim of maintaining a high standard of corporate governance.

Corporate Governance Report

Directors' Responsibilities

The Board is responsible for the overall leadership of the Group, overseeing the Group's strategic decisions and monitors business and performance. To oversee particular aspects of the Company's affairs, the Board has established three Board committees including the Audit Committee, the Remuneration Committee and the Nomination Committee. The Board has delegated to the Board committees responsibilities as set out in their respective terms of reference.

The non-executive Directors and independent non-executive Directors have diversified industry expertise and professional knowledge, and provide advisory, adequate check and balances for effective and constructive contribution to the executive Directors to safeguard the interests of the Company and the Shareholders as a whole.

The Company has arranged appropriate liability insurance in respect of legal action against the Directors. The insurance coverage is reviewed on an annual basis.

Delegation by the Board

The senior management, consisting of the executive Directors along with other senior executives, is delegated with authority and responsibilities for implementing strategies and directions as adopted by the Board and conducting day-to-day management and operation of the Group. The senior management meets regularly to review the performance of the businesses of the Group as a whole, co-ordinate overall resources and make financial and operational decisions. The Board gives clear directions as to their powers of management including circumstances where senior management should report back, and will review the delegation arrangements on a periodic basis to ensure that they remain appropriate to the needs of the Group.

Directors' Responsibilities in respect of the Financial Statements

The Directors acknowledge their responsibilities for preparing the consolidated financial statements of the Group in accordance with statutory requirements and applicable accounting standards and for timely financial disclosures under the Listing Rules and any other regulatory requirements.

The Directors are not aware of material uncertainties relating to events or conditions that may cast significant doubt upon the Company's ability to continue as a going concern.

The statement of the independent auditor of the Company about their reporting responsibilities on the consolidated financial statements is set out in the Independent Auditor's Report on pages 162 to 166 of this annual report.

Corporate Governance Functions

The Board is responsible for performing the corporate governance duties set out in code provision A.2.1 of the CG Code, which includes but not limited to the following:

(a) to develop and review the Company's policies and practices on corporate governance and make recommendations to the Board;

(b) to review and monitor the training and continuous professional development of Directors and senior management;

(c) to review and monitor the Company's policies and practices on compliance with legal and regulatory requirements;

(d) to develop, review and monitor the code of conduct and compliance manual applicable to employees and Directors; and

(e) to review the Company's compliance with the CG Code and disclosure in the Corporate Governance Report.

Appointment, Re-election, Rotation and Removal of Directors

The procedures and process of appointment, re-election and removal of Directors are set out in the Articles of Association. The Nomination Committee is responsible for reviewing the Board composition, monitoring and making recommendations to the Board on the appointment, re-election and succession planning of Directors, in particular the chairman of the Board and the chief executive officer of the Company.

Each of Dr. Lu, Dr. Michael V. Molyneaux and Dr. David Mark Evans, being the executive Directors, has entered into a service contract with the Company on December 16, 2021 for an initial term of three years with effect from the date of their respective appointment, until the third annual general meeting of our Company since the Listing Date (whichever is sooner), and Dr. Xiaochang Dai, being an executive Director, has entered into a service contract with the Company on July 19, 2022 for an initial term of three years with effect from July 19, 2022, subject to provisions on retirement by rotation of Directors as set out in the Articles of Association. Either party has the right to give not less than three months' written notice to terminate the agreement.

Each of Mr. Mincong Huang and Mr. Jiankang Zhang, being the non-executive Directors, has entered into a service contract with the Company on December 16, 2021 for an initial term of three years with effect from the date of their respective appointment, until the third annual general meeting of our Company since the Listing Date (whichever is sooner). Either party has the right to give not less than three months' written notice to terminate the agreement.

During the Reporting Period, Dr. Xiaochang Dai was re-designated from a non-executive Director to an executive Director with effect from July 19, 2022, Mr. Jiajun Lai resigned as a non-executive Director with effect from August 31, 2022, and Mr. Da Liu resigned as a non-executive Director with effect from September 30, 2022.

Each of the independent non-executive Directors, being Dr. Cheung Hoi Yu, Mr. Fengmao Hua, Ms. Monin Ung and Ms. Shing Mo Han, Yvonne, has entered into an appointment letter with our Company on December 16, 2021. The initial term for their appointment letters shall be three years from the date of the Prospectus or until the third annual general meeting of the Company since the Listing Date, whichever is sooner, (subject always to re-election as and when required under the Articles of Association) until terminated in accordance with the terms and conditions of the appointment letter or by either party giving to the other not less than three months' prior notice in writing.

In accordance with the Articles of Association, the Company may by ordinary resolution remove any Director before the expiration of the Director's period of office notwithstanding anything in the Articles of Association or in any agreement between the Company and such Director. The Company may also by ordinary resolution appoint another person in his place. Any Director so appointed shall hold office during such time only as the Director in whose place he is appointed would have held the same if he had not been removed.

The Company may also by ordinary resolution elect any person to be a Director, either to fill a casual vacancy or as an addition to the existing Directors.

At every annual general meeting of the Company, one-third of the Directors for the time being, or, if their number is not three or a multiple of three, then the number nearest to, but not less than, one-third, shall retire from office by rotation, provided that every Director (including those appointed for a specific term) shall be subject to retirement by rotation at least once every three years.

To comply with the above, Dr. Yang Lu, Mr. Mincong Huang, Dr. Cheung Hoi Yu and Ms. Monin Ung shall retire from office and, being eligible, offer themselves for re-election at the forthcoming annual general meeting.

Board Meetings and Board Committee Meetings

The Company adopts the practice of holding Board meetings regularly, at least four times a year and at approximately quarterly intervals, either in person or through electronic means of communications; and the Chairman of the Board at least annually holds meetings with the independent non-executive Directors without the presence of other Directors.

Notices of not less than fourteen days are given for all regular Board meetings to provide all Directors with an opportunity to attend and include matters in the agenda for a regular meeting. For other Board and Board committees meetings, reasonable notice is generally given. The agenda and accompanying board papers are sent to the Directors or Board committee members at least 3 days before the meetings, and all Directors have full and timely access to the senior management, board papers and related materials for any information to enable them to make informed decisions and perform their duties and responsibilities.

Minutes of the Board meetings and Board committees meetings are recorded in sufficient detail about the matters considered and decisions reached, including any concerns raised by the Directors. Draft and final versions of minutes of each meeting are sent to the Directors or Board committees members for their comments and records respectively, within a reasonable time after the meeting is held. Minutes of the Board meetings and Board committees meetings are kept by the joint company secretaries and are open for inspection by the Directors.

The Directors are authorized to seek independent professional advice from external consultants or experts at the Company's expense, to assist them perform their duties to the Company. During the Reporting Period, the Board reviewed the implementation and effectiveness of mechanisms to ensure independent views and input are available to the Board.

Code provision C.5.1 of the CG Code stipulates that the Board should meet regularly and board meetings should be held at least four times a year at approximately quarterly intervals with active participation of the majority of the Directors, either in person or through electronic means of communications.

Code provision C.2.7 of the CG Code requires that the Chairman should at least annually hold meetings with the independent non-executive Directors without the presence of other Directors. During the Reporting Period, the Chairman of the Board held one meeting with the independent non-executive Directors without the presence of other Directors.

A summary of the attendance records of each Director at Board meetings, committee meetings and general meetings during the Reporting Period is set out below:

	Attendance/Number of Meetings				
	Board	Audit Committee	Remuneration Committee	Nomination Committee	General Meeting
Executive Directors					
Dr. Yang Lu	6/6	N/A	N/A	2/2	2/2
Dr. Michael V. Molyneaux	6/6	N/A	N/A	N/A	2/2
Dr. David Mark Evans	6/6	N/A	N/A	N/A	2/2
Dr. Xiaochang Dai [(1)]	2/2	N/A	1/1	N/A	2/2
Non-executive Directors					
Dr. Xiaochang Dai [(1)]	4/4	N/A	2/2	N/A	2/2
Mr. Mincong Huang	6/6	5/5	N/A	N/A	2/2
Mr. Jiankang Zhang	5/6	N/A	N/A	N/A	2/2
Mr. Da Liu [(2)]	5/5	N/A	N/A	N/A	2/2
Mr. Jiajun Lai [(3)]	4/4	N/A	N/A	N/A	2/2
Independent Non-executive Directors					
Dr. Cheung Hoi Yu	6/6	N/A	3/3	2/2	2/2
Mr. Fengmao Hua	5/6	5/5	N/A	2/2	2/2
Ms. Monin Ung	6/6	N/A	3/3	N/A	2/2
Ms. Shing Mo Han, Yvonne	6/6	5/5	N/A	N/A	2/2

Notes:

(1) Dr. Xiaochang Dai was re-designated from a non-executive Director to an executive Director with effect from July 19, 2022.

(2) Mr. Da Liu resigned as a non-executive Director with effect from September 30, 2022.

(3) Mr. Jiajun Lai resigned as a non-executive Director with effect from August 31, 2022.

BOARD COMMITTEES

The Board has established three Board committees, namely the Audit Committee, the Remuneration Committee and the Nomination Committee and all of which are chaired by an independent non-executive Director to oversee particular aspects of the Company's affairs as set out below. Each committee is established with defined written terms of reference.

Audit Committee

The Audit Committee was established by the Board with its written terms of reference in compliance with Rule 3.21 of the Listing Rules and the CG Code. As at the date of this annual report, the Audit Committee consists of one non-executive Director, being Mr. Mincong Huang, and two independent non-executive Directors, being Ms. Shing Mo Han, Yvonne and Mr. Fengmao Hua. Ms. Shing Mo Han, Yvonne is the chairperson of the Audit Committee.

The primary duties of the Audit Committee are set out in the written terms of reference which include reviewing and supervising the financial reporting process, risk management and internal control systems of the Group, and overseeing the audit process. The written terms of reference of the Audit Committee are available on the websites of the Company and the Hong Kong Stock Exchange.

The Audit Committee held five meetings during the Reporting Period, out of which four meetings were attended by the external auditor without the presence of the executive Directors. The following is a summary of work performed by the Audit Committee during the Reporting Period:

- reviewed the Group's annual consolidated financial statements for the year ended December 31, 2021 and made recommendation to the Board for approval;
- reviewed the Group's interim condensed consolidated financial statements for the six months ended June 30, 2022 and made recommendation to the Board for approval;
- reviewed the external auditor's management letter and management's response;
- reviewed the external auditor's independence and objectivity and recommended for the Board's approval on the re-appointment of the external auditor;
- reviewed the Group's financial controls, risk management and internal control systems, and discussed on the adequacy and competency of resources, and findings on risk management and internal control matters;
- reviewed the Group's financial and accounting policies and practices; and
- reviewed the arrangements for raising concerns about possible improprieties in financial reporting, internal control or other matters.

Remuneration Committee

The Remuneration Committee was established by the Board with its written terms of reference in compliance with Rule 3.25 of the Listing Rules and the CG Code adopting the model to make recommendations to the Board on the remuneration packages of individual Directors and senior management. As at the date of this annual report, the Remuneration Committee consists of one executive Director, being Dr. Xiaochang Dai, and two independent non-executive Directors, being Ms. Monin Ung and Dr. Cheung Hoi Yu. Ms. Monin Ung is the chairperson of the Remuneration Committee.

The primary duties of the Remuneration Committee are set out in the written terms of reference which include making recommendations to the Board on the Company's remuneration policy and structure, and on the remuneration packages of the Directors and senior management. The written terms of reference of the Remuneration Committee are available on the websites of the Company and the Hong Kong Stock Exchange.

The Remuneration Committee held three meetings during the Reporting Period. The following is a summary of work performed by the Remuneration Committee during the Reporting Period:

- reviewed the Company's remuneration policy and structure;
- determined, with delegated responsibility, the remuneration packages of individual executive Directors and senior management;
- reviewed the remuneration of non-executive Directors and independent non-executive Directors and made recommendation to the Board for approval;
- reviewed the proposed adoption of the RSU Scheme and the Share Option Scheme and made recommendation to the Board for approval; and
- reviewed the proposed grants of RSUs under the RSU Scheme and Options under the Share Option Scheme and made recommendation to the Board for approval.

Details of the Directors' remuneration for the Reporting Period are set out in note 13 to the consolidated financial statements.

The remuneration of the senior management[1] (other than Directors) of the Group by band for the Reporting Period is set out below:

Remuneration bands (HK$)	Number of individuals
HK$2,500,001 to HK$3,000,000	2
HK$3,000,001 to HK$3,500,000	2
Total	4

Note:

(1) Included Dr. Zhifeng Long (*alias* Steven Long), who ceased to be a member of the senior management of the Group after he left the role of Chief Development Officer of Sirnaomics in February 2023.

Nomination Committee

The Nomination Committee was established by the Board with its written terms of reference in compliance with Rule 3.27A of the Listing Rules and the CG Code. As at the date of this annual report, the Remuneration Committee consists of one executive Director, being Dr. Lu, and two independent non-executive Directors, being Mr. Fengmao Hua and Dr. Cheung Hoi Yu. Mr. Fengmao Hua is the chairperson of the Nomination Committee.

The primary duties of the Nomination Committee are set out in the written terms of reference which include reviewing the structure, size and composition of the Board, selecting and recommending individuals for directorship to the Board, and assessing the independence of the independent non-executive Directors. The written terms of reference of the Nomination Committee are available on the websites of the Company and the Hong Kong Stock Exchange.

When selecting candidates for directorship, the Nomination Committee would consider the following criteria, including, among other things, character and integrity, qualifications (cultural and educational background, professional qualifications, skills, knowledge and experience and diversity aspects under the Board Diversity Policy), any potential contributions the candidate can bring to the Board in terms of qualifications, skills, experience, independence and diversity, and willingness and ability to devote adequate time to discharge duties as a member of the Board and/or Board committee(s).

The Nomination Committee and/or the Board should, upon receipt of the proposal on appointment of new director and the biographical information (or relevant details) of the candidate, evaluate such candidate based on the criteria as set out above to determine whether such candidate is qualified for directorship. The Nomination Committee should then recommend to the Board to appoint the appropriate candidate for directorship with a ranking of the candidates (if applicable) by order of preference based on the needs of the Company and reference check of each candidate.

The Nomination Committee held two meetings during the Reporting Period. The following is a summary of work performed by the Remuneration Committee during the Reporting Period:

- reviewed the structure, size and composition of the Board;
- reviewed the Board Diversity Policy;
- assessed the independence of independent non-executive Directors;
- made recommendation to the Board on the re-election of retiring Directors; and
- reviewed the proposed re-designation of Dr. Xiaochang Dai from non-executive Director to executive Director and made recommendation to the Board for approval.

Model Code for Securities Transactions

The Company has adopted its own code of conduct regarding securities transactions, which applies to all Directors and relevant employees of the Group who are likely to be in possession of unpublished price-sensitive information of the Company, on terms no less than the required standard indicated by the Model Code.

All Directors have confirmed, following specific enquiry by the Company, that they have complied with the Model Code during the Reporting Period. No incident of non-compliance of the Model Code by the Directors and relevant employees was noted during the Reporting Period.

RISK MANAGEMENT AND INTERNAL CONTROL

The Board acknowledges its responsibility for the risk management and internal control systems and reviewing their effectiveness. Such systems are designed to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable and not absolute assurance against material misstatement or loss. The Board has the overall responsibility for evaluating and determining the nature and extent of the risks it is willing to take in achieving the Company's strategic objectives, and establishing and maintaining appropriate and effective risk management and internal control systems. The Company has an internal audit function responsible for independently reviewing the adequacy and effectiveness of the risk management and internal control systems, the adequacy of resources, staff qualifications and experience, and training programs of the Company.

The Audit Committee assists the Board at least annually, in reviewing the design, implementation and monitoring of the risk management and internal control systems.

- **Risk management**

  The Company has conducted risk assessment by the senior management to identify and assess enterprise risks (including environmental, social and governance risks) with reference to the Company's business objectives and strategies. Key risks and the respective mitigation strategies have been discussed among senior management. The senior management reviews the action plans on an on-going basis which have been developed to further enhance the risk management capabilities of particular key risks as appropriate.

- **Internal control**

  The Company ensures internal controls are designed and implemented in all major aspects of the Company's operations and details of internal control activities are included in the operating policies and procedures. The senior management regularly revisits the policies and procedures and furnishes updates as necessary.

  In relation to the handling and dissemination of inside information, the Company has adopted a communication policy to ensure potential inside information being captured and confidentiality of such information being maintained until consistent and timely disclosure are made in accordance with the Listing Rules.

The Company engaged an independent third-party consultant (the "**Internal Control Consultant**") to perform a review over selected areas of internal controls (the "**Internal Control Review**") for the Reporting Period. The selected areas of internal controls that were reviewed by the Internal Control Consultant included entity level controls and business process level controls, including procurement, accounts payable and payment, research and development project management and clinical trial.

The Audit Committee reviewed the internal control review report issued by the Internal Control Consultant and the Company's risk management and internal control systems in respect of the Reporting Period and considered that they are effective and adequate. Any findings or irregularities identified, together with the remedial actions and recommendations to enhance our internal control measures and policies, are discussed with the management and reported to the Audit Committee. The Board assessed the effectiveness of the internal control systems by considering the internal control review report and reviews performed by the Audit Committee and concurred the same.

The Company has established a whistleblowing policy for employees and those who deal with the Group to raise concerns, in confidence and anonymity, with the Audit Committee about possible improprieties in matters of financial reporting, internal control or other matters relating to the Group.

The Company has established anti-corruption, anti-bribery and anti-money laundering policies to set out the minimum standards of ethical conduct to which all employees are required to adhere.

JOINT COMPANY SECRETARIES

Ms. Yun Zhang ("**Ms. Zhang**") and Mr. Leung Ting Cheung ("**Mr. Leung**") have been appointed as the Company's joint company secretaries. Ms. Zhang joined the Group in November 2015 and has gained a thorough understanding of the internal administration and business operation of the Group. Mr. Leung is a fellow of the Hong Kong Institute of Certified Public Accountants and meets the qualification requirements under Note 1 to Rule 3.28 of the Listing Rules, to assist Ms. Zhang in discharging her duties and responsibilities as a joint company secretary of the Company.

In compliance with Rule 3.29 of the Listing Rules, Ms. Zhang and Mr. Leung both undertook not less than 15 hours of professional training during the Reporting Period.

AUDITORS' REMUNERATION

The remuneration paid or payable to Deloitte Touche Tohmatsu, the external auditor of the Company, in respect of its audit and non-audit services provided to the Group during the Reporting Period is set out below:

Type of Services	Amount (USD'000)
Audit services	553
Non-audit services:	
— Tax advisory	87
— Review of interim results	117
— Others	2
Total	759

DIVIDEND POLICY

With respect to dividend policy, the Company currently expects to retain all future earnings for use in the operation and expansion of our business. Any future declarations and payments of dividends will be at the absolute discretion of the Directors and will depend on our actual and expected results of operations, cash flow and financial position, general business conditions and business strategies, expected working capital requirements and future expansion plans, legal, regulatory and other contractual restrictions, and other factors which the Directors consider relevant.

The Company has adopted a dividend policy that, in recommending or declaring dividends, the Company shall maintain adequate cash reserves for meeting its working capital requirements and future growth as well as its shareholder value. The Board would take into account the following factors of the Group when considering the declaration and payment of dividends:

- financial results;
- cash flow situation;
- business conditions and strategies;
- future operations and earnings;
- general economic conditions and other internal or external factors which may have an impact on the business of the Group;
- amount of distributions (if any) received by the Company from its subsidiaries;
- capital requirements and expenditure plans;
- interests of the Shareholders;
- any legal/contractual restrictions on payment of dividends; and
- any other factors that the Board may consider relevant.

SHAREHOLDERS' RIGHTS

Convening of extraordinary general meeting

Pursuant to article 12.3 of the Articles of Association, the Board may, whenever it thinks fit, convene an extraordinary general meeting. General meetings shall also be convened on the written requisition of any one or more members holding together, as at the date of deposit of the requisition, Shares representing not less than one-tenth of the paid up capital of the Company which carry the right of voting at general meetings of the Company. The written requisition shall be deposited at the principal office of the Company in Hong Kong or, in the event the Company ceases to have such a principal office, the registered office of the Company, specifying the objects of the meeting and the resolutions to be added to the meeting agenda, and signed by the requisitionist(s). If the Board does not within 21 days from the date of deposit of the requisition proceed duly to convene the meeting to be held within a further 21 days, the requisitionist(s) themselves or any of them representing more than one-half of the total voting rights of all of them, may convene the general meeting in the same manner, as nearly as possible, as that in which meetings may be convened by the Board provided that any meeting so convened shall not be held after the expiration of three months from the date of deposit of the requisition, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Directors shall be reimbursed to them by the Company.

Putting Forward Proposals at General Meetings

There are no provisions under the Articles of Association regarding procedures for Shareholders to put forward proposals at general meetings other than a proposal of a person for election as Director. Shareholders may follow the procedures set out above to convene an extraordinary general meeting for any business specified in such written requisition.

As regards proposing a person for election as a Director, the procedures are available on the website of the Company. If a shareholder wishes to nominate a person to stand for election as a Director of the Company at the general meeting, the following documents must be addressed to the joint company secretaries of the Company and validly served at the registered office of the Company, namely (1) a notice of intention to propose a resolution at the general meeting; (2) a notice signed by the nominated candidate of the candidate's willingness to be elected; (3) the nominated candidate's information as required to be disclosed under Rule 13.51(2) of the Listing Rules; and (4) the nominated candidate's written consent to the publication of the candidate's personal data.

Enquiries to the Board

Shareholders who wish to make enquiries about the Company to the Board may send their enquiries to the Company's principal place of business in Hong Kong at 46/F, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong or by email at IR@sirnaomics.com. The Company will not normally deal with verbal or anonymous enquiries.

COMMUNICATION WITH SHAREHOLDERS AND INVESTOR RELATIONS

The Company believes that effective communication with the Shareholders is essential for enhancing investor relations and understanding of the Group's business, performance and strategies. The Company also recognizes the importance of timely and non-selective disclosure of information, which will enable Shareholders and investors to make informed investment decisions.

The annual general meeting provides opportunity for the Shareholders to communicate directly with the Directors. The Chairman of the Board and the chairpersons of the Board committees will attend the annual general meeting to answer questions from Shareholders. The Company's external auditor will also attend the annual general meeting to answer questions about the conduct of the audit, the preparation and content of the independent auditor's report, accounting policies and auditor independence.

To facilitate effective communication, the Company maintains a website at www.sirnaomics.com, where information and updates on the Company's business developments and operations, financial information, corporate governance practices and other information are available for public access. The Company is of the view that the current channel of Shareholders communication was implemented effectively during the Reporting Period as the Company was able to understand the views of its Shareholders through the channels described above.

CHANGES IN CONSTITUTIONAL DOCUMENTS

During the Reporting Period, the Board proposed to (i) amend the Memorandum and Articles of Association for the purpose of, among others, reflecting and aligning to the new requirements of Appendix 3 to the Listing Rules with effect from January 1, 2022; and (ii) adopt the fourth amended and restated Memorandum and Articles of Association of the Company incorporating and consolidating the proposed amendments. The proposed amendments were approved by the Shareholders by way of a special resolution at the annual general meeting of the Company held on June 28, 2022. Pursuant to the special resolution passed, the Memorandum and Articles of Association of the Company was amended and restated with effect from June 28, 2022. The amended and restated Memorandum and Articles of Association are available on the websites of the Company and the Hong Kong Stock Exchange.

Environmental, Social and Governance Report

INTRODUCTION

About this Report

Sirnaomics Ltd. (the "**Company**") and its subsidiaries (collectively "**Sirnaomics**", or the "**Group**") is an RNA therapeutics biopharmaceutical company with product candidates in preclinical and clinical stages, focusing on the discovery and development of innovative drugs for indications with medical needs and large market opportunities. With the mission of developing novel therapeutics to alleviate human suffering and advancing patient care in areas of high unmet medical need, the Group continues to develop a strong portfolio of intellectual property ("**IP**") with an enriched product pipeline by consistently focusing on its two guiding principles: Innovation and Global Vision with a Patient Centered focus.

The Group acknowledges that it is of exceptional importance to integrate environmental, social and governance ("**ESG**") initiatives into our business operation. Adhering to responsible development as our business philosophy, the Group is committed to formulating and implementing ESG measures, therefore creating positive influences on our community.

The Group is pleased to publish our second ESG Report (the "**Report**") demonstrating the Group's commitment to sustainable development. The Report summarizes the Group's ESG management approaches, practices and performances during the financial year ended 31 December 2022 (the "**Reporting Period**", "**2022**"), unless otherwise specified. The Report should be read in conjunction with the Group's Annual Report 2022, which covers a comprehensive review of the Group's financial performance and corporate governance practices.

Reporting Scope

Unless otherwise stated, the reporting scope of the Report mainly covers the Group's major subsidiaries which made a material contribution to the Group results of operations and operations that are under the Group's direct operational control, namely US Sirnaomics and RNAimmune located in the U.S., Beijing Sirnaomics, Suzhou Sirnaomics, Guangzhou Sirnaomics and Guangzhou RNAimmune located in Mainland China, and HK Sirnaomics located in Hong Kong. The environmental data of Beijing Sirnaomics is excluded from the Report due to its operation started from September 2022 and limited data availability.

Reporting Standard

The Report is prepared in accordance with Appendix 27 Environmental, Social and Governance Reporting Guide (the "**ESG Reporting Guide**") of the Main Board Listing Rules of the Hong Kong Stock Exchange. The Report has also been prepared with reference to the Global Reporting Initiative ("**GRI**") Standards. The ESG Report has been reviewed and approved by the board of directors of the Group (the "**Board**") in March 2023.

Given the ESG Reporting Guide that underpins the preparation of the Report, the content of the Report has been determined and summarized according to certain reporting principles. The Group has compiled the Report in accordance with the following reporting principles.

Materiality

- Materiality directs ESG management by prioritizing ESG topics of greater significance to the Group and relevant stakeholders. As such, the Group applied the principle of materiality by performing a materiality assessment based on result analysis of stakeholder engagement and peer benchmarking. Please refer to the sections headed "Stakeholder Engagement" and "Materiality Assessment" for further details.

Quantitative

- Information regarding the standards, methodologies and conversion factors applied in the calculation of relevant environmental and social key performance indicators ("**KPIs**") is disclosed in the Report and explicated corresponding purpose and impacts. Comparative data is provided for ease of reference when analyzing changes in ESG performance. Please refer to relevant sections in the Report for details.

Balance

- The Report presented the Group's environmental and social performance on an impartial basis to provide an objective reporting disclosure for readers.

Consistency

- The methodology adopted for disclosing key environmental and social KPIs is consistent with that of the previous Reporting Period, therefore allowing meaningful performance comparison.

The reporting principles are intended to underlie all aspects of the disclosed ESG information. The application of these reporting principles ensures the content of the Report is accurate, objective, transparent and comparable.

Contact Us

Building a trusted relationship with stakeholders is vital for the Group's business sustainability. Your feedback is highly appreciated and facilitate the Group to enhance its management for the best interests of relevant stakeholders. You may provide your comments on the Report or towards the Group's performance in respect of sustainability via email to ESG@sirnaomics.com.

Environmental, Social and Governance Report

MESSAGE FROM THE CHAIRMAN

Sirnaomics are building an enriched product pipeline of innovative RNA-based products, so as to improve the lives and wellbeing of patients worldwide. With our proprietary technology platforms, world-leading clinical programs, highly experienced management team and well-established R&D and manufacturing facilities in both the U.S. and China, the Group is well-positioned to develop novel RNAi therapeutics for cancer, fibrosis diseases, viral infection, liver-metabolic diseases and medical aesthetics.

To enhance the living standard and human wellbeing, the Group adheres to the principle of sustainable development and continues to optimize ESG management, therefore achieving the balanced development of the environment, society and economy. The Board bears the absolute responsibility for the Group's ESG strategy formulation, and continuously monitors the key risks affecting the sustainability of the Group's business. The ESG-related risk management and internal control systems provide a structured framework for the Board to formulate policies and ensure effective implementation correspondingly.

Echoing with the innovation-driven strategy, the Group carries out professional, efficient and reliable R&D. Sirnaomics is advancing a broad portfolio of product candidates, as the exclusive owner of 20 pending patent applications filed in 2022 that cover a polypeptide nanoparticle (PNP) delivery platform (without regard to any particular product or product family). In 2022, The Group continued to make significant progress with respect to our pipeline development and business development, supporting our transition into a clinical-stage biopharmaceutical company with multiple clinical trials and 12 pending international applications in both the U.S. and China. In 2021, The Group built the clinical manufacturing facility in Guangzhou to further enhance our in-house manufacturing capacity. In the first half of 2022, the Guangzhou Facility has supported the production of lyophilized tox lots for STP707, STP908, STP355 and STP369 programs.

The Group is concerned about climate change, and apply comprehensive and targeted management measurements to fully shoulder our responsibilities in environmental protection. To better address the impacts of climate change, The Group conducted risk analysis using methodologies laid out by the Financial Stability Board's Task Force on Climate-related Financial Disclosure (TCFD). The Group has established a comprehensive environmental management system to identify and manage the impact on the environment during the operation process, striving to minimize the Group's influence on the surrounding environment. The Group has implemented the Work Plan for Greenhouse Gas Emission Control and taken different measures in response to rising concerns on climate change.

The Group emphasizes the creation of social value, promoting cooperation and striving for win-win development, to provide our stakeholders with positive influence. The Group also pays great attention to employees' career success, by supporting their growth with fair and equal opportunities, creating a diverse and inclusive working environment, promoting health and wellbeing, and unleashing their full potential. For suppliers and partners, The Group cooperates only with qualified and experienced suppliers, to carry out research and development work of high quality, working together toward the common goal of improving human wellbeing. For the community, The Group devotes itself to engaging in various public welfare activities, to realize corporate responsibility for society.

Environmental, Social and Governance Report

On behalf of the Board, I would like to express my gratitude to my fellow directors, the management team, all employees and stakeholders for their contributions to the Group's sustainable development.

Looking forward, the Board always plans and directs the Group's development with a holistic vision. The Group will continue to demonstrate its professionalism amid the R&D of new products, and make significant contributions to human health and wellbeing.

ABOUT THE GROUP

The Group is an RNA therapeutics biopharmaceutical company with product candidates in preclinical and clinical stages that focuses on the discovery and development of innovative drugs for indications with medical needs and large market opportunities. The Group is the first company to achieve positive Phase IIa clinical outcomes in oncology for an RNAi therapeutics for the Group's core product, STP705, and the first clinical-stage RNA therapeutics company to have a strong presence in both China and the U.S. The Group has built a professional international team for the discovery and development of RNAi therapeutics and mRNA vaccines and therapeutics, based on our proprietary drug delivery technology platforms.

The Group's key differentiating feature are our proprietary platforms for administration of RNA-based therapeutics:. (1) PNP delivery platform for both local and systemic administration of RNAi therapeutics; (2) our unique GalNAc-based RNAi delivery platforms (GalAhead™ platform and PDoV-GalNAc™ platform), which were developed for subcutaneous administration of siRNA drugs; and (3) the proprietary PLNP delivery platform, jointly developed with our subsidiary RNAimmune, for administration of mRNA vaccines and therapeutics. These technologies build the foundation of our product pipelines. Currently, the clinical development pipeline is focused on oncology indications. Through internal research and collaborations with prominent laboratories, the Group is moving towards its mission to develop novel therapeutics to alleviate human suffering and advance patient care in areas of high unmet medical need.

The Group's mission is to develop novel therapeutics to alleviate human suffering and advance patient care in areas of high unmet medical need. The Group has developed a strong portfolio of intellectual property ("**IP**") with an enriched product pipeline by consistently focusing on its two guiding principles: Innovation and Global Vision with a Patient Centered focus. Through the regular training provided to the Group's employees and supported by funding from institutional investors, corporate partnerships and government grants, the Group looks to accomplish its mission by partnering organizations that have the finest reputation for quality and by encouraging a real commitment from every employee.

Company Name	Sirnaomics Ltd.
HKEX Stock Code	2257
Global Headquarters	Germantown, Maryland, the U.S.
Year of Establishment	2007

Awards and Recognitions

The Group has received recognition for its R&D achievements. The table below sets forth the Group's selected key awards and recognitions in 2021 and 2022.

Year	Name of award or recognition	Awarding entity
2022	National R&D Plan "Frontier Biotechnology" (前沿生物技術) Key Project	The Ministry of Science and Technology of the People's Republic of China (the "**PRC**")
2022	2022 Changchun Award (常春獎) — Biopharmaceutical Enterprise of the Year	Shanghai United Media Group
2022	The Listed Enterprise Excellence Awards 2021	Capital Magazine
2021	Top 10 RNA-Based Biopharmas	Genetic Engineering and Biotechnology News
2021	Top 3 finalists of Skin Health Innovation Competition	Gore Range Capital

Sirnaomics has been selected as a constituent stock of the following index series by Hang Seng Indexes Company Limited, with effect from September 5, 2022:

- Hang Seng Composite Index ("**HSCI**");
- Hang Seng Stock Connect Hong Kong Index ("**HSHKI**");

Hang Seng Stock Connect Hong Kong MidCap & SmallCap Index;

Hang Seng Stock Connect Hong Kong SmallCap Index;

Hang Seng SCHK Mainland China Companies Index;

Hang Seng SCHK ex-AH Companies Index;

Hang Seng Healthcare Index;

Hang Seng Small Cap (Investable) Index

The inclusion on the Hang Seng Composite Index also enables us to become eligible for southbound trading on the Hong Kong Stock Connect, which is a channel that facilitates stock trading and investment between Hong Kong and a broader base of Chinese investors in mainland China. This allows the Company to expose to more diversified investors, to improve stock liquidity, and to promote the Company's reputation in the capital market.

Highlights and Performance in 2022

ESG Management	• The Group has established an ESG working group pursuant to the resolutions of the Board passed on March 31, 2022.
Research Innovation	• In 2022, the Group have achieved significant progress with respect to our pipeline development and business development to become a multi-program clinical stage company. • In the first half of 2022, the Guangzhou Facility has supported the production of lyophilized tox lots for STP707, STP355 and STP369 programs. • Support as the Gold Sponsor for the Hong Kong Biotechnology Convention 2022.
Environment Protection	• 100% compliance with environmental laws and regulations • 0 environmental accidents
Talent Care and Development	• Achieved approximately 32.2 training hours per employee

SUSTAINABILITY STRATEGY

ESG Governance

Sirnaomics has formulated an ESG Policy, which outlines the ESG approach and priorities from the Group's perspectives, to respond to the differences in social, economic and environmental needs in each individual market and implement relevant practices across its operations. Maintaining the Group's position as a responsible business, the Group has constructed an ESG management structure for relevant governance, monitoring, and policy execution.

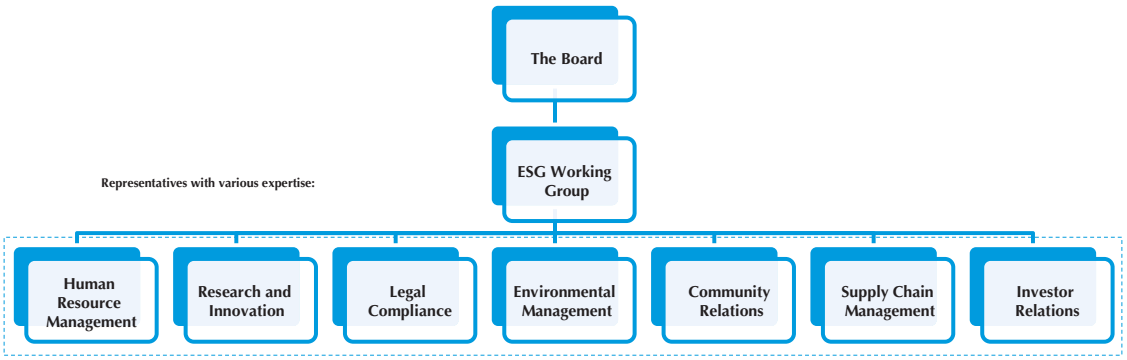
A well-established ESG management structure, consisting of representatives from both the Board, the ESG Working Group and various departments, could strengthen the Group's ESG governance and therefore performances by ensuring the corresponding principles are fully incorporated throughout the Group's business value chain.

The Board is proactively engaged in the Group's ESG strategic planning, therefore guiding the direction of the Group's long-term sustainable development. By overseeing the Group's performance with the existing ESG strategies and management with the assistance of the ESG Working Group, the Board regularly reviews and updates relevant ESG risk management approaches and initiatives. The Board also provides timely strategic guidance on the identification of ESG-related risks and material issues. In addition, the Board is responsible for approving ESG reports prepared by the ESG Working Group. The Group will continue to explore the feasibility of setting multiple applicable ESG-related targets within the ESG umbrella, enhancing its ESG performance with quantifiable tools. For example, Suzhou Sirnaomics has set a definite target that compared with 2021, carbon dioxide emissions within the Suzhou Facility will be reduced by 10% by 2032, to effectively control carbon emissions.

The ESG Working Group is authorized by the Board and composed of representatives with various expertise, with taking into account of the Group's organizational structure and operational mechanism. It is expected that the appointed representatives could utilize their knowledge and expertise in facilitating the Group's ESG governance, management and performance improvement.

The ESG Working Group is responsible to advise ESG matters and ensure the implementation of relevant internal policies from different perspectives, across Sirnaomics' business value chain. Providing valuable insights from various departmental units, the ESG Working Group assists in formulating ESG strategies, and identifying and analyzing significant ESG risks and opportunities. Representatives are associated with different specialties, and therefore capable to report and provide feedback from diverse standpoints to the Board, regarding the latest ESG market trends, industry practices and development. Besides, the ESG Working Group is also to facilitate the Group's stakeholder engagement and materiality assessment, and the annual ESG reporting disclosure. The ESG Working Group shall report the observations and provide recommendations in terms of the Group's ESG performance to the Board regularly.

Individuals from various departments are a part of ESG policy implementation as formulated by the Board and the ESG Working Group. It is important for different department units to monitor relevant progress and achievements against the determined initiatives throughout daily operations. Various departments are also to conduct stakeholder engagement and materiality assessment regularly, and at the same time collect relevant ESG performance data for reporting disclosure and performance review, therefore coordinating the preparation of the Group's annual ESG report.



Stakeholder Engagement

Gaining trust and support from stakeholders is vital to Sirnaomics' sustainable development. To enhance ESG strategy formulation, the Group strives to better understand respective stakeholders' expectations, concerns and perspectives associated with the Group's business and ESG management. During the Reporting Period, the Group's key stakeholder groups include the Board and senior management, shareholders and investors, employees, customers and clinical trial participants, suppliers, partners, government and regulatory bodies, as well as communities and the public. Voices from various key stakeholder groups are taken into consideration, including individuals and organizations who affect or are affected by the Group's business directly and indirectly. With due consideration of respective levels of dependency and influence on business, the Group constructed a communication mechanism to maintain regular two-way communication with identified key stakeholders.

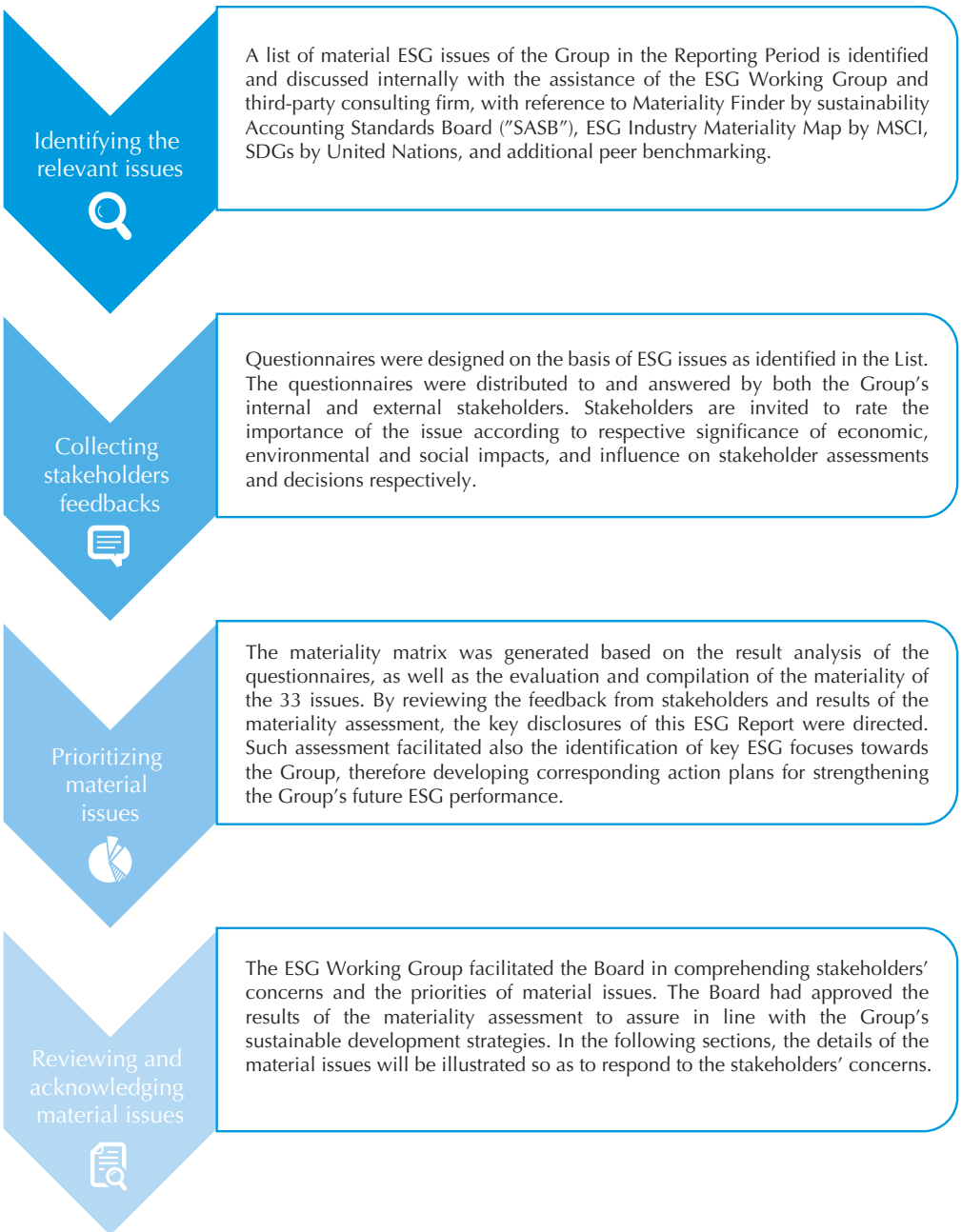
The Group endeavors to respond to respective needs and build a long-term relationship of loyalty and mutual trust with stakeholders. The Group engaged stakeholders and fully considered their opinions on ESG governance structure, internal control system, approach to various ESG-related issues and long-term policy formulation. The below table sets forth the adopted communication channels for stakeholder engagement to ensure building quality communications.

Stakeholders	Expectations and concerns	Communication channels
The Board and senior management 	• R&D progress • Compliance operation • Financial performance • Risk Management mechanism • Stakeholder communication	• Company website • Social media • Training and seminars • Industrial seminars • Meetings
Stakeholders and investors 	• Investor communications • Investment returns • Risk management mechanism • Financial performance • Business innovation • R&D progress • Anti-corruption • Compliance operation	• Annual general meetings or extraordinary general meetings • Financial reports • Press releases and announcements • Company website • Telephone hotline and email
Employees 	• Employee compensation and benefits • Equal employment opportunities • Occupational health and safety • Employee development and training	• Company website • Social media • Employee notice boards • Training activities, seminars, and briefing • Daily communication and meetings • Performance reviews • Intranet and policies
Customers and clinical trial participants 	• Quality and safety of products and services • Consumer rights and privacy protection • Customer satisfaction and complaint handling • Protection of animal rights • Protection of IP rights • Business integrity and ethics • Responsible marketing and labelling	• Routine communications • Company website • Social media • Feedback from front-line employees • Patient services • Informed consent form

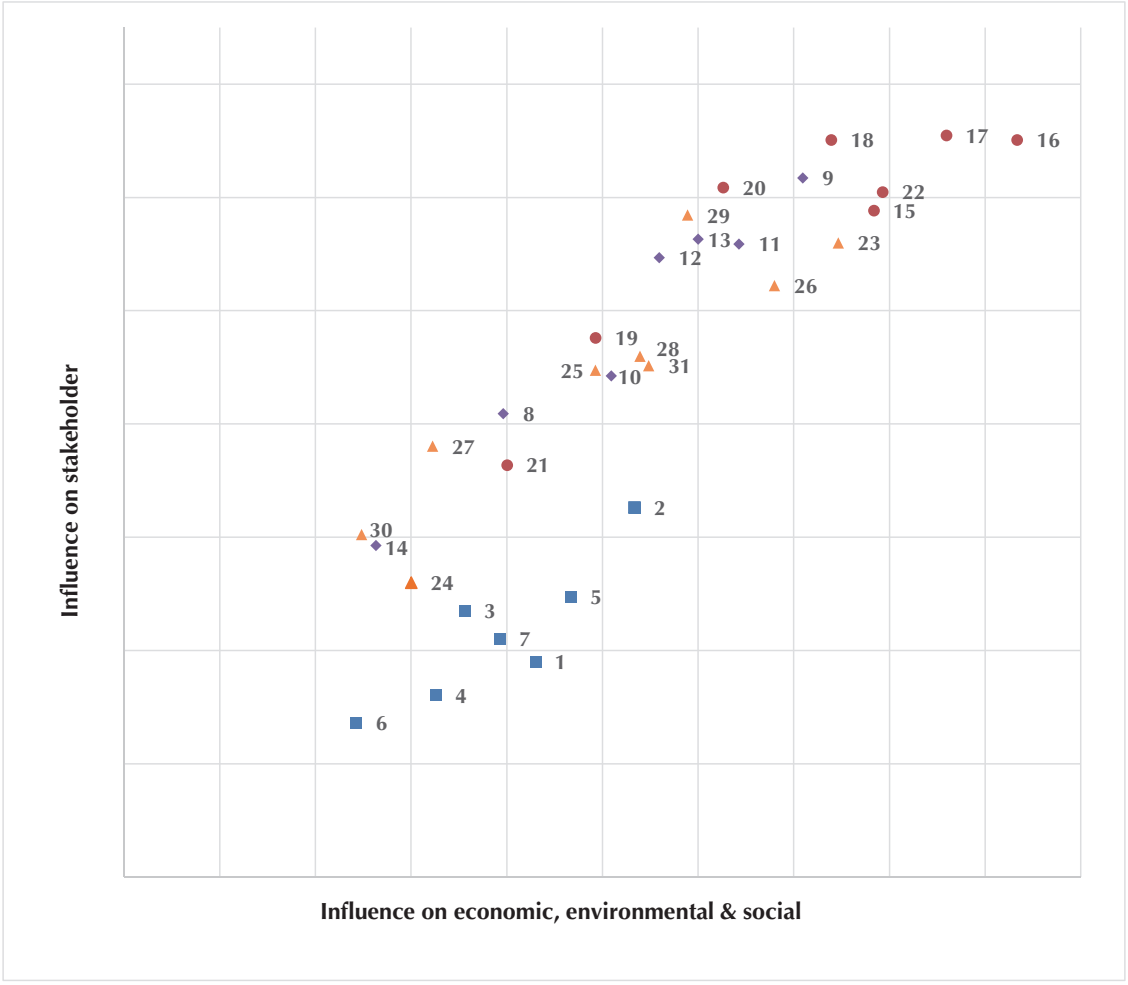
Stakeholders	Expectations and concerns	Communication channels
Suppliers 	• On-time payment • Fair and open procurement • Stable business relationship	• Supplier management meetings and events • Tendering process • On-site visits • Routine communications • Company website • Social media
Partners (e.g. Academia and institutions) 	• Quality and safety of products and services • Compliance operation • R&D capabilities • Exchange and cooperation • Stable business relationship	• Regular communications and meetings • Company website • Social media • On-site coaching and inspection • Performance evaluation
Government and regulatory bodies 	• Compliance operation • Environmental protection • Production safety • Quality and safety of products and services • Equal employment opportunities • Protection of IP rights	• Company website • Written or electronic correspondences • Routine inspections
Communities and the public 	• Environmental protection • Social and public welfare • Timely and adequate information sharing • Industry development • Protection of animal rights	• Company website • Social media • ESG reports • Press release and announcements • Community activities

Materiality Assessment

As facilitated by a third-party consulting firm, the Group carried out an annual materiality assessment to identify key ESG issues that are of high materiality to the Group and respective stakeholders. Therefore, to direct the Group's formulation of ESG strategy and reporting disclosure, by ensuring the Group provides timely responses to concerns highlighted by various stakeholders. Sirnaomics is also committed to continuously improving the process of identifying and determining ESG issues in relevance to the Group's operation. The specific working procedures performed during the Reporting Period are as follows:



Materiality Matrix



Legend:

Symbol	Sector
■	Environment
◆	Employment and Labour Practices
●	Product and Innovation
▲	Corporate Governance, Supply Chain and Community

Sector	#	ESG Issues
Environment	1	Energy management
	2	Waste management
	3	Use of water resources
	4	Greenhouse gas emissions
	5	Air pollutant emissions
	6	Responding actions to climate risks
	7	The environment and natural resources
Employment and Labour Practices	8	Employment practices and labour standard
	9	Employee compensation and benefits
	10	Diversity and Inclusion
	11	Inclusive working environment and equal opportunities
	12	Training and career development
	13	Occupational health and safety
	14	Prevention of child labour and forced labour
Product and Innovation	15	Quality and safety of products and services
	16	R&D and innovation
	17	Safety of and communication with clinical
	18	Protection of intellectual property rights
	19	Drug affordability and availability
	20	Privacy and information security
	21	Safeguard of animal welfare
	22	Safety of chemical products
Supply Chain	23	Consistency and sustainability of supply chain
	24	Fair and open procurement
	25	Supply chain environmental and social risk management
Corporate Governance	26	Business ethics
	27	Anti-corruption
	28	Strategic cooperation
	29	Critical incident risk management
Community	30	Community relationships
	31	Promotion of biopharmaceutical industrial development

The materiality of each ESG topic is illustrated in the materiality matrix after an internal evaluation. The ESG topics that are categorized as high importance are fell on the top right quadrant of the matrix. The result of the materiality matrix and the identified material ESG topics are validated by senior management and the Board. Based on the result of materiality assessment and the reporting principle, the disclosure of the Report is mainly focused on the issues categorized as being of high materiality. The Group considers providing the overall management approaches on such ESG issues categorized as being of moderate materiality and low materiality of the Group in order to provide the overall picture to stakeholders in ESG management. The Group would continue to review the existing ESG strategies, policies, and objectives so as to optimize the ESG performance and reporting disclosure in pursue of continuous improvement.

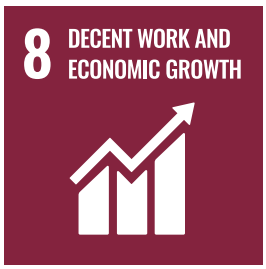
Contributions to the Global Sustainable Development Goals

In September 2015, the United Nations officially adopted the 2030 Agenda for Sustainable Development, and put forward 17 Sustainability Development Goals ("**SDGs**"). The 17 SDGs together with 169 corresponding targets aimed "to end poverty, fight inequality and tackle climate change". The breadth of the SDGs aims to reflect the complexity and scale of challenges to be addressed in the modern era, and guide the global sustainable development agenda for all individuals and aspects of businesses. Sirnaomics, as a socially responsible enterprise, takes the SDGs as an opportunity to step up its efforts on sustainability. Contributing towards the accomplishment of global and local sustainable development, the Group continues to amplify our influences through partnership and collaboration with both the government and other enterprises across disciplines.

On its own path toward sustainable development, the Group upholds the mission of "developing novel therapeutics to alleviate human suffering and advance patient care in areas of high unmet medical need". Following a thorough review of the SDGs' significance to the Group's sustainability initiatives, the Group has identified three key areas of sustainable development and integrated them into the Group's operational strategy.

SDGs	Sirnaomics' s contribution
Goal 3: Ensure healthy lives and promote well-being for all at all ages 	Sustainable development necessitates ensuring healthy lives and encouraging well-being for all generations. Both the spread of pandemic, acute and chronic diseases could pose a dramatic loss of human life worldwide and present an unprecedented challenge to public health. In accordance with the Group's mission, the Group offers clinical trial services for new drug R&D to expedite the introduction of innovative medical treatments. By doing so, the Group believes that, more patients will have the ability to effectively obtain safe medical treatments of high quality. The sections headed "Commitment to Innovation and Quality," "Responsible Operation," and "Community Investment" further illustrate the Group's dedication to promoting people's health and well-being.

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



The Group believes that an enterprise's progress is inextricably linked to the efforts of every individual. The Group values its employees' dedication, expertise, diligence, and compassion. Therefore, the Group strongly abides by sustainable economic growth and ensures equality among all employees. The Group celebrates the milestones achieved by individual efforts and teamwork while fostering its business development. The Group also promotes a healthy corporate atmosphere, with the goal of providing a harmonious working space and operating platform where intelligence and devotion can excel. The section headed "Talent Care and Development" further exemplifies the Group's effort put into cultivating talents.

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

The Group is convinced that scientific and technological innovation drives its success. The Group has accomplished significant advances in medical innovation, and it continues to encourage industrial growth in a sustainable and high-quality manner. Emphasizing sustainability and resilience in the industry, the Group acknowledges the importance of encouraging talent growth and facilitating industry innovation. The section headed "Commitment to Innovation and Quality" further demonstrates the Group's commitment to enhancing industry development.

COMMITMENT TO INNOVATION AND QUALITY

R&D and Innovation

With the mission of becoming a fully integrated international biopharmaceutical company, Sirnaomics is leveraging its deep experience in RNA therapeutics and novel delivery platform technologies, to further support the enhancement of human health and well-being. The Group seeks to rapidly discover, develop and, if approved, commercialize a portfolio of transformative therapeutics and vaccines for patients suffering from a wide range of both rare and large market diseases.

Sirnaomics has built an international professional team for the discovery and development of RNAi therapeutics, mRNA vaccines and therapeutics based on its proprietary drug delivery technology platforms. The Group's target market is global with a current focus specifically on the U.S. and China markets, which are supported by its R&D capabilities and manufacturing facilities in both countries. The Group is adopting a clinical development strategy to conduct clinical trials for its product candidates initially in the U.S. and extend those trials globally.

During the Reporting Period, Sirnaomics is advancing a broad portfolio of product candidates, including its 12 pending international applications including the US and China. For other late-stage preclinical candidates, the Group is evaluating multiple innovative siRNA molecules as candidates that employ different targeting, utilizing our established proprietary PNP delivery platform, its two unique and newly developed GalNAc platforms and, through RNAimmune, proprietary PLNP delivery platform. The Group will advance promising candidates into clinical studies that support the submission of investigational drug applications to conduct initial human clinical trials in multiple countries. Promising development progresses are also recorded with the Group's mRNA vaccine products and other preclinical drug candidates using the PNP Platform, GalAhead™ Platform and PDoV-GalNAc™ Platform.

The Group's proprietary delivery platforms for the administration of RNA-based therapeutics are the foundation of its product pipeline — after more than 15 years of R&D effort, the Group advanced PNP as a therapeutic delivery technology. It serves as an excipient as part of the Group's drug products to meet all pharmaceutical requirements for large-scale manufacturing to successfully test in humans in multiple clinical studies. The Group also obtained exclusive global rights for its PNP delivery technology. In addition, Sirnaomics has also developed and owned the global exclusive rights to its GalNAc-based RNAi delivery technologies, through its in-house development efforts.

To further enhance the Group's in-house manufacturing capacity, the Group built its clinical manufacturing facility in Guangzhou in 2021. Within financial year 2022, the Guangzhou Facility has produced eight batches of drug products to support our preclinical tox studies and clinical studies.

Moving forward, Sirnaomics intends to solidify its leadership position in RNA therapeutics and unlock its therapeutic potential by expanding the capabilities of its proprietary delivery platforms to overcome the current barriers to the delivery of RNAi triggers and mRNA.

Intellectual Property Protection

Sirnaomics is committed to promoting innovation within the competitive biotechnology industry and prioritizing the trusted relationship between the Group and various stakeholders. As a crucial element in maintaining the competitive edge in the industry, Intellectual Property ("**IP**") rights, including patents and trade secrets, are of paramount importance to the Group's business and its clients. The Group continuously enhances its information security technology and secures operations. In accordance with laws and regulations, the Group has established an IP Management Department and implemented various policies[1] for obtaining and maintaining proprietary IP protection for the Group's drug candidates, discoveries, product development technologies, inventions, improvements and know-how, whether developed internally or acquired or licensed. The IP Management Department is obliged for scrutinizing and executing patent acquisitions and trademark registrations, managing IP disputes and lawsuits, implement and governing IP archives. It is also the Department's major responsibility to provide employees with relevant training. Therefore, to raise their awareness in IP protection, perfect the IP management system and mitigate potential risks.

Dedicated to protecting the Group's valuable intangible assets and fostering innovative development, the Group enters Confidentiality, Intellectual Property, Non-competition and Non-Solicitation Agreements with its employees. It is to provide stipulations concerning ownership of IP rights, protection of trade, operation, management and technology secrets, confidentiality obligations, and non-competition and non-solicitation. As the Group enters into commercial or technical cooperation agreements with corporate collaborators, external scientific collaborators, sponsored researchers, contract manufacturers, consultants, advisors and other relevant third parties, the Group designates detailed IP right clauses and elucidates the ownership of IP rights as part of these agreements. In addition to contractual measures, the Group attempts to protect the confidential nature of its proprietary information through other appropriate precautions. Physical and technological security measures are implemented, such as adopting password encryption for important document, limiting access rights to the Group's facilities, and regularly upgrading the Group's cybersecurity system. As such, the Group is enabled to better secure corporate intellectual property rights and prevent any infringement or litigation related to the IP rights of third parties.

[1] Including but are not limited to the Management System of Technical Secrets and Commercial Secrets, Procedures for the Administration of Intellectual Property Rights, and Procedures for the Administration of Enterprise Patents.

	Patent applications filed for the Group in 2022
PCT (international) applications	22
China	10
US	33
Europe	0
National stage entered in 2022 (five patent families)	53

	Patent Applications pending in total for the Group as of December 31, 2022
PCT (international) applications	24
China	35
US	50
Europe	11
Other jurisdictions	93

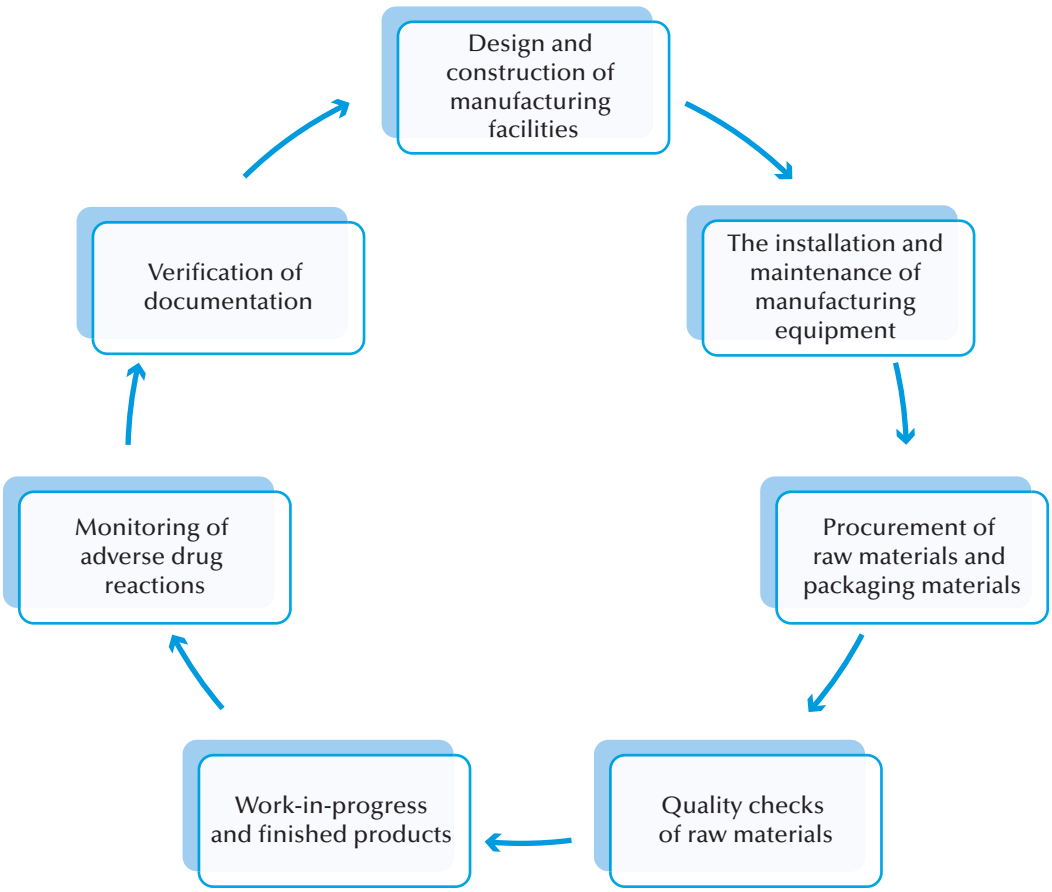
	Group patents issued and in force in total as of December 31, 2022
Previously issued	
US	10
China	10
Europe	21
Issued in 2022	
China	1

Quality and Safety Control of Products and Services

Aside from ensuring operational compliance, Sirnaomics posed also strict quality and safety assurance on its products and services. In-house manufacturing is considered the key for the Group to transform into a commercial-stage biopharmaceutical company — the Group has completed the construction the manufacturing facility in Guangzhou in 2021, so as to further enhance the Group's in-house manufacturing capacity. It is recorded that there is no recall due to safety and health problems during the Reporting Period. Under the implementation of the Group's internal control as facilitated by relevant policies formulated, products of high quality and safety are supplied are assured to be safe in use for clinical patients.

An internal chemistry, manufacturing, and controls ("**CMC**") team has been dedicated to escalating the Group's capacity of in-house manufacturing. In parallel, with the operation of the Group's analytical science team, a scientific, up-to-date and commercial approach is enacted for relevant product and service development. Furthermore, the quintessential and advanced analytical techniques and tools are adopted during the development lifecycle of all of the Group's product candidates. This includes but is not limited to the development and validation of analytical methods for drug substance and drug product: technical transfer of process and analytical methods; establishment of specifications; testing and releasing of each batch of the drug product; and quality control and assurance.

It is undeniable that the quality of the product is the priority of the Group. As to test and validate whether the Group's products meet its predefined standards, the Group has developed a comprehensive quality control system and established the Quality Control and Assurance team for execution and quality assurance. The Group has complied with the GMP standards and other applicable domestic and international standards, so as to monitor and standardize the strategies, practices and operations of the Group's system. All elements of the Group's manufacturing operations are covered by its quality control system, which are illustrated in the following diagram:



A set of relevant regulatory requirements and internal guidelines are circulated that the Group's employees should guarantee the production qualifications, facilities and processes of suppliers or contractors when working with third parties during clinical trials or manufacturing, such as CMOs. Prior to selecting and finalizing any suppliers, Sirnaomics is significantly cautious about its product quality and qualifications when conducting the comprehensive and standardized review.

Strategic Cooperation

Aside from continuous investment in in-house research capacity building, the Group strives to strategically cooperates with various leading biotechnical or pharmaceutical enterprises as well as top research institutions and universities, therefore scaling up its capability in innovative research and future market competitiveness.

Licensing Arrangement with Walvax	In April 2021, Suzhou Sirnaomics, US Sirnaomics and Walvax entered into a co-development and license agreement to co-develop siRNA drugs STP702 targeting the influenza virus.
Collaboration with Innovent	In January 2020, US Sirnaomics entered into a collaboration agreement with Innovent to develop a combination therapy consisting of STP705 and sintilimab, an anti-PD-1 monoclonal antibody, for use in advanced cancers, including NSCLC in the U.S.
Collaboration with Shanghai Junshi	In January 2020, US Sirnaomics entered into a collaboration agreement with Shanghai Junshi to develop a combination therapy consisting of STP705 and Shanghai Junshi's anti-PD-1 monoclonal antibody, toripalimab for use in advanced melanoma, SCC and other agreed clinical applications in mainland China, Hong Kong, Macau, Taiwan and US..
Licensing Arrangement with the University of Maryland	In December 2020, US Sirnaomics and the University of Maryland entered into a patent license agreement to license to US Sirnaomics certain patent rights related to a provisional patent application for improved delivery of mRNA with polymers.
Licensing Arrangement with Mixson	In 2015 and 2019, US Sirnaomics and A. James Mixson ("**Mixson**") entered into a patent license agreements granting US Sirnaomics a license to certain patent rights relating to polymers used in the PNP formulations of US Sirnaomics.

RESPONSIBLE OPERATION

Business Ethic

Anti-corruption

Policy and System

The Group upholds a high standard of business ethics and personal conduct of its employees. Every employee is required to strictly follow the Employee Code of Conduct which covers the professional and ethical standards in conducting business.

The Group strictly abides by applicable laws and regulations in the areas where it operates. All Sirnaomics employees regardless of personal geographical location or place of business must comply with the U.S. Foreign Corrupt Practices Act ("**FCPA**"). The Group has established the Anti-Corruption, Anti-Bribery & Anti-Money Laundering Policies, employee behavior has been regulated in many aspects, such as business gifts, international trade control and political activities. Our contract with suppliers also requires strict compliance with applicable anti-corruption laws in the areas where both parties operate.

During the Reporting Period, the Group was not aware of any incidents of non-compliance with the relevant laws and regulations in relation to bribery, extortion, fraud and money laundering. In addition, there were no legal proceedings concluded against the Group's issuer or its employees in relation to corrupt practices during the Reporting Period.

ANTI-CORRUPTION	ANTI-BRIBERY	ANTI-MONEY LAUNDERING	POLITICAL ACTIVITIES
Any form of corruption practices with customers, suppliers, government officials, or other third parties are strictly prohibited, which includes the following activities: • Bribery (bribery of a government official or commercial bribery); • Extortion; and • Kickbacks	To comply with anti-bribery laws, no employee should ever offer and/or solicit, directly or indirectly, anything of value, including a gift or entertainment, to any government officials or their representatives to: • Obtain or retain business; • Influence business decisions; or • Secure an unfair business advantage	To avoid money laundering activities, employees are required to conduct business only with reputable customers, for legitimate business purposes, with legitimate funds.	Company resources may not be used for personal political activities. Corporate political contributions are strictly regulated and must always be approved by the Group. Sirnaomics encourages its employees to actively participate in their communities, which may include political activities. However, no employees shall receive Company reimbursement, for personal political activities, including contributions to political candidates or parties.

Implementation of Measures

To enhance employees' awareness of integrity and anti-corruption, the Group strives to close the knowledge gap regarding relevant legislation with its employees, and conveys the Anti-Corruption, Anti-Bribery & Anti-Money Laundering Policies to all its employees. An acknowledgment of receipt of the Anti-Corruption, Anti-Bribery & Anti-Money Laundering Policies is required to be signed by employees upon onboarding.

In order to further eliminate unethical business practices and to allow employees and other parties with business relationships with the Group to report fraudulent behaviors and malpractices, the Group's Audit Committee has established the Whistleblowing Policy, which clearly defines the reporting methods, reporting scope and the protection of whistleblowers.

The Group will evaluate every complaint received and decide if a full investigation is necessary. If an investigation is warranted, an investigator from the Internal Audit and Control ("**IAC**") will be appointed to investigate the case, except where an employee of IAC is involved in the case. Where the report discloses a possible criminal offense, the Group will refer the case to the Audit Committee. The Audit Committee, in consultation with the Group's General Counsel or external legal advisers, will decide if the case should be referred to the authorities for further action. The Group keeps strictly confidential the identity of the whistleblower as possible in order to safeguard the legitimate rights and interests of all internal and external parties. To monitor the effectiveness of the Whistleblowing Policy, the IAC is responsible for reviewing all complaints received twice a year and reporting to the Audit Committee if any pattern of improprieties or alleged improprieties exist that need to be addressed. The use and effectiveness of this Policy will be monitored and reviewed regularly by Manager of IAC. Any change to this Policy should be submitted to the Board through the Audit Committee for approval.

Privacy and Information Security

The Group attaches great importance to data security and privacy protection for employees, clinical trial participants and other stakeholders, regarding personal information, medical records, and personal data in clinical trials and other sensitive information, etc. The Group has implemented relevant internal procedures and controls to ensure that user data is protected, and that leakage and loss of such data are avoided.

Employees are required to follow the Information Security Policy and safeguard the confidentiality of the Group's data and information. The Group has specified confidentiality requirements in the employee handbook, requiring employees to strictly abide by the Group's confidentiality system and not to disclose the important content of company documents and commercial secrets. Also, The Group requires employees to maintain the Group's image after resignation, and to keep company secrets in accordance with the provisions of the Confidentiality Agreement.

The Group provides information security training to its employees and circulates any issues or necessary updates from time to time. Employees and relevant parties, such as suppliers, are required to sign the Confidentiality Agreement, to protect the core information assets of the Group.

During the Reporting Period, the Group did not experience any material information leakage or loss of user data.

Drug Availability and Affordability

Although the Group is still in its transition to a commercialization stage of products, the Group understands that making medicine accessible and affordable to those in need aligns with the Group's mission and principles. Upon the Group's upcoming success in commercializing its products, the Group expects to facilitate academic engagement and education around our products by establishing relationships with key opinion leaders, hospitals, and renowned doctors through clinical trials, R&D collaboration, and academic conferences. Through these means, the Group could penetrate the market and enhance the availability of its products in a responsible way. In addition, the Group will abide by the Patient Protection and Affordable Care Act in the U.S. and the Opinions on Advancing Drug Price Reform and the Opinions on the Reform of Review and Approval System for Drugs and Medical Devices in China, to boost the fair and reasonable pricing of products and improve patients' affordability.

Ethics in Research and Development

Ethical Standards in Clinical Trials

The Group designs and carries out clinical trials to resolve legitimate scientific questions or needs. The Group conducts clinical research in strict compliance with relevant laws and ethical principles, including the Good Clinical Practice for Drugs. When recruiting researchers, relevant researchers should have completed GCP training, complied with GCP requirements and agreed to protect the privacy of subjects. Only researchers obtained ethical approval and signed the informed consent of the subjects, could apply clinical research drugs for the subjects.

GCPs set forth standards for the processes of clinical trials, to ensure that data and reported results are credible and accurate, and that the rights, safety, well-being, and confidentiality of trial participants are protected. Furthermore, an Institutional Review Board ("**IRB**") or other independent organizations must review and approve the plan for any clinical trial before it commences at any institution, and the IRB must conduct ongoing review and reapprove the study at least annually.

In the U.S., the new clinical protocol and any amendments to the protocol of the Group will be submitted to FDA for review. An IRB can suspend or terminate approval of a clinical trial at its institution if the trial is not being conducted in accordance with the IRB's requirements or federal regulations governing human subject research, or if the product has been associated with unexpected serious harm to subjects such that the IRB determines patients are at risk.

On the other hand, different phases of clinical trials in China are required to receive NMPA and ethics committee approval and comply with the national GCPs. The Group strictly follows the latest national GCPs such that the sponsors of a clinical trial shall provide investigators and the clinical trial institution with legal and economic insurance or guarantee relating to the clinical trial and, ensure that such insurance or guarantee is appropriate to the nature and degree of risks of the clinical trial.

Safety of and Communication with Clinical Trial Participants

The Group attaches great importance and has taken various measures to ensure the safety and communication of clinical trial participants. During the report preparation period, the Group formulates the Protection of the Subject's Right to Know and Privacy to ensure compliance with laws and regulations such as ICH GCP, Clinical Practice for Drug Clinical Trials, Measures for the Administration of Drug Registration, and the guiding principles and the requirements of SOPs, fully guaranteeing the rights of clinical trial participants during the clinical research period.

Before the phase of screening of clinical trials and conducting the treatment, the Group's researchers explain the nature, importance, impacts and risks of the trial to the participants in detail. Before the participants join the trial, the researchers or their authorized representatives must obtain the participants' signed and dated informed consent, and communicate with the participants regarding the background, purpose and process of the clinical research project, to make sure the participants know the test drug dosage, drug cycle and possible side effects.

To safeguard the health and well-being of clinical trial participants, the Group conducts regular clinical trial inspections and closely monitors the operation and archives documents related to the clinical trials. The Group ensures that insurance for the participants should be purchased by the sponsor of the clinical trial. In case of any negative events caused by the clinical trials, the cost of the treatment and reasonable economic compensation should be covered by the sponsor in accordance with the applicable laws and regulations.

Animal Welfare

Sirnaomics strives to adopts relevant management procedures to maintain the standards of animal welfare. We strictly abide by all applicable laws and regulations regarding animal testing. In addition, we provide training on animal use-related compliance and regulations as required by various regulations and standards, to improve employees' awareness of animal care and welfare. On the other hand, our experiment protocol covers equipment specifications and requirements relevant to the protection of animal welfare, including but not limited to the below:

- Application of Specific Pathogen Free ("**SPF**")-level animal rooms at Suzhou Institute of Systems Medicine as certified by the AAALAC International and licensed by the Animal Management Committee of Jiangsu Provincial Department of Science and Technology;

- Any changes involving the use and care of animals across the experiment setting must be reviewed and approved by the IACUC Committee before implementation; and

- Animal welfare and the relevant operation details are in compliance with AAALAC standards.

Supply Chain Management

Supply Chain

The Group relies on third parties to supply materials and equipment for the research, development, manufacturing and commercialization of our drug candidates. The Group procures raw materials, as well as technical services, equipment and infrastructure construction services needed for the operation of our business from qualified suppliers. Major raw materials that we procure for manufacturing and clinical trials include oligonucleotides and polypeptides, while technical services, such as CRO services and consulting services, that support our clinical trials and preclinical studies. Our key suppliers include reputable CROs, CMOs, CDMOs and research and medical institutions.

Any disruption in production or the inability of our suppliers to produce adequate quantities to meet our needs could impair our operations and the research and development of our drug candidates. Moreover, we require a stable supply of materials for our drug candidates in the course of our research and development activities. The quality of raw material and equipment provided by suppliers is also important for us. Suboptimal or even deficient supplies of materials and equipment may hinder the research and development of our drug candidates, subject us to product liability claims or otherwise have a material adverse effect on our operations. Hence, it is crucial to maintain the steady and sustainable supply chain for our business operations.

CRO	CMO	CDMO
CROs provide us with an array of products and services necessary for preclinical experimentation and complex clinical trials.	CMOs are responsible for manufacturing drug candidates for preclinical studies and clinical trials.	CDMOs are responsible for manufacturing drug candidates for preclinical studies and provide manufacturing process development and optimization services.

The Group procures equipment for the development and manufacturing of our product candidates from reputable manufacturers and suppliers. The Group selects our suppliers by taking into account a number of factors, including their qualifications and experience, industry reputation, cost competitiveness and legal compliance. The Group engages experienced and qualified third parties such as CROs, CDMOs and consultants to support our research and clinical trials. The Group supervises these third-party service providers closely to ensure their compliance with our quality control procedures and applicable laws and the integrity of the data resulting from our trials and studies.

The Group is the owner of the drug candidates and the sponsor of the relevant clinical development activities. We are in charge of the full lifecycle management of the drug candidate including research and development, manufacturing and future commercialization. The Group makes key decisions regarding the overall development direction, clinical trial plans and procedures, and provide funding. The involvement and roles of third-party service providers in the development of novel molecule drug candidates are typically standardized and similar among different projects.

Assessing Suppliers' Environmental and Social Risks

The Group has established the Sustainable Supply Chain Policy and considers the social, ethical and environmental performance of its product suppliers during the procurement and tendering procedures. The supplier list is reviewed annually in accordance with the following principles:

- All suppliers are aware of the environmental, social and ethical issues relevant to their operations and have established minimum standards for these issues;
- The key suppliers and suppliers with higher risks shall have management systems in place to address associated issues and risks;
- Probity and accountability standards are maintained during the review;
- Discrimination is minimized against small and medium enterprises or local vendors, if such vendors could meet the needs of the Group;
- The accuracy of the information provided by suppliers is ensured through audit, third party verification or similar processes; and
- Prior to environmentally and socially responsible suppliers who promote environmentally preferable products and services shall be selected, if all other conditions are equal for the Group.

Any material violation of environmental or other social laws and regulations may lead to the termination of supplier contracts. Through the above review procedures, the Group could minimize the potential environmental and social risks in the supply chain. Such policies and practices are subject to regular review by corresponding departments and shall be updated from time to time when appropriate.

In 2022, the Group had 60 key suppliers, including 33 located in the U.S., 20 located in China and 7 located in other countries, and all key suppliers are subject to the above evaluation and monitoring regularly.

TALENT CARE AND DEVELOPMENT

Employment Compliance

The leading position and success of Sirnaomics is built upon the diverse and experienced workforce. To attract and retain talents, the Group devoted to respecting for all individuals and embracing diversity in workplace throughout daily operations. The Group strictly complied with applicable labor laws and regulations[2] during the Reporting Period and was not aware of any incidents or violations of the relevant labor laws and regulations relating to compensation and dismissal, recruitment, and promotion, working hours, rest periods, equal opportunities, diversity, antidiscrimination and other benefits and welfare. The Group has also been closely monitoring relevant regulatory updates in regions where it operates.

Employment Practice

With reference to the laws and regulations of the operational regions, the Group has formulated the Employee's Handbook, detailing the management approaches regarding remuneration and dismissal, recruitment and promotion, working hours, rest days, compensation and employee welfare and benefits, so as to ensure all employees understand their legitimate labor rights and interests.

A standard human resources management mechanisms is developed in the Employee's Handbook and the Human Resources Management Procedures. By standardizing the procedure and requirements of recruitment, resignation and dismissal work, the Group could assure all the employment practices have complied with the statutory requirements of the regions it operates. Relevant assessments and interviews will be conducted by the Human Resources Department. For recruitment especially, assessing criteria including but not limited to candidates' overall technical skills, competencies, personality and occupational orientation. To continuously improve talent retention and development, the Group conducts also exit interviews with employees, so as to understand and analyze respective reasons for resignation. The overall employee turnover rate in 2022 was 18%, more information about the Group's turnover rate can be found in the section headed "Quantitative Performance Summary".

[2] Including but are not limited to the Fair Labor Standards Act of the U.S., the Equal Employment Opportunity (EEO) laws of the U.S., Employment Ordinance (Cap. 57) of the HKSAR, Employees' Compensation Ordinance (Cap. 282) of the HKSAR, Mandatory Provident Fund Schemes Ordinance (Cap. 485) of the HKSAR, the Labor Law of the PRC and the Labor Contract Law of the PRC.

To respect and safeguard human rights, all operations are aligned with high standards of ethical behavior and labor rights protection. The Group rigorously prohibits any type of child and forced labor in the workplace, as exemplified in the Employee's Handbook and Human Rights Policies. For all job candidates and workers, identification and qualification checks are performed by the Human Resources Department before contract signing, so as to ensure relevant candidates have met the legal age to work under the laws and regulations. If child labor or forced labor is found to have been wrongly employed, the Group will immediately terminate the relevant contract and conduct follow-up investigations regarding the situation. During the Reporting Period, the Group was not aware of any material non-compliance with child and forced labor-related laws and regulations that would have a significant impact on the Group.

Employee data

As of December 31, 2022, the Group had 225 employees, more information about the Group's workforce can be found in the section headed "Quantitative Performance Summary".

Diversity, Equal Opportunities and Anti-discrimination

As demonstrated in the Group's ESG Policy, Sirnaomics strictly adheres to non-discriminatory employment practices and procedures. The Group is also committed to providing a positive working environment that values the wide-ranging perspectives inherent in its diverse workforce to foster knowledge and experience exchange and achievement of business goals.

The Group has formulated various policies, such as the Equal Employment Opportunity Policy, to prevent any activities that may violate the principles of equal opportunity and anti-discrimination. We adhere to the principles of fairness and transparency during the entire employment procedures, including but not limited to recruitment, job assignment, remuneration, promotion, training, and termination. Regardless of race, color, religion, sex, sexual orientation, national origin, age, veteran status, physical or mental disability, marital status, genetic characteristics, traits historically associated with race such as hairstyle, or any other characteristic protected by law, only objective factors, such as qualifications and capabilities, should be considered in the decision-making process. Employees are encouraged to report any instances of discrimination while the Group rigorously prohibits retaliation against any individual who reports discrimination or participates in relevant investigations. The Group takes a zero-tolerance approach to ensure the working environment is free from any form of discrimination. Appropriate disciplinary action, up to and including immediate termination, may be taken against any employee who violates the Policy. More information about the Group's diversity in workforce can be found in the section headed "Quantitative Performance Summary".

Cultivating an inclusive and harmonious working environment, the Group encourages its employees to express concerns about work-related issues. For example, workplace communication, interpersonal conflict, and other working conditions. Sirnaomics is committed to responding timely and taking appropriate action for relevant investigation and therefore attaining a reasonable resolution. Sirnaomics encourages differences and individuality between employees, with the philosophy that diversity can bring new dynamics to the Group's operations and hence enhance competitive advantages.

Caring for and rewarding our employees

Remuneration and Benefits

The Group attaches great importance on attracting and retaining staff and talent. The Group offers its employees a competitive remuneration package. For example, share options may be granted to eligible employees apart from basic remuneration. Meanwhile, full-time staff is entitled other employee benefits include but are not limited to the medical plan, dental plan, and other benefits, such as providing training opportunities and offering flexible worksite schedules. Recognizing respective employees' commitment and achievement, the Group also offers discretionary bonuses, cash incentives and promotions for eligible staff based on annual performance appraisal. As regulated by relevant statutory requirements in China, the Group has also engaged in various social security plans that are administered by local governments for its employees. For example, housing provident fund, pension insurance, medical insurance, maternity insurance, work-related injury insurance and unemployment insurance. The Group conducts regular industry peer reviews and make adjustments on the employee remuneration package to ensure employees are rewarded in a fair means as well as in line with the prevailing market practices and conditions.

Working Hours and Holidays

To ensure and safeguard employees' rights at the same time, the Group has stipulated relevant provisions on working hours, rest and leave, labor protection and working conditions in the labor contract and Employee Handbook. Unnecessary overtime working is not encouraged. Various holidays are granted to the Group's employees, such as national holidays, paid annual leave, sick leave, bereavement leave, study leave, maternity and parental leave, and work injury leave.

Work-life Balance

The Group believes that promoting work-life balance could motivate its employees to deliver satisfactory performance and attain business sustainability. The Group organized various activities to enrich the cultural life of our employees and to help create a happy work environment.

Occupational Health and Safety

Ensuring a Safe Work Environment

Putting employee occupational health and safety first is one of Sirnaomics' primary commitments. The Group is committed to providing a safe workplace for all its employees. To this end, the Group is to comply with or exceed the applicable health and safety laws and regulations. Safety and health considerations should be integrated with the design, maintenance and operations of Group facilities. The Group has formulated the Safety Standardization Policy to thoroughly direct the Group's occupational health and safety-related management. Various areas are covered, ranging from research and trial production safety to occupational health, risk identification, and emergency response. The Group has implemented a comprehensive safety management system, and formed the Safety Committee that clearly defines the roles and responsibilities of representatives from relevant functional department units at all levels for the oversight of safety management. The Safety Committee is responsible for monitoring and enforcing the compliance of the Group's operations with environment, health and safety ("**EHS**") laws and regulations. Upon identification of any EHS risks, the Safety Committee determines and takes all applicable mitigation measures to reduce the impact of such risks or incidents and shelter the employees from potential dangers from the Group's entire research and trial production.

Under the Group's Risk Assessment and Management System, potential safety risks are identified, evaluated and classified — to effectively control and manage safety risks with different approaches based on various risk levels. After the Group's analysis of the risk assessment results, safety production targets are formulated for relevant departments. By conducting safety inspections, audit checks and performance review regularly, the Group attempts to ensure all the safety standardization work are effectively implemented and maintained in workplace and respond to safety issues timely with corrective measure(s).

To minimize the exposure level of key safety hazards, such as the use and handling of hazardous chemicals, and their impact on employees, the Group has developed the Hazardous Chemicals Management Policy, Laboratory Maintenance & Safety Management and Chemical Hygiene Plan, and other guidance for laboratory safety and management. These guidelines facilitate the monitoring and management of relevant purchases, transportation, storage, and disposal and/or treatment. Other relevant policies and safety manuals have also been established to manage issues such as fire safety, special operations, and contractor safety.

Occupational Health

The Group has formulated Occupational Health Management Policy and Management System for Evaluating Occupational Hazard Factors in Workplaces, to eliminate and reduce adverse influences on human health, such as occupational diseases. It is also the Group's responsibility to provide appropriate personal protective equipment to its employees, conducting regular inspections of the Group's operational facilities and special health or medical examinations for designated employees who have potential contact with hazards. Relevant education and training are also provided to raise employees' health and safety awareness. For example, the safety education of three-level for new employees covers the Group's health and safety performance overview, relevant laws and regulations, highlights of fire safety and corresponding case studies. Also, the Group provides annual on-job training regarding relevant health and safety management procedures and hazard protection measures. In addition, periodic occupational health-related inspections are conducted to identify potential hazardous and safety risks across the daily operations and any deficiencies on safety management, and will be timely rectified and devised corresponding safety measures to prevent recurrence.

Combating against Coronavirus Disease 2019 ("COVID-19") Pandemic

The outbreak of COVID-19 has lingered around the globe for more than two years — although the COVID-19 conditions have been mitigated recently, the new wave still swirled around the world . The pandemic is detrimental to all segments of the population, posing significant impacts on physical health, psychological well-being and financial burden. Arrangements have been successfully taken to minimize, if not avoid, the risks of COVID-19 infection and safeguard our employees' and workers' health and safety within the Group. For example, the Epidemic Prevention and Control Plan, the Novel Coronavirus Emergency Plan, and the establishment of a corresponding Emergency Team to strengthen pandemic prevention and control work in workplace.

The Group has been closely monitoring the pandemic situation in the regions where it operates. The Group has also been keeping to the latest pandemic policies, regulations, and precautionary measures suggested by the local government. Responding to epidemic emergencies, the Group implemented prevention and control measures and reviewed their effectiveness.

With the Epidemic Prevention and Control Plan, the Group's execution of daily epidemic prevention and control measures is enhanced as regulated by the Emergency Team. The Team is also to proactively cooperate with the local governments where it operates, to minimize the influence being brought by the epidemic. Meanwhile, the Group is to educate its employees regarding timely and proper response and management towards the epidemic according to the Novel Coronavirus Emergency Plan.

Waves of the COVID-19 outbreaks resulted in unprecedented challenge to public health, while some of the regions was relative unscathed by the pandemic. It is the Group's responsibility to maintain a balance between combating against the pandemic and smooth business operations. The Group's prevention and control measures towards COVID-19 are regularly adjusted according to the latest pandemic development and the social distance restriction in regions where we operate, to ensure its effectiveness and minimize its interference across the Group.

There were no work-related fatalities that occurred in the past three years including the Reporting Period, nor there were any lost days due to work injury. During the Reporting Period, the Group was also not aware of any material non-compliance with health and safety-related laws and regulations that would have a significant impact on the Group.

Training and Development

Sirnaomics continues to lead the emerging business development trend in the industry by continuously cultivating employees' competencies and skills with a positive learning atmosphere. The Group's success through excellence depends on the performance of its employees at every level. The Group recognizes the importance of talents' development — the ability to deal with change is one of the values that the Group inculcates in its employees.

The Group has formulated the Employee Training Policy, to identify the training need of the employees and provide regular, specialized and tailored training correspondingly. According to Employee's Handbook, the Group provides eligible employees with financial incentive for attending designated external training and development programs. The Group also offers a wide range of internal on-job training sessions conducted by senior employees or third-party consultants, so as to encourage employees to keep abreast with changing market trends. Various aspects of the Group's business operations are covered — including but not limited to overall management, project execution and technical know-how. Therefore, to enable the Group's employees to achieve respective career development goals and improve their work capabilities.

Key types of training in 2022

- *Industrial Expertise Training*

  During the Reporting Period, the Group's employees participated in NID2022 — The 2nd Nucleic Acid Drugs Seminar. A wide range of topics are covered, such as emerging technologies in the industry, and existing limitations of the application of mRNA and its drug use. Industry experts from the Group's peers have also shared their leading-edge insights, and provoked discussion on the future industry development. It is expected that employees could keep up with the latest industry trends, equip themselves with knowledge regarding compliance in mRNA quality control, and explore the potentials of small interfering RNA through participating in the Seminar. It is also considered a valuable opportunity to facilitate knowledge sharing and cooperation with other biomedical enterprises.

- *New Employee Training*

  The Group arranges New Employee Training for new joiners and provide an introduction of the corporate culture, latest development, missions and principles, and employee benefits offered by the Group, such as the Group's Flex Day policy, and the arrangement of flexible working hours. Pre-employment training is also provided and might vary depending on different department units of the Group. However, essential training regarding the Group's core products, laboratory work safety and occupational health, pertinent SOPs. It is also expected that new joiners could get familiar with the Group's compliance and procurement requirements through the training. With such training, new employees could adapt to the new working environment swiftly with acquired sufficient knowledge and skillset applicable to the new position.

- *Anti-workplace Sexual Harassment Training*

  During the Reporting Period, the Group organized an anti-workplace sexual harassment training as facilitated by a law firm. It is to raise employees' awareness regarding workplace sexual harassment. It is expected that employees could understand and make necessary response and take appropriate actions according to the Group's internal procedures, when witnessing or encountering relevant incidents.

In 2022, the average number of training hours was 32.2 hours and 88% of the Group's employees received training. More information about the average number of training hours for the Group's employees and percentage of employees who received training can be found in the section headed "Quantitative Performance Summary".

CO-BUILD A GREEN ENVIRONMENT

The Group strives for environmental excellence. The Group is committed to minimizing the impact of its business activities on the environment and natural resources. Environmental-friendly materials, products and processes with potential commercial applications are to be actively adopted, developed and implemented where possible. Support for conservation and environmental protection programs are encouraged and provided. Efforts will be regularly reviewed to ensure their efficiency.

The Group implements various initiatives to monitor and manage the use of resources, including energy, water and other raw materials. Operating companies with high consumption of energy, water and/or raw materials should have policies setting out the control measures to accomplish this objective. Where applicable, targets are set and regularly reviewed, and results are assessed to ensure the efficiency of the measures to control emissions.

During the Reporting Period, the Group was not aware of any non-compliance with the relevant laws and regulations[3] that has a significant impact on the Group relating to air and GHG emissions, discharges into water and land, and generation of hazardous and nonhazardous waste.

Emissions Management

The main emissions generated by the Group during its operations include exhaust gas, GHG emissions, waste and sewage. The Group strictly complies with the laws and regulations of the place and adheres to the emission limit standards by strengthening waste management to minimize the potential negative impact caused in the operation process.

The Group has formulated the Exhaust Gas Management System, Exhaust Gas Management System and Hazardous Waste Management System, for effectively managing the discharge in the research and development ("**R&D**") and production process, and dispose of waste reasonably.

Exhaust Gas

The major types of exhaust gas, including nitrogen oxides ("**NOx**"), sulphur oxides ("**SOx**"), particulate matters ("**PM**") and volatile organic compounds("**VOC**"), are generated by the Group due to the use of chemicals in R&D centers and the combustion of vehicle transportation. The Group strictly abides by the relevant exhaust gas emission standards of the regions where it operates, and manage according to the Exhaust Gas Management System. The System clearly defines the prevention and control measures of exhaust gas pollution, the requirements for treatment control and the allocation of duties of respective departments, etc., so as to ensure the Group's exhaust gas emissions are met the threshold of the emission standards.

During the Reporting Period, the data of air emissions of the Group is set out as below:

Indicators	Unit	2022	2021
NO_X	kg	**79.03**	2.90
SO_X	kg	**0.65**	0.10
PM	kg	**0.30**	0.21
VOC	kg	**28.92**	160.80

Notes: The increase in air emissions for the Reporting Period could be explained by the expanded scope of environmental data collection, the recent commencement of production and increased project amount in some of the Group's facilities.

[3] Including but not limited to the Water Pollution Prevention and Control Law of the PRC, Air Pollution Prevention and Control Law of the PRC, Solid Waste Environmental Pollution Prevention and Control Law of the PRC, the Energy Policy Act of 2005 in the U.S., etc.

GHG Emissions

Climate change is one of the biggest challenges of our time. Regulating carbon emissions has become a shared responsibility of the international community. The Group's direct emissions are principally derived from sources owned or controlled by the Group, including but not limited to the fuel combustion of our owned vehicles and production facilities ("**Scope 1 emissions**"). Our indirect emissions mostly arise from the purchased electricity ("**Scope 2 emissions**"). The Group continues to strengthen the promotion of the concept of energy conservation and emission reduction to our employees, and thereby jointly make efforts in minimizing the carbon emission within the Group.

Take Sirnaomics Suzhou as an example — Responding to the national goals of carbon emissions peak and carbon neutrality and accelerating the Group's green and low-carbon development, Sirnaomics Suzhou has formulated the Work Plan for Controlling Greenhouse Gas Emissions based on actual operating context. The Work Plan sets out the main emission reduction goals and clarifies the action measures, including strengthening the control of new energy carbon emission indicators, vigorously promoting energy conservation, controlling carbon emissions in the industrial field, advocating low-carbon lifestyles, and taking publicity and guidance and other measures, continuously reducing carbon emissions. For Suzhou Sirnaomics, a definite target is set that carbon dioxide emissions within the Suzhou Facility is expected to be reduced by 10% by 2032 as compared with 2021, to effectively control the total carbon emissions.

During the Reporting Period, the GHG emissions of the Group are set out below:

Indicators[1]	**Unit**	**2022**	2021
Direct GHG emissions[2]	tCO_2e	**27.64**	17.28
Energy indirect GHG emissions[3]	tCO_2e	**667.65**	551.33
Total GHG emissions	tCO_2e	**695.30**	568.61
GHG emissions intensity[4]	tCO_2e/employee	**3.09**	3.25

Notes:

1. The data is presented in terms of tonnes of carbon dioxide equivalent and is calculated by reference to, "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standards" issued by the World Resources Institute and the World Business Council for Sustainable Development, "How to prepare an ESG Report — Appendix II: Reporting Guidance on Environmental KPIs" issued by the HKEX, 2020 National Average Emission Factors for Mainland China and Emission Factors for Greenhouse Gas Inventories published by the U.S. Environmental Protection Agency.

2. Scope 1 emissions refer to direct GHG emissions from fuel combustion of unleaded gasoline in company-owned vehicles.

3. Scope 2 emissions refer to indirect GHG emissions from energy generated by the use of electricity purchased from local power companies.

4. As at December 31, 2022, the total number of employees of the Group was 255. This data is also used for calculating other intensity data.

   The increase in GHG emissions for the Reporting Period could be explained by the expanded scope of environmental data collection, the recent commencement of production and increased project amount in some of the Group's facilities.

Hazardous Waste

The majority of the Group's hazardous waste is the chemical waste generated in the process of R&D experiment and trial production, waste activated carbon from the exhaust gas treatment equipment and pharmaceutical waste. According to the relevant laws and regulations[4], the Group has formulated Hazardous Waste Management System and the Responsibility System for Hazardous Waste Managers to strictly govern waste generation, collection, classification, labeling, recording, storage, transportation, and disposal of hazardous wastes from preventing the land pollution on the environment and safeguarding personal health.

All the hazardous waste must be properly packed or stored in the lid containers at designated area for temporary storage. Proper labelling is securely attached on the storage containers for waste identification and transportation. In addition, all such waste is handled by a qualified waste collector for further treatment and disposal and the waste ledgers are kept by responsible departments for monitoring the disposal routes.

During the Reporting Period, the amount of hazardous waste generated by the Group was approximately 11.23 tonnes and the hazardous waste intensity was approximately 0.05 tonnes/employee. The increase in hazardous waste generation for the Reporting Period could be explained by the expanded scope of environmental data collection, the recent commencement of production and increased project amount in some of the Group's facilities.

Non-hazardous Waste

The main non-hazardous wastes produced at our sites are office garbage and industrial solid waste. With the aim of reducing the generation of solid waste, the Group has implemented various waste reduction measures, including promoting paperless office, advancing double-sided printing and the recycling of office supplies. In addition, the Group has placed recycling facilities for advocating clean recycling and engaged qualified third-party for handling of recyclable waste, such as carton boxes and metal waste, are being collected and recycled regularly.

[4] Including the Law of the PRC on the Prevention and Control of Solid Waste Pollution and the Regulations on the Safety Management of Hazardous Chemicals, The Solid Waste Disposal Act in the U.S..

During the Reporting Period, the hazardous and non-hazardous waste generated by the Group are set out below:

Indicators	Unit	2022	2021
Hazardous waste generated	tonnes	**11.23**	3.49
Hazardous waste intensity	tonnes/employee	**0.05**	0.02
Non-hazardous waste generated	tonnes	**23.32**	25.95
Non-hazardous waste intensity	tonnes/employee	**0.10**	0.15

Notes: Data for non-hazardous and hazardous waste generation from Siranomics US for the Reporting Period has been projected and reflected in the data table, due to relocation of the facility.

Data for non-hazardous waste generation for 2021 has been restated, excluding one-off renovation waste.

Sewage

Sewage generated by the Group includes both domestic wastewater and experimental wastewater. The Group has formulated the Wastewater Management Regulations to standardize the procedures of wastewater discharge, treatment, sampling and testing before being discharged to the local municipal sewage system. The in-house wastewater treatment facility is installed in R&D centers to process experimental sewage with the combination of physical, chemical and biological processes. The monitoring system for major water pollutants is also in place for inspecting the level of pollutants including chemical oxygen demand, suspended solids, ammoniac nitrogen and total phosphorus constantly. It is to ensure that the quality of effluent meets the requirement of local standards, reducing the negative impact of sewage on the surrounding environment and employee health.

Resource Management

Energy, water and raw materials are the main resource consumption during the Group's operations. The Group uninterruptedly reinforces the management of energy and resource use, implement diverse measures to improve resources efficiency.

In R&D and production, the Group minimizes energy and resource consumption by strengthening energy-saving management and attaching importance to the recycling of packaging materials. In addition, by advancing the practice of green office and electronic office, the Group focuses on optimizing the use of resources.

Energy Consumption

The energy consumption of the Group throughout the operations mainly comes from a small amount of fuel for company-owned vehicles and purchased electricity. The Group actively identifies potential energy savings opportunities and efficiencies in all aspects of production by standardizing daily operating procedures, regularly monitoring electricity consumption and promoting green office practice. The Group encourages employees to properly plan the driving routes of vehicles to reduce the fuel consumption by employee commuting.

During the Reporting Period, the total energy consumption of the Group is set out as below:

Indicators	Unit	2022	2021
Direct energy consumption[1]	MWh	**92.87**	62.96
Indirect energy consumption	MWh	**1,366.28**	1,006.76
Total energy consumption	MWh	**1,459.15**	1,069.72
Energy consumption intensity	MWh/employee	**6.49**	6.11

Note:

1. Energy conversion is based on the Energy Statistics Manual published by the International Energy Agency.

   The increase in energy consumption for the Reporting Period could be explained by the expanded scope of environmental data collection, the recent commencement of production and increased project amount in some of the Group's facilities.

Case: Sirnaomics Guangzhou completed the upgrade of lighting system

In July 2022, Sirnaomics Guangzhou completed the renovation of lighting system for the R&D and test sites by replacing more than 100 fluorescent lamps with energy-saving lamps. It is estimated that more than 6,000 kilowatt-hours of electricity consumption for lighting can be saved each year, reducing more than 50% of the total power consumption of the site. This project can not only decrease the energy cost of the Group and refine the economic benefits, but also greatly help relieve the government's pressure on energy supply and construction and reduce the carbon footprint.

Water Consumption

With the rapid economic and social development and rapid population growth, the pressure on global clean water resources continues to intensify. The Group constantly enhances our water resources management, improve water utilization efficiency and protect water resources with practical actions.

The Group improves the utilization rate of water resources and avoids unnecessary use of water through technical improvements of equipment. In addition, the Group calls on employees to pay attention to water conservation in areas such as laboratory testing, cleaning and office work as well.

During the Reporting Period, the Group mainly used municipal water. The Group does not take water from areas of high water stress and all its operating sites have sufficient water supply. The Group therefore does not have any issues in sourcing water that is fit for purpose.

During the Reporting Period, the water consumption of the Group is set as below:

Indicators	**Unit**	**2022**	2021
Total water consumption	m^3	**2,265.08**	1,343.63
Water consumption intensity	m^3/employee	**10.07**	7.68

Notes: The increase in water consumption for the Reporting Period could be explained by the expanded scope of environmental data collection, the recent commencement of production and increased project amount in some of the Group's facilities.

Use of chemicals

For the sake of avoiding waste of raw materials, the Group conducts a comprehensive evaluation of the experimental procedures carried out during R&D. Scientific experiments are performed according to the Group's Standard Operation Procedure to ensure operational safety, R&D of high efficiency and efficient use of chemicals. The Group requires employees to take prudent chemical procurement to avoid ordering excess amount of chemicals and to rotate the use of chemical inventories, guaranteeing the chemicals are used before they are overdue.

During the Reporting Period, the Group used approximately 390.71g of chemicals for R&D purposes.

Indicators	**Unit**	**2022**	2021
Total raw material consumption			
• chemicals	g	**390.71**	26.74

Notes: The increase in use of chemicals for the Reporting Period could be explained by the expanded scope of environmental data collection, the recent commencement of production and increased project amount in some of the Group's facilities.

Packaging Material Consumption

The Group constructed the clinical manufacturing factory in Guangzhou in 2021 to further enhance internal production capacity for supporting pre-clinical toxicology research and early clinical research. The main packaging materials used in operation are vials, product packaging, etc. The Group pays great attention to the economical use of packaging materials.

During the Reporting Period, the amount of packaging materials consumed by the Group's operation was 13,396.28kg.

The Environment and Natural Resources

As a responsible enterprise, the Group keeps creating value for the development of the industry and human health. Meanwhile, the Group also adheres to environmental responsibility and is committed to realizing the harmonious coexistence between human and nature. The Group has established a comprehensive environmental management system to identify and manage the impact on the environment during the operation process, striving to minimize the Group's influence on the surrounding environment. Since the Group's products have not yet been commercialized, the current operation process has not caused any significant adverse impact on the environment and natural resources. The Group will continue to seek opportunities to promote green chemistry on the laboratory testing and clinical trial processes and eliminate or reduce the use of hazardous substances, thereby minimizing the potential chemical leakage and pollutions on the environment.

Responding to Climate Change

Climate change is a worldwide concern while carbon neutrality is a common goal amongst many nations. The Paris Agreement, a legally binding agreement on GHG reduction was officially adopted in 2015. In addition, China puts forward the targets of reaching a carbon peak before 2030 and going carbon neutral before 2060. The Group references to the Task Force on Climate-related Financial Disclosure (TCFD) framework and conduct climate-related risk identification, to understand the potential financial and operational impacts brought towards our business, and further explore the opportunities in fighting against the climate change.

Climate Change Risk and Opportunity Identification

Climate change-related risk (level 1)	Climate change-related risk (level 2)	Climate change-related risk (level 3)	Potential impacts
Transition Risks	Policy and Legal Risks	Policy adjustment	• Our worldwide operations may be affected by the more stringent greenhouse gas management policies and regulations.
	Reputation Risk	Increasing concerns about negative feedback from stakeholders	• Our climate change policies and contributions are increasingly scrutinized by investors, clients, the public and governments • Failure to deliver effective feedback to these stakeholders may affect our reputation and investor decision-making
	Technology Risk	Front-end cost of transition to low-carbon technology	• Costs related to research and development of green chemical technologies • Increased operating costs
Physical Risks	Acute Risk	Extreme weather events happened such as typhoons, floods and abnormal rainfall	• Cause damage to property and assets, such as buildings, infrastructure, etc. that operations are interrupted • Result in higher maintenance cost • Cause threats to employee safety cause delay in delivery of the suppliers, affecting the progress of R&D and testing.
	Chronic Risk	Average temperature rise	• Increased energy consumption and operation costs

The Group's Climate Change Management System

Governance

The Group has established a comprehensive ESG governance system that Climate Change Risk Governance is included. The Board has the overall responsibility for the Group's ESG affairs, including climate-related issues. The Group Sustainability Committee assists the Board to identify the ESG and climate-related risks, reviews the ESG practices and performance and reports to the Board regularly.

Strategy

The Group will take account of climate-related risks in its internal control and risk management processes, therefore to identify and assess the climate-related risks based on matrices with the likelihood of occurrence and level of impact considered and/or result of scenario analysis.

The Group has formulated policies, including the Work Plan for Greenhouse Gas Emission Control and Natural Disaster, to improve energy efficiency through systematic management of carbon emissions and the use of energy, and refinement of our energy structure.

Risk Management

The Group recognizes that different climate change trends can have very different impacts on our operations, and take active measures to enhance the climate adaptation and resilience ability. The Group implements various initiatives to monitor and manage the energy consumption and carbon emissions. For more information, please refer to the Utilization of Resources of this report. Considering the possible transformation risks, the Group closely monitors any changes in laws or regulations and the latest trend of market development and industry standards.

Metrics and Targets

The Group measures and reports its GHG emissions in accordance with global standards, including the Greenhouse Gas Protocol. By establishing a comprehensive data collection mechanism, the Group monitors its GHG emissions, waste generation, energy consumption and water consumption before the commencement of large-scale production. Sirnaomics has set a definite target that compared with 2021, carbon dioxide emissions across Suzhou's operation will be reduced by 10% by 2032 to effectively control the total carbon emissions.

COMMUNITY INVESTMENT

Community and Public Welfare Activities

The Group recognizes its corporate social responsibility in giving back to our community. The Group aims to demonstrate its commitment to community with its R&D of drugs to cure diseases while contributing to the health of all mankind. Aside from that, the Group also endeavors in building a win-win relationship with our community by encouraging our employees to participate in different community activities to serve the underprivileged and the needy in the society.

Promotion of Biopharmaceutical Industrial Development

The Group adheres to the value of devoting to the public health, educating the general public and contributing to the growth of biopharmaceutical industry. As the problems of climate change and worldwide epidemics have been challenging in a global context, Sirnaomics has been continuously fostering future innovators and scientists to resolve these barriers. During the Reporting Period, The Group proactively participates in industry activities and tightened the collaboration with our peers in the industry.

- ***Collaboration with the Academia***

  Investment in scientific research helps to nurture the potential future innovators and scientists to tackle global challenges, including climate change and epidemic diseases. The Group seeks to achieve excellence in science and innovation. It does so by supporting and collaborating with research institutes. With expertise in RNAi technologies, the Group collaborated with the National Institutes of Health, NAVY MRC, the Johns Hopkins University, the Duke University, the University of Maryland and the University of Pennsylvania. Through partnerships, the Group has greatly advanced its R&D projects and clinical development strategy.

- ***Popularization of Clinical Research Knowledge***

  Sirnaomics is ambitious to facilitate the scientific literacy of the public and raise health awareness through education, which is critical to the industry, the society, and the public health. The Group always seeks opportunities to engage with the public, such as regularly publishing informative medical and healthcare materials on its official website and social media account in promoting the knowledge in public health.

- ***Contributions to the Biopharmaceutical Industry***

  The Group understands that the long-term prospect of an enterprise correlates with the development of the industry. Thus, the Group always pays close attention to the industry development trends. During the Reporting Period, the Group actively attended industry activities, strengthened the cooperation with peers in the industry, and was committed to contributing to the growth of the entire industry.

- ***Participated in the 2nd Annual Oligonucleotide Therapeutics and Delivery Conference***

  In September 2022, the Group presented the latest developments on delivery of novel RNAi therapies for cancer, and its GalAhead™ platform and programs, at the 2nd Annual Oligonucleotide Therapeutics and Delivery Conference in London. Leveraging and utilizing this platform, the Group also introduced its polypeptide nanoparticle delivery system (PNP-IT) and STP705 as Sirnaomics' lead oncology siRNA therapeutic targeting TGF-β1/COX-2, provoking discussion of novel siRNA therapeutics targeting other oncology indications.

Moving forward, the Group will continue to enhance its projects and clinical development methodologies, as supported by collaboration of various parties. Acknowledging the importance of educating the citizens about clinical research knowledge, the Group will strive to narrow down the knowledge gap regarding public health and human well-being among stakeholders in our communities. The Group has recognized that the advancement of the industry is influenced by the long-term vision of each enterprise, therefore, the Group is to consistently keep track of the tendency of the industry development and contributing to the growth of the entire industry.

APPENDIX

Quantitative Performance Summary

Environmental

Indicators	Unit	2022	2021
Major air pollutant emissions			
NO_x	kg	79.03	2.90
SO_x	kg	0.65	0.10
PM	kg	0.30	0.21
VOC	kg	28.92	160.8
GHG emissions			
Direct (Scope 1) GHG emissions	tCO_2e	27.64	17.28
Energy indirect (Scope 2) GHG emissions	tCO_2e	667.65	551.33
Total GHG emissions	tCO_2e	695.30	568.61
GHG emissions intensity	tCO_2e/employee	3.09	3.25
Waste			
Hazardous waste generated tonnes	tonnes	11.23	3.49
Hazardous waste intensity	tonnes/employee	0.05	0.02
Non-hazardous waste generated	tonnes	23.32	25.95
Non-hazardous waste intensity	tonnes/employee	0.10	0.15
Utilization of resources			
Direct energy consumption	MWh	92.87	62.96
Indirect energy consumption	MWh	1,366.28	1,006.76
Total energy consumption	MWh	1,459.15	1,069.72
Energy consumption intensity	MWh/employee	6.49	6.11
Total water consumption	m^3	2,265.08	1,343.63
Water consumption intensity	m^3	10.07	7.68
Total raw materials consumption	g	390.71	26.74
Packaging material consumption	kg	13,396.28	NA
Paper consumption	kg	1,021.84	NA

Employment

Indicators	2022	2021
Number of employees	225	175
Number and percentage of employees		
By gender		
Female	97 (43.1%)	76 (43.4%)
Male	128 (56.9%)	99 (56.6%)
By age group		
Below 30	67 (29.8%)	57 (32.6%)
30 to 50	117 (52.0%)	94 (53.7%)
Over 50	41 (18.2%)	24 (13.7%)
By geographical region		
China	129 (57.3%)	103 (58.9%)
The U.S.	89 (39.6%)	69 (39.4%)
Hong Kong	7 (3.1%)	3 (1.7%)
By employment type		
Full-time	222 (98.7%)	173 (98.9%)
Part-time	3 (1.3%)	2 (1.1%)
By employee category		
Senior management	23 (10.2%)	15 (8.6%)
Middle management	55 (24.4%)	33 (18.9%)
General staff	147 (65.3%)	127 (72.5%)

New Hires

Indicators	2022	2021
Number and rate (%) of new hires[1]	76 (33.8%)	118 (67.4%)
By gender		
Female	42 (43.3%)	52 (68.4%)
Male	34 (26.6%)	66 (66.7%)
By age group		
Below 30	34 (50.7%)	71 (124.6%)
30 to 50	31 (26.5%)	44 (46.8%)
Over 50	12 (29.3%)	3 (12.5%)
By geographical region		
China	36 (27.9%)	71 (68.9%)
The U.S.	36 (40.4%)	46 (66.7%)
Hong Kong	4 (57.1%)	1 (33.3%)

Note:

1. The calculation method of the rate of new hires: the total number of newly hired in that year ÷ total number of employees at the end of the year × 100%.

Employee Turnover

Indicators	2022	2021
Number and rate (%) of turnover[1]	41 (18.2%)	21 (12.0%)
By gender		
Female	31 (32.0%)	11 (14.5%)
Male	10 (7.8%)	10 (10.1%)
By age group		
Below 30	20 (29.9%)	10 (17.5%)
30 to 50	18 (15.4%)	10 (10.6%)
Over 50	4 (9.8%)	1 (4.2%)
By geographical region		
China	24 (18.6%)	18 (17.5%)
The U.S.	17 (19.1%)	3 (4.3%)
Hong Kong	– (–)	– (–)

Note:

1. The calculation method of the rate of employee turnover: the total number of departures in that year ÷ total number of employees at the end of the year × 100%.

Diversity of governance bodies

Indicators	2022	2021
Number of governance bodies members	10	12
Number and percentage of individuals within the Group's governance bodies		
By gender		
Female	2 (20.0%)	2 (16.7%)
Male	8 (80.0%)	10 (83.3%)
By age group		
Below 30	– (–)	– (–)
30 to 50	1 (10.0%)	2 (16.7%)
Over 50	9 (90.0%)	10 (83.3%)

Occupational Health and Safety

Indicators	2022	2021
Number of work-related injuries	0	0
Rate of work-related injuries	0	0
Number of workdays lost due to work-related injuries	0	0
Lost day rate	0	0
Work-related fatality (%)	0	0
Work-related fatality rate (%)	0	0

Parental Leave

Indicators	2022	2021
Total number of employees that were entitled to parental leave	104	114
By gender		
Female	41	47
Male	63	67
Total number of employees that took parental leave	12	2
By gender		
Female	6	–
Male	6	2
Total number of employees that returned to work in the reporting	10	2
By gender		
Female	5	–
Male	5	2

Training and Development

Indicators	2022	2021
Total number of hours of training received by employees	7,243.3	2,172.5
Total number of employees who received training	198	143
Average training hours per employee[1] and percentage of employees who received training[2]	32.2 (88.0%)	12.4 (81.7%)
By gender[1,2]		
Female	33.5 (94.8%)	10.8 (40.6%)
Male	31.2 (82.8%)	13.6 (59.4%)
By employee category[3, 4]		
Senior management	0.4 (73.9%)	1.1 (6.3%)
Middle management	36.3 (87.3%)	37.7 (24.5%)
General staff	35.6 (90.5%)	7.2 (69.2%)

Notes:

1. The calculation method of the average training hours: total number of training hours ÷ total number of employees as at the end of the year.

2. The calculation method of the percentage of employees trained: employees who took part in training ÷ number of employees as at the end of the year × 100%.

3. The calculation method of the average training hours for employees in relevant categories: total number of training hours for employees in the specified category ÷ number of employees in the specified category as at the end of the year.

4. The calculation method of the percentage of employees trained in relevant categories: employees in the specified category who took part in training ÷ employees who took part in training × 100%.

Supply Chain Management

Indicators	2022	2021
Total number of key suppliers	60	61
By region		
The U.S.	33	28
China	20	26
Other regions (including Canada, the United Kingdom, Japan, Singapore and Taiwan)	7	7
Proportion of spending on local suppliers		
The U.S.	64.1%	66.7%
China	97.0%	87.8%

Indicators	2022	2021
Total number of qualified key suppliers	60	61
The number of key suppliers that have assessed the social impact	60	61
The number of key suppliers with significant actual or potential negative impacts has been identified	—	—
Number of key suppliers that have conducted environmental impact assessment	60	61
The number of key suppliers that have a significant actual or potential negative impact on the environment has been identified	—	—

Anti-corruption

Indicators	Unit	2022	2021
Number of corruption cases reported by employees	case	—	—
Number of concluded corruption cases filed against the issuer or its employees	case	—	—
Total number and percentage of employees that the organization's anti-corruption policies and procedures have been communicated to	%	100%	100%

List of Compliance Laws and Regulations

Field	Applicable Laws and Regulations Abided by Sirnaomics	Compliance	POLITICAL ACTIVITIES
	PRC	U.S.	
Environments Protection	• the Environmental Protection Law of the PRC, • the Solid Waste Environmental Pollution Prevention and Control Law of the PRC, • the Water Pollution Prevention and Control Law of the PRC, • the Atmospheric Pollution Prevention and Control Law of the PRC, • the Emission Standard of Air Pollutants of the PRC, • the Emission Standard for Industrial Enterprises Noise at Boundary (GB12348–2008), etc.	• The Federal Clean Air Act of the U.S., • The Federal Clean Water Act of the U.S., • The Energy Policy Act of 2005 in the U.S., etc.	No Violation
Employment and Labor Standards	• Labor Contract Law of the PRC, • Labor Law of the PRC, • Social Insurance Law of the PRC, • Provisions on Special Protection for Minor Workers, • Provisions on the Prohibition of Using Child Labor, etc.	• Uniformed Services Employment and Reemployment Rights Act in the U.S., • Employee Rights for Workers with Disabilities Paid at Special Minimum Wages in the U.S., • Pay Transparency Nondiscrimination Provision in the U.S., etc.	No Violation
Occupational Health and Safety	• the Work Safety Law of the PRC, • Emergency Response Law of the PRC, etc.	• Occupational Safety and Health Act of the U.S., etc.	No Violation

Field	Applicable Laws and Regulations Abided by Sirnaomics	Compliance	POLITICAL ACTIVITIES
	PRC	U.S.	
Product and Service Quality	• Guidelines for the Development of the Ethics Review Committee for Clinical Research Involving Human Beings, • Guidance for the Ethical Review of Pharmaceutical Clinical Trials, • Regulations for the Administration of Affairs Concerning Experimental Animals, • the Administrative Measures on Good Practice of Experimental Animals, • the Administrative Measures on the Certificate for Experimental Animals (Trial), etc.	• Good Laboratory Practice and human subject regulations, • The Animal Welfare Act in the U.S., • Public Health Service Policy on Humane Care and Use of Laboratory Animals in the U.S., etc.	No Violation
Intellectual Property Protection	• Patent Law of the PRC, • Trademark Law of the PRC • Copyright Law of the PRC, etc.	• Health Insurance Portability and Accountability Act, etc.	No Violation
Anti-corruption	• Company Law of the PRC, • Criminal Law of the PRC, • Anti-Unfair Competition Law of the PRC, • Anti-money Laundering Law of the PRC, etc.	• Foreign Corrupt Practices Act in the U.S., etc.	No Violation

GRI Content Index

GRI Indicator		Description	Report chapter/Website reference and notes
GRI 2: General Disclosures 2021			
The organization and its reporting practices	2–1	Organizational details	About the Group
	2–2	Entities included in the organization's sustainability reporting	About the Group
	2–3	Reporting period, frequency and contact point	About the Group
	2–4	Restatements of information	Not applicable
	2–5	External assurance	Nil This ESG Report was subject to internal audit process. No external assurance was conducted in 2022.
Activities and workers	2–6	Activities, value chain and other business relationships	About the Group
	2–7	Employees	Quantitative Performance Summary
	2–8	Workers who are not employees	Quantitative Performance Summary
Governance	2–9	Governance structure and composition	Corporate Governance
	2–10	Nomination and selection of the highest governance body	Corporate Governance
	2–11	Chair of the highest governance body	Corporate Governance
	2–12	Role of the highest governance body in overseeing the management of impacts	Corporate Governance
	2–13	Delegation of responsibility for managing impacts	Corporate Governance
	2–14	Role of the highest governance body in sustainability reporting	ESG Governance
	2–19	Remuneration policies	Annual report

GRI Indicator		Description	Report chapter/Website reference and notes
	2–20	Process to determine remuneration	Annual report
Strategy, policies and practices	2–22	Statement on sustainable development strategy	Sustainability Strategy
	2–23	Policy commitments	ESG Governance
	2–24	Embedding policy commitments	ESG Governance
	2–26	Mechanisms for seeking advice and raising concerns	Stakeholder Engagement
Stakeholder engagement	2–29	Approach to stakeholder engagement	Stakeholder Engagement
	2–30	Collective bargaining agreements	None in 2022. The Group respects the employees' right to form and join labor unions and will work with legitimate employee representative bodies in accordance with the applicable laws and regulations.

GRI Indicator		Description	Report chapter/Website reference and notes
Material Topics 2021	3–1	Process to determine material topics	Materiality Assessment
	3–2	List of material topics	Materiality Assessment
	3–3	Management of material topics	Materiality Assessment
GRI 201: Economic Performance 2016	201–1	Direct economic value generated and distributed	Annual Report 2022
	201–2	Financial implications and other risks and opportunities due to climate change	Climate Change Risk and Opportunity Identification
GRI 203: Indirect Economic Impacts 2016	—	Topic management disclosures	Community Investment
	203–1	Infrastructure investments and services supported	Community Investment
	203–2	Significant indirect economic impacts	Community Investment
Procurement Practices 2016	—	Topic management disclosures	Supply Chain Management
	204–1	Proportion of spending on local suppliers	Supply Chain Management
Anti-corruption 2016	—	Topic management disclosures	Anti-corruption
	205–1	Operations assessed for risks related to corruption	Anti-corruption
	205–2	Communication and training about anti-corruption policies and procedures	Anti-corruption
	205–3	Confirmed incidents of corruption and actions taken	Anti-corruption

GRI Indicator		Description	Report chapter/Website reference and notes
GRI 302: Energy 2016	—	Topic management disclosures	Energy Consumption
	302–1	Energy consumption within the organization	Energy Consumption
	302–2	Energy consumption outside of the organization	Energy Consumption
	302–3	Energy intensity	Energy Consumption
	302–4	Reduction of energy consumption	Energy Consumption
	302–5	Reductions in energy requirements of products and services	Energy Consumption
GRI 303: Water and Effluents 2018	—	Topic management disclosures	Water Consumption
	303–1	Interactions with water as a shared resource	Water Consumption
	303–2	Management of water discharge-related impacts	Water Consumption
	303–3	Water withdrawal	Water Consumption
	303–4	Water discharge	Water Consumption
	303–5	Water consumption	Water Consumption
GRI 305: Emissions 2016	—	Topic management disclosures	GHG Emissions
	305–1	Direct (Scope 1) GHG emissions	GHG Emissions
	305–2	Energy indirect (Scope 2) GHG emissions	GHG Emissions
	305–3	Other indirect (Scope 3) GHG emissions	GHG Emissions
	305–4	GHG emissions intensity	GHG Emissions
	305–5	Reduction of GHG emissions	GHG Emissions
	305–7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Emission Management

GRI Indicator		Description	Report chapter/Website reference and notes
GRI 306: Waste 2020	—	Topic management disclosures	Non-hazardous Waste Hazardous Waste
	306–1	Waste generation and significant waste-related impacts	Non-hazardous Waste Hazardous Waste
	306–2	Management of significant waste-related impacts	Non-hazardous Waste Hazardous Waste
	306–3	Waste generated	Non-hazardous Waste Hazardous Waste
GRI 307: Environmental Compliance 2016	—	Topic management disclosures	Employment Compliance
	307–1	Non-compliance with environmental laws and regulations	Employment Compliance
GRI 308: Supplier Environmental Assessment 2016	—	Topic management disclosures	Supply Chain Management
	308–2	Negative environmental impacts in the supply chain and actions taken	Supply Chain Management
GRI 401: Employment 2016	—	Topic management disclosures	Supply Chain Management
	401–1	New employee hires and employee turnover	Quantitative Performance Summary
	401–2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Remuneration and Benefits

GRI Indicator		Description	Report chapter/Website reference and notes
GRI 403: Occupational Health and Safety 2018	—	Topic management disclosures	Occupational Health
	403–1	Occupational health and safety management system	Occupational Health
	403–2	Hazard identification, risk assessment, and incident investigation	Occupational Health
	403–3	Occupational health services	Occupational Health
	403–4	Worker participation, consultation, and communication on health and safety	Occupational Health
	403–5	Worker training on occupational health and safety	Occupational Health
	403–6	Promotion of worker health	Occupational Health
	403–7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Health
GRI 404: Training and Education 2016	—	Topic management disclosures	Training and Development
	404–1	Average hours of training per year per employee	Training and Development
	404–2	Programs for upgrading employee skills and transition assistance programs	Training and Development
GRI 405: Diversity and Equal Opportunity 2016	—	Topic management disclosures	Diversity, Equal Opportunities and Anti-discrimination
	405–1	Diversity of governance bodies and employees	Diversity, Equal Opportunities and Anti-discrimination
GRI 408: Child Labor 2016	—	Topic management disclosures	Employment Compliance
	408–1	Operations and suppliers at significant risk for incidents of child labor	Employment Compliance

GRI Indicator		Description	Report chapter/Website reference and notes
GRI 414: Supplier Social Assessment 2016	—	Topic management disclosures	Supply Chain Management
	414–1	New suppliers that were screened using social criteria	Supply Chain Management
	414–2	Negative social impacts in the supply chain and actions taken	Supply Chain Management
GRI 416: Customer Health and Safety 2016	—	Topic management disclosures	Safety of and Communication with Clinical Trial Participants
	416–2	Incidents of non-compliance concerning the health and safety impacts of products and services	Safety of and Communication with Clinical Trial Participants
GRI 418: Customer Privacy 2016	—	Topic management disclosures	Privacy and Information Security
	418–1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Privacy and Information Security
GRI 419: Socioeconomic Compliance 2016	—	Topic management disclosures	Intellectual Property Protection
	419–1	Non-compliance with laws and regulations in the social and economic area	Intellectual Property Protection

HKEX ESG Guide Index

Mandatory Disclosure Requirements		Corresponding Section
Governance Structure	A statement from the board containing the following elements: (i) a disclosure of the board's oversight of ESG issues; (ii) the board's ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the issuer's businesses); and (iii) how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses.	Sustainability Strategy
Reporting Principles	A description of, or an explanation on, the application of the following Reporting Principles in the preparation of the ESG report: **Materiality:** The ESG report should disclose: (i) the process to identify and the criteria for the selection of material ESG factors; (ii) if a stakeholder engagement is conducted, a description of significant stakeholders identified, and the process and results of the issuer's stakeholder engagement. **Quantitative:** Information on the standards, methodologies, assumptions and/or calculation tools used, and source of conversion factors used, for the reporting of emissions/energy consumption (where applicable) should be disclosed. **Consistency:** The issuer should disclose in the ESG report any changes to the methods or KPIs used, or any other relevant factors affecting a meaningful comparison.	Introduction
Reporting Boundary	A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change.	Introduction

Aspect	KPI	Description	Corresponding Section
A. Environment			
A1 Emission	A1	General Disclosure	Emissions Management
	A1.1	The types of emissions and respective emission data	Emissions Management
	A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity	Emissions Management
	A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity	Emissions Management
	A1.4	Total non-hazardous waste produced (in tonnes and, where appropriate, intensity	Emissions Management
	A1.5	Description of emission target(s) set and steps taken to achieve them	Emissions Management
	A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them	Emissions Management
A2 Use of resources	A2	General Disclosure	Resource Management
	A2.1	Direct and/or indirect energy consumption by type in total (kWh in '000s) and intensity	Resource Management
	A2.2	Water consumption in total and intensity	Resource Management
	A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them	Resource Management
	A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them	Resource Management
	A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced	Resource Management
A3 The environment and natural resources	A3	General Disclosure	The Environment and Natural Resources
	A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them	The Environment and Natural Resources
A4 Climate change	A4	General Disclosure	Responding to Climate Change
	A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them	Responding to Climate Change

Aspect	KPI	Description	Corresponding Section
B. Social			
B1 Employment	B1	General Disclosure	Talent Care and Development
	B1.1	Total workforce by gender, employment type, age group and geographical region	Talent Care and Development
	B1.2	Employee turnover rate by gender, age group and geographical region	Talent Care and Development
B2 Health and safety	B2	General Disclosure	Occupational Health and Safety
	B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year	Occupational Health and Safety
	B2.2	Lost days due to work injury	Occupational Health and Safety
	B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored	Occupational Health and Safety
B3 Development and training	B3	General Disclosure	Training and Development
	B3.1	The percentage of employees trained by gender and employee category	Training and Development
	B3.2	The average training hours completed per employee by gender and employee category	Training and Development
B4 Labour standards	B4	General Disclosure	Employment Compliance
	B4.1	Description of measures to review employment practices to avoid child and forced labour	Employment Compliance
	B4.2	Description of steps taken to eliminate such practices when discovered	Employment Compliance
B5 Supply chain management	B5	General Disclosure	Supply Chain Management
	B5.1	Number of suppliers by geographical region	Supply Chain Management
	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored	Supply Chain Management
	B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored	Supply Chain Management
	B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored	Supply Chain Management

Aspect	KPI	Description	Corresponding Section
B. Social			
B6 Product responsibility	B6	General Disclosure	Commitment to Innovation and Quality
	B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	Commitment to Innovation and Quality
	B6.2	Number of products and service related complaints received and how they are dealt with	Commitment to Innovation and Quality
	B6.3	Description of practices relating to observing and protecting intellectual property rights	Commitment to Innovation and Quality
	B6.4	Description of quality assurance process and recall procedures	Commitment to Innovation and Quality
	B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored	Commitment to Innovation and Quality
B7 Anti-corruption	B7	General Disclosure	Business Ethic
	B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases	Business Ethic
	B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored	Business Ethic
	B7.3	Description of anti-corruption training provided to directors and staff	Business Ethic
B8 Community investment	B8	General Disclosure	Community Investment
	B8.1	Focus areas of contribution	Community Investment
	B8.2	Resources contributed to the focus area	Community Investment

Independent Auditor's Report

Deloitte. 德勤

TO THE SHAREHOLDERS OF SIRNAOMICS LTD.
(incorporated in the Cayman Islands with limited liability)

OPINION

We have audited the consolidated financial statements of Sirnaomics Ltd. (the "**Company**") and its subsidiaries (collectively referred to as the "**Group**") set out on pages 167 to 274, which comprise the consolidated statement of financial position as at December 31, 2022, and the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at December 31, 2022, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("**IFRSs**") issued by the International Accounting Standard Board and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with Hong Kong Standards on Auditing ("**HKSAs**") issued by the Hong Kong Institute of Certified Public Accountants ("**HKICPA**"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants (the "**Code**"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KEY AUDIT MATTER

Key audit matter is the matter that, in our professional judgment, was of most significance in our audit of the consolidated financial statements of the current period. The matter was addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on the matter.

KEY AUDIT MATTER (Continued)

Key audit matter	How the matter was addressed in our audit

Cut-off of outsourcing research and development expenses

During the year ended December 31, 2022, the Group incurred research and development ("**R&D**") expenses of approximately US$67,641,000, out of which approximately US$37,095,000 or 55% were attributable to the outsourcing R&D expenses payable to outsourced service providers including contract research organizations, contract manufacturing organizations, and contract development and manufacturing organizations (collectively referred to as the "**Outsourced Service Providers**").

These Outsourced Service Providers provided supports to the Group's various R&D activities in the form of R&D services. And these services are typically performed across the financial reporting periods.

We identified the cut-off of outsourcing R&D expenses as a key audit matter due to its significance and risk of not recording the outsourcing R&D expenses in the appropriate financial reporting period.

Our procedures in relation to the cut-off of outsourcing R&D expenses included:

- Obtaining an understanding of key controls of the management's basis and assessment in relation to the accrual process of the R&D expenses including those payable to Outsourced Service Providers;
- Confirming with the Outsourced Service Providers in respect of the progress of the outsourcing R&D projects, on a sample basis, for the year ended December 31, 2022; and
- Performing cut-off testing for the outsourcing R&D expenses recorded before and after the year end date, on a sample basis, by checking to relevant supporting documents including invoices and contracts to determine whether the outsourcing R&D expenses were recorded in the appropriate financial reporting period.

OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF DIRECTORS AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine 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, the directors are 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 the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

AUDITOR'S 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 auditor's report that includes our opinion solely to you, as a body, in accordance with our agreed terms of engagement, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs 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 HKSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- 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.

- 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.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' 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 auditor's 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 auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- 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.

- 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, actions taken to eliminate threats or safeguards applied.

From the matters communicated with those charged with governance, we determine the matter that was of most significance in the audit of the consolidated financial statements of the current period and is therefore the key audit matter. We describe the matter in our auditor's 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.

The engagement partner on the audit resulting in the independent auditor's report is Fung Suet Ngan.

Deloitte Touche Tohmatsu
Certified Public Accountants
Hong Kong

March 28, 2023

Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended December 31, 2022

	NOTES	2022 US$'000	2021 US$'000
Other income	7	**2,114**	350
Other gains and losses	8	**(292)**	(244)
Changes in fair value of financial asset at fair value through profit or loss ("**FVTPL**")	21	**4**	—
Changes in fair value of financial liabilities at FVTPL	26	**(6,124)**	(146,038)
Administrative expenses		**(24,191)**	(16,120)
Research and development expenses		**(67,641)**	(40,673)
Listing expenses		**—**	(12,192)
Other expenses	9	**(450)**	(678)
Finance costs	10	**(798)**	(339)
Loss before tax		**(97,378)**	(215,934)
Income tax expense	11	**—**	—
Loss for the year	12	**(97,378)**	(215,934)
Other comprehensive (expense) income:			
Item that may be reclassified subsequently to profit or loss:			
Exchange differences arising on translation of foreign operations		**(1,850)**	141
Other comprehensive (expense) income for the year		**(1,850)**	141
Total comprehensive expense for the year		**(99,228)**	(215,793)
Loss for the year attributable to:			
Owners of the Company		**(88,299)**	(213,071)
Non-controlling interests		**(9,079)**	(2,863)
		(97,378)	(215,934)
Total comprehensive expense for the year attributable to:			
Owners of the Company		**(90,080)**	(212,989)
Non-controlling interests		**(9,148)**	(2,804)
		(99,228)	(215,793)
Loss per share	16		
— Basic and diluted (US$)		**(1.16)**	(14.30)

Consolidated Statement of Financial Position

As at December 31, 2022

	NOTES	2022 US$'000	2021 US$'000
NON-CURRENT ASSETS			
Property, plant and equipment	17	**24,076**	7,862
Right-of-use assets	18	**5,446**	6,855
Intangible assets	19	**919**	1,069
Financial asset at FVTPL	21	**15,004**	—
Deposits	20	**1,237**	1,056
		46,682	16,842
CURRENT ASSETS			
Prepayments, deposits and other receivables	20	**12,020**	11,748
Restricted bank balances	22	**—**	63
Cash and cash equivalents	22	**105,229**	211,994
		117,249	223,805
CURRENT LIABILITIES			
Trade and other payables	23	**11,758**	14,098
Contract liability	24	**718**	784
Lease liabilities	25	**1,751**	1,346
		14,227	16,228
NET CURRENT ASSETS		**103,022**	207,577
TOTAL ASSETS LESS CURRENT LIABILITIES		**149,704**	224,419
NON-CURRENT LIABILITIES			
Financial liabilities at FVTPL	26	**29,139**	8,437
Lease liabilities	25	**9,005**	5,694
		38,144	14,131
NET ASSETS		**111,560**	210,288

Consolidated Statement of Financial Position

As at December 31, 2022

	NOTES	2022 US$'000	2021 US$'000
CAPITAL AND RESERVES			
Share capital	27	**88**	88
Reserves		**121,918**	211,527
Equity attributable to owners of the Company		**122,006**	211,615
Non-controlling interests	28	**(10,446)**	(1,327)
TOTAL EQUITY		**111,560**	210,288

The consolidated financial statements on pages 167 to 274 were approved and authorized for issue by the Board of Directors on March 28, 2023 and are signed on its behalf by:

Dr. Yang Lu
DIRECTOR

Dr. Xiaochang Dai
DIRECTOR

Consolidated Statement of Changes in Equity

For the year ended December 31, 2022

	Attributable to owners of the Company												
	Share capital US$'000	Shares held for share option scheme US$'000	Share premium US$'000	Capital reserve US$'000 (Note iii)	Other reserves US$'000 (Note i)	Treasury share reserve US$'000	Translation reserve US$'000	Share option reserve US$'000	Share award reserve US$'000	Accumulated losses US$'000	Sub-total US$'000	Non-controlling interests US$'000	Total US$'000
At January 1, 2021	14	–	–	2,395	(3,954)	(853)	(1,600)	2,631	–	(93,066)	(94,433)	253	(94,180)
Loss for the year	–	–	–	–	–	–	–	–	–	(213,071)	(213,071)	(2,863)	(215,934)
Exchange differences arising on translation of foreign operations	–	–	–	–	–	–	82	–	–	–	82	59	141
Total comprehensive expense for the year	–	–	–	–	–	–	82	–	–	(213,071)	(212,989)	(2,804)	(215,793)
Effect of conversion of SAFE (as defined in Note i) to a subsidiary's ordinary shares (Note 35.1(a))	–	–	–	–	1,356	–	–	–	–	–	1,356	1,406	2,762
Cancellation of treasury shares of US Sirnaomics (Note ii)	–	–	–	(853)	–	853	–	–	–	–	–	–	–
Exercise of stock purchase warrants by US Sirnaomics (Note 35.1(a))	–	–	–	–	(302)	–	–	–	–	–	(302)	302	–
Exercise of Series C Warrants (as defined in Note i) granted to non-controlling shareholders and conversion of their equity interests in a subsidiary to the Company's preferred shares	–	–	–	–	189	–	269	–	–	–	458	(458)	–
Issuance of shares arising from Group Reorganization (as defined in Note 2)	–	–	10,178	(1,542)	(8,636)	–	–	–	–	–	–	–	–
Acquisition of interest in a subsidiary from a non-controlling shareholder (Note 35.1(b))	–	–	–	–	(303)	–	–	–	–	–	(303)	(47)	(350)
Recognition of share-based payment	–	–	–	–	–	–	–	11,259	–	–	11,259	21	11,280
Lapse of share options	–	–	–	–	–	–	–	(20)	–	20	–	–	–
Forfeiture of share options	–	–	–	–	–	–	–	(91)	–	91	–	–	–
Issue of shares of the Company under share option scheme	1	–	326	–	–	–	–	(155)	–	–	172	–	172
Issue of shares pursuant to initial public offering ("**IPO**")	7	–	63,699	–	–	–	–	–	–	–	63,706	–	63,706
Transaction costs directly attributable to issue of new shares in the IPO	–	–	(4,076)	–	–	–	–	–	–	–	(4,076)	–	(4,076)
Automatic conversion of preferred shares to ordinary shares upon IPO (Note 26)	53	–	446,714	–	–	–	–	–	–	–	446,767	–	446,767
Issue of shares held on trust	13	(13)	–	–	–	–	–	–	–	–	–	–	–
At December 31, 2021	88	(13)	516,841	–	(11,650)	–	(1,249)	13,624	–	(306,026)	211,615	(1,327)	210,288

Consolidated Statement of Changes in Equity

For the year ended December 31, 2022

	Attributable to owners of the Company												
	Share capital US$'000	Shares held for share option scheme US$'000	Share premium US$'000	Capital reserve US$'000 (Note iii)	Other reserves US$'000 (Note i)	Treasury share reserve US$'000	Translation reserve US$'000	Share option reserve US$'000	Share award reserve US$'000	Accumulated losses US$'000	Sub-total US$'000	Non-controlling interests US$'000	Total US$'000
At January 1, 2022	88	(13)	516,841	–	(11,650)	–	(1,249)	13,624	–	(306,026)	211,615	(1,327)	210,288
Loss for the year	–	–	–	–	–	–	–	–	–	(88,299)	(88,299)	(9,079)	(97,378)
Exchange differences arising on translation of foreign operations	–	–	–	–	–	–	(1,781)	–	–	–	(1,781)	(69)	(1,850)
Total comprehensive expense for the year	–	–	–	–	–	–	(1,781)	–	–	(88,299)	(90,080)	(9,148)	(99,228)
Share repurchases (Note 27)	–	–	–	–	–	(10,217)	–	–	–	–	(10,217)	–	(10,217)
Cancellation of treasury shares (Note 27)	(1)	–	(9,011)	–	–	9,012	–	–	–	–	–	–	–
Recognition of share-based payment	–	–	–	–	–	–	–	202	197	–	399	14	413
Exercise of share options	–	1	2,740	–	–	–	–	(691)	–	–	2,050	–	2,050
Capital contribution from non-controlling shareholders	–	–	–	–	–	–	–	–	–	–	–	15	15
Issue of shares upon exercise of the over-allotment option (Note iv)	1	–	8,238	–	–	–	–	–	–	–	8,239	–	8,239
At December 31, 2022	88	(12)	518,808	–	(11,650)	(1,205)	(3,030)	13,135	197	(394,325)	122,006	(10,446)	111,560

Notes:

i. Other reserves included 1) effect of series C warrants ("**Series C Warrants**") granted to non-controlling shareholders to convert their registered capital in a subsidiary, Sirnaomics Biopharmaceuticals (Suzhou) Co., Ltd.* 聖諾生物醫藥技術(蘇州)有限公司 ("**Suzhou Sirnaomics**") to preferred shares of its holding company, namely, Sirnaomics, Inc. ("**US Sirnaomics**"), 2) differences between the carrying amounts of net assets attributable to the additional non-controlling interests at the date of issuance of subsidiary's equity and the relevant proceeds received, 3) differences between the carrying amounts of net assets attributable to the additional non-controlling interests at the date of conversion of Simple Agreements for Future Equity ("**SAFE**") shares to ordinary shares of a subsidiary, RNAimmune, Inc. ("**RNAimmune**"), 4) differences between the decrease in the carrying amounts of net assets attributable to the non-controlling shareholders and the relevant consideration paid in the acquisition and 5) effect of Group Reorganization (as defined in Note 2).

ii. On May 31, 2021, the board of directors of US Sirnaomics resolved that all the shares of common stock held in treasury by US Sirnaomics were cancelled and retired and then transferred to capital reserve.

iii. Capital reserve represents the share premium of US Sirnaomics, which was transferred to other reserves upon the completion of the Group Reorganization.

iv. On January 26, 2022, 973,450 ordinary shares of the Company were issued and allotted by the Company at HK$65.9 per share for gross proceeds of approximately HK$64,150,000 (equivalent to US$8,239,000) pursuant to the exercise of the over-allotment option on January 21, 2022 by the Joint Representatives as described and defined in the prospectus of the Company dated December 20, 2021.

* The English names are for identification purpose only.

Consolidated Statement of Cash Flows

For the year ended December 31, 2022

	NOTES	2022 US$'000	2021 US$'000
OPERATING ACTIVITIES			
Loss for the year		**(97,378)**	(215,934)
Adjustments for:			
Amortization of intangible assets		**87**	64
Interest income		**(1,353)**	(213)
Changes in fair value of structured deposits		**(45)**	(312)
Changes in fair value of financial asset at FVTPL		**(4)**	—
Changes in fair value of financial liabilities at FVTPL		**6,124**	146,038
Depreciation of property and equipment		**2,023**	791
Depreciation of right-of-use assets		**1,823**	775
Loss (gain) on disposal of property, plant and equipment		**36**	(3)
Issuance costs of financial liabilities at FVTPL		**—**	678
Finance costs		**798**	339
Share-based payment expense	30	**413**	11,280
Operating cash outflows before movements in working capital		**(87,476)**	(56,497)
Increase in prepayments, deposits and other receivables		**(301)**	(10,034)
(Decrease) increase in trade and other payables		**(931)**	8,774
Increase in contract liability		**—**	784
NET CASH USED IN OPERATING ACTIVITIES		**(88,708)**	(56,973)
INVESTING ACTIVITIES			
Purchase and deposits paid for property, plant and equipment		**(18,830)**	(5,079)
Placement of structured deposits		**(18,621)**	(170,986)
Proceeds from redemption of structured deposits		**18,666**	171,298
Purchase of financial asset at FVTPL		**(15,000)**	—
Payment for rental deposit		**(179)**	(692)
Interest received		**1,353**	213
Purchase and deposits paid for intangible assets		**—**	(795)
Proceeds from disposal of property, plant and equipment		**—**	6
NET CASH USED IN INVESTING ACTIVITIES		**(32,611)**	(6,035)

Consolidated Statement of Cash Flows

For the year ended December 31, 2022

	NOTES	2022 US$'000	2021 US$'000
FINANCING ACTIVITIES			
Proceeds from issuance of financial liabilities at FVTPL		**14,578**	232,154
Proceeds from exercise of the over-allotment option		**8,239**	—
Receipt of lease allowance		**4,036**	—
Proceeds from exercise of share options		**2,050**	172
Capital injection from non-controlling shareholders		**15**	—
Payment for share repurchases		**(10,217)**	—
Repayment of lease liabilities		**(697)**	(707)
Accrued issue costs paid		**(1,318)**	(2,747)
Interest paid on lease liabilities		**(798)**	(319)
Interest paid on bank and other borrowings		**—**	(72)
Proceeds from bank and other borrowings		**—**	2,093
Repayment of bank borrowings		**—**	(3,240)
Payment of issuance costs of financial liabilities at FVTPL		**—**	(1,784)
Consideration paid for acquiring non-controlling interest of Guangzhou Sirnaomics (as defined in Note 2)		**—**	(350)
Consideration paid for acquiring the non-controlling interests of Suzhou Sirnaomics upon exercise of the Series C Warrants		**—**	(24,712)
Repayment to holders of Convertible Loans upon exercise of Series D Warrants		**—**	(93,230)
Proceeds from IPO		**—**	63,706
NET CASH FROM FINANCING ACTIVITIES		**15,888**	170,964
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS		**(105,431)**	107,956
CASH AND CASH EQUIVALENTS AT JANUARY 1		**211,994**	103,122
Effect of foreign exchange rate changes		**(1,334)**	916
CASH AND CASH EQUIVALENTS AT DECEMBER 31, represented by bank balances and cash		**105,229**	211,994

1. GENERAL INFORMATION

Sirnaomics Ltd. (the "**Company**") is a public limited company incorporated in the Cayman Islands and its shares are listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "**Hong Kong Stock Exchange**") effective from December 30, 2021. The respective address of the registered office and the principal place of business of the Company are disclosed in the corporate information section to the annual report.

The Company is an investment holding company. The Company and its subsidiaries (collectively, referred to as the "**Group**") are clinical stage biotechnology companies engaged in developing and commercializing of ribonucleic acid interference ("**RNAi**") technology and multiple therapeutics. Details of particulars of the Company's subsidiaries are disclosed in note 35.

The consolidated financial statements are presented in US$, which is the same as the functional currency of the Company.

2. GROUP REORGANIZATION AND BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("**IFRSs**") issued by the International Accounting Standards Board ("**IASB**") and the conventions applicable for group reorganization as detailed below.

Prior to the incorporation of the Company and the completion of the group reorganization (the "**Group Reorganization**"), the principal operation of the Group has been operated by US Sirnaomics and its subsidiaries, Suzhou Sirnaomics, Sirnaomics Biopharmaceuticals (Guangzhou) Co., Ltd.* 聖諾生物醫藥技術(廣州)有限公司 ("**Guangzhou Sirnaomics**"), Sirnaomics (Hong Kong) Limited ("**HK Sirnaomics**") and RNAimmune.

* The English names are for identification purpose only.

2. GROUP REORGANIZATION AND BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company was incorporated under the laws of Cayman Islands as an exempted company with limited liability on October 15, 2020. The authorized share capital of the Company was US$150,000, which was initially divided into 150,000,000 shares with par value of US$0.001 each at the date of incorporation. At the time of incorporation, one ordinary share was transferred to the initial subscribing shareholder and on the same day, the ordinary share was transferred to Dr. Yang Lu, a director and chief executive officer ("**CEO**") of the Company. On January 21, 2021, the authorized share capital of the Company was divided into 100,000,000 ordinary shares of US$0.001 par value each and 50,000,000 preferred shares ("**Preferred Shares**") of a par value of US$0.001 each, of which 2,024,860 were designated "Series A Preferred Shares", 7,374,632 were designated "Series B Preferred Shares", 14,600,142 were designated "Series C Preferred Shares" and 16,249,174 were designated "Series D Preferred Shares".

On January 21, 2021, US Sirnaomics, the then shareholders of US Sirnaomics, the holders of Series C Warrants and Series D Warrants and the Company entered into a share exchange agreement, pursuant to which, the then shareholders of US Sirnaomics transferred all their shares in US Sirnaomics to the Company, and in exchange for such transfer, the Company issued corresponding ordinary shares of the Company, Series A Preferred Shares, Series B Preferred Shares, Series C Preferred Shares and Series D Preferred Shares to the then shareholders of US Sirnaomics to mirror their shareholding in US Sirnaomics. The holders of Series C Warrants and Series D Warrants exchanged their Series C Warrants and Series D Warrants of US Sirnaomics for Series C Preferred Share Purchase Warrants and Series D Preferred Share Purchase Warrants of the Company, respectively.

After completion of the above steps of Group Reorganization, the Company became the holding company of the Group on January 21, 2021.

As the shares were proportionately issued to the ordinary equity owners of the Company, which involved interspersing the Company between US Sirnaomics and its then shareholders, the Group comprising the Company, US Sirnaomics and its subsidiaries resulting from the Group Reorganization is regarded as a continuing entity throughout the year, regardless of the actual date when they legally form part of a group.

Accordingly, the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year ended December 31, 2021 have been prepared to include the results, changes in equity and cash flows of the companies now comprising the Group as if the group structure upon the completion of the Group Reorganization had been in existence throughout the year ended December 31, 2021, or since their respective dates of incorporation, where there is a shorter period.

3. APPLICATION OF AMENDMENTS TO IFRSs

Amendments to IFRSs that are mandatorily effective for the current year

In the current year, the Group has applied the following amendments to IFRSs issued by the IASB for the first time, which are mandatorily effective for the annual periods beginning on or after 1 January 2022 for the preparation of the consolidated financial statements:

Amendments to IFRS 3	Reference to the Conceptual Framework
Amendment to IFRS 16	Covid-19-Related Rent Concessions beyond June 30, 2021
Amendments to IAS 16	Property, Plant and Equipment — Proceeds before Intended Use
Amendments to IAS 37	Onerous Contracts — Cost of Fulfilling a Contract
Amendments to IFRS Standards	Annual Improvements to IFRSs 2018–2020

The application of the amendments to IFRSs in the current year has had no material impact on the Group's financial positions and performance for the current and prior years and/or on the disclosures set out in these consolidated financial statements.

New and amendments to IFRSs in issue but not yet effective

The Group has not early applied the following new and amendments to IFRS Standards that have been issued but are not yet effective:

IFRS 17 (including the June 2020 and December 2021 Amendments to IFRS 17)	Insurance Contracts[1]
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[2]
Amendments to IFRS 16	Lease Liability in a Sale and Leaseback[3]
Amendments to IAS 1	Classification of Liabilities as Current or Non-current[3]
Amendments to IAS 1	Non-current Liabilities with Covenants[3]
Amendments to IAS 1 and IFRS Practice Statement 2	Disclosure of Accounting Policies[1]
Amendments to IAS 8	Definition of Accounting Estimates[1]
Amendments to IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction[1]

1 Effective for annual periods beginning on or after January 1, 2023.
2 Effective for annual periods beginning on or after a date to be determined.
3 Effective for annual periods beginning on or after January 1, 2024.

3. APPLICATION OF AMENDMENTS TO IFRSs (Continued)

New and amendments to IFRSs in issue but not yet effective (Continued)

Except for Amendments to IAS 1 and IAS 12 mentioned below, the directors of the Company anticipate that the application of all other new and amendments to IFRSs will have no material impact on the consolidated financial statements in the foreseeable future.

Amendments to IAS 1 *Classification of Liabilities as Current or Non-current* and Amendments to IAS 1 *Non-current Liabilities with Covenants (the "2022 Amendments")*

The 2020 Amendments provide clarification and additional guidance on the assessment of right to defer settlement for at least twelve months from reporting date for classification of liabilities as current or non-current, which:

- clarify that if a liability has terms that could, at the option of the counterparty, result in its settlement by the transfer of the entity's own equity instruments, these terms do not affect its classification as current or non-current only if the entity recognises the option separately as an equity instrument applying IAS 32 *Financial Instruments: Presentation*.

- specify that the classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period. Specifically, the amendments clarify that the classification should not be affected by management intentions or expectations to settle the liability within 12 months.

For rights to defer settlement for at least twelve months from reporting date which are conditional on the compliance with covenants, the requirements introduced by the 2020 Amendments have been modified by the 2022 Amendments. The 2022 Amendments specify that only covenants with which an entity is required to comply with on or before the end of the reporting period affect the entity's right to defer settlement of a liability for at least twelve months after the reporting date. Covenants which are required to comply with only after the reporting period do not affect whether that right exists at the end of the reporting period.

In addition, the 2022 Amendments specify the disclosure requirements about information that enables users of financial statements to understand the risk that the liabilities could become repayable within twelve months after the reporting period, if the entity classify liabilities arising from loan arrangements as noncurrent when the entity's right to defer settlement of those liabilities is subject to the entity complying with covenants within twelve months after the reporting period.

3. APPLICATION OF AMENDMENTS TO IFRSs (Continued)

New and amendments to IFRSs in issue but not yet effective (Continued)

Amendments to IAS 1 *Classification of Liabilities as Current or Non-current* and Amendments to IAS 1 *Non-current Liabilities with Covenants (the "2022 Amendments") (Continued)*

The 2022 Amendments also defer the effective date of applying the 2020 Amendments to annual reporting periods beginning on or after 1 January 2024. The 2022 Amendments, together with the 2020 Amendments, are effective for annual reporting periods beginning on or after 1 January 2024, with early application permitted. If an entity applies the 2020 amendments for an earlier period after the issue of the 2022 Amendments, the entity should also apply the 2022 Amendments for that period.

As at December 31, 2022, the Group's outstanding preferred shares which include counterparty conversion options that do not meet equity instruments classification by applying IAS 32. The Group classified the liabilities as current or non-current based on the earliest date in which the Group has the obligation to redeem preferred shares through cash settlement. These instruments were designated as financial liabilities at FVTPL with carrying amounts of US$29,139,000 as at December 31, 2022 and are classified as non-current. Upon the application of the amendments, the transfer of equity instruments upon the exercise of the conversion options that do not meet equity instruments classification also constitute settlement of the preferred shares. Given that the conversion options are exercisable anytime at the holders' discretions, the preferred shares designated as financial liabilities at FVTPL amounting to US$29,139,000 would be reclassified to current liabilities as the holders have the option to convert within twelve months.

Amendments to IAS 12 *Deferred Tax related to Assets and Liabilities arising from a Single Transaction*

The amendments narrow the scope of the recognition exemption of deferred tax liabilities and deferred tax assets in paragraphs 15 and 24 of IAS 12 *Income Taxes* so that it no longer applies to transactions that, on initial recognition, give rise to equal taxable and deductible temporary differences.

As disclosed in note 4, for leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies IAS 12 requirements to the relevant assets and liabilities as a whole. Temporary differences relating to relevant assets and liabilities are assessed on a net basis.

Upon the application of the amendments, the Group will recognize a deferred tax asset (to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized) and a deferred tax liability for all deductible and taxable temporary differences associated with the right-of-use assets and the lease liabilities.

3. APPLICATION OF AMENDMENTS TO IFRSs (Continued)

New and amendments to IFRSs in issue but not yet effective (Continued)

Amendments to IAS 12 *Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Continued)*

The amendments are effective for the Group's annual reporting periods beginning on or after January 1, 2023. As at December 31, 2022, the carrying amounts of right-of-use assets and lease liabilities which are subject to the amendments amounted to US$5,446,000 and US$10,756,000 respectively. The Group is still in the process of assessing the full impact of the application of the amendments. The cumulative effect of initially applying the amendments will be recognized as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the beginning of the earliest comparative period presented.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES

4.1 Basis of preparation of consolidated financial statements

The consolidated financial statements have been prepared in accordance with the IFRSs issued by IASB. For the purpose of preparation of the consolidated financial statements, information is considered material if such information is reasonably expected to influence decisions made by primary users. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("**Listing Rules**") and by the Hong Kong Companies Ordinance.

The consolidated financial statements have been prepared on the historical cost basis, except for certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies set out below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.1 Basis of preparation of consolidated financial statements (Continued)

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of IFRS 2 Share-based Payment, leasing transactions that are accounted for in accordance with IFRS 16 *Leases*, and measurements that have some similarities to fair value but are not fair value, such as net realizable value in IAS 2 Inventories or value in use in IAS 36 *Impairment of Assets*.

In addition, for financial reporting purposes, fair value measurements are categorized into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

4.2 Significant accounting policies

Basis of consolidation

The consolidated financial statements incorporates the financial statements of the Company and entities controlled by the Company and its subsidiaries. Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Basis of consolidation (Continued)

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Profit or loss and each item of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies.

All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Non-controlling interests in subsidiaries are presented separately from the Group's equity therein, which represent present ownership interests entitling their holders to a proportionate share of net assets of the relevant subsidiaries upon liquidation.

Changes in the Group's interests in existing subsidiaries

Changes in the Group's interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's relevant components of equity and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries, including re-attribution of relevant reserves between the Group and the non-controlling interests according to the Group's and the non-controlling interests' proportionate interests.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Basis of consolidation (Continued)

Changes in the Group's interests in existing subsidiaries (Continued)

Any difference between the amount by which the non-controlling interests are adjusted, and the fair value of the consideration paid or received is recognized directly in equity and attributed to owners of the Company.

Revenue from contracts with customers

The Group recognizes revenue when (or as) a performance obligation is satisfied, i.e. when "control" of the goods or services underlying the particular performance obligation is transferred to the customer.

A performance obligation represents a good or service (or a bundle of goods or services) that is distinct or a series of distinct goods or services that are substantially the same.

Except for granting of license that is distinct from other promised goods or services, control is transferred over time and revenue is recognized over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs;
- the Group's performance creates or enhances an asset that the customer controls as the Group performs; or
- the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognized at a point in time when the customer obtains control of the distinct good or service.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Revenue from contracts with customers (Continued)

A contract asset represents the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. It is assessed for impairment in accordance with IFRS 9 *Financial Instruments* ("**IFRS 9**"). In contrast, a receivable represents the Group's unconditional right to consideration, i.e. only the passage of time is required before payment of that consideration is due.

A contract liability represents the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A contract asset and a contract liability relating to the same contract are accounted for and presented on a net basis.

Contracts with multiple performance obligations (including allocation of transaction price)

For contracts that contain more than one performance obligations, the Group allocates the transaction price to each performance obligation on a relative stand-alone selling price basis.

The stand-alone selling price of the distinct good or service underlying each performance obligation is determined at contract inception. It represents the price at which the Group would sell a promised good or service separately to a customer. If a stand-alone selling price is not directly observable, the Group estimates it using appropriate techniques such that the transaction price ultimately allocated to any performance obligation reflects the amount of consideration to which the Group expects to be entitled in exchange for transferring the promised goods or services to the customer.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Revenue from contracts with customers (Continued)

Over time revenue recognition: measurement of progress towards complete satisfaction of a performance obligation

Input method

The progress towards complete satisfaction of a performance obligation is measured based on input method, which is to recognize revenue on the basis of the Group's efforts or inputs to the satisfaction of a performance obligation relative to the total expected inputs to the satisfaction of that performance obligation, that best depict the Group's performance in transferring control of goods or services.

Variable consideration

For license fee income and research and development service fee income that contain variable consideration, the Group estimates the amount of consideration to which it will be entitled using the most likely amount, which better predicts the amount of consideration to which the Group will be entitled.

The estimated amount of variable consideration is included in the transaction price only to the extent that it is highly probable that such an inclusion will not result in a significant revenue reversal in the future when the uncertainty associated with the variable consideration is subsequently resolved.

At the end of the reporting period, the Group updates the estimated transaction price (including updating its assessment of whether an estimate of variable consideration is constrained) to represent faithfully the circumstances present at the end of the reporting period and the changes in circumstances during the reporting period.

Notwithstanding the above criteria, the Group shall recognize revenue for a sales-based or usage-based royalty promised in exchange for a license of intellectual property only when (or as) the later of the following events occurs:

- the subsequent sale or usage occurs; and
- the performance obligation to which some or all of the sales-based or usage-based royalty has been allocated has been satisfied.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Revenue from contracts with customers (Continued)

Existence of significant financing component

In determining the transaction price, the Group adjusts the promised amount of consideration for the effects of the time value of money if the timing of payments agreed (either explicitly or implicitly) provides the customer or the Group with a significant benefit of financing the transfer of goods or services to the customer. In those circumstances, the contract contains a significant financing component. A significant financing component may exist regardless of whether the promise of financing is explicitly stated in the contract or implied by the payment terms agreed to by the parties to the contract.

For contracts where the period between payment and transfer of the associated goods or services is less than one year, the Group applies the practical expedient of not adjusting the transaction price for any significant financing component.

For advance payments received from customers before the transfer of the associated goods or services in which the Group adjusts for the promised amount of consideration for a significant financing component, the Group applies a discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. The relevant interest expenses during the period between the advance payments were received and the transfer of the associated goods and services are accounted for on the same basis as other borrowing costs.

Leases

Definition of a lease

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

For contracts entered into or modified on or after the date of initial application of IFRS 16 or arising from business combinations, the Group assesses whether a contract is or contains a lease based on the definition under IFRS 16 at inception, modification date or acquisition date, as appropriate. Such contract will not be reassessed unless the terms and conditions of the contract are subsequently changed.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Leases (Continued)

The Group as lessee

Allocation of consideration to components of a contract

For a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

The Group applies practical expedient not to separate non-lease components from lease component, and instead account for the lease component and any associated non-lease components as a single lease component.

Short-term leases

The Group applies the short-term lease recognition exemption to leases of offices that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. Lease payments on short-term leases are recognized as expense on a straight-line basis over the lease term.

Right-of-use assets

The cost of right-of-use assets includes:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group; and
- an estimate of costs to be incurred by the Group in dismantling and removing the underlying assets, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease.

Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Leases (Continued)

The Group as lessee (Continued)

Right-of-use assets (Continued)

Right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term.

The Group presents right-of-use assets as a separate line item on the consolidated statement of financial position.

Refundable rental deposits

Refundable rental deposits paid are accounted under IFRS 9 and initially measured at fair value. Adjustments to fair value at initial recognition are considered as additional lease payments and included in the cost of right-of-use asset.

Lease liabilities

At the commencement date of a lease, the Group recognizes and measures the lease liability at the present value of lease payments that are unpaid at that date. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable.

The lease payments include:

- fixed payments (including in-substance fixed payments) less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable by the Group under residual value guarantees;
- the exercise price of a purchase option if the Group is reasonably certain to exercise the option; and
- payments of penalties for terminating a lease, if the lease term reflects the Group exercising an option to terminate the lease.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Leases (Continued)

The Group as lessee (Continued)

Lease liabilities (Continued)

After the commencement date, lease liabilities are adjusted by interest accretion and lease payments.

The Company remeasures lease liabilities (and makes a corresponding adjustment to the related right-of-use assets) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the related lease liability is remeasured by discounting the revised lease payments using a revised discount rate at the date of reassessment.

- the lease payments change due to changes in market rental rates following a market rent review, in which cases the related lease liability is remeasured by discounting the revised lease payments using the initial discount rate.

The Group presents lease liabilities as a separate line item on the consolidated statement of financial position.

Lease modifications

The Group accounts for a lease modification as a separate lease if:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and

- the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, the Group remeasures the lease liability based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Leases (Continued)

The Group as lessee (Continued)

Lease modifications (Continued)

The Group accounts for the remeasurement of lease liabilities by making corresponding adjustments to the relevant right-of-use asset. When the modified contract contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the modified contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than the functional currency of that entity (foreign currencies) are recognized at the rates of exchange prevailing on the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items, and on the retranslation of monetary items, are recognized in profit or loss in the period in which they arise.

For the purposes of presenting the consolidated financial statements, the assets and liabilities of the Group's operations are translated into the presentation currency of the Group (i.e. US$) using exchange rates prevailing at the end of each reporting period. Income and expenses items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during that period, in which case the exchange rates at the date of transactions are used. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity under the heading of translation reserve (attributed to non-controlling interests as appropriate).

In relation to a partial disposal of a subsidiary that does not result in the Group losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognized in profit or loss.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets until such time as the assets are substantially ready for their intended use or sale.

Any specific borrowing that remain outstanding after the related asset is ready for its intended use or sale is included in the general borrowing pool for calculation of capitalization rate on general borrowings.

All other borrowing costs are recognized in profit or loss in the period in which they are incurred.

Government grants

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate.

Government grants related to income that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they become receivable. Such grants are presented under "other income".

Employee benefits

Retirement benefit costs

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Employee benefits (Continued)

Short-term employee benefits

Short-term employee benefits are recognized at the undiscounted amount of the benefits expected to be paid as and when employees rendered the services. All short-term employee benefits are recognized as an expense unless another IFRS requires or permits the inclusion of the benefit in the cost of an asset.

A liability is recognized for benefits accruing to employees, such as wages and salaries, after deducting any amount already paid.

Share-based payments

Equity-settled share-based payment transactions

Share options granted to employees

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date.

The fair value of the equity-settled share-based payments determined at the grant date without taking into consideration all non-market vesting conditions is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity (share option reserve). At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest based on assessment of all relevant non-market vesting conditions. The impact of the revision of the original estimates, if any, is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the share option reserve. For shares that vest immediately at the date of grant, the fair value of the shares granted is expensed immediately to profit or loss.

When share options are exercised, the amount previously recognized in share option reserve will be transferred to share premium. When the share options are forfeited after the vesting date or are still not exercised at the expiry date, the amount previously recognized in share option reserve will be transferred to accumulated losses.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Share-based payments (Continued)

Equity-settled share-based payment transactions (Continued)

Share options granted to employees (Continued)

An expense is recognized for any modification that increases the total fair value of the share-based payments, or is otherwise beneficial to the employee as measured at the date of modification. Where the modification reduces the fair value of the equity instruments granted, measured immediately before and after the modification, the decrease in fair value will not be recognized. The amount recognized for services received continues to be measured based on the grant date fair value of the instrument originally granted. Where the modification reduces the number of equity instruments granted to an employee, the reduction is accounted for as a cancelation of that portion of the grant. Where the modification of vesting conditions is a manner that is not beneficial to the employee, the amount recognized for services received shall not take the modified vesting conditions into account and continues to be measured based on the grant date vesting conditions of the instrument originally granted.

Share options granted to non-employees

Equity-settled share-based payments transactions with parties other than employees are measured at the fair value of the goods or services received, except where that fair value cannot be estimated reliably, in which case they are measured at the fair value of the equity instruments granted, measured at the date the entity obtains the goods or the counterparty renders the service. The fair values of the goods or services received are recognized as expenses (unless the services qualify for recognition as assets).

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Share-based payments (Continued)

Equity-settled share-based payment transactions (Continued)

Share award

For share award schemes, the fair value of services received, determined by reference to the fair value of awarded shares granted at the grant date, is expensed on a straight-line basis over the vesting period, with a corresponding increase in share award reserve. The cost of acquisition of the Company's shares held for the share award scheme is recorded as treasury shares (shares held for share award scheme). At the time when the awarded shares are vested, the amount previously recognized in share award reserve and the amount of the relevant treasury shares will be transferred to accumulated losses. At the end of each reporting period, the Group revisits its estimates of the number of awarded shares that are expected to ultimately vest. The impact of the revision of the estimates during the vesting period, if any, is recognized in profit or loss, with a corresponding adjustment to the share award reserve.

Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from loss before tax because of income or expense that are taxable or deductible in other years/periods and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of each reporting period.

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from the initial recognition of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Taxation (Continued)

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realized, based on tax rate (and tax laws) that have been enacted or substantively enacted by the end of each reporting period.

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of each reporting period, to recover or settle the carrying amount of its assets and liabilities.

For the purposes of measuring deferred tax for leasing transactions in which the Group recognizes the right-of-use assets and the related lease liabilities, the Group first determines whether the tax deductions are attributable to the right-of-use assets or the lease liabilities.

For leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies IAS 12 Income Taxes requirements to the leasing transaction as a whole. Temporary differences relating to right-of-use assets and lease liabilities are assessed on a net basis. Excess of depreciation on right-of-use assets over the lease payments for the principal portion of lease liabilities resulting in net deductible temporary differences.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied to the same taxable entity by the same taxation authority.

Current and deferred tax are recognized in profit or loss.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Property, plant and equipment

Property, plant and equipment are tangible assets that are held for use in the production or supply of goods or services, or for administrative purposes. Property, plant and equipment are stated in the consolidated statement of financial position at cost less subsequent accumulated depreciation and subsequent accumulated impairment losses, if any.

Assets under construction for production, supply or administrative purposes are carried at cost, less any recognized impairment loss. Costs include any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, including costs of testing whether the related assets is functioning properly, and, for qualifying assets, borrowing costs capitalized in accordance with the Group's accounting policy. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

Depreciation is recognized so as to write off the cost of assets less their residual values over their estimated useful lives, using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at costs less accumulated amortization. Amortization for intangible assets with finite useful lives is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Internally-generated intangible assets — research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred. An internally-generated intangible asset arising from development activities (or from the development phase of an internal project) is recognized if, all of the following have been demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible asset is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognized, development expenditure is recognized in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses (if any).

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

At the end of each reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use assets and intangible assets with finite useful lives to determine whether there is any indication that these assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the relevant asset is estimated in order to determine the extent of the impairment loss (if any).

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Impairment on property, plant and equipment, right-of-use assets and intangible assets (Continued)

The recoverable amounts of property, plant and equipment, right-of-use assets and intangible assets are estimated individually. When it is not possible to estimate the recoverable amount individually, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

In testing a cash-generating unit for impairment, corporate assets are allocated to the relevant cash-generating unit when a reasonable and consistent basis of allocation can be established, or otherwise they are allocated to the smallest group of cash generating units for which a reasonable and consistent allocation basis can be established. The recoverable amount is determined for the cash-generating unit or group of cash-generating units to which the corporate asset belongs, and is compared with the carrying amount of the relevant cash-generating unit or group of cash-generating units.

Recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset (or a cash-generating unit) for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or a cash-generating unit) is reduced to its recoverable amount. For corporate assets or portion of corporate assets which cannot be allocated on a reasonable and consistent basis to a cash-generating unit, the Group compares the carrying amount of a group of cash-generating units, including the carrying amounts of the corporate assets or portion of corporate assets allocated to that group of cash-generating units, with the recoverable amount of the group of cash-generating units. In allocating the impairment loss, the impairment loss is allocated first to reduce the carrying amount of any goodwill (if applicable) and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit or the group of cash-generating units. The carrying amount of an asset is not reduced below the highest of its fair value less costs of disposal (if measurable), its value in use (if determinable) and zero. The amount of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit or the group of cash-generating units. An impairment loss is recognized immediately in profit or loss.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Impairment on property, plant and equipment, right-of-use assets and intangible assets (Continued)

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit or a group of cash-generating units) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or a cash-generating unit or a group of cash-generating units) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

Cash and cash equivalents

Cash and cash equivalents presented on the consolidated statement of financial position include:

(a) cash, which comprises of cash on hand excluding bank balances that are subject to regulatory restrictions that result in such balances no longer meeting the definition of cash; and

(b) cash equivalents, which comprises of short-term (generally with original maturity of three months or less), highly liquid investments that are readily convertible to a known amount of cash and which are subject to an insignificant risk of changes in value. Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes.

For the purposes of the consolidated statement of cash flows, cash and cash equivalents consist of cash and cash equivalents as defined above.

Financial instruments

Financial assets and financial liabilities are recognized when a group entity becomes a party to the contractual provisions of the instrument. All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets and financial liabilities are initially measured at fair value except for trade receivables arising from contracts with customers which are initially measured in accordance with IFRS 15 *Revenue from Contracts with Customers*. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets or liabilities at FVTPL) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognized immediately in profit or loss.

The effective interest method is a method of calculating the amortized cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments (including all fees paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Financial assets

Classification and subsequent measurement of financial assets

Financial assets that meet the following conditions are subsequently measured at amortized cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Classification and subsequent measurement of financial assets (Continued)

Financial assets that meet the following conditions are subsequently measured at fair value through other comprehensive income ("**FVTOCI**"):

- the financial asset is held within a business model whose objective is achieved by both selling and collecting contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All other financial assets are subsequently measured at FVTPL.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling in the near term; or
- on initial recognition it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

In addition, the Group may irrevocably designate a financial asset that are required to be measured at the amortized cost or FVTOCI as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Classification and subsequent measurement of financial assets (Continued)

(i) Amortized cost and interest income

Interest income is recognized using the effective interest method for financial assets measured subsequently at amortized cost. Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired (see below). For financial assets that have subsequently become credit-impaired, interest income is recognized by applying the effective interest rate to the amortized cost of the financial asset from the next reporting period. If the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognized by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit-impaired.

(ii) Financial asset at FVTPL

Financial assets that do not meet the criteria for being measured at amortized cost or FVTOCI or designated as FVTOCI are measured at FVTPL.

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognized in profit or loss. The net gain or loss recognized in profit or loss includes any dividend or interest earned on the financial asset and is included in the "change in fair value of financial asset at FVTPLs" line item.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets which are subject to impairment assessment under IFRS 9

The Group performs impairment assessment under expected credit losses ("**ECL**") model on financial assets (including other receivables and deposits, restricted bank balances and bank balances) which are subject to impairment assessment under IFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ECL ("**12m ECL**") represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessment is done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group measures the loss allowance equal to 12m ECL for its financial instruments, unless when there has been a significant increase in credit risk since initial recognition, in which case the Group recognizes lifetime ECL. The assessment of whether lifetime ECL should be recognized is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

(i) Significant increase in credit risk

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at each reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets which are subject to impairment assessment under IFRS 9 (Continued)

(i) Significant increase in credit risk (Continued)

In particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;
- significant deterioration in external market indicators of credit risk, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor;
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets which are subject to impairment assessment under IFRS 9 (Continued)

(ii) Definition of default

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

Irrespective of the above, the Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

(iii) Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

(a) significant financial difficulty of the issuer or the borrower;

(b) a breach of contract, such as a default or past due event;

(c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider; or

(d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganization.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets which are subject to impairment assessment under IFRS 9 (Continued)

(iv) Write-off policy

The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Groups recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries are recognized in profit or loss.

(v) Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data and forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights.

Generally, the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition.

Interest income is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit-impaired, in which case interest income is calculated based on amortized cost of the financial asset.

The Group recognizes an impairment gain or loss in profit or loss for all financial instruments by adjusting their carrying amount.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire.

On derecognition of a financial asset measured at amortized cost, the difference between the asset's carrying amount and the sum of consideration received and receivable is recognized in profit or loss.

Financial liabilities and equity

Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by a group entity are recognized at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancelation of the Company's own equity instruments.

Financial liabilities

All financial liabilities are subsequently measured at amortized cost using the effective interest method or at FVTPL.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial liabilities and equity (Continued)

Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is held for trading or designated as at FVTPL.

A financial liability is held for trading if:

- it has been acquired principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative, except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration of an acquirer in a business combination may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and IFRS 9 permits the entire combined contract to be designated as at FVTPL.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial liabilities and equity (Continued)

Preferred Shares, Convertible Loans and SAFE

The Preferred Shares, Convertible Loans and SAFE, which contain redemption features and/or other embedded derivatives, are designated as financial liabilities at FVTPL.

The amount of change in the fair value of the financial liability measured at FVTPL that is attributable to changes in the credit risk of that liability is recognized in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. The remaining amount of change in the fair value of the financial liability measured at FVTPL is recognized in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognized in other comprehensive income are not subsequently reclassified to profit or loss; instead, they are transferred to accumulated losses upon derecognition of the financial liability.

Series C and D Warrants of the Company

Series C and D Warrants of the Company are accounted for as derivatives and are recognized as fair value upon initial recognition.

Prior to the exercise of the Series C and D Warrants, the changes in fair value are recognized in the profit or loss.

4. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

4.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial liabilities and equity (Continued)

Series A Preferred Shares and Series Seed Preferred Shares (note 26)

The Series A Preferred Shares and Series Seed Preferred Shares are designated as financial liabilities at FVTPL.

The amount of change in the fair value of the financial liability measured at FVTPL that is attributable to changes in the credit risk of that liability is recognized in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. The remaining amount of change in the fair value of the financial liability measured at FVTPL is recognized in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognized in other comprehensive income are not subsequently reclassified to profit or loss; instead, they are transferred to accumulated losses upon derecognition of the financial liability. Fair value is determined in the manner described in note 26.

Financial liabilities at amortized cost

Financial liabilities including trade and other payables are subsequently measured at amortized cost, using the effective interest method.

Derecognition/modification of financial liabilities

The Group derecognizes financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTIES

In the application of the Group's accounting policies, which are described in note 4, the directors of the Company are required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Critical judgement in applying accounting policies

The following are the critical judgements, apart from those involving estimations (see below), that the directors of the Company have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements.

Research and development expenditures

Development expenses incurred on the Group's product pipelines are capitalized and deferred only when the Group can demonstrate the technical feasibility of completing the intangible assets so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the pipeline and the ability to measure reliably the expenditure during the development. Development expenses which do not meet these criteria are expensed when incurred. The management of the Group assesses the progress of each of the research and development projects and determines that the Group's product pipelines do not meet the above said capitalization criteria. During the year, all the development costs are expensed when incurred.

Determination on lease term of contracts with renewal options

The Group applies judgement to determine the lease term for lease contracts in which it is a lessee that include renewal option, specifically, the leases relating to office. The assessment of whether the Group is reasonably certain to exercise renewal options impacts the lease term, which significantly affects the amount of lease liabilities and right-of-use assets recognized. Re-assessment is performed upon the occurrence of either a significant event or a significant change in circumstances that is within the control of lessee and that affects the assessment.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTIES (Continued)

Critical judgement in applying accounting policies (Continued)

Determination on lease term of contracts with renewal options (Continued)

When assessing reasonable certainty, the Group considers all relevant facts and circumstances including economic incentives/penalties for exercising or not exercising the options. Factors considered include:

- contractual terms and conditions for the optional periods compared with market rates (e.g. whether the amount of payments in the optional periods is below the market rates);
- the extent of leasehold improvements undertaken by Group;
- costs relating to termination of the lease (e.g. relocation costs, costs of identifying another underlying asset suitable for the Group's needs);

As at December 31, 2022, the Group is not reasonably certain to exercise of the renewal option.

Key sources of estimation uncertainties

The following are the key assumptions concerning the future, and other key sources of estimation uncertainties at the end of each reporting period, that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTIES (Continued)

Key sources of estimation uncertainties (Continued)

Fair value of financial liabilities at FVTPL

The Group had issued Series Seed Preferred Shares and Series A Preferred Shares to a group of investors prior to and during the reporting period as set out in note 26. The Group recognized these financial instruments as financial liabilities at FVTPL in which no quoted prices in an active market exist. The fair value of the financial instruments is established by using valuation techniques, which include back-solve method and equity allocation based on the Black-Scholes Option Pricing Model ("**OPM**") involving various parameters and inputs. Valuation techniques are certified by an independent qualified professional valuer before being implemented for valuation and are calibrated to ensure that outputs reflect market conditions. Valuation models established by the valuer make the maximum use of market inputs and rely as little as possible on the Group's specific data. However, it should be noted that some inputs, such as fair value of the ordinary shares of RNAimmune, possibilities under different scenarios, such as qualified initial public offering, redemption, liquidation and other inputs, such as time to liquidation, risk-free interest rate, expected volatility value and dividend yield, require management estimates. Management estimates and assumptions are reviewed periodically and are adjusted if necessary.

Should any of the estimates and assumptions change, it may lead to a change in the fair value of financial liabilities at FVTPL. The fair value of the financial liabilities at FVTPL of the Group as at December 31, 2022, representing Series A Preferred Shares and Series Seed Preferred Shares of RNAimmune, were approximately US$29,139,000 (2021: US$8,437,000, representing Series Seed Preferred Shares of RNAimmune).

Fair value of financial asset at FVTPL

As at December 31, 2022, the Group's investment fund amounting to US$15,004,000 is measured at fair value with fair value being determined based on valuation methodology with significant unobservable inputs. Judgment and estimation are required in establishing the relevant valuation methodology and the relevant inputs thereof. Changes in assumptions relating to these factors could result in material adjustments to the fair value of these instruments. Details of such financial asset and the corresponding fair value measurement are set out in notes 21 and 32.

6. REVENUE AND SEGMENT INFORMATION

Revenue

The Group has not generated any revenue during both years.

Segment information

For the purpose of resource allocation and assessment of performance, the executive directors of the Company, being the chief operating decision makers, focus and review on the overall results and financial position of the Group as a whole. Accordingly, the Group has only one single operating segment and no further analysis of the single segment is presented.

Geographical information

The Group's operations and non-current assets are mainly located at the United States of America (the "**U.S.**") and the mainland of the People's Republic of China (the "**PRC**"). Information about the Group's non-current assets is presented based on the geographical location of the assets.

	Non-current assets excluding financial instruments	
	2022	2021
	US$'000	US$'000
The U.S.	**21,680**	7,885
The PRC	**9,107**	8,243
Hong Kong	**6**	5
	30,793	16,133

7. OTHER INCOME

	2022 US$'000	2021 US$'000
Government grants (Note)	**679**	34
Interest income from restricted bank balances and bank balances	**1,353**	213
Consultancy income	**26**	37
Others	**56**	66
	2,114	350

Note: For both years, government grants include cash incentives specifically for research and development activities, which are recognized upon compliance with the relevant conditions where applicable. During the year ended December 31, 2022, government grants also include a cash incentive of US$620,000 upon completion of listing of the Company's shares on the Hong Kong Stock Exchange.

8. OTHER GAINS AND LOSSES

	2022 US$'000	2021 US$'000
Net foreign exchange losses	**(301)**	(559)
(Loss) gain on disposal of property, plant and equipment	**(36)**	3
Changes in fair value of structured deposits	**45**	312
	(292)	(244)

9. OTHER EXPENSES

	2022 US$'000	2021 US$'000
Subscription fee of financial asset at FVTPL (Note 21)	**450**	—
Issuance costs of financial liabilities at FVTPL	**—**	678
	450	678

10. FINANCE COSTS

	2022 US$'000	2021 US$'000
Interest on bank and other borrowings	—	72
Interest on lease liabilities	798	319
Total borrowing costs	798	391
Less: amounts capitalized in the cost of qualifying assets	—	(52)
	798	339

11. INCOME TAX EXPENSE

The Company was incorporated in the Cayman Islands and is exempted from the Cayman Islands income tax.

Hong Kong Profits Tax of HK Sirnaomics is calculated at 8.25% on the first HK$2 million of the estimated assessable profits and at 16.5% on the estimated assessable profits above HK$2 million.

Under the U.S. Tax Cuts and Jobs Act, the U.S. corporate income tax rate has charged at flat rate of 21% during both years. In addition, under the relevant rules of state taxes in Florida, Virginia, California, Massachusetts and Maryland of the U.S., the state tax rates are charged at ranging from 5.5% to 8.84% during the year (2021: 3.535% to 8.84%).

Under the law of the PRC on Enterprise Income Tax (the "**EIT Law**") and implementation regulations of the EIT Law, the basic tax rate of the Company's PRC subsidiaries is 25% for both years.

Guangzhou Sirnaomics and Suzhou Sirnaomics have been accredited as a "High and New Technology Enterprise" by the Science and Technology Bureau of Guangzhou City and relevant authorities in June 2017, and have been registered with the local tax authorities for enjoying the reduced Enterprise Income Tax ("**EIT**") rate at 15% for a term of three years. The latest approval for Guangzhou Sirnaomics enjoying this tax benefit was obtained in December 2020 for the financial years of 2020, 2021 and 2022. This tax benefit was obtained by Suzhou Sirnaomics in October 2022 for the financial years of 2022, 2023 and 2024.

No Hong Kong Profits Tax, U.S. corporate income and state taxes and EIT were provided as the group entities had no assessable profits for both years.

11. INCOME TAX EXPENSE (Continued)

The income tax expense during the year is reconciled to the loss before tax per the consolidated statement of profit or loss and other comprehensive income as follows:

	2022 US$'000	2021 US$'000
Loss before tax	**(97,378)**	(215,934)
Tax at the U.S. corporate income tax rate of 21% (Note i)	**(20,449)**	(45,346)
Tax effect of expenses not deductible for tax purposes	**568**	33,776
Additional tax reduction on research and development expenses (Note ii)	**(695)**	(824)
Tax effect of tax losses not recognized	**7,800**	12,522
Tax effect of deductible temporary differences not recognized	**12,498**	—
Effect of different tax rates of subsidiaries operating in other jurisdictions	**278**	(128)
Income tax expense for the year	**—**	—

Notes:

(i) The domestic tax rate (which is U.S. corporate income tax rate) in the jurisdiction where the operation of the Group is substantially based is used.

(ii) Pursuant to Announcement of the Ministry of Finance, the State Taxation Administration and the Ministry of Science and Technology 2022 circular No. 16, the PRC subsidiaries for Small and Medium Sci-tech Enterprises enjoy super deduction of 200% on qualifying research and development expenditures throughout the year ended December 31, 2022 (2021: 175% on qualifying research and development expenditures pursuant to Caishui 2018 circular No. 99 and Announcement of the Ministry of Finance, the State Taxation Administration 2021 circular No.6).

Upon the implementation of the U.S. Tax Cuts and Jobs Act in 2018, net operating losses, losses incurred in business pursuits, can be carried forward indefinitely as a result of the U.S. Tax Cuts and Jobs Act.

As at December 31, 2022, the Group had unused tax losses of approximately US$169,730,000 (2021: US$137,130,000) and deductible temporary difference of US$59,514,000 (2021: US$ nil) for offset against future profits. No deferred tax asset has been recognized in respect of tax losses and such deductible temporary difference due to the unpredictability of future profit streams. Included in unrecognized tax losses as at December 31, 2022 are the amounts of US$65,980,000 (2021: US$54,530,000) which will expire from 2023 to 2037. Other losses may be carried forward indefinitely.

12. LOSS FOR THE YEAR

	2022 US$'000	2021 US$'000
Loss for the year has been arrived at after charging:		
Auditor's remuneration	**674**	488
Outsourcing service fees included in research and development expenses	**37,095**	17,020
Amortization of intangible assets	**87**	64
Depreciation of property, plant and equipment	**2,023**	791
Depreciation of right-of-use assets	**1,823**	775
	3,933	1,630
Analyzed as:		
— charged in administrative expenses	**1,458**	327
— charged in research and development expenses	**2,475**	1,303
	3,933	1,630
Directors' remuneration (Note 13)	**1,910**	6,661
Other staff costs		
— Salaries and other allowances	**17,845**	9,537
— Retirement benefit scheme contributions	**1,340**	647
— Share-based payment expense	**249**	6,065
— Performance and discretionary bonus (Note)	**239**	1,771
	21,583	24,681
Analyzed as:		
— charged in administrative expenses	**7,014**	8,144
— charged in research and development expenses	**14,569**	16,537
	21,583	24,681

Note: Performance and discretionary bonus is determined at the end of each reporting period based on the duties and responsibilities of the relevant individuals within the Group and the Group's performance.

13. DIRECTORS' AND CHIEF EXECUTIVES' EMOLUMENTS

Details of the emoluments paid to the individuals, who were appointed as the directors and chief executives of the Company (including emoluments for services as employees/directors of the group entities prior to becoming the directors of the Company), during the year, disclosed pursuant to the applicable Listing Rules and Hong Kong Companies Ordinance, are as follows:

Year ended December 31, 2022

	Date of appointment as director of the Company	Fees US$'000	Salaries and other allowances US$'000	Retirement benefit schemes contributions US$'000	Share-based payment expenses US$'000	Performance and discretionary bonus US$'000	Total US$'000
Name of directors							
CEO and executive director:							
Dr. Yang Lu	October 15, 2020	–	520	24	58	–	602
Executive directors:							
Dr. Michael V. Molyneaux, chief medical officer ("**CMO**")	January 25, 2021	–	416	21	34	–	471
Dr. David Mark Evans, chief scientific officer ("**CSO**")	July 12, 2021	–	330	18	22	–	370
Dr. Xiaochang Dai (Note (i))	January 25, 2021	–	179	6	50	–	235
		–	925	45	106	–	1,076
Non-executive directors:							
Mr. Da Liu (Note (ii))	January 25, 2021	–	–	–	–	–	–
Mr. Jiajun Lai (Note (ii))	January 25, 2021	–	–	–	–	–	–
Mr. Mincong Huang	January 25, 2021	5	–	–	–	–	5
Mr. Jiankang Zhang	July 12, 2021	5	–	–	–	–	5
		10	–	–	–	–	10
Independent non-executive directors:							
Dr. Cheung Hoi Yu	December 20, 2021	46	–	–	–	–	46
Mr. Fengmao Hua	December 20, 2021	46	–	–	–	–	46
Ms. Monin Ung	December 20, 2021	65	–	–	–	–	65
Ms. Shing Mo Han, Yvonne	December 20, 2021	65	–	–	–	–	65
		222	–	–	–	–	222
Total		232	1,445	69	164	–	1,910

13. DIRECTORS' AND CHIEF EXECUTIVES' EMOLUMENTS (Continued)

Year ended December 31, 2021

	Date of appointment as director of the Company	Fees US$'000	Salaries and other allowances US$'000	Retirement benefit schemes contributions US$'000	Share-based payment expenses US$'000	Performance and discretionary bonus US$'000	Total US$'000
Name of directors							
CEO and executive director:							
Dr. Yang Lu	October 15, 2020	–	379	18	3,694	138	4,229
Executive directors:							
Dr. Michael V. Molyneaux, CMO	January 25, 2021	–	398	18	412	108	936
Dr. David Mark Evans, CSO	July 12, 2021	–	297	17	480	69	863
		–	695	35	892	177	1,799
Non-executive directors:							
Mr. Mike M. Ghias (Note (iii))	January 25, 2021	–	–	–	18	–	18
Dr. Xiaochang Dai (Note (i))	January 25, 2021	–	–	–	611	–	611
Mr. Da Liu (Note (ii))	January 25, 2021	–	–	–	–	–	–
Mr. Jiajun Lai (Note (ii))	January 25, 2021	–	–	–	–	–	–
Mr. Mincong Huang	January 25, 2021	–	–	–	–	–	–
Mr. Yunchun Li (Note (iii))	January 25, 2021	–	–	–	–	–	–
Mr. Jiankang Zhang	July 12, 2021	–	–	–	–	–	–
		–	–	–	629	–	629
Independent non-executive directors:							
Dr. Cheung Hoi Yu	December 20, 2021	1	–	–	–	–	1
Mr. Fengmao Hua	December 20, 2021	1	–	–	–	–	1
Ms. Monin Ung	December 20, 2021	1	–	–	–	–	1
Ms. Shing Mo Han, Yvonne	December 20, 2021	1	–	–	–	–	1
		4	–	–	–	–	4
Total		4	1,074	53	5,215	315	6,661

Notes:

(i) Dr. Xiaochang Dai was re-designated from a non-executive director to an executive director of the Company on July 19, 2022.

(ii) Mr. Da Liu and Mr. Jiajun Lai resigned as non-executive directors of the Company with effect from September 30, 2022 and August 31, 2022 respectively.

(iii) Mr. Mike M. Ghias and Mr. Yunchun Li resigned as non-executive directors of the Company on July 12, 2021.

13. DIRECTORS' AND CHIEF EXECUTIVES' EMOLUMENTS (Continued)

The executive directors' and non-executive directors' emoluments shown above were mainly for their services in connection with the management of the affairs of the Group.

The independent non-executive directors' emoluments shown above were for their services as directors of the Company.

There were no arrangement under which a director of the Company or the chief executives waived or agreed to waive any remuneration during the year.

No emolument was paid to any directors as an inducement to join or upon joining the Group or as compensation for loss of office during the year.

During the year, certain directors were granted share options in respect of their services to the Group under the 2022 Post-IPO Scheme of the Company. Details of the share option scheme are set out in note 30.

14. FIVE HIGHEST PAID EMPLOYEES

The five highest paid individuals of the Group included 3 directors of the Company for the year ended December 31, 2022 (2021: 2 directors), and details of whose remuneration are set out above. Details of the remuneration for the remaining 2 (2021: 3) highest paid employees for year ended December 31, 2022 are as follows:

	2022 **US$'000**	2021 US$'000
Salaries and other allowances	**765**	784
Retirement benefits schemes contributions	**39**	39
Share-based payment expense	**46**	2,166
Performance and discretionary bonus (Note)	**—**	403
Total	**850**	3,392

Note: Performance and discretionary bonus is determined at the end of each reporting period based on the duties and responsibilities of the relevant individuals within the Group and the Group's performance.

14. FIVE HIGHEST PAID EMPLOYEES (Continued)

The emoluments of these employees (excluding the directors) are within the following bands:

	2022	2021
HK$3,000,001 to HK$3,500,000	**2**	—
HK$7,500,001 to HK$8,000,000	**—**	1
HK$8,500,001 to HK$9,000,000	**—**	1
HK$9,500,001 to HK$10,000,000	**—**	1
Total	**2**	3

During the year, certain non-director and non-chief executives highest paid employees were granted share options and share awards in respect of their services to the Group under the 2022 Post-IPO Incentive Plans. Details are set out in note 30.

15. DIVIDEND

No dividend was paid or proposed for ordinary shareholders of the Company during the year ended December 31, 2022, nor has any dividend been proposed since the end of the reporting period.

16. LOSS PER SHARE

The calculation of the basic and diluted loss per share attributable to owners of the Company is based on the following data:

	2022	2021
Loss for the year attributable to owners of the Company for the purpose of basic and diluted loss per share (US$'000)	**(88,299)**	(213,071)
Number of shares		
Weighted average number of ordinary shares for the purpose of basic and diluted loss per share	**76,008,301**	14,897,047

The weighted average number of ordinary shares for the purpose of calculating basic and diluted loss per share has been determined on the assumption that the Group Reorganization as disclosed in note 2 had been effected since January 1, 2021.

Diluted loss per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares.

For the years ended December 31, 2022 and 2021, the different series of preferred shares issued by the Company and RNAimmune, the over-allotment option granted by the Company to the International Underwriters as described and defined in the prospectus of the Company dated December 20, 2021 and the share options issued by the Company, US Sirnaomics and RNAimmune outstanding were not included in the calculation of diluted loss per share, as their inclusion would be anti-dilutive.

17. PROPERTY, PLANT AND EQUIPMENT

	Leasehold improvement US$'000	Furniture and fixtures US$'000	Laboratory equipment US$'000	Vehicles US$'000	Equipment and computers US$'000	Assets under construction US$'000	Total US$'000
COST							
At January 1, 2021	190	248	1,970	91	136	1,675	4,310
Additions	631	39	3,096	116	165	1,587	5,634
Transfer	—	—	2,773	—	—	(2,773)	—
Disposals/written off	—	—	(19)	(32)	(3)	—	(54)
Exchange adjustments	12	3	70	4	4	19	112
At December 31, 2021	833	290	7,890	179	302	508	10,002
Additions	492	783	3,475	122	292	13,619	18,783
Transfer	13,301	—	—	—	—	(13,301)	—
Disposals/written off	—	(9)	(107)	—	(21)	—	(137)
Exchange adjustments	(86)	(18)	(469)	(20)	(44)	(24)	(661)
At December 31, 2022	14,540	1,046	10,789	281	529	802	27,987
ACCUMULATED DEPRECIATION							
At January 1, 2021	148	159	925	67	80	—	1,379
Provided for the year	46	28	620	22	75	—	791
Eliminated on disposals/ written off	—	—	(18)	(30)	(3)	—	(51)
Exchange adjustments	4	2	10	2	3	—	21
At December 31, 2021	198	189	1,537	61	155	—	2,140
Provided for the year	405	62	1,418	46	92	—	2,023
Eliminated on disposals/ written off	—	(2)	(78)	—	(21)	—	(101)
Exchange adjustments	(24)	(11)	(72)	(7)	(37)	—	(151)
At December 31, 2022	579	238	2,805	100	189	—	3,911
CARRYING VALUES							
At December 31, 2022	13,961	808	7,984	181	340	802	24,076
At December 31, 2021	635	101	6,353	118	147	508	7,862

17. PROPERTY, PLANT AND EQUIPMENT (Continued)

The above items of property, plant and equipment, other than assets under construction, are depreciated on a straight-line basis, after taking into account the residual value, at the rate per annum as follows:

Leasehold improvement	Over the term of the lease
Furniture and fixtures	5 years
Laboratory equipment	3–10 years
Vehicles	4–5 years
Equipment and computers	3 years

18. RIGHT-OF-USE ASSETS

	Equipment US$'000	Leased properties US$'000	Total US$'000
Carrying amount			
At January 1, 2021	—	1,520	1,520
Additions	103	5,941	6,044
Depreciation charge for the year	(47)	(728)	(775)
Exchange adjustments	—	66	66
At December 31, 2021	56	6,799	6,855
Additions	—	1,223	1,223
Lease modification	—	(665)	(665)
Depreciation charge for the year	(51)	(1,772)	(1,823)
Exchange adjustments	(1)	(143)	(144)
At December 31, 2022	4	5,442	5,446

	2022 US$'000	2021 US$'000
Expenses relating to short-term leases	**252**	138
Total cash outflows for leases	**1,747**	1,164

During the year, the Group leases various offices and equipment for its operations. Lease contracts are entered into for fixed term of one to ten years (2021: one to ten years). The lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. In determining the lease term and assessing the length of the non-cancellable period, the Group applies the definition of a contract and determines the period for which the contract is enforceable.

18. RIGHT-OF-USE ASSETS (Continued)

The Group regularly entered into short-term leases for office use. As at December 31, 2022 and 2021, the portfolio of short-term leases is similar to the portfolio of short term leases to which the short-term lease expense disclosed above.

The Group has extension options in one lease for its office. This is used to maximise operational flexibility in terms of managing the assets used in the Group's operations. The extension option held is exercisable only by the Group and not by the lessor.

The Group assesses at the lease commencement date whether it is reasonably certain to exercise the extension options. The potential exposures to these future lease payments for extension options in which the Group is not reasonably certain to exercise are summarized below:

	Lease liabilities recognized as at December 31, 2022 US$'000	**Potential future lease payments not included in lease liabilities (undiscounted) as at December 31, 2022 US$'000**	**Lease liabilities recognized as at December 31, 2021** US$'000	**Potential future lease payments not included in lease liabilities (undiscounted) as at December 31, 2021** US$'000
Office — the U.S.	**8,171**	**21,474**	3,846	21,474

During the year ended December 31, 2022, the Group has not recognized any additional lease liabilities as the Group did not exercise any extension option.

In addition, the Group reassesses whether it is reasonably certain to exercise an extension option, upon the occurrence of either a significant event or a significant change in circumstances that is within the control of the lessee. During the year, there is no such triggering event (2021: Nil).

Rent concessions

During the year ended December 31, 2022, lessors of the relevant offices provided rent concessions to the Group through rent reduction.

The rent concession was not within the scope of Covid-19-related rent concessions and concluded the changes in lease payments constitute lease modifications. The reduction of the Group's lease liabilities of US$665,000 (2021: Nil) and a corresponding adjustment of the same amount to the right-of-use assets were recognized.

19. INTANGIBLE ASSETS

	Patent rights US$'000
COST	
At January 1, 2021	386
Additions	775
Exchange adjustments	9
At December 31, 2021	1,170
Exchange adjustments	(66)
At December 31, 2022	1,104
ACCUMULATED AMORTIZATION	
At January 1, 2021	37
Provided for the year	64
At December 31, 2021	101
Provided for the year	87
Exchange adjustments	(3)
At December 31, 2022	185
CARRYING VALUE	
At December 31, 2022	919
At December 31, 2021	1,069

The above intangible assets represent patent rights which are amortized over a period of 10 years to 16.2 years (2021: 10 years to 16.2 years) on a straight-line basis. The useful lives of patent rights were determined based on (i) the license period in accordance with the license agreement entered into between the Group and the patent owners and (ii) the expiration date of the relevant patent.

20. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	2022 US$'000	2021 US$'000
Prepayments to outsourced service providers	**11,060**	6,392
Prepayments for legal and other professional services	**284**	801
Deposits paid for purchase of property, plant and equipment	**332**	327
Rental deposits	**922**	756
Others receivables, net of allowance of credit losses	**639**	598
Deposit paid for purchase of intangible assets	**20**	20
Prepayments for financial advisory service	**—**	3,900
Staff advance	**—**	10
	13,257	12,804
Analyzed as:		
Current	**12,020**	11,748
Non-current	**1,237**	1,056
	13,257	12,804

Details of impairment assessment of other receivables and deposits are set out in note 32.

21. FINANCIAL ASSET AT FVTPL

During the year ended December 31, 2022, HK Sirnaomics, a wholly owned subsidiary of the Company, subscribed for Class B non-voting, participating, non-redeemable shares (the "**Segregated Portfolio Shares**") of a segregated portfolio of TradArt Flagship Investment SPC (the "**Fund**"). The Group has subscribed for 15,000 Segregated Portfolio Shares at a total subscription amount of US$15,000,000 in November and December 2022. The subscription fee of US$450,000 has been paid to the Fund upon subscription and recognized in profit or loss for the current financial year. The Fund has appointed TradArt Asset Management Co., Limited, an independent third party of the Group, as its investment manager.

The main investment strategies of the segregated portfolio are to invest in initial public offerings candidates and secondary market stocks in countries including but not limited to, Hong Kong, the U.S. and the PRC.

21. FINANCIAL ASSET AT FVTPL (Continued)

The fair value of this investment fund was determined by adopting the net asset value approach. The investment manager determines the net asset values of the investment fund by using methodology based on relevant comparable data to quantify the adjustment from cost or latest transaction price where appropriate, or to justify that cost or latest transaction price is a proper approximation to fair value of the underlying investments held by the investment fund.

	Financial asset at FVTPL US$'000
At January 1 and December 31, 2021	—
Additions	15,000
Unrealized changes in fair value	4
At December 31, 2022	15,004

22. CASH AND CASH EQUIVALENTS/RESTRICTED BANK BALANCES

Cash and cash equivalents

Cash and cash equivalents include short term deposits for the purpose of meeting the Group's short term cash commitments, which carry interest at market rates ranging from 0.001% to 3.49% (2021: 0.0001% to 1.75%).

Restricted bank balances

As at December 31, 2022, no bank balances (2021: US$63,000) were restricted by certain banks for bank facilities. The deposits carried interest at prevailing market rates ranging from 0% to 1.75% per annum.

Details of impairment assessment of restricted bank balances and bank balances are set out in note 32.

23. TRADE AND OTHER PAYABLES

	2022 US$'000	2021 US$'000
Trade payables	**4,892**	1,484
Accruals for outsourcing research and development fees	**3,395**	1,765
Accruals for other operating expenses	**1,833**	1,228
Accruals for staff costs	**922**	2,028
Payables for acquisition of property, plant and equipment	**716**	714
Accruals for listing expenses and issuance costs	**—**	6,858
Accruals for other research and development expenses	**—**	21
	6,866	12,614
	11,758	14,098

The credit period on purchase of materials or receiving services for research and development activities is usually within 30 days (2021: 30 days). The following is an aging analysis of trade payables presented based on the invoice date at the end of each reporting period:

	2022 US$'000	2021 US$'000
0 to 30 days	**3,843**	1,397
31 to 60 days	**1,014**	3
Over 60 days	**35**	84
	4,892	1,484

24. CONTRACT LIABILITY

In 2021, the Group entered into a license agreement (the "**Agreement**") with Walvax Biotechnology Co., Ltd. ("**Walvax**"), the parent company of Shanghai Walga Biotechnology Limited, to co-develop small interfering RNA drugs targeting the influenza virus. Pursuant to the Agreement, the Group will grant the exclusive rights of license in the target drug in the territory covering Mainland China, Hong Kong, Macau and Taiwan plus research and development services to Walvax. The license and the research and development service are not distinct and they are accounted for as a performance obligation that is satisfied over time using input method. The consideration of the Agreement includes an upfront payment of RMB5,000,000 (approximately US$718,000 (2021: US$784,000)), service payment for preclinical research and development services of RMB36,500,000, and variable considerations including milestone payments up to an aggregate amount of RMB100,000,000 and a sales based royalty.

As at December 31, 2022 and 2021, the Group had received an upfront fee of RMB5,000,000 (approximately US$718,000 (2021: US$784,000)) which was recognized as a contract liability until the services have been delivered to the customer.

The directors of the Company expected the contract liability to be settled within normal operating cycles. Therefore, the amount is classified under current liabilities.

25. LEASE LIABILITIES

	2022 US$'000	2021 US$'000
Lease liabilities payable:		
Within one year	**1,751**	1,346
Within a period of more than one year but not exceeding two years	**1,360**	1,390
Within a period of more than two years but not exceeding five years	**2,548**	3,016
Exceeding five years	**5,097**	1,288
	10,756	7,040
Less: Amount due for settlement with 12 months shown under current liabilities	**(1,751)**	(1,346)
Amount due for settlement after 12 months shown under non-current liabilities	**9,005**	5,694

As at December 31, 2022, the incremental borrowing rates applied to lease liabilities ranged from 6.1% to 18.3% (2021: 6.1% to 18.3%).

26. FINANCIAL LIABILITIES AT FVTPL

(i) Preferred Shares

RNAimmune was authorized to issue 50,000,000 preferred shares of US$0.00001 par value per share, of which 7,936,509 and 15,000,000 authorized preferred shares were designated as series seed preferred shares ("**Series Seed Preferred Shares**") and series A preferred shares ("**Series A Preferred Shares**"), respectively. The remaining 27,063,491 authorized preferred shares had not been designated as at December 31, 2022.

Preferred shares	Year of issue	Number of investor(s)	Total number of Preferred Shares issued	Subscription price per preferred share US$	Total consideration US$'000
Series Seed Preferred Shares	2021	7	7,936,509	1.26	10,000
Series A Preferred Shares	2022	8	7,553,390	3.09	23,340
			15,489,899		33,340

(ii) Series Seed Preferred Shares and Series A Preferred Shares issued by RNAimmune

On March 29, 2021, RNAimmune entered into share purchase agreements of Series Seed Preferred Shares with US Sirnaomics and independent investors to issue 1,587,302 and 6,349,207 Series Seed Preferred Shares at a consideration of US$2,000,000 and US$8,000,000, respectively. As at December 31, 2022 and 2021, 7,936,509 Series Seed Preferred Shares were issued and outstanding.

On March 10, 2022, RNAimmune entered into share purchase agreements of Series A Preferred Shares with US Sirnaomics and independent investors to issue 2,588,997 and 6,258,891 Series A Preferred Shares at a consideration of US$8,000,000 and US$19,340,000, respectively. As at December 31, 2022, out of the 6,258,891 Series A Preferred Shares which the independent investors agreed to purchase, 4,964,393 preferred shares with a total consideration of US$15,340,000 were issued and outstanding.

No redemption rights are held by the holders of Series Seed Preferred Shares and Series A Preferred Shares and the other key terms of the Series Seed Preferred Shares and Series A Preferred Shares of RNAimmune are as follows:

26. FINANCIAL LIABILITIES AT FVTPL (Continued)

(ii) Series Seed Preferred Shares and Series A Preferred Shares issued by RNAimmune (Continued)

(a) Voting Right

The voting, dividend and liquidation rights of ordinary shares are subject to and qualified by the rights, powers and preferences of Series Seed Preferred Shares and Series A Preferred Shares. Ordinary shares are entitled to one vote per share at all meetings of stockholders and there is no cumulative voting. On any matter presented to stockholders of RNAimmune for their action or consideration at any meeting of stockholders, each holder of outstanding Series Seed Preferred Shares and Series A Preferred Shares is entitled to the number of votes equal to the number of whole shares of ordinary shares into which Series Seed Preferred Shares and Series A Preferred Shares are convertible. Holders of Series Seed Preferred Shares and Series A Preferred Shares shall vote together with the holders of ordinary shares as a single class.

Holders of ordinary shares, voting exclusively and as a separate class, shall be entitled to elect four directors of RNAimmune. Holders of ordinary shares, Series Seed Preferred Shares and Series A Preferred Shares vote together as a single class shall be entitled to elect the balance of the total number of directors of RNAimmune.

(b) Dividends

RNAimmune shall not declare, pay, or set aside any dividends on shares of any other class or series of capital stock, unless holders of Series Seed Preferred Shares and Series A Preferred Shares shall first receive a dividend in an amount at least equal to the product of (A) the dividend payable as if all shares had been converted into ordinary shares and (B) the number of shares of ordinary shares issuable upon conversion of a share of preferred shares calculated on the record date for determination of holders entitled to receive such dividend.

The dividend payable to holders of preferred shares pursuant to shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest dividend to, first, holders of Series A Preferred Shares and, second, holders of Series Seed Preferred Shares.

A dividend is payable only when funds are legally available therefore and only when, as and if declared by the board of directors of RNAimmune. RNAimmune is not obligated to pay a dividend. During the year ended December 31, 2022 and 2021, the board of directors of RNAimmune has not declared any dividends.

26. FINANCIAL LIABILITIES AT FVTPL (Continued)

(ii) Series Seed Preferred Shares and Series A Preferred Shares issued by RNAimmune (Continued)

(c) Liquidation Preference

In the event of any liquidation, dissolution or winding up of RNAimmune, or a deemed liquidation event as defined in the amended and restated certificate of incorporation of RNAimmune, outstanding Series Seed Preferred Shares and Series A Preferred Shares are entitled to be paid in full out of RNAimmune's assets available for distribution before payment on ordinary shares in the following order: (i) on Series A Preferred Shares, the sum of (I) US$3.09 and (II) any dividends accrued or declared but unpaid and (ii) on Series Seed Preferred Shares, the sum of (I) US$1.26 and (II) any dividends accrued or declared but unpaid. If RNAimmune's assets available for distribution are insufficient to pay the full amount on a series of outstanding preferred shares, such series of preferred shares shall share rateably in any distribution of the assets available for distribution.

After payment of all preferential amounts on outstanding preferred shares, the remaining RNAimmune's assets are distributed among preferred shares and ordinary shares, pro rata based on the number of share held by each holder as if they had been converted to ordinary share immediately prior to such liquidation, dissolution or winding up of RNAimmune or deemed liquidation event.

(d) Optional Conversion

Holders of Series Seed Preferred Shares and Series A Preferred Shares have conversion rights. Each series of preferred shares is convertible, at holder's option, without payment of additional consideration, into number of fully paid ordinary shares of RNAimmune as determined by dividing original issue price by the conversion price for each series (as disclosed in below) in effect at the time of conversion.

In order for a holder of preferred shares to convert preferred shares into ordinary shares, such holder provides written notice to RNAimmune that such holder elects to convert all or any portion of preferred shares. In general, preferred shares which have been surrendered for conversion are no longer deemed to be outstanding, and all rights with respect to such preferred shares cease and terminate at the conversion time. Any preferred shares so converted are retired and cancelled and may not be reissued.

26. FINANCIAL LIABILITIES AT FVTPL (Continued)

(ii) Series Seed Preferred Shares and Series A Preferred Shares issued by RNAimmune (Continued)

(e) Conversion Price/Anti-Dilution Protection

The conversion price for each Series Seed Preferred Shares and Series A Preferred Shares is adjusted on a weighted-average basis if RNAimmune issues additional shares of ordinary shares or ordinary shares equivalents (other than for stock option grants and other customary exclusions) at a purchase price less than the applicable conversion price, subject to appropriate adjustments in the certificate of incorporation. The initial "Series Seed conversion price" and "Series A conversion price" is US$1.26 per share and US$3.09 per share, which also represents the original issue price of Series Seed Preferred Shares and Series A Preferred Shares, respectively.

If RNAimmune, after the original issue date for a series of preferred shares, issues additional shares of ordinary shares or ordinary shares equivalents, without consideration or for a consideration per share less than the conversion price for such series in effect immediately prior to such issue, then the conversion price for such series is reduced, concurrently with such issue, to a price determined in accordance with the formula set forth in the restated certificate of incorporation.

No adjustment in the conversion price for a series of preferred shares is made if RNAimmune receives written notice from holders of a majority of such series of preferred shares then outstanding agreeing that no such adjustment should be made as the result of the issuance or deemed issuance of additional shares of ordinary shares or ordinary shares equivalents.

(f) Mandatory Conversion

Upon (i) the closing of the sale of ordinary shares of RNAimmune to the public in a firm-commitment underwritten public offering resulting in at least US$50,000,000 of aggregate proceeds, net of the underwriting discount and commissions, the ordinary shares of RNAimmune is listed for trading on Nasdaq Stock Market's National Market, Hong Kong Stock Exchange, or another stock exchange approved by the board of directors of RNAimmune or (ii) the date and time, or the occurrence specified by vote or written consent of requisite holders, then all outstanding shares of Series Seed Preferred Shares and Series A Preferred Shares of RNAimmune shall be converted automatically into ordinary shares of RNAimmune, at the effective conversion price and such shares may not be reissued by RNAimmune.

26. FINANCIAL LIABILITIES AT FVTPL (Continued)

(ii) Series Seed Preferred Shares and Series A Preferred Shares issued by RNAimmune (Continued)

(f) Mandatory Conversion (Continued)

With respect to each series of preferred shares of RNAimmune, all holders of such series of preferred shares are sent written notice of the mandatory conversion time and the place designated for mandatory conversion of all such series. In general, all rights with respect to a series of preferred shares of RNAimmune converted, including the rights, if any, to receive notices and vote (other than as a holder of ordinary shares of RNAimmune), terminate at the mandatory conversion time for such series. Such converted shares of such series of preferred shares shall be retired and cancelled and may not be reissued as shares of such series.

Presentation and Classification

The directors of the Company considered that the Series Seed Preferred Shares and Series A Preferred Shares issued by RNAimmune are accounted for as financial liabilities measured at FVTPL.

The directors of the Company also considered that the changes in the fair value of the Series Seed Preferred Shares and Series A Preferred Shares attributable to the change in credit risk of these financial liabilities are minimal. Changes in fair value of the Series Seed Preferred Shares and Series A Preferred Shares not attributable to the change in credit risk of the financial liabilities are charged to profit or loss and presented as "changes in fair value of financial liabilities at FVTPL".

The Series Seed Preferred Shares and Series A Preferred Shares were valued by the directors of the Company with reference to valuation reports carried out by an independent qualified professional valuer, AVISTA Valuation Advisory Limited ("**AVISTA Valuation**"), which has appropriate qualifications and experiences in valuation of similar instruments. The address of AVISTA Valuation is Suites 2401–06, 24/F, Everbright Centre, No. 108 Gloucester Road, Wan Chai, Hong Kong.

The directors of the Company used the back-solve method to determine the underlying share value of RNAimmune and performed an equity allocation based on Black-Scholes Option Pricing Model ("**OPM**") to arrive the fair value of the Series Seed Preferred Shares and Series A Preferred Shares at December 31, 2022.

26. FINANCIAL LIABILITIES AT FVTPL (Continued)

Presentation and Classification (Continued)

In addition to the underlying share value of RNAimmune determined by back-solve method, other key valuation assumptions used in OPM to determine the fair value of Series Seed Preferred Shares and Series A Preferred Shares are as follows:

(a) Series Seed Preferred Shares and Series A Preferred Shares

	At December 31, 2022
Time to liquidation	**3.27 years**
Risk-free interest	**4.19%**
Expected volatility value	**72.4%**
Dividend yield	**0%**
Possibilities under liquidation scenario	**90%**
Possibilities under IPO scenario	**10%**

(b) Series Seed Preferred Shares

	At December 31, 2021
Time to liquidation	4.3 years
Risk-free interest	1.20%
Expected volatility value	70%
Dividend yield	0%
Possibilities under liquidation scenario	100%

The directors of the Company estimated the risk-free interest rate based on the yield of the United States Government Bond with a maturity life equal to period from the respective valuation dates to the expected liquidation dates. Expected volatility value was estimated on each valuation date based on average of historical volatilities of the comparable companies in the same industry for a period from the respective valuation dates to expected liquidation dates. Dividend yield, possibilities under different scenarios and time to liquidation are estimated based on management estimation at the valuation dates.

26. FINANCIAL LIABILITIES AT FVTPL (Continued)

Presentation and Classification (Continued)

(b) Series Seed Preferred Shares (Continued)

	Preferred Shares US$'000	Series C Warrants US$'000	Convertible Loans US$'000	SAFE issued by RNAimmune US$'000	Series Seed Preferred Shares issued by RNAimmune US$'000	Series A Preferred Shares issued by RNAimmune US$'000	Total US$'000
At January 1, 2021	73,180	31,902	88,989	2,745	—	—	196,816
Conversion of SAFE to a subsidiary's ordinary shares	—	—	—	(2,762)	—	—	(2,762)
Issuance of Series Seed Preferred Shares	—	—	—	—	8,000	—	8,000
Issuance of Preferred Shares upon exercising Series C Warrants and Series D Warrants upon completion of overseas direct investment	122,958	(33,845)	(89,113)	—	—	—	—
Issuance of Series E Preferred Shares	106,212	—	—	—	—	—	106,212
Automatic conversion into ordinary shares upon IPO	(446,767)	—	—	—	—	—	(446,767)
Unrealized changes in fair value	—	—	—	—	437	—	437
Realized changes in fair value	144,417	1,943	(776)	17	—	—	145,601
Exchange adjustments	—	—	900	—	—	—	900
At December 31, 2021	—	—	—	—	8,437	—	8,437
Issuance of Series A Preferred Shares by RNAimmune	—	—	—	—	—	14,578	14,578
Unrealized changes in fair value	—	—	—	—	4,071	2,053	6,124
At December 31, 2022	—	—	—	—	12,508	16,631	29,139

27. SHARE CAPITAL

	Number of shares	Share capital US$
Ordinary shares of US$0.001 each		
Authorized		
At January 1, 2021	150,000,000	150,000
Increase on June 20, 2021	80,000,000	80,000
Reclassification and re-designation on issuance of Preferred Shares in relation to Group Reorganization		
— Series A	(2,024,860)	(2,025)
— Series B	(7,374,632)	(7,375)
— Series C	(14,600,142)	(14,600)
— Series D	(16,249,174)	(16,249)
— Series E	(18,000,000)	(18,000)
— undesignated	(21,751,192)	(21,751)
Automatic conversion of Preferred Shares upon IPO	80,000,000	80,000
At December 31, 2021, January 1, 2022 and December 31, 2022	230,000,000	230,000

	Number of shares	Share capital US$
Issued and fully paid		
At January 1, 2021	1	—*
Issuance of ordinary shares in relation to Group Reorganization	14,349,637	14,350
Exercise of share options	530,000	530
Issuance of ordinary shares pursuant to IPO (Note (i))	7,540,000	7,540
Automatic conversion of Preferred Shares upon IPO	52,877,142	52,877
Issuance of ordinary shares held on trust (Note (ii))	12,770,000	12,770
At December 31, 2021 and January 1, 2022	88,066,780	88,067
Exercise of the over-allotment option (Note (iii))	973,450	973
Shares repurchased and cancelled (Note (iv))	(1,072,550)	(1,073)
At December 31, 2022	87,967,680	87,967

* Less than US$1

27. SHARE CAPITAL (Continued)

Notes:

(i) In connection with the Company's IPO, 7,540,000 ordinary shares of US$0.001 each were issued at HK$65.90 per ordinary share of the Company for the total gross cash consideration of HK$496,886,000 (equivalent to US$63,706,000) on December 30, 2021.

(ii) On December 30, 2021, the Company issued and allotted 12,770,000 ordinary shares to Maples Trustee Services (Cayman) Limited, held on trust for the benefit of eligible participants under the equity-settled share option scheme of the Company.

(iii) On January 26, 2022, 973,450 ordinary shares of the Company were issued and allotted by the Company at HK$65.9 per share for gross proceeds of approximately HK$64,150,000 (equivalent to US$8,239,000) pursuant to the exercise of the over-allotment option on January 21, 2022 by the Joint Representatives as described and defined in the prospectus of the Company dated December 20, 2021.

(iv) During the year ended December 31, 2022, the Company repurchased 1,245,150 of its own ordinary shares through the Hong Kong Stock Exchange, of which 1,072,550 shares were cancelled during the year and the total amount paid to acquire the cancelled shares of HK$70,294,000 (equivalent to approximately US$9,012,000) was deducted from equity.

Month of repurchase	Number of ordinary shares repurchased	Price per share		Aggregate consideration paid
		Highest	Lowest	
		HK$	HK$	US$'000
July 2022	628,500	70.40	62.05	5,272
August 2022	27,300	66.90	64.20	228
September 2022	293,350	69.90	63.95	2,491
October 2022	123,400	66.00	60.15	1,021

The remaining 172,600 shares, which the Company paid HK$9,397,000 (equivalent to approximately US$1,205,000) to acquire during the year and had not yet been cancelled as at December 31, 2022, were subsequently cancelled on January 11, 2023.

Month of repurchase	Number of ordinary shares repurchased	Price per share		Aggregate consideration paid
		Highest	Lowest	
		HK$	HK$	US$'000
November 2022	15,100	57.90	54.10	109
December 2022	157,500	57.95	51.15	1,096

28. NON-CONTROLLING INTERESTS

	Share of net assets of subsidiaries US$'000	Share option reserve of subsidiaries US$'000	Total US$'000
At January 1, 2021	249	4	253
Share of loss for the year	(2,863)	—	(2,863)
Exchange differences arising on translation of foreign operations	59	—	59
Exercise of stock repurchase warrants by US Sirnaomics (Note 35.1(a))	302	—	302
Effect of conversion of SAFE to a subsidiary's ordinary shares (Note 35.1(a))	1,406	—	1,406
Exercise of Series C Warrants granted to non-controlling shareholders and conversion of their equity interests in a subsidiary to the Company's preferred shares	(458)	—	(458)
Acquisition of interest in a subsidiary from a non-controlling shareholder (Note 35.1(b))	(47)	—	(47)
Recognition of share-based payment	—	21	21
At December 31, 2021	(1,352)	25	(1,327)
Share of loss for the year	(9,079)	—	(9,079)
Exchange differences arising on translation of foreign operations	(69)	—	(69)
Capital contribution from non-controlling shareholders	15	—	15
Recognition of share-based payment	—	14	14
At December 31, 2022	(10,485)	39	(10,446)

29. RETIREMENT BENEFITS PLANS

The Group operates a Mandatory Provident Fund Scheme ("**MPF Scheme**") for all qualified employees in Hong Kong under the Mandatory Provident Fund Schemes Ordinance. The assets of the MPF Scheme are held separately from those of the Group in funds under the control of an independent trustee. Under the rule of the MPF Scheme, the employer and its employees are each required to make contributions to the scheme at a rate of 5% specified in the rules, but subject to a cap of HK$1,500 per month. The only obligation of the Group with respect of MPF Scheme is to make the required contributions under the scheme.

The employees employed in the PRC are members of the state-managed retirement benefit schemes operated by the PRC government. The PRC subsidiaries are required to contribute a certain percentage of their payroll to the retirement benefit schemes to fund the benefits. The only obligation of the Group with respect to the retirement benefit schemes is to make the required contributions under the schemes.

The Group maintains multiple qualified contributory saving plans as allowed under Section 401(k) of the Internal Revenue Code in the U.S. These plans are defined contribution plans covering employees employed in the U.S. and provide for voluntary contributions by employees, subject to certain limits. The contributions are made by both the employees and the employer. The employees' contributions are primarily based on specified dollar amounts or percentages of employee compensation.

During the year ended December 31, 2022, the total contribution charged to the consolidated statement of profit or loss and other comprehensive income amount to US$1,409,000 (2021: US$700,000).

30. SHARE-BASED PAYMENT TRANSACTIONS

(a) Share option scheme

Equity-settled share option scheme of US Sirnaomics

2008 Stock Incentive Plan

Effective on March 18, 2008, US Sirnaomics adopted the "2008 Stock Incentive Plan" pursuant to which the Group was authorized to grant stock options, stock appreciation rights and restricted stock to directors, officers, employees, consultants and other nonemployee individuals of US Sirnaomics. Under the 2008 Stock Incentive Plan, a total of 10 million shares of ordinary shares was reserved for issuance. Options may be granted as incentive stock options or non-qualified stock options. Stock options were granted with an exercise price not less than the fair market value of the US Sirnaomics' s ordinary shares at the date of grant, and have exercise terms of up to 10 years with vesting periods determined at the discretion of the board of directors of US Sirnaomics, and are subject generally to a continued service relationship. Effective on June 10, 2016, the Group terminated the 2008 Stock Incentive Plan, meaning that, while no additional awards of stock options, stock appreciation rights, or restricted stock were permitted thereunder, all outstanding awards continued to be governed by their existing terms.

2016 Stock Incentive Plan

Effective on June 10, 2016, US Sirnaomics adopted the "2016 Stock Incentive Plan" pursuant to which US Sirnaomics is authorized to grant stock options, stock appreciation rights, and restricted stock to directors, officers, employees, consultants and other nonemployee individuals of US Sirnaomics. Under the 2016 Stock Incentive Plan, a total of 12.7 million shares of ordinary shares was reserved for issuance. Options may be granted as incentive stock options or non-qualified stock options. Stock options are to be granted with an exercise price not less than the fair market value of US Sirnaomics' ordinary shares at the date of grant, and have exercise terms of up to 10 years with vesting periods determined at the discretion of the board of directors of US Sirnaomics, and are subject generally to a continued service relationship.

Effective on January 21, 2021, the Group terminated the 2016 Stock Incentive Plan, meaning that, while no additional awards of stock options, stock appreciation rights, or restricted stock were permitted thereunder, all outstanding awards continued to be governed by their existing terms.

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of US Sirnaomics (Continued)

Substitution of ordinary shares of US Sirnaomics to the Company's ordinary shares under 2008 Stock Incentive Plan and 2016 Stock Incentive Plan

As part of the Share Exchange Arrangement as detailed in note 2, US Sirnaomics would i) substitute 1 share of ordinary share of US Sirnaomics under the 2008 Stock incentive Plan and 2016 Stock incentive Plan to 1 share of ordinary share of the Company and ii) assume on the same terms and conditions as the 2008 Stock incentive Plan and the 2016 Stock incentive Plan for issuance of stock options, stock appreciation rights, and restricted stock under the 2021 Stock Incentive Plan as defined and detailed below. The directors of the Company considered that the modification of terms of 2008 Stock Incentive Plan and 2016 Stock Incentive Plan have no material change in fair value of the share options at the date of modification.

The following table discloses movements of the share options held by director and employees during the year ended December 31, 2022 under 2008 Stock Incentive Plan:

				Number of share options ('000)						
Options	Vesting year	Expiry year	Exercise price US$	At January 1, 2021	Exercised during the year	Lapsed/ Forfeited during the year	At December 31, 2021	Exercised during the year	Lapsed/ Forfeited during the year	At December 31, 2022
Employees										
Tranche 2010–1	2014	2020	0.325	600	(530)	(70)	–	–	–	–
				600	(530)	(70)	–	–	–	–
Exercisable at the end of the reporting period							–			–
Weighted average exercise price				0.325	0.325	0.325	NA	NA	NA	NA

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of US Sirnaomics (Continued)

Substitution of ordinary shares of US Sirnaomics to the Company's ordinary shares under 2008 Stock Incentive Plan and 2016 Stock Incentive Plan (Continued)

The following table discloses movements of the share options held by directors, senior management, employees and non-employee during the year ended December 31, 2022 under 2016 Stock Incentive Plan:

				Number of share options ('000)						
Options	Vesting year	Expiry year	Exercise price US$	At January 1, 2021	Granted during the year	Forfeited during the year	At December 31, 2021	Exercised during the year	Forfeited during the year	At December 31, 2022
Directors										
Tranche 2017–3	2019	2025	1.36	110	–	–	110	(5)	–	105
Tranche 2016–1	2020	2025	1.36	600	–	–	600	–	–	600
Tranche 2017–1	2019	2022	1.50	200	–	–	200	(200)	–	–
Tranche 2017–2	2021	2025	1.36	400	–	–	400	–	–	400
Tranche 2018–1	2022 (Note (ii))	2022	1.60	400	–	–	400	(400)	–	–
Tranche 2018–2	2022 (Note (ii))	2027	1.45	900	–	(200)	700	–	–	700
Tranche 2020–1	2024 (Note (ii))	2029	2.35	675	–	–	675	–	–	675
Tranche 2020–2	Milestones (Note (i))	2029	1.75	700	–	–	700	–	–	700
				3,985	–	(200)	3,785	(605)	–	3,180
Senior management										
Tranche 2017–3	2019	2025	1.36	20	–	–	20	(20)	–	–
Tranche 2018–2	2022 (Note (ii))	2027	1.45	100	–	–	100	(30)	–	70
Tranche 2018–3	2022 (Note (ii))	2027	1.60	260	–	–	260	(50)	–	210
Tranche 2019–2	2023 (Note (ii))	2028	1.75	100	–	–	100	–	–	100
Tranche 2020–2	Milestones (Note (i))	2029	1.75	200	–	–	200	–	–	200
Tranche 2020–3	2024 (Note (ii))	2029	1.75	100	–	–	100	–	–	100
Tranche 2020–5	2024 (Note (ii))	2029	2.35	320	–	–	320	(25)	–	295
				1,100	–	–	1,100	(125)	–	975

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of US Sirnaomics (Continued)

Substitution of ordinary shares of US Sirnaomics to the Company's ordinary shares under 2008 Stock Incentive Plan and 2016 Stock Incentive Plan (Continued)

				Number of share options ('000)						
Options	Vesting year	Expiry year	Exercise price US$	At January 1, 2021	Granted during the year	Forfeited during the year	At December 31, 2021	Exercised during the year	Forfeited during the year	At December 31, 2022
Employees										
Tranche 2016–2	2018	2025	1.36	800	–	–	800	(65)	–	735
Tranche 2017–3	2019	2025	1.36	616	–	(5)	611	(11)	–	600
Tranche 2017–2	2021	2025	1.36	28	–	–	28	(5)	–	23
Tranche 2017–4	2020	2025	1.36	100	–	–	100	–	–	100
Tranche 2018–2	2022 (Note (ii))	2027	1.45	715	–	–	715	(95)	–	620
Tranche 2018–3	2022 (Note (ii))	2027	1.60	10	–	–	10	–	–	10
Tranche 2019–2	2023 (Note (ii))	2028	1.75	80	–	–	80	(1)	–	79
Tranche 2019–3	2019	2028	1.75	50	–	–	50	(50)	–	–
Tranche 2019–4	2020	2028	1.75	50	–	–	50	(50)	–	–
Tranche 2020–1	2020	2029	1.75	300	–	–	300	–	–	300
Tranche 2020–2	Milestones (Note (i))	2029	1.75	600	–	–	600	(50)	–	550
Tranche 2020–4	2021	2029	2.35	125	–	–	125	(50)	–	75
Tranche 2020–5	2024 (Note (ii))	2029	2.35	345	–	–	345	(23)	–	322
				3,819	–	(5)	3,814	(400)	–	3,414
Non-employee										
Tranche 2018–2	2022 (Note (ii))	2027	1.45	100	–	–	100	(10)	–	90
Tranche 2020–1	2020	2029	1.75	300	–	–	300	–	–	300
				400	–	–	400	(10)	–	390
				9,304	–	(205)	9,099	(1,140)	–	7,959
Exercisable at the end of the reporting period							9,099			7,959
Weighted average exercise price				1.65	NA	1.45	1.66	1.63	NA	1.67

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of US Sirnaomics (Continued)

Substitution of ordinary shares of US Sirnaomics to the Company's ordinary shares under 2008 Stock Incentive Plan and 2016 Stock Incentive Plan (Continued)

Notes:

(i) Milestone-based share options are vested conditionally upon the achievement of a specified performance target including but not limited to, the completion of the Company's IPO, Series D financing by the fourth quarter in 2020 or achievement of drug project related milestones.

(ii) The unvested portion of share options having an original vesting year of 2022 or later are vested immediately upon fulfilment of milestone of completion of the Company's IPO during on December 30, 2021.

Equity-settled share option scheme of the Company

2021 Stock Incentive Plan

Effective on January 21, 2021, the Company adopted the "2021 Stock Incentive Plan" pursuant to which the Company is authorized to grant stock options, stock appreciation rights and restricted stock to directors, officers, employees, consultants, advisers and individuals who provide services to the Company and its affiliates. Under the 2021 Stock Incentive Plan, a total of 13.3 million ordinary shares of the Company were reserved for issuance. Options may be granted as incentive stock options or non-qualified stock options. Stock options are to be granted with an exercise price not less than the fair market value of the Company's ordinary shares at the date of grant, and have exercise terms of up to 10 years with vesting periods determined at the discretion of the board of directors of the Company, and are subject generally to a continued service relationship.

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of the Company (Continued)

2021 Stock Incentive Plan (Continued)

The following table discloses movements of the Company's share options held by directors, senior management and employees during the year ended December 31, 2022 under 2021 Stock Incentive Plan since January 21, 2021:

				Number of share options ('000)						
Options	Vesting year	Expiry year	Exercise price US$	At January 1, 2021	Granted during the year	Forfeited during the year	At December 31, 2021	Exercised during the year	Forfeited during the year	At December 31, 2022
Directors										
Tranche 2021-4	2025 (Note (ii))	2030	2.35	–	20	–	20	–	–	20
Tranche 2021-5	2025 (Note (ii))	2030	3.5	–	1,500	–	1,500	–	–	1,500
Tranche 2021-6	2025 (Note (ii))	2030	3.55	–	150	–	150	–	–	150
				–	1,670	–	1,670	–	–	1,670
Senior management										
Tranche 2021-5	2025 (Note (ii))	2030	3.5	–	800	–	800	–	–	800
Employees										
Tranche 2021-1	2021	2030	2.35	–	50	(42)	8	(8)	–	–
Tranche 2021-2	Milestone (Note (i))	2030	2.35	–	8	–	8	–	–	8
Tranche 2021-3	Milestone (Note (i))	2030	2.35	–	8	–	8	–	–	8
Tranche 2021-4	2025 (Note (ii))	2030	2.35	–	489	(288)	201	(34)	–	167
Tranche 2021-5	2025 (Note (ii))	2030	3.5	–	686	–	686	(23)	–	663
Tranche 2021-6	2025 (Note (ii))	2030	3.55	–	289	(6)	283	(5)	–	278
				–	1,530	(336)	1,194	(70)	–	1,124
				–	4,000	(336)	3,664	(70)	–	3,594
Exercisable at the end of the reporting period				–			3,664			3,594
Weighted average exercise price				NA	3.34	2.37	3.43	2.82	NA	3.44

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of the Company (Continued)

2021 Stock Incentive Plan (Continued)

Notes:

(i) Milestone-based share options are vested conditionally upon the achievement of a specified performance target including but not limited to, the execution of a collaboration, development, joint venture, or partnership agreement or completion of achievement of drug project related milestones.

(ii) The unvested portion of share options having an original vesting year of 2022 or later are vested immediately upon fulfilment of milestone of completion of the Company's IPO on December 30, 2021.

2022 Post-IPO Scheme

The Company adopted the restricted share unit scheme (the "**RSU Scheme**") on April 22, 2022 and adopted the Post-IPO share option scheme (the "**2022 Post-IPO Scheme**") on June 28, 2022 (collective referred to as "**2022 Post-IPO Incentive Plans**"). The purposes of the 2022 Post-IPO Incentive Plans are to (i) recognize the contributions by the eligible participants ("**Participants**") with an opportunity to acquire a proprietary interest in the Company; (ii) encourage and retain individuals for the continual operation and development of the Group; (iii) provide additional incentives to achieve performance goals; (iv) attract suitable personnel for further development of the Group and (v) motivate the Participants to maximize the value of the Group for the benefits of both the Participants and the Company, with a view to achieving the objectives of increasing the value of the Group and aligning the interests of the Participants directly to the shareholders through ownership of the shares of the Company.

Under the 2022 Post-IPO Incentive Plans, the directors of the Company may grant options to subscribe for shares in the Company or award ordinary shares of the Company to eligible employees, executive, officer, director, consultant, advisor or agent of any member of the Group or holding companies and fellow subsidiaries of the Company.

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of the Company (Continued)

2022 Post-IPO Scheme (Continued)

Pursuant to the 2022 Post-IPO Scheme, the directors of the Company may invite Participants to take up the options at a price determined by the board of directors or the Chief Executives (the chairman of the board of directors of the Company and the chief executive officer of the Company) provided that it shall be not less than the highest of (a) the closing price of a share as stated in the Hong Kong Stock Exchange's daily quotation sheet on the date on which an offer is made by the Company to the grantee (which date much be a business day, "**Grant Date**"); (b) a price being the average closing price of a share of the Company as stated in the Hong Kong Stock Exchange's daily quotation sheets for the five business days immediately preceding the Grant Date; and (c) the nominal value per share of the Company on the Grant Date.

At December 31, 2022, the number of shares in respect of which options had been granted and remained outstanding under the Scheme was 1,293,000, representing approximately 1.4% of the shares of the Company in issue at that date. The total number of shares which may be issued upon exercise of all options that may be granted under the 2022 Post-IPO Scheme and any other schemes of the Company shall not in aggregate exceed 10% of the issued shares as of June 28, 2022 (i.e. the Share Option Scheme Adoption Date) unless the Company obtains the approval from the shareholders to refresh the limit.

The maximum entitlement for any one Participant is that the total number of shares issued and to be issued to each Participant (excluding any options lapsed) in any 12-month period shall not exceed 1% of the issued shares unless otherwise separately approved by the shareholders of the Company in a general meeting. Options granted to substantial shareholders or independent non-executive directors in excess of 0.1% of the Company's share capital or with a value in excess of HK$5,000,000 must be approved in advance by the Company's shareholders.

A letter comprising acceptance of the share option duly signed by the grantee together with a remittance in favour of the Company of HK$1.00 by way of consideration for the grant thereof is received by the Company within the period specified in the letter containing the offer of the grant of the share option.

The option may be exercised in accordance with the terms of the 2022 Post-IPO Scheme of up to 10 years with vesting periods which were determined and notified by the board of directors to the grantee at the time of making an offer.

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of the Company (Continued)

2022 Post-IPO Scheme (Continued)

The 2022 Post-IPO Scheme is valid and effective for a period of 10 years commencing on June 28, 2022.

The following table discloses movements of the Company's share options held by directors, senior management and employees during the year ended December 31, 2022 under 2022 Post-IPO Scheme:

Options	Date of grant	Vesting year	Expiry year	Exercise price US$	Number of share options ('000) At January 1, 2022	Granted during the year	Forfeited during the year	At December 31, 2022
Directors								
Tranche 2022–1	November 24, 2022	2024 (note i)	2032	7.55	—	189	—	189
Tranche 2022–2	November 24, 2022	2026 (note ii)	2032	7.55	—	116	—	116
					—	305	—	305
Senior management								
Tranche 2022–1	November 24, 2022	2024 (note i)	2032	7.55	—	76	—	76
Tranche 2022–2	November 24, 2022	2026 (note ii)	2032	7.55	—	139	—	139
					—	215	—	215
Employees								
Tranche 2022–1	November 24, 2022	2024 (note i)	2032	7.55	—	141	—	141
Tranche 2022–2	November 24, 2022	2026 (note ii)	2032	7.55	—	632	—	632
					—	773	—	773
					—	1,293	—	1,293
Exercisable at the end of the reporting period					—			—
Weighted average exercise price					N/A	7.55	N/A	7.55

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of the Company (Continued)

2022 Post-IPO Scheme (Continued)

Notes:

(i) 50% of the share options granted are vested on each of the first and second anniversary of the grant date respectively.

(ii) 25% of the share options granted are vested on each of the first, second, third and fourth anniversary of the grant date respectively.

On November 24, 2022, the Company granted 1,293,000 share options to certain selected directors and employees of the Company and conditionally granted 219,000 share options to Chief Executive, which entitle them to subscribe for a total of 1,512,000 shares at an exercise price of HK$58.9 per share (equivalent to approximately US$7.55 per share). The closing price of the shares of the Company immediately before the date on which the options were granted was HK$57.8 per share. 219,000 shares to the Chief Executive have been approved in the shareholder meeting held on February 3, 2023.

2020 Stock Incentive Plan

Effective on March 8, 2020, RNAimmune adopted the "2020 Stock Incentive Plan" pursuant to which RNAimmune is authorized to grant stock options, stock appreciation rights and restricted stock to directors, officers, employees, consultants, advisers and individuals who provide services to RNAimmune and its affiliates. Under the 2020 Stock Incentive Plan, a total of seven million ordinary shares of RNAimmune were reserved for issuance. Options may be granted as incentive stock options or non-qualified stock options. Stock options are to be granted with an exercise price not less than the fair market value of RNAimmune's ordinary shares at the date of grant, and have exercise terms of up to 10 years with vesting periods determined at the discretion of the board of directors of RNAimmune, and are subject generally to a continued service relationship.

During the year ended December 31, 2022, 150,000 options were granted with an exercise price of US$0.51 per share.

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of the Company (Continued)

2020 Stock Incentive Plan (Continued)

The following table discloses movements of RNAimmune's share options held by senior management and employees during the year ended December 31, 2022 under 2020 Stock Incentive Plan:

				Number of share options ('000)						
Options	Vesting year	Expiry year	Exercise price US$	At January 1, 2021	Granted during the year	Forfeited during the year	At December 31, 2021	Granted during the year	Forfeited during the year	At December 31, 2022
Senior management										
Tranche 2020–2	Milestones (note (i))	2029	0.10	200	–	(8)	192	–	–	192
Tranche 2021–1	Milestones (note (i))	2030	0.51 (note(i))	–	800	(200)	600	–	(400)	200
				200	800	(208)	792	–	(400)	392
Employees										
Tranche 2020–1	Milestones (note (i))	2029	0.11	2,520	–	(420)	2,100	–	–	2,100
Tranche 2020–2	Milestones (note (i))	2029	0.10	920	–	(150)	770	–	–	770
Tranche 2022–2	Milestones (note (i))	2031	0.51	–	–	–	–	25	–	25
Tranche 2021–2	2024	2030	0.51 (note (ii))	–	50	(25)	25	–	–	25
Tranche 2021–3	2025	2030	0.51 (note (ii))	–	75	–	75	–	–	75
Tranche 2022–2	2026	2031	0.51	–	–	–	–	125	–	125
				3,440	125	(595)	2,970	150	–	3,120
				3,640	925	(803)	3,762	150	(400)	3,512
Exercisable at the end of the reporting period				948			2,742			3,307
Weighted average exercise price				0.11	1.26	0.43	0.32	0.51	0.51	0.16

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of the Company (Continued)

2020 Stock Incentive Plan (Continued)

Notes:

(i) Milestone-based share options are vested conditionally upon the achievement of a specified performance target including but not limited to, closing a seed round financing, obtaining an approval of non-dilutive government or foundation funding, execution of a collaboration, development, joint venture, or partnership agreement or completion of achievement of drug project related milestones.

(ii) During the year ended December 31, 2022, RNAimmune has repriced the exercise price of these share options from US$1.26 per share to US$0.51 per share. The incremental fair value of approximately US$23,000 will be expensed over the remaining vesting period.

The fair value of services received in return for share options under 2020 Stock Incentive Plan of RNAimmune, and 2022 Post-IPO Scheme is measured by reference to the fair value of share options granted. Back-solve method was used to determine the equity fair value of the ordinary shares of RNAimmune at grant date for options granted under 2020 Stock Incentive Plan. The estimated fair value of the share options granted is measured based on the binomial option pricing model. The variables and assumptions used in computing the fair value of the share options are based on the directors' best estimate with reference to valuation reports carried out by AVISTA Valuation. The value of an option varies with different variables of certain subjective assumptions.

The key inputs of the model as at the grant date and modification date were as follows:

	2020 Stock Incentive Plan of RNAimmune	2022 Post-IPO Scheme of the Company
Share price	US$0.03 – US$0.51	US$6.81 – US$7.50
Exercise price	US$0.1 – US$0.51	US$7.55
Expected volatility	74% – 75%	76% – 77%
Risk-free rate	0.48% – 2.07%	3.11% – 3.56%
Expected dividend yield	0%	0%
Time-to-maturity	4.8 – 8.8 years	10 years

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(a) Share option scheme (Continued)

Equity-settled share option scheme of the Company (Continued)

2020 Stock Incentive Plan (Continued)

The directors of the Company estimated the risk-free interest rate based on the yield of the United States Government Bond and Hong Kong Monetary Authority with a maturity life equal to the option life of the share option granted under 2020 Stock Incentive Plan of RNAimmune and 2022 Post-IPO Scheme of the Company, respectively. Volatility was estimated at grant date based on average of historical volatilities of the comparable companies with length commensurable to the time to maturity of the share options. Dividend yield is based on management estimation at the grant date. The time-to-maturity used in the model has been adjusted, based on management's best estimate, for the effects of non-transferability, exercise restrictions and behavioural considerations. The Group recognized the total expense of US$214,000 (2021: US$11,280,000) in relation to share options granted by the Company, and RNAimmune.

(b) RSU Scheme of the Company

The RSU Scheme is valid and effective for a period of 10 years commencing from April 22, 2022. Pursuant to the rules of the RSU Scheme, the Group's holding the awarded shares before they are vested.

The number of shares awarded under the RSU Scheme shall not exceeding 10% of the issued shares from time to time. The granting of restricted share unit awards is also subject to an annual limit of 3% of the total issued shares as at April 22, 2022, unless otherwise approved by the shareholders of the Company. The maximum number of shares which may be awarded to any one Participant under the RSU Scheme may not exceed 1% of the issued shares from time to time.

On November 24, 2022, the Company awarded 564,000 shares to certain selected employees of the Company and conditionally awarded 339,000 shares to certain directors of the Company and an officer of a subsidiary of the Company (the "**Connected Person**") under the RSU scheme. The closing price of the shares of the Company immediately before the grant of awarded shares was HK$57.8 per share. 339,000 shares to the Connected Person have been approved in the shareholder's meeting held on February 3, 2023.

The estimated fair values of the awarded shares are HK$58.9 per share based on the market trading price of the share at the grant date. The Group recognized the total expense of US$197,000 for the year ended December 31, 2022 in relation to share award granted by the Company.

30. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

(b) RSU Scheme of the Company (Continued)

The following tables disclose movements of the Company's RSUs held by senior management and employees during the year ended December 31, 2022:

Categories of grantees	Date of grant	Vesting year	Number of share awarded ('000) At January 1, 2022	Awarded during the year	Vested during the year	At December 31, 2022
Senior management						
Tranche 2022–1	November 24, 2022	2024 (note i)	—	76	—	76
Tranche 2022–2	November 24, 2022	2026 (note ii)	—	27	—	27
			—	103	—	103
Employees						
Tranche 2022–1	November 24, 2022	2024 (note i)	—	137	—	137
Tranche 2022–2	November 24, 2022	2026 (note ii)	—	324	—	324
			—	461	—	461
			—	564	—	564

Notes:

(i) 50% of the RSUs granted are vested on each of the first and second anniversary of the grant date respectively.

(ii) 25% of the RSUs granted are vested on each of the first, second, third and fourth anniversary of the grant date respectively.

31. CAPITAL RISK MANAGEMENT

The Group manages its capital to ensure that it will be able to continue as a going concern while maximizing the return to equity holders through the optimisation of the debt and equity balance. The Group's overall strategy remains unchanged during the year.

The capital structure of the Group consists of net debts, which includes lease liabilities, and financial liabilities at FVTPL, and net of cash and cash equivalents, and equity attributable to owners of the Company, comprising share capital and reserves.

The management of the Group reviews the capital structure regularly. As part of this review, the management of the Group considers the cost of capital and the risks associated with each class of capital. Based on recommendations of the management of the Group, the Group will balance its overall capital structure through the new ordinary share/preferred share issues, share repurchase as well as the issue of new debts.

32. FINANCIAL INSTRUMENTS

Categories of financial instruments

	2022 **US$'000**	2021 US$'000
Financial assets		
Amortized cost	**106,790**	213,411
Financial asset as at FVTPL	**15,004**	—
Financial liabilities		
Amortized cost	**10,836**	12,070
Designated as at FVTPL	**29,139**	8,437

Financial risk management objectives and policies

The Group's major financial instruments include deposits and other receivables, restricted bank balances, cash and cash equivalents, financial asset at FVTPL, trade and other payables and financial liabilities at FVTPL. Details of these financial instruments are disclosed in the respective notes. The risks associated with these financial instruments and the policies on how to mitigate these risks are set out below. The management of the Group manages and monitors these exposures to ensure appropriate measures was implemented on a timely and effective manner.

32. FINANCIAL INSTRUMENTS (Continued)

Financial risk management objectives and policies (Continued)

Market risk

(i) Currency risk

Certain bank balances, deposits and other receivables and trade and other payables denominated in foreign currency of respective group entities expose the Group to foreign currency risk. The Group currently does not have a foreign currency hedging policy. However, the management monitors foreign exchange exposure and will consider hedging significant foreign currency exposure should the need arise.

The carrying amounts of the Group's foreign currency denominated monetary assets and liabilities and intra-group balances at the end of each reporting period are mainly as follows:

	2022 **US$'000**	2021 US$'000
Assets		
US$	**894**	2,532
HK$	**—**	57,193
Liabilities		
US$	**—**	1,102

The management of the Group considers that as HK$ is pegged to US$, the Group is not subject to significant foreign currency risk from change in foreign exchange rate of HK$ against US$ and no sensitivity analysis was presented.

(ii) Interest rate risk

The Group is primarily exposed to fair value interest rate risk in relation to lease liabilities and cash flow interest rate risk in relation to variable-rate bank balances. The Group's cash flow interest rate risk is mainly concentrated on the fluctuation of interest rates on bank balances.

The Group currently does not have an interest rate hedging policy to mitigate interest rate risk; nevertheless, the management monitors interest rate exposure and will consider hedging significant interest rate risk should the need arise.

32. FINANCIAL INSTRUMENTS (Continued)

Financial risk management objectives and policies (Continued)

Market risk (Continued)

(ii) Interest rate risk (Continued)

Total interest income from financial assets (including restricted bank balances and bank balances) that are measured at amortized cost for the year ended December 31, 2022 was approximately US$1,353,000 (2021: US$213,000).

Interest charges on financial liabilities not measured at FVTPL:

	2022 **US$'000**	2021 US$'000
Bank and other borrowings	**—**	72
Lease liabilities	**798**	319
	798	391

No sensitivity analysis was presented for variable-rate restricted bank balances, bank balances and bank borrowings as the management considers that the relevant interest rate risk is minimal.

(iii) Other price risk

The Group is exposed to other price risk arising from investment fund which were classified as financial asset at FVTPL (2021: N/A), and Series A and Series Seed Preferred Shares which were classified as financial liabilities at FVTPL (2021: Series Seed Preferred Shares) as at December 31, 2022, respectively.

Sensitivity analysis

The sensitivity analyses below have been determined based on the exposure to equity price risk at the reporting date for financial asset at FVTPL and financial liabilities at FVTPL.

32. FINANCIAL INSTRUMENTS (Continued)

Financial risk management objectives and policies (Continued)

Market risk (Continued)

(ii) Interest rate risk (Continued)

Financial asset at FVTPL

If the underlying net asset value of the investment fund had been 5% higher/lower, the loss of Group for the year ended December 31, 2022, would decrease by approximately US$750,000 (2021: N/A) and increase by approximately US$750,000 (2021: N/A).

Financial liabilities at FVTPL

If the equity value of RNAimmune had been changed based on the 5% higher/lower:

- the loss of the Group for the year ended December 31, 2022 would increase by approximately US$1,209,000 (2021: US$291,000) and decrease by approximately US$1,227,000 (2021: US$293,000).

Credit risk and impairment assessment

Credit risk refers to the risk that the Group's counterparties default on their contractual obligations resulting in financial losses to the Group. The Group's credit risk exposures are primarily attributable to restricted bank balances, bank balances and deposits and other receivables. The Group does not hold any collateral or other credit enhancements to cover its credit risks associated with its financial assets.

The Group performed impairment assessment for financial assets under ECL model. Information about the Group's credit risk management, maximum credit risk exposures and the related impairment assessment, if applicable, are summarized as below:

Deposits and other receivables

For deposits and other receivables, the management of the Group makes periodic individual assessment on the recoverability of deposits and other receivables based on historical settlement records, past experience, and also quantitative and qualitative information that is reasonable and supportive forward-looking information. The management of the Group believes that there are no significant increase in credit risk of the deposits and other receivables since initial recognition and the Group provided impairment based on 12m ECL.

32. FINANCIAL INSTRUMENTS (Continued)

Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Bank balances

Credit risk on bank balances is limited because the counterparties are reputable banks with high credit ratings assigned by credit agencies. The Group assessed 12m ECL for bank balances by reference to information relating to probability of default of the respective credit rating grades published by external credit rating agencies. Based on the average loss rates, the 12m ECL on bank balances is considered to be insignificant.

The Group's internal credit risk grading assessment comprises the following categories:

Internal credit rating	Description	Financial assets
Low risk	The counterparty has a low risk of default and does not have any past-due amounts	12-month ECL
Watch list	Debtor frequently repays after due dates but settle the amounts in full	12-month ECL
Doubtful	There have been significant increases in credit risk since initial recognition through information developed internally or external resources	Lifetime ECL - not credit-impaired
Loss	There is evidence indicating the asset is credit-impaired	Lifetime ECL - credit-impaired
Write-off	There is evidence indicating that the debtor is in severe financial difficulty and the Group have no realistic prospect of recovery	Amount is written off

32. FINANCIAL INSTRUMENTS (Continued)

Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

The tables below detail the credit risk exposures of the Group's financial assets, which are subject to ECL assessment:

	Notes	Internal/external credit rating	12m or lifetime ECL	December 31, 2022 Gross carrying amount US$'000	December 31, 2021 Gross carrying amount US$'000
Financial assets at amortized cost					
Restricted bank balances	22	A1	12m ECL	—	63
Cash and cash equivalents	22	A3-Aa1	12m ECL	105,229	211,994
Other receivables and deposits	20	Low risk (Note)	12m ECL	1,561	1,354
				106,790	213,411

Note: For the purposes of internal credit risk management, the Group uses past due information to assess whether credit risk has increased significantly since initial recognition:

At December 31, 2022

	Past due US$'000	No fixed repayment terms US$'000	Total US$'000
Deposits and other receivables	**—**	**1,561**	**1,561**

At December 31, 2021

	Past due US$'000	No fixed repayment terms US$'000	Total US$'000
Deposits and other receivables	—	1,354	1,354

32. FINANCIAL INSTRUMENTS (Continued)

Financial risk management objectives and policies (Continued)

Liquidity risk

In management of the liquidity risk, the Group monitors and maintains levels of cash and cash equivalents deemed adequate by the management to finance the Group's operations and mitigate the effects of fluctuations in cash flows.

The following table details the Group's remaining contractual maturity for its financial liabilities based on the agreed repayment terms. The table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows.

	Weighted average interest rate %	On demand or less than 30 days US$'000	31 days to 180 days US$'000	181 days to 365 days US$'000	> 1 year US$'000	Total undiscounted cash flows US$'000	Carrying amount US$'000
At December 31, 2022							
Trade and other payables	—	10,836	—	—	—	10,836	10,836
Lease liabilities	8.71	69	827	990	16,085	17,971	10,756
		10,905	827	990	16,085	28,807	21,592

	Weighted average interest rate %	On demand or less than 30 days US$'000	31 days to 180 days US$'000	181 days to 365 days US$'000	> 1 year US$'000	Total undiscounted cash flows US$'000	Carrying amount US$'000
At December 31, 2021							
Trade and other payables	—	12,070	—	—	—	12,070	12,070
Lease liabilities	9.26	131	650	841	18,711	20,333	7,040
		12,201	650	841	18,711	32,403	19,110

Note: The amounts as at December 31, 2022 shown in the above table have excluded the carrying amounts of Series A and Series Seed Preferred Shares issued by RNAimmune amounting to US$29,139,000 (2021: Series Seed Preferred Shares issued by RNAimmune which amounting to US$8,437,000) as these instruments do not contain any redemption rights.

32. FINANCIAL INSTRUMENTS (Continued)

Fair value measurements of financial instruments

This note provides information about how the Group determines fair values of various financial assets and financial liabilities.

Fair value measurements and valuation processes

Some of the Group's financial instruments are measured at fair value for financial reporting purposes. The directors of the Company are responsible to determine the appropriate valuation techniques and inputs for fair value measurements.

In estimating the fair value, the Group uses market-observable data to the extent it is available. Where Level 1 inputs are not available, the Group determines the appropriate valuation techniques and inputs for fair value measurements and works closely with the qualified valuer to establish the appropriate valuation techniques and inputs to the model.

32. FINANCIAL INSTRUMENTS (Continued)

Fair value measurements of financial instruments (Continued)

Fair value of the Group's financial asset and financial liabilities that are measured at fair value on a recurring basis

Some of the Group's financial asset and financial liabilities are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial asset and financial liabilities are determined (in particular, the valuation technique(s) and inputs used). There were no transfers out of Level 3 during the year.

	Fair value as at December 31,		Fair value hierarchy	Valuation technique(s) and key inputs	Significant unobservable inputs	Relationship of significant unobservable inputs to fair value
	2022 US$'000	2021 US$'000				
Financial asset/ Financial liabilities						
Financial asset at FVTPL – Investment fund	**15,004**	–	Level 3	The fair value of the investment fund is determined with reference to the adjusted net assets value approach	Net asset value	A significant increase in net asset value would result in a significant increase in fair value, and vice versa
Financial liabilities at FVTPL – Preferred Shares	**29,139**	8,437	Level 3	Back-solve method and the OPM Time to liquidation, risk-free interest, expected volatility value, dividend yield and possibilities under liquidation scenario and IPO Scenario	Expected volatility value	A significant increase in expected volatility value would result in a significant increase in fair value, and vice versa (Note (i)).

Note:

(i) A 5% increases (decreases) in the expected volatility value, while all other variables keep constant, would increase (decrease) the carrying amount of Series Seed Preferred Shares and Series A Preferred Shares issued by the Group as at December 31, 2022 by US$281,000 and US$81,000, respectively and US$(418,000) and US$(70,000), respectively.

32. FINANCIAL INSTRUMENTS (Continued)

Fair value measurements of financial instruments (Continued)

Fair value of the Group's financial asset and financial liabilities that are measured at fair value on a recurring basis (Continued)

Reconciliation of Level 3 fair value measurements

The reconciliation of Level 3 measurements of financial asset at FVTPL and financial liabilities at FVTPL are set out in notes 21 and 26 respectively and fair value changes on financial asset at FVTPL and financial liabilities at FVTPL are presented as "changes in fair value of financial asset at FVTPL" and "changes in fair value of financial liabilities at FVTPL", respectively.

Fair value of the Group's financial asset and financial liabilities that are not measured at fair value on a recurring basis (but fair value disclosures required)

The management of the Group considers that the carrying amounts of financial asset and financial liabilities recorded at amortized cost in the consolidated financial statements approximate their fair values.

33. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

	Financial liabilities at FVTPL US$'000	Bank and other borrowings US$'000	Accrued issue costs US$'000	Lease liabilities US$'000	Total US$'000
At January 1, 2021	196,816	1,134	1,339	1,747	201,036
Financing cash flows	114,212	(1,219)	(4,531)	(1,026)	107,436
Non-cash changes					
New leases entered/lease modified	—	—	—	5,968	5,968
Finance costs	—	72	—	319	391
Accrued issuance costs of financial liabilities at FVTPL	—	—	678	—	678
Deferred share issue costs	—	—	3,814	—	3,814
Change in fair value	146,038	—	—	—	146,038
Conversion of SAFE to a subsidiary's ordinary shares	(2,762)	—	—	—	(2,762)
Automatic conversion of preferred shares upon IPO	(446,767)	—	—	—	(446,767)
Exchange adjustments	900	13	18	32	963
At December 31, 2021	8,437	—	1,318	7,040	16,795
Financing cash flows	14,578	—	(1,318)	2,541	15,801
Non-cash changes					
New leases entered/lease modified	—	—	—	558	558
Finance costs	—	—	—	798	798
Change in fair value	6,124	—	—	—	6,124
Exchange adjustments	—	—	—	(181)	(181)
At December 31, 2022	29,139	—	—	10,756	39,895

34. RELATED PARTY TRANSACTIONS

Saved for disclosed elsewhere in the consolidated financial statements, the Group also entered into the following significant transactions with its related parties during the year.

	2022 **US$'000**	2021 US$'000
Jiangsu Better Time Biotechnology Co., Ltd. ("**BTM**") 江蘇佳時泰醫藥生物科技有限公司 (Note)		
Consultancy services provided by a related party	**—**	168

Note: BTM is a company controlled by Dr. Xiaochang Dai, a director of the Company, who also has 100% beneficial interest in BTM.

Compensation of key management personnel

The remuneration of the directors of the Company and key management personnel of the Group during the year were as follows:

	2022 **US$'000**	2021 US$'000
Salaries and other allowances	**3,094**	2,152
Retirement benefits schemes contributions	**122**	106
Share-based payment expense	**236**	7,071
Performance and discretionary bonus (Note)	**—**	571
	3,452	9,900

Note: Performance and discretionary bonus is determined based on the duties and responsibilities of the relevant individuals within the Group and the Group's performance.

35. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY

35.1 General information of principal subsidiaries

Details of the principal subsidiaries directly and indirectly held by the Company at the end of the reporting period are set out below.

Name of subsidiaries	Place and date of incorporation or establishment/ operation	Issued and fully paid share capital/ paid-up capital	Effective equity interest attributable to the Group As at December 31, 2022	2021	Principal activities
Directly owned subsidiary					
US Sirnaomics	The U.S. February 12, 2007	US$1 (2021: US$1)	**100%**	100%	Developing and commercializing of RNAi technology and multiple therapeutics
Indirectly owned subsidiaries					
RNAimmune (note a)	The U.S. May 5, 2016	US$208 (2021: US$208)	**60%**	60%	Technical research and development of mRNA delivery platform and mRNA-based drug and vaccine
HK Sirnaomics	Hong Kong March 8, 2019	HK$10,000 (2021: HK$10,000)	**100%**	100%	Provision of management support services and investment holding
Suzhou Sirnaomics (note b)	The PRC March 10, 2008	RMB386,771,270 (2021: RMB336,771,270)	**100%**	100%	Technical research, development, service and transfer of nucleic acid drugs
Guangzhou Sirnaomics (note b)	The PRC May 8, 2012	RMB100,000,000 (2021: RMB70,000,000)	**100%**	100%	Manufacturing and development of drug products
RNAimmune Vaccine (Guangzhou) Co., Ltd. 達冕疫苗(廣州)有限公司 ("**Guangzhou RNAimmune**")	The PRC January 28, 2021	RMB32,736,537 (2021: RMB10,846,037)	**60%**	60%	Manufacturing and development of vaccines

35. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY (Continued)

35.1 General information of principal subsidiaries (Continued)

Notes:

a. On May 5, 2016, RNAimmune was incorporated in the U.S. by Dr. Yang Lu being the sole director but has not issued any shares nor commenced any business since its incorporation. On February 1, 2020, RNAimmune issued 6,250,000 shares with par value of US$0.00001 each to US Sirnaomics for US$250,000 and on March 8, 2020, RNAimmune further issued 2,600,000, 575,000, 275,000, 275,000, 275,000 shares with par value of US$0.00001 each for US$40,000 to the founders and management of RNAimmune, and the Group held 61% of equity interests in RNAimmune upon allotment of these shares and as at December 31, 2020.

In February 2021, the SAFE investors of RNAimmune converted their SAFE into ordinary shares of RNAimmune and the Group's equity interests in RNAimmune has decreased to 43% upon this conversion.

Pursuant to the written resolution dated May 31, 2021, the Company exercised the conversion option of all the Preferred Shares of US Sirnaomics and converted them into 18,725,227 ordinary shares with par value of US$0.001 of US Sirnaomics on a 1:1 ratio. It has also been resolved that the 33,074,865 ordinary shares of US Sirnaomics were combined into 1,000 ordinary shares.

On July 12, 2021, US Sirnaomics exercised the stock purchase warrant to purchase 6,250,000 additional shares of RNAimmune at the purchase price of US$0.11 and the Group's equity interests in RNAimmune has increased to 60%.

b. On January 22, 2021, Suzhou Sirnaomics acquired the 4.17% equity interests held by a non-controlling shareholder in Guangzhou Sirnaomics at total consideration of RMB2,231,000 (equivalent to US$350,000).

As part of ODI arrangement, after a capital reduction took place on March 1, 2021 and the acquisition mentioned above, Suzhou Sirnaomics and Guangzhou Sirnaomics were wholly owned by US Sirnaomics.

All subsidiaries are limited liability companies and have adopted December 31, as their financial year end date.

Other than the financial instruments set out in note 26, none of the subsidiaries had issued any debt securities at the end of the year.

35. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY (Continued)

35.2 Details of non-wholly owned subsidiaries that have material non-controlling interests

Name of subsidiaries	Place of establishment and principal place of business	Proportion of ownership interests held by non-controlling interests		Loss allocated to non-controlling interests		Accumulated non-controlling interests	
		As at December 31,		For the year ended December 31,		As at December 31,	
		2022	2021	**2022**	2021	**2022**	2021
				US$'000	US$'0000	**US$'000**	US$'000
RNAimmune	The U.S.	**40%**	40%	**(8,152)**	(2,731)	**(9,446)**	(1,308)
Individually immaterial subsidiaries with non-controlling interests				**(927)**	(132)	**(1,000)**	(19)
				(9,079)	(2,863)	**(10,446)**	(1,327)

Summarized financial information in respect of the Group's subsidiaries that had material non-controlling interests are set out below. The summarized financial information below represents amounts before the elimination of intra-group transactions.

35. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY (Continued)

35.2 Details of non-wholly owned subsidiaries that have material non-controlling interests (Continued)

(a) RNAimmune

	2022 US$'000	2021 US$'000
Current assets	**13,550**	5,572
Non-current assets	**8,717**	2,756
Current liabilities	**(2,976)**	(1,050)
Non-current liabilities	**(43,030)**	(10,563)
Net liabilities	**(23,739)**	(3,285)
Total deficit attributable to		
— owners of the Company	**(14,293)**	(1,977)
— non-controlling interests	**(9,446)**	(1,308)
	(23,739)	(3,285)

	2022 US$'000	2021 US$'000
Expenses and loss for the year	**(20,490)**	(6,006)
Loss and total comprehensive expenses for the year attributable to		
— owners of the Company	**(12,338)**	(3,275)
— non-controlling interests	**(8,152)**	(2,731)
	(20,490)	(6,006)
Net cash outflow from operating activities	**(11,726)**	(5,146)
Net cash outflow from investing activities	**(4,062)**	(2,642)
Net cash inflow from financing activities	**22,472**	10,652
Net cash inflow	**6,684**	2,864

36. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

	2022 US$'000	2021 US$'000
NON-CURRENT ASSETS		
Interests in subsidiaries	**104,111**	103,731
Loan to a subsidiary	**206,774**	205,063
	310,885	308,794
CURRENT ASSETS		
Amount due from a subsidiary	**53,303**	—
Prepayments and other receivables	**113**	4,486
Cash and cash equivalents	**9,308**	68,229
	62,724	72,715
CURRENT LIABILITY		
Other payables	**1,684**	8,600
NET CURRENT ASSETS	**61,040**	64,115
NET ASSETS	**371,925**	372,909
CAPITAL AND RESERVES		
Share capital	**88**	88
Reserves (Note)	**371,837**	372,821
TOTAL EQUITY	**371,925**	372,909

36. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (Continued)

Note: The movements in the reserves of the Company are as follows:

	Shares held for share option scheme	Share premium	Treasury share reserve	Share option reserve	Share award reserve	Accumulated losses	Total
	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000
At January 1, 2021	—	—	—	—	—	(885)	(885)
Loss and total comprehensive expense for the year	—	—	—	—	—	(156,820)	(156,820)
Recognition of share-based payment	—	—	—	11,230	—	—	11,230
Lapse of share options	—	—	—	(20)	—	20	—
Forfeiture of share options	—	—	—	(91)	—	91	—
Issuance of shares arising from Group Reorganization	—	10,178	—	—	—	—	10,178
Transfer of share option reserve from US Sirnaomics to the Company	—	—	—	2,623	—	—	2,623
Issue of shares under share option scheme	—	326	—	(155)	—	—	171
Issue of shares pursuant to IPO	—	63,699	—	—	—	—	63,699
Transaction costs directly attributable to issue of new shares in the IPO	—	(4,076)	—	—	—	—	(4,076)
Automatic conversion of preferred shares to ordinary shares upon IPO	—	446,714	—	—	—	—	446,714
Issue of shares held on trust	(13)	—	—	—	—	—	(13)
At December 31, 2021	(13)	516,841	—	13,587	—	(157,594)	372,821
Loss and total comprehensive expense for the year	—	—	—	—	—	(1,431)	(1,431)
Share repurchases (Note 27)	—	—	(10,217)	—	—	—	(10,217)
Cancellation of treasury shares (Note 27)	—	(9,011)	9,012	—	—	—	1
Recognition of share-based payment	—	—	—	178	197	—	375
Exercise of share options	1	2,740	—	(691)	—	—	2,050
Issue of shares upon exercise of the over-allotment option	—	8,238	—	—	—	—	8,238
At December 31, 2022	(12)	518,808	(1,205)	13,074	197	(159,025)	371,837

37. CAPITAL COMMITMENTS

	2022 US$'000	2021 US$'000
Capital expenditure in respect of the acquisition of property, plant and equipment contracted for but not provided in the consolidated financial statements	**140**	11,357

38. PLEDGE OF ASSETS

The Group's bank facilities have been secured by the pledge of the Group's assets and the carrying amounts of the assets are as follows:

	2022 US$'000	2021 US$'000
Restricted bank deposits	—	63

Restrictions on assets

In addition, lease liabilities of approximately US$10,756,000 (2021: US$7,040,000) are recognized with related right-of-use assets of approximately US$5,446,000 (2021: US$6,855,000) as at December 31, 2022. The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessor and the relevant leased assets may not be used as security for borrowing purposes.

39. MAJOR NON-CASH TRANSACTIONS

Saved for disclosed elsewhere in the consolidated financial statements, the Group has the following major non-cash transactions during the year:-

Lease arrangements

During the year ended December 31, 2022, the Group entered into new lease agreements and renewed the existing leases for the use of leased properties for three years (2021: two years to ten years). On the lease commencement during the year ended December 31, 2022, the Group recognized US$1,223,000 (2021: US$5,968,000) of right-of-use assets and US$1,223,000 (2021: US$5,968,000) of lease liabilities.

40. EVENTS AFTER THE REPORTING PERIOD

(i) The Group noted that, on March 10, 2023, Silicon Valley Bank ("**SVB**"), Santa Clara, California, was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation (the "**FDIC**") as receiver. The Group has maintained a number of accounts with banks in the People's Republic of China, including the Hong Kong Special Administrative Region, the Republic of Singapore and the United States, and the Group's bank account with SVB is mainly used for payment of wages and other research and development contracts. On March 13, 2023, the FDIC published a press release that it transferred all deposits and substantially all assets of SVB to a newly created, full-service FDIC-operated "bridge bank" in an action designed to protect all depositors of SVB. As at the date of issuance of these financial statements, the Group has transferred all cash deposited with SVB to accounts maintained with other banks, except for a small cash balance remained to honor scheduled payments from the SVB account.

(ii) On March 16, 2023, a total of 822,750 new ordinary shares of the Company were issued and allotted to a trust, held on trust for the benefit of eligible participants under the RSU Scheme.

In this annual report, unless the context otherwise requires, the following expressions shall have the following meanings.

"Administrative Committee"	the committee comprising of any one executive Director and any other two officers of the Company as designated by the Board from time to time
"Articles" or "Articles of Association"	the articles of association of the Company, as amended, supplemented and restated from time to time
"Audit Committee"	the audit committee of the Board
"Beijing Sirnaomics"	Sirnaomics Biopharmaceuticals (Beijing) Co., Ltd. (聖諾美科生物醫藥技術(北京)有限公司), a company established under the laws of the PRC on April 20, 2022 with limited liability, an indirect wholly owned subsidiary of the Company
"Board" or "Board of Directors"	the board of directors of the Company
"Business Day(s)"	a day on which banks in Hong Kong are generally open for business and the Hong Kong Stock Exchange is open for business of dealing securities
"CG Code"	the Corporate Governance Code set out in Appendix 14 to the Listing Rules
"Chief Executives"	(i) the Chairman of the Board, and (ii) the Chief Executive Officer of the Company, or, for the purpose of the Share Option Scheme and the RSU Scheme only, any person as designated by him/her from time to time. For the avoidance of doubt, any decision prescribed to be made by the Chief Executives under the Share Option Scheme or the RSU Scheme (as the case may be) shall be made jointly by both persons of (i) and (ii) above

Definitions

"China", "mainland China" or the "PRC"	the People's Republic of China, but for the purpose of this annual report and for geographical reference only, except where the context requires, references in this annual report to "China", "mainland China" and the "PRC" do not apply to Hong Kong, Macau and Taiwan
"Company", "our Company" or "the Company"	Sirnaomics Ltd., an exempted company incorporated in the Cayman Islands with limited liability on October 15, 2020
"Core Product"	STP705, the designated "core product" as defined under Chapter 18A of Listing Rules
"Director(s)"	the director(s) of the Company
"EHS"	environment, health and safety
"ESG Report"	the Environmental, Social and Governance report
"ESG Reporting Guide"	the Environmental, Social and Governance Reporting Guide
"ESG"	Environmental, Social and Governance
"FDA"	U.S. Food and Drug Administration
"FVTPL"	Fair value through profit or loss
"GCPs"	Good Clinical Practices
"Global Offering"	the Hong Kong Public Offering and the International Offering
"GRI"	Global Reporting Initiative
"Group", "our Group", "the Group", "we", "us" or "our"	the Company, its subsidiaries or, where the context so requires, in respect of the period prior to the Company becoming the holding company of its present subsidiaries, such subsidiaries as if they were subsidiaries of the Company at the relevant time

"Guangzhou Facility"	our manufacturing facility in Guangzhou
"Guangzhou RNAimmune"	RNAimmune Vaccine (Guangzhou) Co., Ltd. (達冕疫苗(廣州)有限公司), a company established under the laws of the PRC on January 28, 2021 with limited liability, an indirect wholly owned subsidiary of the Company
"Guangzhou Sirnaomics"	Sirnaomics Biopharmaceuticals (Guangzhou) Co., Ltd. (聖諾生物醫藥技術(廣州)有限公司), a company established under the laws of the PRC on May 8, 2012 with limited liability, an indirect wholly owned subsidiary of the Company
"HK$"	Hong Kong dollars, the lawful currency of Hong Kong
"HK Sirnaomics"	Sirnaomics (Hong Kong) Limited (聖諾(香港)有限公司), a company incorporated under the laws of Hong Kong on March 8, 2019 with limited liability, an indirect wholly owned subsidiary of the Company
"Hong Kong" or "HK"	the Hong Kong Special Administrative Region of the People's Republic of China
"Hong Kong Stock Exchange"	The Stock Exchange of Hong Kong Limited
"IFRSs"	International Financial Reporting Standards
"Independent Third Party(ies)"	an individual(s) or a company(ies) who or which is/are not connected person(s) (within the meaning of the Listing Rules) of the Company
"IP"	intellectual property
"Junior Grantee(s)"	any grantee(s) other than a Senior Grantee
"KPIs"	key performance indicators
"Listing"	the listing of the Shares on the Main Board by way of the Global Offering

Definitions

"Listing Date"	December 30, 2021, on which the Shares were listed on the Hong Kong Stock Exchange and from which dealings in the Shares were permitted to commence on the Hong Kong Stock Exchange
"Listing Rules"	the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange, as amended, supplemented or otherwise modified from time to time
"Main Board"	the stock market (excluding the option market) operated by the Hong Kong Stock Exchange which is independent from and operated in parallel with the GEM of the Hong Kong Stock Exchange
"Memorandum" or "Memorandum of Association"	the memorandum of association of the Company, as amended, supplemented and restated from time to time
"Model Code"	the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix 10 to the Listing Rules
"NMPA"	the National Medical Products Administration
"Nomination Committee"	the nomination committee of the Board
"Pre-IPO Equity Incentive Plan"	the pre-IPO equity incentive plan adopted by the Company on January 21, 2021
"Prospectus"	the prospectus of the Company dated December 20, 2021, issued in connection with the Hong Kong Public Offering
"R&D"	research and development
"Related Entity"	the holding companies, fellow subsidiaries or associated companies of the Company

"Remuneration Committee"	the remuneration committee of the Board
"Reporting Period"	for the year ended December 31, 2022
"RNAimmune"	RNAimmune, Inc., a company incorporated under the laws of Delaware, U.S. on May 5, 2016, a controlled subsidiary of the Company
"RSU Scheme"	the restricted share unit scheme adopted by the Company on April 22, 2022
"RSU Scheme Adoption Date"	April 22, 2022, being the date on which the RSU Scheme first was adopted by the Board
"RSU Scheme Limit"	has the meaning described in the sub-paragraph headed "(I) RSU Scheme Limit" under the paragraph headed "Report of the Directors — Pre-IPO Equity Incentive Plan, RSU Scheme and Share Option Scheme — RSU Scheme — (5) Maximum Number of Shares Available for Awards" in this annual report
"RSU(s)"	the restricted share unit(s) granted and/or conditionally granted (as the case may be) under the RSU Scheme
"SAFE"	Simple Agreements for Future Equity
"SASB"	Sustainability Accounting Standards Board
"SDGs"	Sustainability Development Goals
"Senior Grantee(s)"	the grantee(s) under the Share Option Scheme or the RSU Scheme (as the case may be) who is either (i) a Director, or (ii) a member of the senior management of the Company as included in the latest annual report of the Company published on the website of the Hong Kong Stock Exchange immediately before the grant date

Definitions

"Series C Warrants"	series C warrants granted to non-controlling shareholders to convert their registered capital in Suzhou Sirnaomics to preferred shares of its holding company, namely, US Sirnaomics
"SFO"	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time
"Share(s)"	ordinary share(s) in the share capital of our Company with a par value of US$0.001 each
"Shareholder(s)"	holder(s) of our Shares
"Share Option Scheme Adoption Date"	June 28, 2022, being the date on which the Share Option Scheme was approved and adopted by the Shareholders
"Share Option Scheme Limit"	has the meaning described in the sub-paragraph headed "(I) Share Option Scheme Limit" under the paragraph headed "Report of the Directors — Pre-IPO Equity Incentive Plan, RSU Scheme and Share Option Scheme — Share Option Scheme — (5) Maximum Number of Shares Available for Subscription" in this annual report
"Share Option Scheme"	the share option scheme adopted by the Company on June 28, 2022
"Suzhou Sirnaomics"	Sirnaomics Biopharmaceuticals (Suzhou) Co., Ltd. (聖諾生物醫藥技術(蘇州)有限公司), a company established under the laws of the PRC on March 10, 2008 with limited liability, an indirect wholly owned subsidiary of the Company
"TCFD"	Task Force on Climate-related Financial Disclosures

"TMHW"	Taiwan Ministry of Health and Welfare
"United States", "U.S." or "US"	the United States of America
"US$"	U.S. dollars, the lawful currency of the United States of America
"US Sirnaomics"	Sirnaomics, Inc., a company incorporated under the laws of Delaware, U.S. on February 12, 2007, a wholly owned subsidiary of the Company
"Walvax"	Walvax Biotechnology Co., Ltd. (雲南沃森生物技術股份有限公司), a company listed on Shenzhen Stock Exchange (stock code: 300142), one of our collaborators and an Independent Third Party
"%"	per cent

Glossary of Technical Terms

This glossary contains explanations of certain technical terms used in connection with the Company and its business.

"AE"	adverse event, which may be mild, moderate, or severe, any untoward medical occurrences in a patient administered a drug or other pharmaceutical product during clinical trials and which do not necessarily have a causal relationship with the treatment
"ApoC3"	apolipoprotein C3
"ASGPR"	asialoglycoprotein receptor
"BCC"	basal cell carcinoma, a type of non-melanoma skin cancer
"CCA"	cholangiocarcinoma, tumor that is occurring with increasing frequency and develops from bile duct epithelium found within the intrahepatic and extrahepatic biliary tree, excluding the ampulla or gallbladder
"CDMO"	contract development and manufacturing organization, a pharmaceutical company that develops and manufactures drugs for other pharmaceutical companies on a contractual basis
"CMC"	chemistry, manufacturing, and controls processes in the development, licensure, manufacturing, and ongoing marketing of pharmaceutical products
"cohort"	a group of patients as part of a clinical trial who share a common characteristic or experience within a defined period and who are monitored over time
"combination therapy"	a treatment modality that combines two or more therapeutic agents administered separately in two or more different pharmaceutical products or in a fixed-dose combination product comprising the two or more therapeutic agents
"COVID-19"	coronavirus disease 2019, an infectious disease
"COX-2"	cyclooxygenase-2, a membrane-bound, short-living, and rate-limiting enzyme

Glossary of Technical Terms

"CRO"	contract research organization, a pharmaceutical company that conducts research for other pharmaceutical companies on a contractual basis
"cSCC"	cutaneous squamous-cell skin cancer, a common form of skin cancer that develops in the squamous cells that make up the middle and outer layers of the skin
"delivery platform"	the platform used for the delivery of drugs to target sites of pharmacological actions
"endosomal escape"	escaping from being hindered by entrapment and subsequent degradation in acidic compartments of the endo/lysosomal pathway
"ESC"	Early Selected Compound
"Factor XI"	a plasma glycoprotein that is primarily synthesized in the liver and is part of the coagulation cascade, playing a role in clot stabilization and expansion
"GalAhead"	our GalNAc RNAi delivery platform that conjugates GalNAc moieties to RNAi triggers
"GalNAc"	N-Acetylgalactosamine, a sugar molecule that can recognize and bind to a cell surface protein, the asialoglycoprotein receptor
"global rights"	rights of a commercial nature to develop or commercialize a product, which may include rights in know-how and rights in patents and patent applications, in each case, directed to the drug product, drug composition and/or methods of use thereof or in the drug delivery platform
"GLP"	Good Laboratory Practice, a set of principles intended to assure the quality and integrity of non-clinical laboratory studies that are intended to support research or marketing permits for products regulated by government agencies

Glossary of Technical Terms

"GMP"	Good Manufacturing Practice, a system for ensuring that products are consistently produced and controlled according to quality standards, which is designed to minimize the risks involved in any pharmaceutical production that cannot be eliminated through testing the final product. It is also the practice required in order to conform to the guidelines recommended by agencies that control the authorization and licensing of the manufacture and sale of pharmaceutical products
"HBV"	hepatitis B virus
"HCC"	hepatocellular carcinoma, a type of primary liver cancer
"HKP"	histidine-lysine polypeptide
"HKP+H"	histidine-lysine-histidine polypeptide
"HPV"	human papillomavirus
"HSV"	herpes simplex virus
"HTS"	hypertrophic scar is a thickened, wide, often raised scar that develops where skin is injured
"in vitro"	Latin for "within the glass", studies using components of an organism that has been isolated from their usual biological surroundings, such as microorganisms, cells or biological molecules
"in vivo"	Latin for "within the living", studies in vivo are those in which the effects of various biological or chemical substances are tested on whole, living organisms including animals, humans and plants, as opposed to a partial or dead organism, or those done in vitro
"IND"	investigational new drug or investigational new drug application, also known as clinical trial application
"isSCC"	squamous cell carcinoma in situ

Glossary of Technical Terms

"LNP"	lipid nanoparticles are spherical vesicles made of ionizable lipids, which are positively charged at low pH (enabling RNA complexation) and neutral at physiological pH (reducing potential toxic effects, as compared with positively charged lipids, such as liposomes)
"mRNA"	messenger RNA, a large family of RNA molecules that are complimentary to DNA molecules and convey genetic information from the DNA to be translated by ribosomes into proteins
"metastasis"	the spread of cancer from the primary site (place where it started) to other places in the body
"microfluidic"	microfluidics is the science of manipulating and controlling fluids, usually in the range of microliters (10–6) to picoliters (10–12), in networks of channels with dimensions from tens to hundreds of micrometers
"muRNA"	multi-unit RNAi trigger, RNAi trigger composed of multiple oligonucleotides (2 or more) to simultaneously downregulate two or more gene targets
"mxRNA"	miniaturized RNAi trigger, RNAi trigger composed of single ~30 nucleotide long oligonucleotides designed to downregulate individual gene target
"NMSC"	non-melanoma skin cancer
"NSCLC"	non-small cell lung cancer is any type of epithelial lung cancer other than small cell lung cancer
"OL China"	out-licensed mainland China, Hong Kong, Macau and Taiwan rights under agreement with Walvax but we retain the rights for rest of the world
"PCSK9"	proprotein convertase subtilisin/kexin type 9, an enzyme encoded by the PCSK9 gene in humans on chromosome 1

Glossary of Technical Terms

"PCT"	the Patent Cooperation Treaty, which assists applicants in seeking patent protection internationally for their inventions, helps patent offices with their patent granting decisions, and facilitates public access to a wealth of technical information relating to those inventions
"PDoV"	Peptide Docking Vehicle, a linker which contains a therapeutic compound, such as an siRNA molecule, and a targeting ligand
"PDoV-GalNAc"	our GalNAc RNAi delivery platform that conjugates GalNAc moieties to PDoV peptide linkers and up to two siRNAs to the peptide
"Phase I clinical trials" or "Phase I"	study in which a drug is introduced into healthy human subjects or patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion, and if possible, to gain an early indication of its effectiveness
"Phase I/II clinical trials" or "Phase I/II"	Phase I/II clinical trials combine Phase I and Phase II into one trial. The clinical trial design may adaptively use data from all previous patients to make decisions and select the best dose for each new cohort
"Phase II clinical trials" or "Phase II"	study in which a drug is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases, and to determine dosage tolerance and optimal dosage
"Phase IIa clinical trials" or "Phase IIa"	Phase IIa clinical trials are usually pilot studies designed to demonstrate clinical efficacy or biological activity
"Phase IIb clinical trials" or "Phase IIb"	Phase IIb clinical trials determine the optimal dose at which the drug shows biological activity with minimal side-effects

Glossary of Technical Terms

"Phase III clinical trials" or "Phase III"	study in which a drug is administered to an expanded patient population generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to statistically evaluate the efficacy and safety of the product for approval, to provide adequate information for the labeling of the product
"PLNP"	polypeptide-lipid nanoparticle, a proprietary polypeptide nanoparticle combined with LNP
"PNP"	polypeptide nanoparticle is composed of a branched histidine lysine polymer
"PNP-ID"	PNP platform formulated for intradermal administration
"PNP-IT"	PNP platform formulated for intratumoral administration
"PNP-IV"	PNP platform formulated for intravenous administration
"preclinical studies"	studies or programs testing a drug on non-human subjects, to gather efficacy, toxicity, pharmacokinetic and safety information and to decide whether the drug is ready for clinical trials
"PSC"	Primary Sclerosing Cholangitis, a chronic, or long-term, disease that slowly damages the bile ducts
"RNA"	Ribonucleic acid, a polymeric molecule essential in various biological roles in coding, decoding, regulation and expression of genes
"RNAi"	RNA interference, a biological process in which RNA molecules are involved in sequence-specific suppression of gene expression by double-stranded RNA, through translation or transcriptional repression

Glossary of Technical Terms

"SAE"	serious AE, any medical occurrence in human drug trials that at any dose: results in death; is life-threatening; requires inpatient hospitalization or causes prolongation of existing hospitalization; results in persistent or significant disability/incapacity; may have caused a congenital anomaly/birth defect, or requires intervention to prevent permanent impairment or damage
"siRNA"	small interference RNA, double-stranded RNA molecules comprised of two oligonucleotides of about 20nt-long guide (antisense) and passenger (sense) strands; the RNA-Induced Silencing Complex (RISC) incorporates the guide strand and binds mRNA target molecules to generate its cleavage or inhibit protein translation from it
"solid tumors"	an abnormal mass of tissue that usually does not contain cysts or liquid areas. Solid tumors may be benign (not cancer), or malignant (cancer). Different types of solid tumors are named for the type of cells that form them
"SCC"	squamous cell carcinoma, an uncontrolled growth of abnormal cells arising from the squamous cells in the epidermis, the skins outermost layer
"TGF-ß1"	transforming growth factor beta 1 or TGF-ß1, a polypeptide member of the transforming growth factor beta superfamily of cytokines, which activates Smad and non-Smad signaling pathways